RISK MANAGEMENT STRATEGIES AND PERFORMANCE OF NON-WITHDRAWABLE DEPOSIT TAKING SAVINGS AND CREDIT SOCIETIES IN NAIROBI CITY COUNTY, KENYA

LILIAN AKINYI OLUOCH

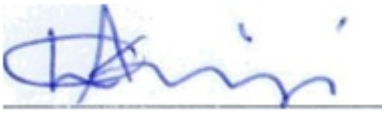
D53/OL/CTY/32554/2016

A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS, ECONOMICS AND TOURISM IN PARTIAL FULFILMENT FOR THE AWARD OF DEGREE IN MASTER OF BUSINESS ADMINISTRATION (STRATEGIC MANAGEMENT) KENYATTA UNIVERSITY

SEPTEMBER, 2024

DECLARATION

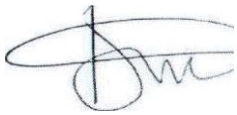
This project is my original work and has not been presented for the award of a degree in any university.

Signed  Date: .....

Lilian Akinyi Oluoch

REG. NO. D53/OL/CTY/32554/2016

This research project has been submitted for examination with my approval as university supervisor.

Signed  Date: .....

Dr. Anne Muchemi

Lecturer, School of Business, Economics and Tourism

Kenyatta University

DEDICATION

I dedicate this project to my children Teddy and Dinah for their encouragement to complete this study.

ACKNOWLEDGEMENT

Firstly, I wish to thank the Almighty God for his grace in my academics. Secondly my sincere gratitude goes to my supervisor, Dr. Anne Muchemi for her guidance, wisdom, and patience in helping me accomplish this research project. Lastly, I express my profound gratitude to Kenyatta University Library which is well equipped and assisted in providing the information required.

TABLE OF CONTENTS

DECLARATION ..... **ii**
DEDICATION ..... **iii**
ACKNOWLEDGEMENT ..... **iv**
LIST OF TABLES ..... **viii**
LIST OF FIGURES ..... **ix**
OPERATIONAL DEFINITION OF TERMS ..... **x**
ABSTRACT ..... **xii**
CHAPTER ONE: INTRODUCTION **1**
1.1 Background to the Study 1
1.1.1 Organizational Performance 3
1.1.2 Risk Management Strategies 4
1.1.3 Non-Withdrawable Deposit Taking Cooperative Societies 7
1.2 Statement of the Problem 7
1.3 Objectives of the Research 9
1.3.1 General Objective 9
1.3.2 Specific Objectives 9
1.4 Research Questions 10
1.5 Significance of the Study 10
1.6 Scope of the Study 11
1.7 Limitation of the Study 12
1.8 Organization of the Study 12
CHAPTER TWO: LITERATURE REVIEW **14**
2.1 Introduction 14
2.2 Theoretical Literature Review 14
2.2.1 Balanced Scorecard Model 14
2.2.2 Agency Theory 16
2.2.3 Modern Portfolio Theory 18
2.3 Empirical Literature Review 19
2.3.1 Risk Avoidance and Performance 19

2.3.2 Risk Acceptance and Performance 22
2.3.3 Risk Reduction and Performance 24
2.3.4 Risk Transfer and Performance 26
2.4 Summary of Research Gaps 28
2.5 Conceptual Framework 31
CHAPTER THREE: RESEARCH METHODOLOGY 33
3.1 Introduction 33
3.2 Research Design 33
3.3 Target Population 33
3.4 Sampling Design and Procedure 34
3.5 Data Collection 35
3.6 Data Collection Procedure 35
3.7 Pilot Study 36
3.7.1 Validity Test 36
3.7.2 Reliability Test 37
3.8 Data Analysis and Presentation 38
3.9 Ethical Considerations 39
CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSION 40
4.1 Introduction 40
4.2 Response Rate 40
4.3 Demographic Information 41
4.3.1 Length of Operation of the SACCO 41
4.3.2 Tenure of Service in the SACCO 42
4.4 Descriptive Statistics 43
4.4.1 Risk Avoidance 44
4.4.2 Risk Acceptance 45
4.4.3 Risk Reduction 47
4.4.4 Risk Transfer 48
4.4.5 SACCO Performance 50
4.5 Inferential Statistics Analysis 51
4.5.1 Pearson Correlation 51

4.5.2 Regression Analysis 52
4.6 Qualitative Analysis 54
4.6.1 Risk Avoidance 54
4.6.2 Risk Acceptance 55
4.6.3 Risk Reduction 56
4.6.4 Risk Transfer 57
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS 59
5.1 Introduction 59
5.2 Summary of Key Findings 59
5.3 Conclusion 61
5.4 Recommendations for Policy and Practise 63
5.5 Suggestions for Future Studies 65
REFERENCES 67
APPENDICES 72
Appendix I: Researcher's Letter of Introduction 72
Appendix II: Research Questionnaire 73
Appendix III: List of Non-Withdrawable Deposit Taking SACCOs in Nairobi 77
Appendix IV: List of SACCOs Sampled for Pilot Study 81
Appendix V: Research License 82

LIST OF TABLES

Table 2.1 Summary of Research Gaps 29
Table 3.1 Distribution of Target Population 34
Table 3.2 Reliability Analysis 37
Table 4.1 Response Rate 40
Table 4.2 Risk Avoidance 44
Table 4.3 Risk Acceptance 46
Table 4.4 Risk Reduction 47
Table 4.5 Risk Transfer 49
Table 4.6 Performance of SACCOs 50
Table 4.7 Pearson Correlation Matrix 51
Table 4.8 Model Summary 52
Table 4.9 ANOVA[a] 53
Table 4.10 Regression Coefficients 54

LIST OF FIGURES

Figure 2.1 Conceptual Framework 32
Figure 4.1 Length of SACCO Operation 42
Figure 4.2 Tenure of Service in the SACCO 43

OPERATIONAL DEFINITION OF TERMS

Organizational Performance: It is the ability of a company to achieve its objectives and maximize their returns.

Risk Acceptance: It is an aspect whereby a company or individual admits that investing money is not justified by the possible loss from a risk on it for purposes of eliminating it.

Risk Avoidance: It is the process or strategy of eliminating exposures or activities that can negatively impact the organization's performance.

Risk Management Strategies: These are structured activities for managing risks. The actions include risk avoidance, risk reduction, risk acceptance and risk transfer as strategies for management.

Risk Reduction: This technique deals with mitigating financial consequences of potential loss. The business or investor avoids the risk by not investing in a particular business due to the unforeseen risks.

Risk Transfer: This is a technique whereby one party assumes the liabilities of another party, in exchange for financial loss. It is mostly accomplished through an insurance policy.

ABBREVIATIONS AND ACRONYMS

ACCOSCA	African Confederation of Cooperative Savings and Credit Association
CSA	Cooperative Societies Act
DPA	Data Protection Act
DT-SACCOS	Deposit Taking Savings and Credit Cooperative Societies
FOSA	Front Office Services Activity
GDP	Gross Domestic Product
ICA	International Cooperative Alliance
KRA	Kenya Revenue Authority
KUSCCO	Kenya Union of Savings and Credit Cooperatives
NWDT-SACCOS	Non-Withdrawable Deposit Taking Savings and Credit Cooperative Societies
NPL	Non-Performing Loans
RMP	Risk Management Program
SACCO	Savings and Credit Cooperative Societies
SASRA	SACCO (Savings and Credit Cooperative Societies) Societies Regulatory Authority
SSA	SACCO (Savings and Credit Cooperative Societies) Societies Act
SPSS	Statistical Package for the Social Sciences
WOCCU	World Council of Credit Unions
NACOSTI	National Commission for Science, Technology and Innovation

ABSTRACT

Savings and Credit Cooperative Societies (SACCOS) provide savings and credit facilities to their members and like other organizations in the financial sector, it undergoes several economic challenges which threaten their growth. The non-withdrawable deposit taking Savings and Credit Cooperative Societies subsector have undergone performance failures leading to some collapsing, hence the necessity of a successful risk management plan in order to meet their goals. The specific objectives of this research were to determine the effect of risk avoidance, risk acceptance, risk reduction and risk transfer on performance of non-withdrawable deposit taking Savings and Credit Cooperative Societies in Nairobi County. Variables of analysis were the risk management strategies which included risk avoidance, reduction, acceptance, and transfer. The research was grounded on modern portfolio and agency theories. For this investigation, a descriptive research design was used and the target population constituted of 132 non-withdrawable deposit taking Savings and Credit Cooperative Societies in Nairobi County. A census method was employed to choose the Savings and Credit Cooperative Societies with a sample size of 132. The study had a total population of 132 respondents. Primary data was gathered by semi structured questionnaires, and secondary data came from documented information in regulatory bodies reports, journals, books amongst others. Research instruments were tested for validity and reliability. Descriptive and inferential statistics were used in the study to analyse the data. During the entire study, ethical considerations was adhered to. The results of the investigation demonstrated that risk acceptance and risk avoidance have a positive relationship with performance and a significant effect. Similarly, the findings showed that risk reduction was negatively significant in predicting the performance of non-withdrawable Savings and Credit Cooperative Societies. However, the study revealed that risk transfer was slightly insignificant in forecasting the effectiveness of non-withdrawable deposit taking Savings and Credit Cooperative Societies at 95% confidence level. Therefore, the investigation concluded that risk avoidance, risk acceptance, and risk reduction are key risk management strategies that may affect how the non-withdrawable deposit taking Savings and Credit Cooperative Societies in Nairobi city perform. Additionally, risk transfer does not significantly impact performance of non-withdrawable deposit taking Savings and Credit Cooperative Societies in Nairobi City. The study recommends that researchers can further explore and expand upon the findings of this investigation to better understand the connection between risk management strategies, and the performance of non-withdrawable deposit taking Savings and Credit Cooperative Societies in other counties and other financial institutions.

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

Savings and Credit Cooperative Societies (SACCOs) contribution to economic development is important; over 63% of Kenya's population currently benefits from it (Okumu & Oyugi, 2016). According to Mmari, Goodluck & Thinyane, Lebitso (2019), one of the main roles of the Cooperative Societies has been providing financial access to poor people who are excluded from the conventional lending institutions such as banks and microcredit organizations. Worth noting are the many challenges the Cooperative Societies face which sometimes affect their performance, for instance, loan default or poor governance. SACCOs pool savings and give credit facilities to the members, thus enabling them acquire businesses, properties amongst other gains in the society (SASRA, 2015).

Worldwide, SACCOs are regarded as a good source of economic growth and development (Mwangi & Ombui, 2018). According to Tache (2016), SACCO Societies in United States, Europe, India amongst other countries were formed to relieve poverty levels amongst the population. Canada is one of the countries with the highest members comprising five million, more branches than banks having a third of the country's deposits in savings. United States of America has more than 76 million members in more than 19,500 SACCOs, asset portfolio of over $300 billion which is 13 percent of the credit clients in the market. Brazil SACCOs has 959,231 members, deposits of 205.17 billion, 192.6 billion in loans, and a profit of 8,946.43 million in 2005 (Brusky, 2006).

Regionally, performance of SACCOS has been accelerated by ACCOSCA (African Confederation of Cooperative Savings and Credit Associations); an organization that has

provided enormous opportunity for the African continent to become the World's second fastest growing region (Star magazine, Issue No. 59, 2022). According to the Society for International Development (SID, 2018), cooperatives are significant economic actors in national economies of Africa. Ghana established the first SACCO in 1959, with expansions to countries Senegal, Kenya, Uganda, and Tanzania, amongst others. However, Ghana's performance was noted to be on a downward trend at 1 million members as at 2020, attributed to poor leadership, low profitability amongst other economic challenges.

In Kenya, the SACCOS sector has helped the country achieve its Big 4 Agenda Pillars, acting as important financiers in land, housing, education, medical, manufacturing amongst others. The sector contributes over 45% towards the country's gross domestic product with at least one in every two Kenyans benefiting from it (Bwana, Kembo & Mwakujonga, Joshua, 2022). This sector is widespread all over the country, but majority of the SACCOS are in Nairobi County. The sector is separated into Deposit Taking SACCOS and Non-withdrawable deposit taking SACCOS subsectors. Deposit taking SACCOS accept deposits and offer banking operations, just like commercial banks while the non-withdrawable deposit taking SACCOS mobilize savings, which act as collaterals to loans advanced to the members. However, deposit taking SACCOS are more popular based on their performance of savings mobilization and asset portfolio than non-withdrawable deposit taking SACCOS (SASRA, 2020).

According to Sasra Supervision Annual Report, (2021) performance of SACCOs in Kenya has seen it grow its membership from 4.5 million in 2019 to 6 million in 2021; asset growth moved from 556 billion in 2019 up to 807 billion in 2021. Non-withdrawable deposit taking SACCOs performance has not been impressive due to economic challenges like poor

leadership, loan default, competition from banks, cyberattacks amongst others which has led to collapse or closure of some of them. These challenges pose a risk to performance thus calling for effective risk strategies that will enable the SACCOS accomplish their objectives

1.1.1 Organizational Performance

Performance indicates a way in which a business uses its resources to generate higher profits. It measures the financial circumstances of a business and can be used to compare performance across sectors or same sector (Mutuku, 2022). According to Mwinamo (2020), Performance contributes to the organization's reputation with the various important audiences that are of benefit to it. A firm's financial performance is a reflection of the extent to which its financial goals are accomplished (Mutua, 2019).

Ogilo (2012) suggest that financial ratios have for a long time been used to measure performance of a firm. According to Kemal (2014), using RO is the best method of measuring financial performance because it is expected that after a merger and acquisition, the equity and assets of the company increases hence it's prudent to establish the returns from equity. According to Otley (2009), accounting metrics have been the backbone of organization performance measurement for qualitative approaches.

Herrmann (2008) asserts that an analysis of profitability of a firm will evaluate the main profitability measures which comprise; return on assets, income statements, return on capital, the price to earnings ratio and earnings per share. Richard (2007) in his study suggests that institution performance should include quantitative and qualitative elements of measurement and not just profits, return on investments or market segment. Further, Ouma (2022) attests that performance measurement should include both fiscal and non-

fiscal dimensions to assist managers gain broader perception on gauging and comparing performance.

Empirical studies by previous scholars on SACCOs have measured performance using various metrics; Kamau (2010) measured performance employing (ROA) return on assets, ROE (return on equity) and capital adequacy. Ondu (2020), measured performance using consumer loyalty while Opala (2014) used capital adequacy, liquidity and asset quality to demonstrate a favourable impact on financial performance. On this basis, this study is going to measure performance using membership, total assets, and loans as indicators of SACCO performance. This is because growth of a SACCO is directly related to its ability to increase in membership numbers, savings mobilization and amount of loans issued. If savings grow, more loans are issued which subsequently generates interest to the SACCO and this boosts the performance.

1.1.2 Risk Management Strategies

Risk management strategy is a way or plan of addressing risks using a structured approach in various companies within any industry (Mckinsey, 2021). The objective of risk management is not to prohibit or prevent risk taking activity, but to ensure that the risks are consciously taken with full knowledge, clear purpose and understanding so that it can be measured and mitigated (Annapurna, 2023).

Risk management strategies differ for each organization due to risk diversity, dynamic technology, and market efficiency. According to Mbuguah (2023) the dynamic nature of business requires regular review of the risk management strategies to ensure relevance and effectiveness of the business. Hopkins (2018) asserts that risk management can be

reinforced by having a framework process in the organization. Risk management's primary advantage is that it can improve the organization's everyday operations' efficacy and efficiency.

There are four main risk management strategies practised by organisations: avoidance, reduction, sharing and retention strategies (Brustbaeur, 2016; Kerzner, 2019). Dorfman (2017) also attests to four strategies that can be utilized based on the existing risk component; risk evasion, risk retention, risk decrease and risk exchange.

According to Muchemi & Thuku, (2021), there is no general approach of implementing the different risk management strategies because of distinct business environments. As such each organization will adopt a particular strategy based on the kind of risks it faces. SASRA guidelines and regulations require SACCOs to create and put into place internal control and risk management systems in order to obtain licenses and enhance financial soundness. According to reviewed studies, not all SACCOs apply the risk management strategies in the day-to-day operations. This study adopted four strategies which cover risk avoidance, reduction, acceptance, and transfer, since they are the most applicable in the sector under study.

Risk avoidance involves getting rid of a risk before it poses a threat to the organization. According to Merna (2014), risk avoidance seeks to eliminate uncertainty by eradicating the root cause or evading some organisational activities. For instance, during the Covid-19 pandemic, some companies allowed staff to work from home to avoid contracting the disease. Chepkwony (2018) concluded that a risk avoidance strategy is crucial during credit recovery. Examples of risk avoidance strategies include having adequate credit securities, staff training and good governance.

Risk acceptance is a better practice if the risk occurrence is unlikely and has minimal impact. In such cases, you can simply accept the risk as-is and do nothing. They include emerging risks or those that pose some threats in the future. Examples of the risk acceptance strategies include identifying the risk, evaluating it and having current technology to counter the risks. Risk acceptance is a vital activity in financial organizations and companies for generating shareholders wealth; for example, risks in the financial market like interest rates or those from the regulatory authorities (Pykhtin, 2005)

Risk reduction is a better solution if the risk causes a real threat or hitch to operations, and avoiding or accepting it is impossible. According to Muchiri (2017), risk reduction involves utilization of methods that minimize the likelihood that the risk will materialize or severe impact. It must be reduced if the risk impact is negative and costly to the company and its employees. For example, in a SACCO, default risk can be reduced by having adequate security of guarantors or collateral. Examples of risk reduction strategies include adequate internal controls, policies and procedures and complying with laws and regulations.

Risk transfer is an option used when challenges arise and acceptance, avoidance or reduction cannot be used. For instance, lack of expertise to address the risk may require the organization to transfer the risk to another party. It entails transferring the responsibility to a third party (Alfred, 2013). Risk transfer involves contracting out another organized party to take the control, administration, and financial related duty when the risk occurs (Mhetre, Konnur & Landage, 2016). Some transfer strategies include insurance, hedging and outsourcing.

1.1.3 Non-Withdrawable Deposit Taking Cooperative Societies

According to International Co-operative Alliance (ICA), SACCOs are people-based organizations controlled and managed by members to improve their economic, cultural, and social essential needs. SACCOs are owned by members, and they have open, voluntary membership. The members generally have a common interest based on the community, employer, geographic area, and any other affiliation (Opala, 2014). According to Njeru, Florence and Ondabu (2015), Kenya is one of the leading countries in SACCO associations in Africa.

According to SASRA Supervision Annual Report (2021), Kenya has 185 non-withdrawable deposit taking SACCOs, with 5,999,574 members and total assets portfolio of 807.11 billion, as of December 2021. Nairobi City County harbours 71% of these SACCOs (132) hence the choice to research in it. However, majority of these SACCOs have dismal performance as relates to governance, loan default, collapse amongst others subsequently leading to loss of members funds. All these challenges pose a risk to the members, being the main stakeholders and a need arose for this investigation. A list of all non-withdrawable deposit taking SACCOs in Nairobi is indicated in Appendix IV.

1.2 Statement of the Problem

SACCO membership come from all classes (upper, middle, lower) making it a critical player in achieving Vision 2030, whose objective is to develop and better the living standards of all Kenyans. As a financial institution driven by globalization and rapid digital technology, this sector faces several risks in achieving its objectives. Deposit taking SACCOs subsector performance has been impressive thus dominating the sector; however,

the non-withdrawable deposit taking SACCOs subsector has been undergoing dismal performance.

The dismal performance of non-withdrawable deposit taking SACCOs has been associated with fraudulent operations and pyramid scheme-like entities, which have fleeced the public of their savings leading to collapse of most of the SACCOs. (SASRA, 2020). According to the Sasra Annual Supervision report (2022), the non-withdrawable deposits taking SACCOs in Kenya have not been able to meet their members financial obligations or prudential standards. Membership in these SACCOs was at 475,270 members in 2022, being 14% only of the total membership sector. The non-withdrawable deposits taking SACCOs dormant membership was at 19% attributed to low membership growth. The non-withdrawable deposit taking SACCO's share of the total assets was a paltry 14.37%, while their gross loans were 14% of the total sector in year 2022. This poor performance was due to challenges encountered like funds misappropriation, poor governance by board members, and staff incompetence, which led to closures of some of these SACCOs resulting in the risk of members losing their hard-earned funds.

It's crucial to remember that, with the dismal performance and shortcomings of non-withdrawable deposit taking SACCOs, this subsector remains unexplored in scholarly context. With the challenges affecting non-withdrawable deposit taking SACCOs, a performance gap exists, and adequate strategies are necessary to counter these challenges. Research on risk management studies by previous scholars are limited and most of them focus on traditional risks, SACCOs sector in general or deposit taking SACCOs. Not much has been on risk management of non-withdrawable deposit taking SACCOs.

Empirical literature review indicate that risk management strategies and performance have been investigated under different contexts. Chepkwony (2018) studied strategies for risk management and how they impact credit recovery in SACCOs. Kokobe and Gemechu (2016) found out that risk management practices that included; loss financing, risk avoidance, loss prevention and control resulted to poor financial performance of Ethiopia's insurance industry. Further Ondu (2020) carried out research on risk management practises and how they impact SACCO performance. Karanja (2017), determined that risk transfer strategies and risk absorption strategies affected bank's competitive while risk avoidance had a positive but insignificant influence. Through guidance from these studies amongst others, this study aims to close the current performance gap of this study by describing and linking the factors to offer a clear method of controlling risks.

1.3 Objectives of the Research

The goals of this study were categorized into the general objective and specific objectives.

1.3.1 General Objective

To determine the effect of risk management strategies and performance of non-withdrawable Deposit Taking Cooperative Societies in Nairobi City County.

1.3.2 Specific Objectives

The specific objectives of this research include:

i. To establish the effect of risk avoidance on performance of non-withdrawable deposit taking Cooperative Societies in Nairobi city.

ii. To determine the effect of risk acceptance on performance of non-withdrawable deposit taking Cooperative Societies in Nairobi city.

iii. To establish the effect of risk reduction on performance of non-withdrawable deposit taking Cooperative Societies in Nairobi city.

iv. To determine the effect of risk transfer on performance of non-withdrawable deposit taking Cooperative Societies in Nairobi city.

1.4 Research Questions

i. How does risk avoidance affect performance of non-withdrawable deposit taking Cooperative Societies in Nairobi city?

ii. What is the effect of risk acceptance on performance of non-withdrawable deposit taking Cooperative Societies in Nairobi city?

iii. What is the effect of risk reduction on performance of non-withdrawable deposit taking Cooperative Societies in Nairobi city?

iv. What is the effect of risk transfer on performance of non-withdrawable deposit taking Cooperative Societies in Nairobi city?

1.5 Significance of the Study

Numerous parties involved in the SACCOs sector will find great value in the study's conclusions. It is likely to generate more knowledge on risk management strategies and improve decision making, thereby providing growth opportunities to the stakeholders. To the SACCOs board members and staff, this study will empower them to proactively identify and mitigate risk exposures, thus improving their performance and success. This way they stand to gain competitive advantage through savings on losses arising from unforeseen threats.

To the policymakers and regulators in government like SASRA, who supervise Cooperative Societies, the findings will assist them understand the new and emerging risks

in the sector. This will aid in development of appropriate policy changes that can timely address the risks and keep the sector in check since it is one of the contributors of gross domestic product. In addition, it will provide them with a basis upon which sound decision making can be undertaken through risks prioritization.

To other research and scholars, this study will provide a comprehensive reference in managing risks and enhance their understanding of risk management strategies in non-withdrawable deposit taking SACCOs. It will add to the scholarly reference materials for new research and provide a basis for further research. To existing and new SACCO members, this study will help them understand why the SACCO may not be giving out loans and setting certain conditions on savings and dividend pay-out. It will also help them understand why the risk section or department is vital in a SACCO.

1.6 Scope of the Study

This research covered the non-withdrawable deposit taking SACCOs in Nairobi city and examined how their performance is affected by risk management strategies. The research was confined to determining the effect of risk avoidance, acceptance, reduction and transfer on the performance of non-withdrawable deposit taking SACCOs. The study was guided by modern portfolio and agency theories which are linked to performance and risk management strategies as variables of research, respectively. Census sampling was used since the population is small and included all the 132 non-deposits taking SACCOs in Nairobi County. Respondents comprised at least one senior manager from each of the SACCOs. To collect data, semi-structured questionnaires were employed to cover the independent variables of risk avoidance, acceptance, reduction, transfer, and performance

as the dependent variables. The study was conducted from August 2023 to December 2023, a period of six months. However comparative trend analysis scope was from 2020 to 2022.

1.7 Limitation of the Study

The research came across some constraints; when some respondents did not answer and submit the questionnaires within the data collection period leading to delays. Some respondents were reluctant to answer all questions. To mitigate this, questionnaires were accompanied by a cover letter to assure respondents that data would only be collected for scholarly research and maintained in confidence. The surveys were delivered and collected personally to ensure no delays in the data collection, prior to contacting the respondents.

Some respondents were hesitant to answer all the question, either they are many or ignored some. This was mitigated by ensuring they are open-ended questions, not more than two pages. Timeframe was also given prior to dropping and picking the questionnaires to ensure no delays are experienced.

1.8 Organization of the Study

This project is organized in five chapters; Chapter one introduces the study. It discusses the background information of SACCOs, risk management strategies, performance of SACCOs and non-withdrawable deposit taking SACCOs in Nairobi. In addition, it discusses the statement of the problem, spells out the objectives and subsequent research questions, enumerating significance, limitations, and scope of study. Chapter two provides the literature reviewed, by reference to accredited scholars. It introduces the theoretical and conceptual framework. Chapter three covers techniques used to conduct the study. It discusses data techniques used to gather the information.

Chapter four displays the outcomes of the project objectives and the data analysis findings. It examines the results in relation to the literature on the subject of the study and presents both descriptive and inferential statistics. An overview of the major conclusions in relation to the study's objectives is provided in Chapter five. It concludes with recommendations for policy implementation and a call for further research on risk management techniques resulting from study findings.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Literature review focuses on literary work applicable to this topic. It provides a comprehensive study of the topic from existing research and scholarly perspective of books, journals, manuscripts amongst others. It reviews the previous studies on which the research has been based, analysing the arguments of others while introducing the theoretical, empirical studies and conceptual framework. The theoretical review section analyses the theories supporting this research while the empirical review highlights previous studies related to risk management in organizations and performance.

2.2 Theoretical Literature Review

This section reviews the existing theoretical literature related to risk management strategies and performance. The study was anchored on Balanced Scorecard Model and complimented by Agency theory and Modern Portfolio theory.

2.2.1 Balanced Scorecard Model

This is a strategic performance measurement system that was first introduced in 1992 by David Norton and Robert Kaplan. It arose out of the need to measure performance based on more than just financial statements, which is considered historical but on where the business is or should be headed. It aims to translate an organization's mission and vision into actual (operational) actions and improved performance, by providing a comprehensive view to stakeholders to gauge organizational performance. It examines performance from four perspectives; financial, customer, internal processes and learning and growth. *(*Kaplan *&* Norton*,* 1996). Balanced scorecard has been found to be one of the important strategic management tools adopted by companies to measure their performance (CIMA, 2009).

This is because it eliminates subjectivity and with clear strategic goals to be achieved (Kabiru, 2013)

According to Kaplan & Norton (1996), balanced scorecard should be used as a communication, information and learning system and not as a control system. BSC communicates this through four perspectives which are; financial, customer, Internal processes and learning and growth (Kaplan & Norton, 1992). Financial perspective is a quantitative benchmark based on past figures which provides a reliable insight into the organization's performance. It includes measures such as operating income, profitability, return on investments, financial ratios amongst others. Customer perspective is measured through customer satisfaction. It looks at customer service and retention. It gauges customer satisfaction with the quality, price, and availability of products or services.

Internal processes perspective focuses on the processes within the organization that are most critical for attaining customer and shareholder goals. It evaluates how well products are manufactured and tracks any delays, bottlenecks, shortages, or waste. Learning and Growth perspective is analyzed through the investigation of training and knowledge resources. It assesses how well information is captured and how effectively employees use that information to convert it to a competitive advantage within the organization. The four perspectives need constant measurement, improvement and analysis for the business to thrive (Hannabarger, Buchman & Economy, 2011)

BSC concept is applicable in various organizations to enhance performance. The model is appropriate to extant study since it postulates utilization of both fiscal and non-fiscal dimensions of performance which extant study will employ to measure dependent variable (Ouma, 2022). BSC is considered an all-inclusive model that enables the strategic plan and

vision of the organization to be achieved systematically. According to Moullin (2007), BSC has been used in the public sector successfully to improve performance. Commercial state corporations in Kenya have also used it to have a central view of its operations (Mmaiti, 2014). This theory explicitly supports performance, being the dependent variable in the SACCO. It will help managers to concurrently monitor several operations in the organization at the same time thus achieve the SACCOs's strategic objectives, while embracing proactive approach to risk management.

2.2.2 Agency Theory

Jensing and Meckling established this theory in 1976. This is an economic theory in which shareholders invest in companies or organizations by entrusting their resources to the directors and management of the company. A principal-agent relationship is established between the firm management or directors and shareholders, giving rise to an agency relationship. According to Jensen & Meckling (1976) in some agency relationships, the agent possesses business knowledge superior to the principal and so to act on his behalf, the principal assigns the agent decision-making authority. According to Munene, Ndegwa, Senaji & Mugambi (2020), agency theory supports inclusion of outside directors to be part of the boards to assist in managing the company and limit challenges associated with skills, independence, and objectivity.

Agency theory is linked to the independent variables which comprise risk avoidance, acceptance, reduction, and transfer. This theory helps to answer the study objective of risk avoidance strategy whereby agents manage a project on behalf of the principal (Kamunya, 2021). Principals rely on agents to execute day-to-day transactions by entrusting to them decision making authority on their behalf. This may sometimes lead to difference in

opinion or interest between the principal and agent. The agent is the decision maker and uses resources of the principal, but he suffers little or no risk since the principal bears all losses. Disputes in agency theory arises when the agents take up high risk markets or ventures to gain short term profitability which may pose unjustified risk to principals (shareholders). According to Oguku & Olweny (2016), non-executive board members can help in mitigating agency problems by checking on the managers behaviours that may curtail business operations. Kahuthu (2016) reiterated that the underlying agency problem in present-day firms emanates from a separation between owners and management on assumption of an inherent conflict concerning the firm's interest.

Agency theory is applicable in various areas; In the SACCO sector, whereby the members appoint directors to manage their funds in a profitable way so they can get dividends and/or rebates end of the year. In the financial sector, investment managers are appointed as agents by clients to manage their stocks in the stock market with the expectation of gaining profitable returns. During project management, agency theory assists in identifying risks that occur during the program life and allocating them to participants with ability to manage them and ensure successful completion of the program (Muchiri, 2017). Prudent corporate governance mechanisms align interest of directors and managers with that of shareholders leading to improved financial performance through efficient risk management strategies (Ondigo, 2016). In corporate risk management, agency issues impact managers attitudes regarding hedging and risk taking (Smith and Stulz, 1985). This theory supports independent variables of the study; For instance, when agents (management) do not follow the credit policies adequately, loan default will occur leading to loss of income and reduced profitability which directly affects the principals (shareholders) negatively.

2.2.3 Modern Portfolio Theory

This is an investment theory which was pioneered by Harry Marcowitz (1952). It provides the tools for recognizing portfolios which provide the highest overall return for a given level of risk. According to Zamore (2018), a portfolio refers to a group of financial assets such as bonds and physical investment assets such as real estates. This theory allows investors to construct efficient and diversified portfolios within a given risk level that maximizes their overall returns. This theory assumes that risk and return are directly linked, and investors of the portfolios are risk averse. This implies that if two portfolios offer the same expected return, then investors will most likely go for the less risky one.

According to Marcowitz (1952), diversification reduces the total risk of a portfolio. Diversification is an allocation strategy whose objective is to minimize the non-systematic risks through investment in assets not perfectly positively correlated. Diversification lowers overall portfolio risk by spreading a loss in one asset with a gain in another asset which is negatively correlated. This is also according to Omisore, Munirat & Nwufo (2012) that with all variables being constant, investing resources in various classes of advantage, provides a shield during market volatilities.

Modern Portfolio theory is applicable to businesses whose objective is maximizing their returns based on their risk tolerance through diversified portfolios. According to Mutua (2015), portfolios are capable of being constructed according to time, type of industry and purpose to spread risk when investing. In the stock market, this theory helps the risk averse investors efficiently allocate resources among a variety of different assets (Liu, 2022). In relation to credit risk transfer, Chepkwony (2015), attests that this theory reduces credit

risk through diversification of assets in diverse portfolios, hence a default in one portfolio will not affect others.

This theory supports the dependent variable of performance in this research study. It clarifies the connection between risk and return, which aids in quantifying performance (Rhoads, 2021). In addition, Otanga (2021) study attests this theory to support performance, since it assists businesses in identifying high-return portfolios and examines investment decision on financial performance of SACCOs. Investors can improve the business performance by building portfolios that maximize overall returns for a given level of risk.

2.3 Empirical Literature Review

This section analyses previous empirical studies locally and globally related to risk management strategies and performance to provide an answer to the specific research objectives. It explores past research and actual experiences based on the topic under study for comparison.

2.3.1 Risk Avoidance and Performance

Kamunya (2021) examined how risk avoidance affected the success of non-governmental organizations' projects in Nairobi County. The study focused on stakeholder theory supported by theory of resource-based view and agency theory. Descriptive research design was used and random stratified sampling of 5 subsectors within the organizations comprising 110 respondents. Results indicated that most non-governmental organizations practiced risk avoidance for continued sustenance in the non-governmental organizations world, specifically where many stakeholders were involved. Methods used to avoid risks

included cutting off projects from some regions or restricting them to a specific period were used in the avoidance strategy. The study focused on stakeholder theory supported by theory of resource-based view and agency theory. The current study was anchored on balanced scorecard, agency and modern portfolio theories.

The purpose of the study conducted by Macharia (2017) aimed to investigate the connection between risk avoidance strategies and construction projects' efficacy in secondary schools in Muranga County. Underlying theories in this study were enterprise risk management, network, and expectancy. Purposive sampling was used in conjunction with a descriptive research approach in the study to choose the schools. Data collection was accomplished using questionnaires. The findings revealed a strong influence between risk avoidance strategy and the performance of construction projects in secondary schools in Muranga county. The study recommended techniques during implementation to avoid risks which included using work plans, contingency plans, safety plans and regular inspections to ensure no disruptions in project performance. This study was on projects undertaken by secondary schools in Muranga county while the current study is on non-withdrawable deposit taking SACCOs in Nairobi County.

Aduma & Kimutai (2018) study aimed to investigate how risk avoidance affected the success of NHIF programs in Kenya. 241 staff members were chosen randomly for this study's descriptive research design from a population of 651 staff. Data collection was by questionnaires. According to the study, NHIF project performance and risk avoidance have a positive relationship. It recommended strategies for risk avoidance which included use of contingency, work plans, detailed planning, and safety systems. This study population was 651 while the current study population was 132.

Okumu (2017) studied risk management impact on performance of motor insurance companies operating in Kenya. The research design adopted was descriptive survey, with a sample size of 54 employees out of the 18 motor insurance companies. Data was examined using descriptive statistics. The performance of automobile insurance firms and risk avoidance technique were found to be significantly and favourably correlated. The study recommends avoidance of high-risk activities by minimizing scope, increasing time or resources, and utilizing familiar approaches in operations. While the present study focused on SACCOs in Nairobi City, this study focused on the motor insurance businesses.

Kaluai (2020) examined the influence of risk management practices on Kenya's Women and Girls Economic Empowerment programme performance in Kiambu and Nairobi city counties, Kenya. The study was anchored on the stakeholder theory, prospect theory, contingency theory, and realistic evaluation theory. This study adopted a census research design. The population targeted were staff of the CARE's Kenya's Women and Girls Economic Empowerment programme. A semi-structured questionnaire was adopted for primary data collection. Descriptive statistics and multiple regression were utilized to analyse the quantitative data, while content analysis was used to analyse qualitative data. Risk management was found to have a significant influence on the performance of Kenya's Women and Girls Economic Empowerment Programme The study established that lack of structured risk management frameworks for risk identification and mitigation is the cause of project implementation failure. The study recommended mitigation strategies like staff training, establishing an audit department to mitigate risks through the minimization of threats and opportunities. This study was on projects while the current study is on SACCOs.

2.3.2 Risk Acceptance and Performance

Ondu (2020) investigation on the influence of risk retention and performance of SACCOs in Nakuru. established a positive relationship with their performance. The research design was descriptive survey, and 63 respondents were selected using simple random sampling method being SACCO staff in Nakuru County. Questionnaires were utilized to gather information. According to study results, risk retention strategy and SACCO performance are positively correlated. This study recommended SACCOs to distribute their risks to members to prevent it from solely carrying the loss which may negatively impact the business. Further, the findings also highlighted that most of the SACCO staff had the capacity to identify the risks to retain. The study concentrated on SACCOs in Nakuru County while the current study was on non-withdrawable deposit taking SACCOs in Nairobi.

Mumassabba, Mukulu & Atikiya (2022) explored the impact of risk retention strategy on competitiveness of small and medium enterprises in Kisumu County. The study used stratified random sampling to choose permit fee category of between Kshs. 5,000 and Kshs. 200,000 as at December 2018 with between 10-49 and 50- to 99. 375 respondents were chosen by way of simple random sampling. Standard questionnaires were used to collect data. Study findings showed a significant, positive relationship occurring between risk retention and competitiveness of the enterprises in Kisumu. The study recommends small and medium enterprises to undertake situational analysis which will assist them understand the market and come up with realistic budget to achieve competitive advantage. This study used stratified random sampling which is tedious when allocating items to subgroups of

small and medium enterprises in Kisumu, Kenya while the current study used simple random sampling method of non-withdrawable deposit taking SACCOs in Nairobi, Kenya.

Mutisya (2020) examined the impact of retention strategies on the success of youth projects in Machakos County that are supported by the government. Four theories; prospect theory, theory of constraints, systems theory, and expectation theory were used to guide the investigation. 250 youth initiatives composed the target population of Machakos County. Using a stratified sampling technique, 122 respondents were chosen as the sample size from this. A methodical questionnaire was employed to collect primary data from the participants. The study findings revealed that the people handling youth projects were applying risk retention strategies such as adopting self-insurance, use of contingency plans and at times deciding not to take any action at all when a risk occurs. As such, the use of risk retention strategies had a positive influence on the performance of government funded youth projects in Machakos County. This study used stratified sampling which involves a lot of planning and information gathering while the current study used purposive sampling.

Maghanga (2019) investigated the effect of project risk management practices on project performance in cement manufacturing firms in Kenya. The study adopted purposive sampling. The study used primary data which was collected using structured questionnaires. The population was 162 and the sample was 62 officers from the cement manufacturing companies in Kenya. The study adopted purposive sampling. Reliability and validity of the research instrument was conducted. The study concluded that project risk retention practices have a significant effect on performance of cement manufacturing companies in Kenya. This study was on projects in the cement manufacturing companies while the current study is on SACCOs in Nairobi County.

Obillo (2020) assessed how risk retention affected the execution of urban housing projects in Nairobi County. An exploratory descriptive survey and an inferential design comprised the research methodology. To identify 72 respondents, the study used stratified and simple random sampling. Semi-structured questionnaires were used to collect data and a table with the results was produced. The study's findings suggested a beneficial connection between Kenya's execution of urban housing projects and its risk retention approach. Cost overruns, contractor-client disputes, and subpar workmanship are among the hazards that absence of a plan for retaining risks in project delivery is likely to cause. This study used random sampling technique while the current study used purposive sampling technique.

2.3.3 Risk Reduction and Performance

Jaber (2020) investigated on how risk reduction affects performance of insurance companies in Jordan. Study data was done using questionnaires from 120 sampled managers working in the insurance companies in Jordan. From the data analysis carried out, variables correlation affecting the variables was performed. The study demonstrated that risk reduction was the most influencing organizational performance. This implies insurance companies prefer mitigating risks and they have structures for calculating and estimating potential losses during contract signing. The study recommends insurance companies to use cost-effective measures for risks identification to effectively reduce their risks timely. The study area was insurance companies in Jordan while the current study is on SACCOs in Nairobi, Kenya.

Ondieki & Muathe (2017) examined the impact of lowering risks on small agricultural enterprises' performance in Kiambu County. The study variables were financial, regulatory, operational, disaster strategies and human resource. Descriptive research design was used

comprising 11,120 population which included small agribusinesses businesses in Kiambu County. In the study, stratified random sampling was employed and questionnaires used to gather the data which was analysed by both descriptive and inferential statistics. The research findings revealed that organizations can improve their performance by having contingent measures in place to reduce the financial risks. This research study used stratified random sampling method which is bias when choosing a sample size while the current study used purposive sampling.

Maina (2023) explored the effect of risk mitigation on performance of infrastructural projects in Nakuru County, Kenya. The study was anchored on uncertainty theory, prospect theory, enterprise risk management theory, and portfolio theory. The study adopted a cross-sectional survey design. The unit of observation was 201 project managers of the infrastructural projects, with a sample of 134 project managers. Data was collected using questionnaires. The study used content and construct validity. Descriptive and inferential statistics were analysed using SPSS version 28. Findings showed a strong significant relationship between risk mitigation and project performance. The study recommended that project managers should mitigate risks through diversification and applying a system of policies and strategies. The study utilised Yamane sampling technique which makes assumes normal distribution of research parameters while the current study used purposive sampling which makes no assumption and is based on merited information.

Mbugua (2017) probed the impact of risk reduction on performance of police work in Kuresoi Sub County, Kenya. The variables of this study were risk identification, risk assessment and risk mitigation. The research design used by the study were descriptive and explanatory. The sampling technique used was stratified random to generate 44 police

officers and 30 members of the public. Data collection was by questionnaires. The study findings revealed that risk mitigation affects performance of police work, by helping to avoid insecurity occurrences. The study used random stratified sampling, which is difficult to use when it comes to selection of subgroups and may create biasness. The current study used purposive sampling.

Thuku (2021) did a research to analyse the effects of risk reduction strategy on performance of insurance companies in Nyeri. Theories underlying the study included balance score card, enterprise risk management and agency theories. The target population comprised 66 employees sampled from 22 insurance companies in Nyeri. The research study embraced descriptive and explanatory for research design and data collection was achieved by questionnaires. The research study findings showed that risk reduction strategies of endorsements, advisory services, deductibles, and independent assessments strategies had a noteworthy and favourable impact on performance of insurance companies in Nyeri.

2.3.4 Risk Transfer and Performance

Thuku & Muchemi (2021) examined the effects of risk transfer strategy on the performance of insurance companies in Nyeri County. Target population consisted of 22 insurance companies from which 66 employees were selected using a census design. Explanatory and descriptive research design were utilised, and data collection done using questionnaires. The dependent and independent variables' correlation was described using both inferential and descriptive statistics. The investigation found that performance of insurance companies is significantly influenced by risk transfer strategies in Nyeri County. For better performance benefits, the study recommends insurance businesses to focus on employing insurance derivatives, partnerships, and reinsurance with other insurance firms on high-

risk situations. It also suggests expanding the coverage of group insurance products. The study was limited to risk transfer in the insurance sector while the current study focused on other strategies like risk avoidance, reduction and retention, inaddition to risk transfer.

Biira, Tukei & Mboma (2022) explored the connection between organizational performance and risk transfer strategies of Total Uganda Ltd. Descriptive study design was used in the investigation and data collection was by questionnaires' and conducting interviews of key informants during the study. 126 respondents were sampled for this study. The study findings revealed that risk transfer strategies had a major impact on organizational performance. The study found that better performance resulted from incorporating risk transfer techniques into the business's operations. The study area was Uganda while the current study is Kenya thus providing a good comparison between the two countries.

Lambaino (2019) did a research to establish the effects of supply chain resilience and risk transfer in Kenya's petroleum sectors. A descriptive and correlational research design was used. The population comprised 87 oil marketing firms residing in Kenya. Census survey technique was used and data collected by questionnaires. Inferential and descriptive statistics were used to analyse the data. The study findings revealed that risk transfer had a significantly, positive effect on supply chain resilience. Most of the respondents preferred the risks to be managed by third parties to avoid supply chain disruptions. The study recommends the companies in the petroleum industry to continuously execute risk transfer strategies to enhance supply chain resilience. The study revolved on the supply chain of the petroleum industry. This study is in the Cooperative sector, specifically non-withdrawable deposit taking SACCOs

Onyele & Ariwa (2019), investigated risk transfer strategy and growth of Nigeria's insurance sector. The study's underlying theories were the equivalence principal and real options. Data of secondary nature was collected from the insurance companies and analysed by way of vector error correction and Johansen cointegration test. The study findings revealed that a long-term correlation exists between risk transfer mechanisms and insurance sector growth. For example, claims on employers' liability, marine, and accident insurance have no substantial long-term link with the growth of the insurance business, but claims on fire and auto insurance policies did. The study recommends proactive plans to improve efficiency and effectiveness in Nigeria's insurance sector. The study's theoretical framework comprised principle of equivalence and real options while the current study theories were on balanced scorecard, agency, and portfolio theories.

2.4 Summary of Research Gaps

From the literature reviewed above, the findings indicate how risk management strategies affect company performance. The degree of this effect differs in the studies. However, majority of the studies in the reviewed literature attest that risk management influence an organization performance. A summary of the findings is as Table 2.1below:

Table 2.1 Summary of Research Gaps

Author	Study	Findings	Identified gap	Focus of the Current Study
Thuku, W. & Muchemi, A. (2021)	The effects of risk transfer strategy on the performance of insurance companies in Nyeri County	Risk transfer strategy positively and significantly affect performance of insurance companies	This study was only on risk transfer	This study focused on the main risk strategies of avoidance, acceptance, reduction and transfer
Lambaino (2019)	Influence of risk mitigation strategies on supply chain resilience in the petroleum industry in kenya	Risk avoidance and risk acceptance had an insignificant influence while risk reduction and risk transfer had a significant influence on supply chain resilience	The study revolved on the supply chain of the petroleum industry	This study is in the Cooperative sector, specifically non-withdrawable deposit taking SACCOs
Maina (2023)	The effect of risk management practice on performance of infrastructural projects in Nakuru County, Kenya	There is a significant relationship between risk mitigation practises and project performance.	Yamane sampling technique used which assumes normal distribution of parameters	Purposive sampling used which makes no assumption and is based on merit information of respondents
Jaber (2020)	The impact of risk management practises on organizational performance of Insurance Companies in Jordan, Middle East	All the risk management practises variables (identification, assessment, implementation and monitoring) have a positive impact on the organization performance	The study area is Insurance companies in Jordan, Middle East	The study area is in the SACCO sector in Nairobi, Kenya

Obillo (2020)	The influence of risk management strategies on delivery of urban housing project in Kenya	Findings revealed a significant positive relationship between risk strategies and urban housing.	The study used stratified and simple random sampling and yamane technique	This study used only purposive sampling technique, which is easier to apply
Mumassabba, Mukulu & Atikiya (2022)	The influence of risk retention strategies and competitiveness of small and medium enterprises in Kisumu, Kenya	Risk retention has a significant influence on SMEs competitiveness	This study was limited to competitiveness of small and medium enterprises in Kisumu, Kenya	The current study is on performance of non-withdrawable deposit taking SACCOS in Nairobi County
Aduma & Kimutai (2018)	The effect of project risk management techniques on project performance, at National Hospital Insurance Fund (NHIF) in Kenya	Risk prevention, risk control and risk acceptance have a greater effect while risk transfer have the lowest effect on NHIF project performance	The study had a population of 651 and used a random sampling technique	This study had a population of 132 and used purposive sampling technique
Kamunya (2021)	To determine the role of risk management practices on the performance of non-governmental organizations projects within Nairobi City County	Findings revealed that the success of projects is dependent on the careful selection of risk management strategies (Risk avoidance, sharing, retention, transfer)	The study focuses on the stakeholder theory, supported by the theory of resource-based view and agency theory	This study focused on 3 theories BSC, Agency and Modern Portfolio

2.5 Conceptual Framework

The conceptual framework was developed based on the theoretical and empirical review of the study. It provides a relationship between the variables diagrammatically. The study sought to determine how the independent variables of risk avoidance, reduction, acceptance and transfer affect performance of non-withdrawable deposit taking SACCOs in Nairobi city. Each of the variables have indicators below them.

The indicators of the dependant variable are linked to SACCO performance and include membership, asset and loans portfolio growth. Efficient variation of the independent variables indicators results in a growth of the dependent variable indicators. For example, to avoid loan default in a SACCO, staff need to be regularly trained, adequate securities like deposits need to be considered and good governance followed. Figure 2.1 below illustrates this relationship:

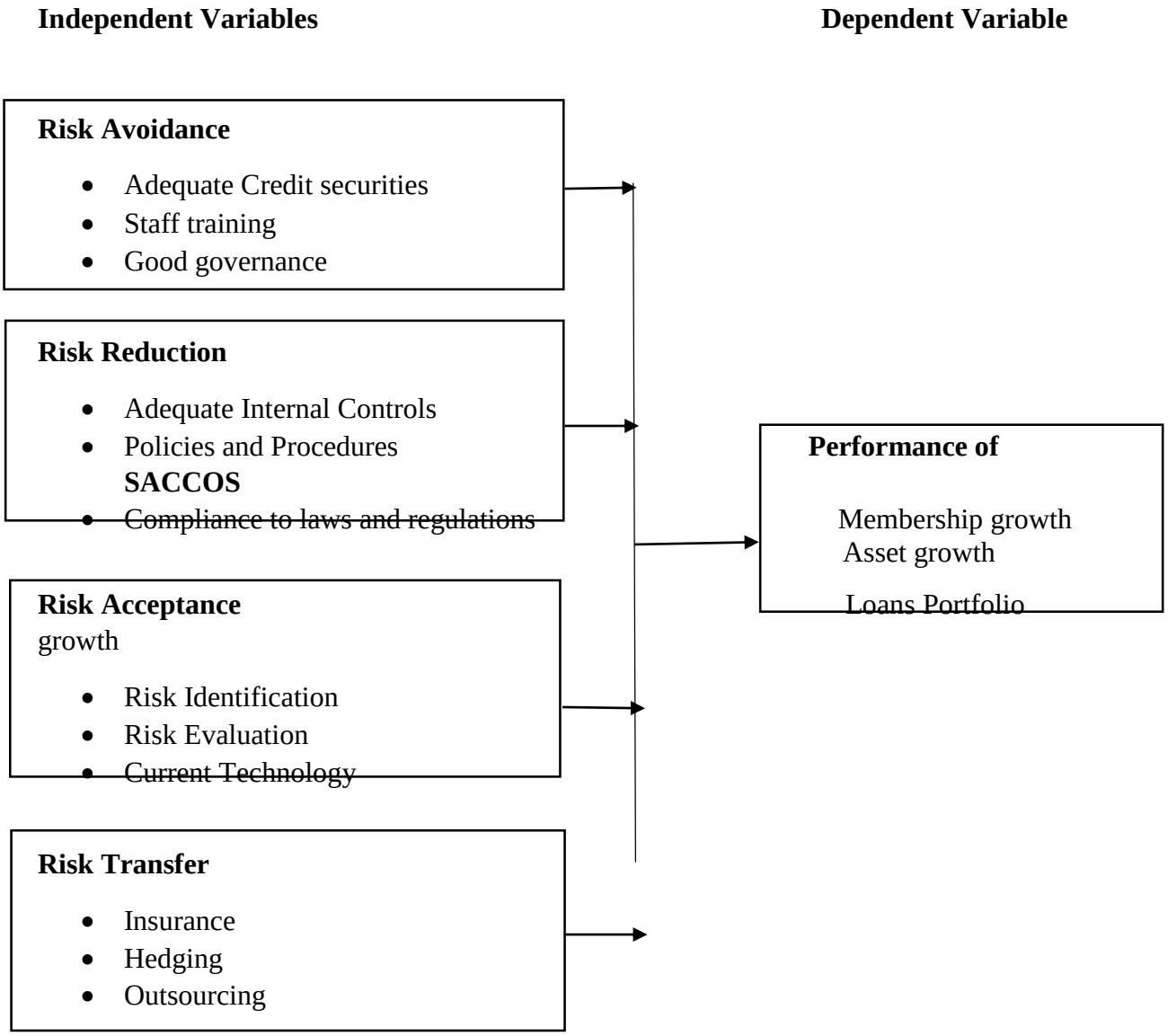


Figure 2.1 Conceptual Framework

Source: Researcher (2023)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The study's methodology is covered in this chapter. This includes techniques for gathering data, analysing data, and presenting information. It also highlights the target population, techniques of sampling, collection, and analysis of data.

3.2 Research Design

According to McCombes (2019), descriptive research describes a population, situation, or phenomena precisely and methodically, by answering questions relating to what, when where or how. This study employed descriptive research design because it aids to identify relationships existing between variables associated with perceptions, values, attitudes, or behaviours. It provides a correlation between the dependent and independent variables through qualitative and quantitative approach.

3.3 Target Population

Population refers to many individuals, things, or occasions which share a specific observable and distinguishing characteristic. (Mugenda and Mugenda, 2002). This study's target population was 132 non-withdrawable deposit taking SACCOs headquartered in Nairobi County as indicated in Appendix II. The study respondents comprised at least one senior manager in each SACCO because they are deemed to be conversant with the operations and risk management. These SACCOs are classified into categories called tiers, based on their total assets, as below Table 3.1:

Table 3.1 Distribution of Target Population

Category	Base	Total Asset Size (Kshs)	No. of SACCOs
Tier 1	Very Large	Above 10 billion	0
Tier 2	Large	Between 4 billion and 10 billion	6
Tier 3	Medium	Between 2 billion and 4 billion	6
Tier 4	Medium	Between 1 billion and 2 billion	16
Tier 5	Small	Below 1 billion	104
Total			**132**

Source: SACCO Supervision Annual Report 2022, by SASRA

3.4 Sampling Design and Procedure

A sample refers to a portion of the population that serves as a proxy for the entire population. According to Chandran (2004), sample design is a technique for selecting a subset or subgroup of the total population to accurately portray the population. Kothari (2004) attests that a significant size of sample should be taken, if possible, to increase the researcher's confidence in the findings.

Census sampling was used because the population is small. Census incorporates all members in the group or population (Saunders, 2007). As such, all the 132 regulated non-withdrawable deposit taking SACCOs in Nairobi were included in the research. Census method is not biased and gives an equal chance to all respondents in the study.

Purposive sampling was used to choose respondents who comprised at least one senior manager from each of the SACCOs. This is because they are perceived to be well conversant with the risk matters of the SACCO (Kioko, 2016). According to Sekaran &

Bougie (2010), purposive sampling involves selecting subject matters who possess essential information pertaining to the study and can give an advantage. The respondents in this study case were either the Chief Executive Officer, Finance Manager or Risk Manager from each of the non-withdrawable deposit taking SACCOs in Nairobi. The sample size was 132 respondents.

3.5 Data Collection

Data collection involves information gathering from appropriate sources to generate answers to a problem (Dudovskiay, 2022). It is a methodical process for gathering information pertaining to a particular subject matter. According to Choy (2014) before data collection process, a researcher needs to decide on the kind of data to collect, areas to collect it from, method of collection and people to be involved in the exercise.

Both primary and secondary data collection techniques were used in this study. Semi structured questionnaires were used to collect primary data because it provides a good source of first-hand information and is economical. The questionnaires had closed and open-ended questions to ensure that there was sufficient data relevant to the research. Secondary data was collected by reviewing and assessing printed materials which included published reports and circulars from regulatory bodies, online portals, books, and journals. This helped to authenticate data gathered from primary sources like questionnaires.

3.6 Data Collection Procedure

The researcher self-administered the questionnaires to all recipients and gathered them within a predetermined timeframe. Each questionnaire had a cover letter detailing the justification of collecting the data and assuring respondents of confidentiality on their

responses. A NACOSTI licence was also issued for verification to some respondents who requested for it. For respondents who would not adhere to the timeframe of collection of the questionnaire, time extension was provided. A follow-up by telephone was also done after administering the questionnaires before collection to confirm pickup.

3.7 Pilot Study

This is exploratory research on a small portion of the study area to review the logistics and effectiveness of a future comprehensive study. It tries the instruments on a small number of participants before undertaking a full-scale study (Hazzi & Maldaon, 2014). A recommended pilot study is estimated to be between one to ten percent of the entire population (Mugenda & Mugenda, 2003). In this study, the questionnaires were tested on ten percent of the population; being thirteen (13) SACCOs in Nairobi County, as indicated in Appendix IV, one respondent from each SACCO. Respondents from SACCOs who answered the pilot survey were not allowed to take part in the main research.

3.7.1 Validity Test

Validity refers to how well the results of data analysis match the scenario or event under study (Robinson, 2002). In addition, Heale (2015) enumerates that validity is the extent of measuring a concept with accuracy in quantitative research. The current investigation used content and construct validity. A test's content validity examines if a test represents all relevant areas of the study. According to Drost (2012), content validity test can be achieved by posing comparable queries to a particular target audience and experts. This way and based on expert views, unclear and confusing statements can be improved while unimportant ones discarded. Construct validity was achieved by ensuring the questionnaires had relevant questions pertaining to our study area.

3.7.2 Reliability Test

Reliability concerns the extent to which identical outcomes can be derived using the same tools more than once; consistency of various measures used. (Kothari, 2012). Reliability can also be defined as a measure by which data collection instrument produces consistent results upon repeated trials (Ngechu, 2004). This study adopted a test of Cronbach alpha for all questions in the questionnaire to ensure data reliability. According to Cooper and Shindler (2003), 0.50 and higher Cronbach alpha levels are regarded as credible indicators. For this study, Cronbach alpha values greater than 0.70 was used as an acceptable limit to test reliability of the study questionnaires. The outcomes for all variables are indicated in below table 3.2

Table 3.2 Reliability Analysis

Variables	Cronbach Alpha	No. of Item	Decision
Risk Avoidance	0.788	6	Sufficiently reliable
Risk Reduction	0.752	6	Sufficiently reliable
Risk Retention	0.813	6	Highly reliable
Risk Transfer	0.817	6	Highly reliable
Performance	0.800	5	Highly reliable
Overall	**0.830**	**29**	**Highly reliable**

Source: Researcher (2023)

As depicted in the table, every variable satisfied the minimum allowable Cronbach value of 0.7. In the analysis, variables with Cronbach values above 0.8 were recorded as “Highly reliable”, while those within 0.7 were recorded as “Sufficiently reliable” (Tashakkori and Teddlie, 2010). These findings conclude that the research questionnaire used for this study was reliable.

3.8 Data Analysis and Presentation

In research, data analysis lends credibility to data gathered by offering an understanding and interpretation of the complete data to eliminate any possibility of human bias (Abhinash, 2012). It helps to study the huge amount of data simply and accurately, thus understanding trends and patterns of the population. The collected data included qualitative and quantitative information that were checked for accuracy and consistency.

Data was analysed using the Statistical Package for the Social Science (SPSS) to give descriptive statistics inform of mean, standard deviations and percentages. Inferential statistics was used to analyse the interaction between variables under study, using a linear regression model. The regression model below was used to determine the effects of risk management strategies on performance.

The regression models.

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

Where:

Y = Performance of non-withdrawable deposit taking SACCOs

β0= Constant term

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4$= Beta coefficients

$\boldsymbol{X_1}$ = Risk Avoidance

X_2 = Risk Acceptance

X_3 = Risk Reduction

X_4 = Risk Transfer

εi = Error term

The coefficients determined the dependent variable (Y) was impacted by the independent variables ($\boldsymbol{X_1}$, X_2, X_3, and X_4). The research questions of this study were investigated at 95% level of confidence. For computational purposes, it was assumed that the error term would be 0.

3.9 Ethical Considerations

The researcher adhered to ethical standards of research and data protection Act (2029), during the entire research process. The researcher obtained an official letter from the university to collect data and a license from NACOSTI, which was presented to the respondents when delivering the questionnaires. Each questionnaire had a copy of the introductory letter clearly highlighting the purpose of the data collection and assuring the respondent that the information gathered was for scholarly purposes only and shall be kept confidential. SACCOs are financial institutions with sensitive information for its members hence adherence to data privacy was crucial. The questionnaires excluded the respondent's personal details and the SACCOs they work for. All collected questionnaires were kept safely for analysis.

CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

The data analysis findings are presented in this chapter with respect to the study goals and research questions. This chapter explores the findings in relation to the body of literature on the research issue and provides the outcome of descriptive and inferential statistics. Furthermore, the response rate and respondents' demographic data are demonstrated in this chapter.

4.2 Response Rate

The total number of instruments returned and properly filled out, was divided by the total number of instruments administered in so as to establish the response rate of data collection instruments that were administered. Table 4.1 presents the results.

Table 4.1 Response Rate

Response Rate	Frequency	Response rate (%)
Returned questionnaires	108	90
Unreturned questionnaires	11	10
Total	**119**	**100**

Source: Researcher (2023)

The study's population consisted of 132 non-withdrawable deposit taking SACCOs that operate in Nairobi City. After the pilot study comprising 13 Cooperative Societies, the final study administered 119 questionaires. 108 questionnaires were fully completed and returned while 11 questionnaires were not returned. The outcome resulted in 90% response

rate, which was deemed to sufficiently portray the target population. A response rate of more than half (50%) is sufficient, according to Mugenda & Mugenda (2003), to represent the intended population. Therefore, this study's response rate was deemed high, when compared to other research of a comparable nature; Saunders, Lewis and Thornhill (2011) at 81% and Ledikwe et al. 2019) at 72%. The high response rate (90%) indicates that the authorization letter from Kenyatta University and the research permit from NACOSTI proved effective in encouraging the participants to actively engage in answering the questions.

4.3 Demographic Information

The research participants were asked to provide details of their background information based on two perspectives: length of the operation of the SACCO and their tenure of service within each SACCO. The results are presented in terms of counts and percentages.

4.3.1 Length of Operation of the SACCO

The respondents were requested to show the respective years of operation of their SACCOs. The questionnaire items were believed to be important because it was deemed to give an indication on the SACCOs length of operation, in practicing risk management strategies and how they can gauge their performance over the duration of operation. The item was also supposed to establish that the study was inclusive of non-withdrawable deposit taking SACCOs with diverse experience based on the timeframe (in years) it has been operating. The results of the length of operation of the SACCO is presented in Figure 4.1 below.

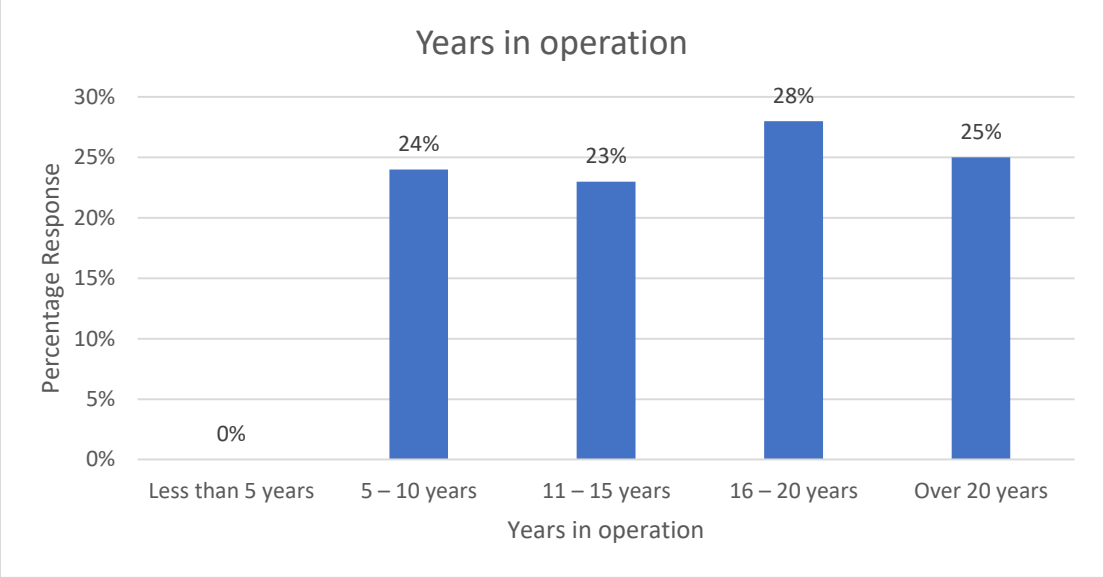


Figure 4.1 Length of SACCO Operation

Source: Researcher (2023)

The findings in Figure 4.1 demonstrate that majority of the non-withdrawable deposit taking SACCOs surveyed had been in operation for more than 10 years, accounting for 76%. This implies that most of the SACCOs that formed part of the study have diverse experience in the industry.

4.3.2 Tenure of Service in the SACCO

The participants of the study were requested to indicate the duration they had been employed in the respective SACCOs. The question was considered important because it was believed that it would provide an indication of the individual respondents' practical experiences in risk management strategies in their respective SACCOs and how it affects performance. The questionnaire item was used to establish that the study is inclusive of individual participants with diverse experience based on the number of years working with the SACCOs. The responses are shown in Figure 4.2

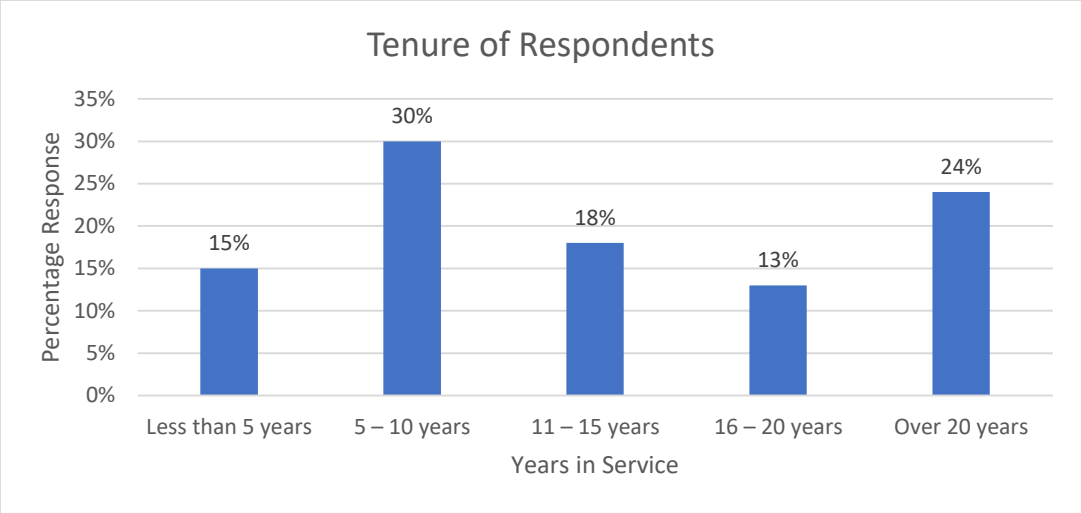


Figure 4.2 Tenure of Service in the SACCO

Source: Researcher (2023)

As depicted in Figure 4.2, most of the participants had at least five years of experience in their particular SACCOs. This accounts for 85% of the total non-withdrawable deposit taking SACCOs. This is an indication that many participants are adequately and sufficiently conversant with the risk management practices in their respective SACCOs and how it influences the organizational performance among the SACCOs. The findings further give an impression of the representation of the respondents because they had diverse experiences from various SACCOs based on their length of service.

4.4 Descriptive Statistics

The factors that were investigated in this research were assessed for their descriptive calculations in order to show how they manifested in the non-withdrawable deposit taking SACCOs surveyed. These comprised of risk management strategies as indicated by risk avoidance indicated by staff training, adequate credit securities and good governance; risk acceptance as indicated by risk identification, risk evaluation, and up-to-date technology;

risk reduction as indicated by adequate internal controls, policies and procedures and compliance to laws and regulations; risk transfer as measured by insurance, hedging and outsourcing and performance as indicated by high profitability, membership growth and asset growth.

4.4.1 Risk Avoidance

This research aimed to investigate the effect of risk avoidance on performance of non-withdrawable deposit taking SACCOs in Nairobi City. A descriptive statistics analysis was undertaken on the parameters based on five-point Likert scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = highly agree. Mean values from 1 and below suggests a low approval rating, mean values between 2.5 and 3.4 suggest average approval rating while mean values ranging from 3.5 to 5.0 suggest a high approval rating. Table 4.2 presents the findings of descriptive statistics of risk avoidance of non-withdrawable deposit taking SACCOs.

Table 4.2 Risk Avoidance

	Mean	**Std. Dev.**
The SACCO has a risk register with all material risks to focus on.	2.1364	0.9431
Proper appraisal of loans ensures risk of default is avoided	4.7364	0.4426
Proper due diligence is done on new members and transactions to avoid regulatory risks	3.1000	1.3474
The SACCO has policies and procedures for its operations to avoid risks	4.7818	0.4955
The SACCO performs periodic trainings to staff and board on risk awareness	3.5818	1.2369
The SACCO conducts periodic member trainings to help members avoid financial risks	4.2818	0.8687
Average Score	**3.7697**	**0.8890**

Source: Researcher (2023)

The study findings presented in Table 4.2 reveal that an aggregate average score = 3.77 (SD=0.89), suggesting that an average number of those surveyed confirmed that risk avoidance strategies affected SACCO performance. Most of the respondents approved to a notable level, that the SACCOs have policies and procedures for their operations to avoid risks (4.78); proper appraisal of loans to avoid risk of default (4.74); SACCO conducts periodic member trainings to help members avoid financial risks (4.28) and SACCO performs periodic trainings to staff and board on risk awareness (3.58). A low mean score was observed on performing proper due diligence on new members and transactions to avoid regulatory risks (3.1) and the SACCOs having a risk register with all material risks to focus on (2.13). The low scores imply no proper due diligence is performed and this could be a contributor to high loan default. Lack of a risk register by SACCOS can be attributed to absence of an audit department, thus no staff to manage the register.

4.4.2 Risk Acceptance

This study tried to find out the extent to which risk acceptance affects the performance of non-withdrawable deposit taking SACCOs. A descriptive statistical analysis was conducted on the constructs based on a five-point Likert scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = highly agree. Mean values from 1 and below suggests a low approval rating, mean values between 2.5 and 3.4 suggest average approval rating while mean values ranging from 3.5 to 5.0 suggest a high approval rating. Table 4.3 presents the findings of descriptive statistics of risk acceptance.

Table 4.3 Risk Acceptance

Risk Acceptance	Mean	Std. Dev.
The SACCO has an audit department which handles risk management.	2.7818	1.4985
The SACCO requires collateral securities for risky loans	3.4364	1.3716
The SACCO accepts risks whose likelihood of occurrence and consequences is low	4.6727	0.4714
The SACCO monitors risks that are accepted periodically	4.5182	0.7509
The SACCO prioritizes which risk to accept to improve performance of the SACCO	4.7455	0.4376
Risk acceptance is used when other strategies are uneconomical	3.7182	1.0058
Average Score	**3.9788**	**0.9226**

Source: Researcher (2023)

The results from Table 4.3 demonstrates an aggregate average of 3.979 (SD=0.923), suggesting that majority of those surveyed confirmed that risk acceptance strategies affected SACCO performance. In particular, majority of the respondents approved to a notable level that SACCOs prioritize which risk to accept to improve performance (4.75); accepts risks whose likelihood of occurrence and consequences is low (4.67); monitors risks that are accepted periodically (4.52); risk acceptance is used when other strategies are uneconomical (3.72) and requires collateral securities for risky loans (3.44). However, a low mean score of 2.78 was observed on whether the SACCOs have an audit department which handles risk management. This implied majority of the SACCOs do not have the department, and it is not a regulatory requirement for non-withdrawable deposit taking SACCOs.

4.4.3 Risk Reduction

The study investigated the effect of risk reduction on performance of non-withdrawable deposit taking SACCOs in Nairobi City. A descriptive statistical analysis was computed on the concepts based on five-point Likert scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = highly agree. Mean values from 1 and below suggests a low approval rating, mean values between 2.5 and 3.4 suggest average approval rating while mean values ranging from 3.5 to 5.0 suggest a high approval rating. The outcome is indicated in Table 4.4

Table 4.4 Risk Reduction

	Mean	**Std. Dev.**
The SACCO reviews its risk register annually to manage risks that may impact its operations.	2.8545	1.4196
Risk management incorporates all other departments in identifying and assessing risks.	3.2818	1.3889
The SACCO has an up-to-date system and internal controls to reduce risks of errors, fraud etc	4.4636	0.501
Credit securities used by the SACCO reduces default risk	4.3909	0.5434
The operational procedures and policies reduce risks and improves SACCO performance	4.7091	0.4563
Risk reduction influence loan defaults	4.6091	0.5434
Average Score	**4.0515**	**0.8088**

Source: Researcher (2023)

Results depicted from Table 4.4 shows an aggregate average of 4.05 (SD=0.809), suggesting that majority of those surveyed confirmed that risk reduction strategies affected SACCO performance. Specifically, majority of the respondents approved to a notable level, that operational procedures and policies reduce risks and improves performance (4.71);

risk reduction influence loan defaults (4.61); SACCOs have an up-to-date system and internal controls to reduce risks (4.46); credit securities used by the SACCO reduces default risk (4.39). On risk management incorporating all other departments in identifying and assessing risks was noted be scoring a mean of 3.28. This can be attributed to the lack of adequate staff training in some SACCOs. On SACCOs reviewing their risk register annually to manage risks that may impact its operations got a score of 2.85. This low rating implies only a few SACCOs maintain risk register to manage their operations.

Specifically, the respondents confirmed that regarding annual risk register reviews, identification and assessing of risks from other departments, up-to-date systems, internal controls, credit securities, operational procedures and policies, and influence of risk reduction on loan defaults.

4.4.4 Risk Transfer

The research examined the effect of risk transfer on performance of non-withdrawable deposit taking SACCOs in Nairobi. A statistical analysis was conducted on the concepts based on the five-point Likert scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = highly agree. Mean values from 1 and below suggests a low approval rating, mean values between 2.5 and 3.4 suggest average approval rating while mean values ranging from 3.5 to 5.0 suggest a high approval rating. Findings of this analysis are shown in Table 4.5

Table 4.5 Risk Transfer

	Mean	Std. Dev.
The SACCO transfers some risks to third parties because they cannot manage them.	4.5182	0.502
The SACCO insures its loans and deposits to reduces associated risks like death or liquidation	4.6909	0.4642
The SACCO incurs additional costs when it transfers its risks to third parties	4.7181	0.5607
Risk transfer exposes the SACCO to third party risks which may lead to cyber-hacking	3.9364	1.1516
Risk transfer enables the organization to be more productive	3.5727	1.3509
Risk transfer is expensive due to high premiums involved	2.9727	1.6337
Average Score	**4.0682**	**0.9439**

Source: Researcher (2023)

As indicated in Table 4.5, an aggregate average of 4.07 (SD=0.944) was noted, suggesting that majority of those surveyed confirm that risk transfer strategies affected SACCO performance. In more particular terms, majority of the respondents highly confirmed that SACCOs incur additional costs when transferring risks (4.72); they insure loans and deposits to minimize associated costs (4.69); they transfer some risks to third parties because they cannot manage them (4.52); transfers expose SACCOs to third party risks that may lead to cyber-hacking (3.94) and that risk transfer enable the SACCOs to be more productive (3.57). An average score of 2.97 was observed by participants that risk transfer is expensive due to high premiums involved. This implies an additional cost associated with risk transfer which may impact performance of the SACCOS.

4.4.5 SACCO Performance

Descriptive statistics of SACCO performance in Nairobi City was conducted as shown below by the number of members, asset base and loans portfolio indicators. A five-point Likert scale was used: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = highly agree. Mean values from 1 and below suggests a low approval rating, mean values between 2.5 and 3.4 suggest average approval rating while mean values ranging from 3.5 to 5.0 suggest a high approval rating. Table 4.6 presents the outcome.

Table 4.6 Performance of SACCOs

	Mean	**Std. Dev.**
The number of new members joining the SACCO has increased in the last 5 yrs.	4.9	0.3014
The SACCO's annual turnover has increased in the last 5 years	4.8455	0.3631
The number of members accessing loan products has increased	4.8727	0.3348
Time spent to process loans for members has reduced	3.5909	1.2656
The SACCO's dividend and interest on deposits pay-out has increased in the last 5 years	4.4364	0.6137
Average Score	**4.5291**	**0.5757**

Source: Researcher (2023)

Results observable from Table 4.6 reveal that majority of the SACCOS performance had improved in terms of new members, annual turnover, loan products accessibility, time spent processing loans and dividend and interest pay-out as, as per the average means of 4.90, 4.87, 4.85, 4.44, 3.59 and 4.44 respectively. Aggregate mean (4.53) and standard deviation (0.58) score imply affirms a consensus response amongst participants on performance indicators of the non-withdrawable deposit taking SACCOs. This can be attributed to staff trainings, good governance and having upto date policies and regulations to follow, which consequently led operational efficiencies and customer satisfaction on the SACCOs.

4.5 Inferential Statistics Analysis

The study performed a Pearson correlation and regression analysis with an objective to test the advanced research hypotheses and model the linear relationship between the predictor and the response variables. These statistical analyses were conducted with the presumption that the response variables and the predictor have a linear relationship and that the constructs are normally distributed for estimation accuracy.

4.5.1 Pearson Correlation

The direction and strength of the relationship between the predictors and response variable were ascertained in this study using Pearson correlation analysis. In this analysis, the correlation value (r) indicates the correlation's scale, while the statistical significance value (Sig.) indicates the association's significance. The results of the correlation analysis is presented in Table 4.7

Table 4.7 Pearson Correlation Matrix

		Performance	R. Avoidance	R. Acceptance	R. Reduction	R. Transfer
Performance	r	1.0000				
	Sig.					
R. Avoidance	r	0.9404*	1.0000			
	Sig.	0.0000				
R. Acceptance	r	0.9382*	0.9654*	1.0000		
	Sig.	0.0000	0.0000			
R. Reduction	r	0.8815*	0.9318*	0.9705	1.0000	
	Sig.	0.0000	0.0000	0.0000		
R. Transfer	r	0.8688*	0.8946*	0.9159*	0.9233*	1.0000
	Sig.	0.0000	0.0000	0.0000	0.0000	
Obs.		110	110	110	110	110

* 2-tailed correlation with significance at 0.05

Source: Researcher (2023)

The results depict a significant, positive, and strong linear relationship between risk avoidance and performance (r=0.94; Sig.=0.000); between risk acceptance and performance (r=0.94; Sig. 0.000); between risk reduction and performance (r=0.88; 0.000), and between risk transfer and performance (r=0.86; Sig.=0.000).

The findings were in concurrence with Okumu (2014), Mukulu and Atikiye (2022), Jaber (2020), and Lambaino (2019) whose studies observed a positive correlation between risk transfer, risk acceptance, risk avoidance, risk reduction and performance respectively. However, the findings were divergent with Onyele and Ariwa (2021) whose study demonstrated a significant and negative link between risk acceptance and performance.

4.5.2 Regression Analysis

For the purpose of determining the significance of each criterion and the determinant concept on the dependant variable, regression analysis was carried out with all other components being ceteris paribus and, consequently test hypotheses. This analysis produced three results; summary of the model, Analysis of Variance (ANOVA), and regression coefficients. The findings of the regression coefficients were interpreted according to their statistical significance in order to test the stated hypotheses. The outcomes are displayed in Table 4.8, 4.9 and 4.10 as shown below.

Table 4.8 Model Summary

Model	R	R Square	Adj. R Square	Std. Error of Estimate	Sig.
1	.9554[a]	0.9128	0.9095	0.0989	0.0000

a. Predictors: (Constant), Risk avoidance, Risk acceptance, Risk reduction, Risk transfer

Source: Researcher (2023)

As depicted from Table 4.8, a 0.955 correlation value (R) was observed, illustrating a strong linear relationship between the variables; risk avoidance, acceptance, reduction, transfer and performance. In addition, Adjusted R^2 value of 0.913 was established, suggesting that risk avoidance, acceptance, reduction and transfer jointly explain for 91.3% of the variations in performance and the remaining 8.7% account for additional elements omitted by the regression model. Table 4.9 below depict the ANOVA test of regression analysis.

Table 4.9 ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.0408	4	6.5102	274.95	.0000[b]
	Residual	2.4861	105	0.0237		
	Total	28.5269	109	0.2617		

a. Dependent Variable: Performance

b. Predictors: (Constant), Risk avoidance, Risk acceptance, Risk reduction, Risk transfer

Source: Researcher (2023)

According to the ANOVA test findings displayed in Table 4.9, the modelling of the association between the risk management strategies and performance was statistically significant (F=274.95; Sig.<0.05). Similarly, the results show that the regression squares sum was 26.041, based on the total squares sum (28.527) and this was calculated at 95% confidence level. This suggests the regression model explains almost 91.29% of the data variability while the remaining sum of 2.486 indicates 8.71% unexplained dataset variability.

Table 4.10 Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.6969	0.0989		17.15	0.000
	Risk Avoidance	0.3669	0.092	0.4639	3.99	0.000
	Risk Acceptance	0.6317	0.1171	0.6877	5.39	0.000
	Risk Reduction	-0.3741	0.0884	-0.4537	-4.23	0.000
	Risk Transfer	0.1108	0.0586	0.1167	1.89	0.061

a. Predictors: (Constant), Risk Avoidance, Risk Acceptance, Risk Reduction and Risk Transfer

b. Dependent Variable: Performance

Source: Researcher (2023)

Table 4.10 depicts risk avoidance (B=0.367, Sig.=0.000<0.05), risk acceptance (B=0.632, Sig.=0.000<0.05), and risk reduction (B=-0.374, Sig.=0.000<0.05) to significantly affecting performance at 95% confidence level. However, risk transfer (B=0.1108, Sig.=0.061>0.05) does not affect performance as it below the 95% confidence level.

4.6 Qualitative Analysis

This part provides study findings from the qualitative information gathered from the data collecting tool's open-ended questions. The data was qualitatively analysed by the utilization of both narrative and direct quote from the participants.

4.6.1 Risk Avoidance

The research required the participants to indicate other risk avoidance strategies their respective organization employ to improve performance. Majority of the participants responded in the affirmative, showcasing that risk avoidance strategies adopted in their SACCOs have a potential of improving performance management.

A participant stated that:

> *"…… adopting diversification, monitoring and reporting, technology and compliance and governance strategies, our SACCO has incredibly reduced operational costs that has led to the increased improvement in the performance of our SACCO……."*.
>
> Respondent Number 11

It is, therefore, deducible using the results, that most non-withdrawable deposit taking SACCOs in the study area use various risk avoidance strategies aimed at improving the performance of their respective entities. The most common among these strategies include diversification, credit policies and procedures, compliance and governance and technology adoption strategies. It is also depicted that a statistical connection in the extant literature between risk avoidance and performance of SACCOs in Nairobi City County, Kenya. By adopting new risk avoidance strategies in SACCOs through these new strategies, the performance of SACCOs is improved through the adoption of diversified strategies.

4.6.2 Risk Acceptance

Participants were required to apply their knowledge in SACCO sector to showcase the risk acceptance strategies adopted to influence the performance of their respective SACCOs, to which majority of the participants affirmed that by accepting risks as one way of managing credit risks in improving performance of an organization.

A respondent noted that:

> *"…… as part of our risk management strategies, we adopt various risk acceptance strategies like contingency planning, regular training and education, diversification and monitoring and reporting of potential risks. These strategies put together ensure that the SACCO is well covered in terms of losses that may occur, thereby improving the general performance of the organization……."*.
>
> Respondent Number 39

It is, therefore, deducible from the findings that most of the non-withdrawable deposit taking SACCOs in the study area adopt risk acceptance strategies through various strategies like diversification, contingency planning, regular training and education, and credit policies and procedures. Accordingly, it has been established that a statistical relationship exists in the previous studies between risk acceptance and performance of non-withdrawable deposit taking SACCOs in Nairobi City County. By adopting risk acceptance strategies, SACCOs improve their performance through contingency planning, monitoring, and reporting and diversification strategies, which when put together reduces the costs for compliance and governance that result in improvement of SACCO performance.

4.6.3 Risk Reduction

This study inquired on whether using respondents' experience, which other risk reduction strategies do their SACCOs employ to improve their performance, most of the respondents affirmed that by adopting risk reduction strategies like having robust internal controls,

adequate reserves, risk assessment and mitigation measures and member education lead to the improvement of non-withdrawable deposit taking SACCOs in Nairobi City.

> *"…… when risk reduction strategies like loan portfolio management, risks assessment and mitigation measures, liquidity management, member education and robust internal controls are well implemented, it becomes easy for the SACCO to record improved performance ……."*
>
> Respondent Number 100

It is observable from the results, that majority of the non-withdrawable deposit taking SACCOs in Nairobi City employ diverse risk reduction strategies with the aim of reducing the operational cost risks associated with performance improvement. From the inferential statistics, risk reduction strategies showed a negatively but significant effect on performance of SACCOs operating in Nairobi City. Prominent observation among these strategies includes robust internal controls, continuous monitoring and evaluation, loan portfolio management and risk assessment and mitigation measures.

4.6.4 Risk Transfer

The respondents were requested to highlight other risk transfer strategies adopted by their respective SACCOs to improve performance based on their experience in SACCOs, majority of the responders gave affirmative answers. A majority elaborated that risk transfer strategies result in improved performance through the adoption of insurance, re-insurance, hedging, outsourcing and securitization. Notably, the most common risk transfer strategy adopted by SACCOs includes insurance policies, reinsurance, and outsourcing, which aim in mitigation of potential losses.

It is deducible from the results that majority of the non-withdrawable deposit taking SACCOs operating in Nairobi adopt a variety of risk transfer strategies to enable them mitigate losses and thereby improving the performance of the SACCOs. Popular among the risk transfer strategies include insurance, reinsurance, securitization, and outsourcing strategies. This is perceived to contribute to the performance of the SACCOs by mitigating and reducing potential losses that may occur during the organizational day to day operations.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

A summary of the main outcome according to the study objectives are outlined in this chapter. It also highlights the study conclusions based on the study results and findings. In addition, this chapter details a set of study recommendations for policy implementation and additional research on risk management strategies arising from the limitation and findings of the study.

5.2 Summary of Key Findings

This research yielded 92% response rate, which was high, sufficient, and acceptable for the study. The study found that non-withdrawable deposit taking SACCOs in Nairobi City are more inclined to recruit relatively young employees at senior level management positions to manage the SACCOs. It was also revealed that majority of respondents had a great deal of experience in the SACCO business area, thus the study's conclusions were reliable. Further findings disclosed that majority of the SACCOs had been in operation for more than 5 years hence the participants had the essential information pertaining to the study topic.

The study also found that SACCOs perform periodical trainings to staff and board to enhance their performance. The results of the analysis suggested that non-withdrawable deposit taking SACCOs have invested in training initiatives to enhance performance of the firmshe study found out that non-withdrawable deposit SACCOs have a risk register documenting all material risks, although with some inconsistencies and variations on how various organizations address risk identification and documentation. The study also noted that majority of the non-withdrawable deposit taking SACCOs review their risk register on

a regular basis to eliminate immaterial risks and focus only on the material risks. However, there was varied findings on the updating policies and procedures for their operations on regular basis, calling for a comprehensive review of all SACCO rules and regulations to guarantee their regular updating and application throughout all operational domains.. Generally, the non-withdrawable deposit taking SACCOs have implemented measures to avoid risks with a view of improving their performance.

The study revealed that majority of the SACCOs have a strong commitment to minimize risks and implement comprehensive risk acceptance strategies. The study found most of the non-withdrawable deposit taking SACCOs had not established an internal audit function since it is not a regulatory requirement; however, there were differences among the SACCOs in the degree of internal audit engagement as regards risk management. It is also key to note that the study also demonstrated that SACCOs do not prioritize risk acceptance for performance improvement. The findings point out that identifying and accepting some risks would contribute to improved performance. Similarly, the study found that SACCOs do communicate on risks to be accepted and monitors them periodically. The study presented mixed findings on the effective communication and monitoring systems for accepted risks as some SACCOs have robust mechanisms while others do not have effective communication and monitoring systems.

In terms of risk reduction and SACCO performance, a considerable number of SACCOs prioritize risk reduction and implement such strategies extensively, as observed in the study. The findings also demonstrate that non-withdrawable deposit taking SACCOs transfers risk with an aim of reducing them due to lack of capacity to manage high levels of risks. However, the perception of the effectiveness of this strategy varies among the

SACCOs. Similarly, the study found that SACCOs insure their loans and deposits to reduce the associated risks, albeit with varying levels of adoption of this risk reduction strategy. Further, the study findings reveal that most SACCOs incur additional costs when transferring its risks to third parties, underscoring the importance of risk reduction strategies in improving the firm's performance. On whether the risk transfer exposing the SACCO to third party risks, which may potentially lead to cyber-hacking was a major concern to almost all participants.

In terms of risk transfer strategy and performance, the study revealed that SACCOs employ risk transfers to varying degrees in their operations. The study found that SACCOs have an up-to-date systems and internal controls to reduce risks of errors, fraud, and other related inaccuracies in evaluating risks. The study findings revealed that operational procedures and policies reduce risks and improve SACCO's performance. The results suggest that SACCOs have a risk response plan to manage extreme events that can adversely impact their operations. The study further found that SACCOs' risk management strategies incorporate all other departments in identifying and assessing risks. According to the findings, most SACCOs adopt insurance cover and reinsurance as risk management strategies to mitigate potential losses in the event of adverse eventuality.

5.3 Conclusion

Numerous conclusions that were important to the study’s objectives and findings were reached. The conclusions outlined in these sections were in line with risk transfer, risk avoidance, risk reduction, risk acceptance and performance of non-withdrawable deposit-taking SACCOs in Nairobi City. Regression analysis findings in Table 4.8, observed a

0.955 correlation value (R), illustrating a strong linear relationship between the variables; risk avoidance, acceptance, reduction, transfer and performance

This study concluded that non-withdrawable deposit taking SACCOs have implemented measures to avoid risks to improve their performance. This includes having a risk register that documents material risks and regularly reviewing it to eliminate immaterial risks. However, a thorough examination of rules and processes is required to guarantee uniformity in all operational domains. SACCOs also invest in training programs to improve staff and board performance. The study further concluded that risk avoidance strategies were significant in predicting the level of performance among non-withdrawable deposit taking SACCOs.

The study concluded that non-withdrawable deposit taking SACCOs have shown a strong commitment to minimizing risks and implementing comprehensive risks acceptance management policies. The SACCOs have internal audit function that evaluates the acceptance risk levels. However, the level of internal audit involvement and the effectiveness of strategies vary among SACCOs. It is worth noting that some SACCOs do not prioritize risk acceptance for performance improvement, but the findings put more emphasis on identifying and accepting certain risks that could improve performance. Effective communication and monitoring systems for the accepted risks should be regularly done to enhance risk management. The study concluded that risk acceptance strategies were insignificant in predicting the level of performance among non-withdrawable deposit taking SACCOs.

Considerable number of non-withdrawable deposit taking SACCOs prioritize risk reduction and extensively implement risk reduction strategies. They transfer risks to reduce them due to the lack of capacity to manage high risks. SACCO also insure their loans and deposits to reduce the related risks, though the level of adoption of this strategy varies across the SACCOs. Risk reduction strategies are significant in improving the performance of SACCOs, despite incurring additional costs when transferring risks to third parties. The study concluded that risk reduction strategies were insignificant in predicting the level of performance among non-withdrawable deposit taking SACCOs.

The study concluded that non-withdrawable deposit taking SACCOs adopt risk transfer strategies to varying levels. The SACCOs have up-to-date systems and internal controls to reduce risks, operational procedures, and policies to improve performance. Further, the study concludes that SACCOs have a risk response plan to mitigate the extreme events, and their risk management strategies by involving all departments in risk identification and assessment. The most adopted risk transfer strategies among the SACCOs are the insurance policy and reinsurance to mitigate the potential losses. The study further concluded that risk transfer strategies were significant in predicting the level of performance among non-withdrawable deposit taking SACCOs.

5.4 Recommendations for Policy and Practise

With consideration to the findings regarding strategies of risk management and performance of non-withdrawable deposit taking SACCOs, several recommendations can be made to improve risk management.

In order to avoid risks, this study recommends SACCOs to improve consistency in risk identification and documentation by establishing standardized procedures and guidelines. This guarantees that hazards are constantly recognized and recorded across the company. Regularly reviewing and updating the risk register is crucial to eliminate immaterial risks and focus on the most significant ones. Additionally, the study recommends that management conduct a comprehensive review of policies and procedures that will help avoid gaps or outdated practices that may leave the organization vulnerable to risks. Finally, the study recommends that SACCOs' management make significant investments in board and employee training, since it will broaden their understanding of risk management and provide them the ability to recognize and successfully manage risks effectively, thus building a culture of risk-awareness.

To accept risks, the study recommends that SACCOs strengthen its commitment to minimizing risks by implementing comprehensive risk acceptance management policies. This will set a clear direction for accepting and managing risks. The study recommends that management enhance the involvement of internal audits in risk management and evaluations of acceptance risk levels, prioritizing risks to accept and improving the effectiveness of risk management strategies that contribute to better risk acceptance practices. Establishing effective communication and monitoring systems for accepted risks will further aid in continuously tracking, evaluating, and addressing accepted risks. Regular reporting and sharing of information on accepted risks will enhance transparency and support better decision-making.

To reduce risks, the study recommends management of SACCOs to prioritize the development of comprehensive risk reduction plans. These plans should include strategies

to mitigate identified risks, create internal policies and processes, and periodically review and evaluate risk-reduction plans. Exploring insurance options is also recommended, as suitable insurance coverage for loans and deposits can significantly reduce the financial impact of adverse events. Assessing reinsurance options and considering the potential benefits and costs of different insurance coverage is important in making informed decisions about risk reduction strategies.

To transfer risks, SACCO management should focus on strengthening internal controls and systems to reduce the risks of errors, fraud, and other inaccuracies. This can be achieved by maintaining up-to-date systems, ensuring adequate checks and balances, and regularly evaluating the effectiveness of internal controls. Developing risk response plans to manage extreme events is also necessary. This entails determining possible hazards, creating backup measures, and establishing clear procedures for addressing and minimizing the impact of such risks. Additionally, incorporating all departments in risk management will help in identifying and assessing risks comprehensively, as each department may have unique insights and perspectives on potential risks.

5.5 Suggestions for Future Studies

The research suggests that scholars look into and build upon its findings to comprehend the relationship more fully between strategies of risk management and performance of non-withdrawable deposit taking SACCOs in other counties and other financial institutions. Future research can focus on identifying best practices in risk management for SACCOs and assessing the performance of different risk management techniques in various situations. Scholars can also examine how risk management tactics affects other facets of the SACCO, such as member satisfaction and financial stability, amongst others. From the

literature reviewed, few studies have been conducted in the area of risk management of Cooperative Societies. Hence, more research will be able to unearth the risks associated to improve performance of Cooperatives.

REFERENCES

Aduma, L. K. & Kimutai, G. (2018). Project risk management strategies and project performance at the National Hospital Insurance Fund in Kenya. International Academic *Journal of Information Sciences and Project Management*, 3(2), 80-110

African Confederation of Co-Operative Savings and Credit Associations, ACCOSCA (2018). About Us. https://accosca.org/about-us/

Alfred F., (2013). *Risk Management*., Massachusetts: Software SIG. MITRE Corporation Publications

Castelo, B.M. (2013). Shareholder Theory. In: Idowu, S.O., Capaldi, N., Zu, L., Gupta, A.D. (eds) Encyclopaedia of Corporate Social Responsibility. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-28036-8_31

Chapple, Mike & Seidl, David. (2020). Risk Management. 511-534. 10.1002/9781119684060.ch15.

Cooper, R.D., & Schindler, S.P. (2003). *Business Research Methods*. South Western Cengage Learning

Dolde W (1993) Use of foreign exchange and interest rate risk management in large firms. Univ Conn Sch Bus Adm Working Pap:93–042

Dudovskiy, J. (2018). The Ultimate Guide to Writing a Dissertation in Business Studies: A Step-by-Step Assistance.

Mwangi, E., & Wambua, L. (2016). Factors Influencing Performance Of SACCOs In Kenya: A Case Of Unaitas SACCO.

Fadun, O. (2013). Risk management and risk Management Failure: Lessons for Business Enterprises. International Journal of Academic Research in Business & Social Sciences, 3(2), 1-21

Gajewska, E. and *Ropel*, M. (*2011*) Risk management practices in a construction project, MSC, Chalmers University of Technology, Sweden

Gegeh, E. (2016) *The effect of credit risk management practices on financial performance of deposit taking SACCOs in Kenya.* MBA, University of Nairobi

Gweyi, M. (2018) *Influence of Financial Risk on financial performance of deposit taking SACCOs in Kenya,* Jomo Kenyatta University of Agriculture and Technology

Hentschel, L., & Kothari, S. P. (2001). Are Corporations Reducing or Taking Risks with Derivatives? *The Journal of Financial and Quantitative Analysis*, *36*(1), 93–118. https://doi.org/10.2307/2676199

Hillson, D. (1999). Developing effective risk responses. Proceedings of the 30th Annual Project Management Institute Seminars & Symposium, Philadelphia, PA.

Hillson, D. (2001). Effective strategies for exploiting opportunities. Paper presented at Project Management Institute Annual Seminars & Symposium, Nashville, TN. Newtown Square, PA: Project Management Institute.

Hopkin, P. (2018) *Fundamentals of Risk Management* Understanding, Evaluating and Implementing Effective Risk Management. Kogan Page Publishers, London

ISO 31000 standard, *Risk Management -- Guidelines*,

Jaldesa, F. (2013) *Effects of Credit Risk Management practices on non-Performing loans in commercial banks in Kenya*, MBA, University of Nairobi.

Jena, Abhinash (2012, Jan 30). *How important is data analysis in a research paper*. Knowledge Tank; Project Guru. https://www.projectguru.in/important-data-analysis-research/

Jensen, M.C. and Meckling, W.H. (1976) Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3, 305-360.

Kahneman, Daniel & Tversky, Amos. (1979). Prospect Theory: An Analysis of Decision Under Risk. Econometric. 47. 263-91. 10.2307/1914185.

Karanja, M (2017) The effect of risk management strategies on the sustainable competitive Advantage of Commercial banks in Kenya, MBA, University of Nairobi

Kenya Law Reports. (2008). *SACCO Societies Act of 2008 (Acts No. 14 ed.* Vol. 98). Nairobi: National Council for Law Reporting

Kibui, N. & Moronge, M. (2014). Effects of credit risk management on financial performance of SACCOS: A case study of Harambee SACCO. International Academic *Journal of Information Sciences and Project Management,* 1 (3), 157-172

Kinyua, M. & Warui, F. (2020) Financial risk management and profitability of deposit taking savings and credit cooperative societies in Nyeri county, Kenya *International Journal of Current Aspects in Finance, Banking and Accounting, Volume 2, Issue 2, 2020 PP 1-20, ISSN 2707-8035*

Kioko, A. M. (2016): *Effect of Capital Adequacy Regulations on Savings and Credit Cooperative Societies in Kenya: A study of Deposit Taking SACCOs in Nairobi County, USIU-A*

Kirshenblatt-Gimblett, B. (2006). Part 1. What Is Research Design? The Context of Design. Performance Studies Methods Course Syllabus. In W. M. K. Trochim (Ed.), Research Methods Knowledge Base. New York: New York University.

Lawrence J. Fennelly CPOI, CSSI, CHL-III, CSSP-1, Marianna A. Perry M.S., CPP, CSSP-1, in Physical Security: 150 Things You Should Know (Second Edition)*, 2017*

Margaret, Gakenia, Kinyua., Fredrick, Warui. (2020). Financial Risk Management and Profitability of Deposit Taking Savings and Credit Cooperative Societies in Nyeri County, Kenya. 2(2):1-20. doi: 10.35942/IJCFA.V2I2.126

Markowitz, H. (1952). Portfolio Selection. *The Journal of Finance*, *7*(1), 77–91. https://doi.org/10.2307/2975974

Melnic, Andreia-Simona. (2010). Risk Response Strategies in Project Management. Metalurgia international. 15. 74-78.

Michel Crouchy, Dan Galai, Robert Mark McGraw Hill Professional, 2005

Mohajan, H. K. (2020). Quantitative research: A successful investigation in natural and social sciences. Journal of Economic Development, Environment and People, 9(4), 50-79.

Muchiri, F. (2017), *Influence of Risk Management Strategies on implementation of Women Development Programs: A case of African Women Entrepreneurship program in Nairobi County, Kenya.* Masters of Arts in Project Planning and Management, University of Nairobi.

Mugenda, and Mugenda, A. (2003) *Research Methods: Quantitative and qualitative approaches.* Nairobi: ACTS Press

Muhammed, I. (2015) *Risk Management in Banks: Determination of Practices and Relationship with Performance, University of Bedfordshire*

Mutua, D (2014) *Effect of Credit risk Management on performance of commercial banks in Kenya* MBA, University of Nairobi

Mwandau, S. (2014), *Risk Management in Savings and Credit Cooperative Societies,* MBA, United States International University, Africa

Mwangi, A. (2015) Credit risk, Liquidity risk and financial performance of deposit taking savings credit and credit societies in Kenya, MBA, Kenyatta University

Ndlela, M.N. (2019). A Stakeholder Approach to Risk Management. In: Crisis Communication. Palgrave Pivot, Cham. https://doi.org/10.1007/978-3-319-97256-5_4

O'Connell M., Ward A.M. (2020) Shareholder Theory/Shareholder Value. In: Idowu S., Schmidpeter

O'Connell, Maeve & Ward, Anne-Marie. (2020). Shareholder Theory/Shareholder Value. 10.1007/978-3-030-02006-4_49-1.

Ondu P. (2016) *Risk Management Strategies and Performance of SACCOs in Nakuru County, MBA, Kenyatta University*

Opala, J.A. (2014), *Effect of financial stability on the performance of deposit taking SACCOs in Nairobi County,* School of Business, University of Nairobi, Nairobi

Otanga, G. 2021 Moderating Effect of Investment Decisions on Corporate Risk Management and Financial Performance of Deposit Taking Savings and Credit Cooperative Societies In Western Kenya, School of Business and Economics, Maseno University

Otieno Joel Okumu and Luke Oyugi, 2016. Factors influencing financial performance of Savings and Credit cooperative societies in Kisumu County, Kenya, *International* Journal *of Current Research.* Vol. 8, Issue, 05, pp.31293-31310

Peasgood T. (2014) Expected Utility Theory. In: Michalos A.C. (eds) Encyclopedia of Quality of Life and Well-Being Research. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-0753-5_962

SASRA (2021). SACCO Supervision Annual Report, 2021: Deposit Taking SACCOs, Nairobi: SASRA

SASRA. (2022). Guidelines on Good governance of DTS: SASRA

SASRA. (2022). Licensed SACCOs in 2021: List of licensed and authorised SACCO Societies in Kenya for the Financial year ending 31st December 2022: SASRA

SASRA. (2022). SASRA Circular No. 1 of 2010 of SACCO societies (Deposit Taking SACCOs Business Regulations, 2010: SASRA

SASRA. (2022). SASRA Risk Management Guidelines: SASRA

Siedlecki, S. L. (2020). Understanding descriptive research designs and methods. Clinical Nurse Specialist, 34(1), 8-12.

Susan Snedaker, Chris Rima, in Business Continuity and Disaster Recovery Planning for IT Professionals (Second Edition)*, 2014*

The Essentials of Risk Management, Chapter 1 - Risk Management--A Helicopter Views

Mumassaba, J., Mukulu, E., Atikiye, R. (2022) Risk retention strategy and competitiveness of small and medium enterprises in Kenya. *International Academic Journal*
of Human Resource and Business Administration, 4(1), 466-481

Thuku & Muchemi (2021) Risk Transfer Strategy and The Performance of Insurance Companies in Nyeri County, Kenya. *International Journal of Innovative Research and Advanced Studies (IJIRAS)*

Wabomba, K. (2015) *Influence of Risk Management Strategies on Project Performance: A Survey of Selected International Development Organizations Based in Nairobi City, Kenya,* Master of Arts, University of Nairobi

Yembi Renault, Berenger & Agumba, Justus & Ansary, Nazeem. (2016). A Theoretical Review of Risk Identification: Perspective of Construction Industry.

J. Annapurna, A Study on Usage of Risk Management Strategies in Financial Institutions, International Journal of Commerce and Business Studies (IJCBS), 5(2), 2023, pp. 7–14. https://iaeme.com/Home/issue/IJCBS?Volume=5&Issue=2

Maghanga, M.E. (2019). Effect of project risk management practices on project performance in cement manufacturing firms in Kenya. Kenyatta University

Kaluai, F.K. (2020). Project management practices and performance of projects under the women and girls economic empowerment program in Kiambu and Nairobi city counties, Kenya. Kenyatta University

Maina, L.G. (2023). Risk management practices and performance of infrastructural projects in nakuru county, Kenya. Jomo Kenyatta University of Agriculture and Technology, Kenya

Mbuguah, C.M. (2023). Risk management practices and performance of deposit taking SACCOS in Nakuru county, Kenya. Kenyatta University, Kenya

Biira, N. & Tukei, O. (2020). Risk Avoidance Strategies and performance of Total Uganda Limited. International Journal of Technology and Management, 6(1)1-7

Lambaino, N.K. (2019). Influence of Risk Mitigation Strategies on Supply Chain Resilience in the Petroleum industry in Kenya. Jomo Kenyatta University of Technology, Kenya.

APPENDICES

Appendix I: Researcher's Letter of Introduction

Lilian Akinyi Oluoch

Kenyatta University

Nairobi

Dear Sir/Madam

Re: Request to Collect Research Data

I am a master's student in Business Administration at Kenyatta University specializing in Strategic Management. To award this degree, the university requires I undertake a research study on "Risk management strategies and performance of non-withdrawable deposit taking SACCOs in Nairobi County".

Your esteemed organization has been chosen to be part of this scholarly research. I kindly seek your assistance in filling out the accompanying questionnaire. Information and data gathered will be kept in absolute secrecy and purposely be used for academic research only. Your help will be highly appreciated.

Yours sincerely,

MBA Student

Kenyatta University

Appendix II: Research Questionnaire

QUESTIONNAIRE

Instructions

i. Answer all the questions in Section A and B
ii. Each response will be treated as an opinion for the study.
iii. Please tick ✓ on the appropriate answer

Section A: Demographic Information

1. For how long your SACCO has been in operation

   Less than 5 years [ ] 5-10 years [ ] 10-20 years [ ] Over 20 years [ ]

2. How long have you been in the current position in your SACCO?

   Less than 5 [ ] 5-10 years [ ] 10-20 years [ ] Over 20 years [ ]

SECTION B: Risk Management Strategies and performance of Non-withdrawable Deposit taking SACCOs.

Indicate your level of agreement (✓) relating to your SACCO performance. Use a Likert scale of 1-5, where 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5- Strongly Agree

1. **Risk avoidance and Performance of non-withdrawable Deposit Taking SACCOs**

	1	**2**	**3**	**4**	**5**
The SACCO has a risk register with all material risks to focus on.					
Proper appraisal of loans ensures risk of default is avoided					
Proper due diligence is done on new members and transactions to avoid regulatory risks					
The SACCO has policies and procedures for its operations to avoid risks					

The SACCO performs periodic trainings to staff and board on risk awareness					
The SACCO conducts periodic member trainings to help members avoid financial risks					

With your experience, which other risk avoidance strategies does your SACCO employ to improve its performance?

……

……

……

……

……

……

2. Risk Acceptance and Performance of non-withdrawable Deposit Taking SACCOs

	1	**2**	**3**	**4**	**5**
The SACCO has an audit department which handles risk management.					
The SACCO requires collateral securities for risky loans					
The SACCO accepts risks whose likelihood of occurrence and consequences is low					
The SACCO monitors risks that are accepted periodically					
The SACCO prioritizes which risk to accept to improve performance of the SACCO					
Risk acceptance is used when other strategies are uneconomical					

With your experience, which other risk acceptance strategies does your SACCO employ to improve its performance?

……

……

……

……

3. **Risk Reduction and Performance of non-withdrawable Deposit Taking SACCOs**

	1	2	3	4	5
The SACCO reviews its risk register annually to manage risks that may impact its operations.					
Risk management incorporates all other departments in identifying and assessing risks.					
The SACCO has an up-to-date system and internal controls to reduce risks of errors, fraud etc					
Credit securities used by the SACCO reduces default risk					
The operational procedures and policies reduce risks and improves SACCO performance					
Risk reduction influence loan defaults					

With your experience, which other risk reduction strategies does your SACCO employ to improve its performance?

……

……

……

4. **Risk Transfer and Performance of non-withdrawable Deposit Taking SACCOs**

	1	2	3	4	5
The SACCO transfers some risks to third parties because they cannot manage them.					
The SACCO insures its loans and deposits to reduces associated risks like death or liquidation					
The SACCO incurs additional costs when it transfers its risks to third parties					
Risk transfer exposes the SACCO to third party risks which may lead to cyber-hacking					
Risk transfer enables the organization to be more productive					
Risk transfer is expensive due to high premiums involved					

With your experience, which other risk transfer strategies does your SACCO employ to improve its performance?

……

……

5. Performance of non-withdrawable deposit taking SACCOs

	1	**2**	**3**	**4**	**5**
The number of new members joining the SACCO has increased in the last 5 years					
The SACCO's annual turnover has increased in the last 5 years					
The number of members accessing loan products has increased					
Time spent to process loans for members has reduced					
The SACCO's dividend and interest on deposits payout has increased in the last 5 years					

In your experience, have risk management strategies in your SACCO influenced your organizational performance? Please elaborate.

……

……

……

……

……

……

Appendix III: List of Non-Withdrawable Deposit Taking SACCOs in Nairobi

No.	NAME OF REGULATED NWDT-SACCO SOCIETY	TOTAL ASSETS (Kshs. Billion)
1	ACCEL REGULATED NWDT-SACCO	0.19
2	ADVENTIST REGULATED NWDT-SACCO	0.48
3	AIBK REGULATED NWDT-SACCO	0.15
4	AIRLINK REGULATED NWDT-SACCO	0.15
5	AMREF REGULATED NWDT-SACCO	2.49
6	APOLLOSURE REGULATED NWDT-SACCO	0.16
7	BALLOT REGULATED NWDT-SACCO	0.39
8	BALOZI REGULATED NWDT-SACCO	4.41
9	BANDS REGULATED NWDT-SACCO	0.46
10	BANKI KUU REGULATED NWDT-SACCO	2.45
11	BARABARA REGULATED NWDT-SACCO	0.24
12	BARAKA YETU REGULATED NWDT-SACCO	0.24
13	BAT REGULATED NWDT-SACCO	1.31
14	BIBLIA REGULATED NWDT-SACCO	1.26
15	BLUE EAGLE REGULATED NWDT-SACCO	0.35
16	BRAEMEG REGULATED NWDT-SACCO	0.49
17	B-SMART REGULATED NWDT-SACCO	0.23
18	BUNGE REGULATED NWDT-SACCO	1.92
19	CDF REGULATED NWDT-SACCO	0.21
20	CIC REGULATED NWDT-SACCO	0.2
21	COCOTECH REGULATED NWDT-SACCO	0.14
22	COMMUNICATION REGULATED NWDT-SACCO	0.55
23	CONCORDE REGULATED NWDT-SACCO	0.54
24	CO-OPERATIVE BANK REGULATED NWDT-SACCO	4.05
25	DAVIS AND SHIRTLIFF REGULATED NWDT-SACCO	0.26
26	DEVCO REGULATED NWDT-SACCO	0.23
27	DHAMINI REGULATED NWDT-SACCO	0.51
28	DHL REGULATED NWDT-SACCO	0.24
29	DIGITAL MEDIA REGULATED NWDT-SACCO	0.08
30	DUDU REGULATED NWDT-SACCO	0.22
31	EMBASSAVA REGULATED NWDT-SACCO	0.26
32	ENERGY REGULATED NWDT-SACCO	0.22
33	EQUITY REGULATED NWDT-SACCO	1.86
34	EXAM REGULATED NWDT-SACCO	0.36

35	FAMILY REGULATED NWDT-SACCO	0.59
36	FAULU BANK REGULATED NWDT-SACCO	0.22
37	FINNLEMM REGULATED NWDT-SACCO	1.94
38	FORWARD REGULATED NWDT-SACCO	1.18
39	FUGO REGULATED NWDT-SACCO	0.33
40	HACO REGULATED NWDT-SACCO	0.16
41	HEART REGULATED NWDT-SACCO	0.14
42	HELB REGULATED NWDT-SACCO	0.23
43	HOECHEM REGULATED NWDT-SACCO	0.16
44	ICEA AGENTS REGULATED NWDT-SACCO	0.16
45	IRRIGATION REGULATED NWDT-SACCO	0.23
46	JACHIN REGULATED NWDT-SACCO	0.16
47	JAVA REGULATED NWDT-SACCO	0.16
48	JOGOO REGULATED NWDT-SACCO	1.14
49	JUMUIA YA ULAYA REGULATED NWDT-SACCO	0.16
50	KAG REGULATED NWDT-SACCO	1.04
51	KANISA REGULATED NWDT-SACCO	0.49
52	KASNEB REGULATED NWDT-SACCO	0.21
53	KEMRI REGULATED NWDT-SACCO	0.53
54	KENCHIC REGULATED NWDT-SACCO	0.24
55	KENRED REGULATED NWDT-SACCO	0.14
56	KENTOURS REGULATED NWDT-SACCO	1.09
57	KENYA MEDICAL ASSOCIATION REGULATED NWDT-SACCO	5.15
58	KENYA RE REGULATED NWDT-SACCO	0.3
59	KENYA RURAL ROADS REGULATED NWDT-SACCO	0.32
60	KENYA USA DIASPORA REGULATED NWDT-SACCO	0.4
61	KENYATTA MATIBABU REGULATED NWDT-SACCO	1.51
62	KEWISCO REGULATED NWDT-SACCO	1.54
63	KICO REGULATED NWDT-SACCO	0.14
64	KILELE REGULATED NWDT-SACCO	0.37
65	KINGA REGULATED NWDT-SACCO	0.16
66	KINGSIZE REGULATED NWDT-SACCO	0.56
67	KIRUNGI REGULATED NWDT-SACCO	0.86
68	KUMBU KUMBU REGULATED NWDT-SACCO	0.33
69	LAW SOCIETY OF KENYA REGULATED NWDT-SACCO	2.91
70	LOMPASAGO REGULATED NWDT-SACCO	0.63
71	MADISON REGULATED NWDT-SACCO	0.16
72	MAKTABA REGULATED NWDT-SACCO	0.25
73	MASTERWAYS REGULATED NWDT-SACCO	0.46

74	MHASIBU REGULATED NWDT-SACCO	7.49
75	MINET REGULATED NWDT-SACCO	0.17
76	MKOMBOZI REGULATED NWDT-SACCO	0.15
77	MOFAA REGULATED NWDT-SACCO	0.25
78	MULTIPLE REGULATED NWDT-SACCO	0.18
79	MZIMA SPRINGS REGULATED NWDT-SACCO	0.33
80	NAIROBI CONSUMERS REGULATED NWDT-SACCO	0.36
81	NAIROBI WATER REGULATED NWDT-SACCO	1.11
82	NASCA REGULATED NWDT-SACCO	0.22
83	NETWORK REGULATED NWDT-SACCO	0.21
84	NIMEPATA REGULATED NWDT-SACCO	0.24
85	NJIWA REGULATED NWDT-SACCO	6.47
86	NYUMBA NAIROBI REGULATED NWDT-SACCO	0.26
87	PARENT PLAN REGULATED NWDT-SACCO	0.15
88	PARLIAMENTARIANS REGULATED NWDT-SACCO	2.62
89	PCEA KAYOLE REGULATED NWDT-SACCO	0.71
90	PCEA REGULATED NWDT-SACCO	0.89
91	PEFA NAIROBI REGULATED NWDT-SACCO	0.36
92	PESA REGULATED NWDT-SACCO	0.2
93	PICEA STAFF REGULATED NWDT-SACCO	0.45
94	POLYTECH REGULATED NWDT-SACCO	0.13
95	POST BANK REGULATED NWDT-SACCO	0.67
96	QUEENSWAY REGULATED NWDT-SACCO	0.26
97	RADIO GUARD REGULATED NWDT-SACCO	0.39
98	RAMBHAI REGULATED NWDT-SACCO	0.13
99	RAMCO REGULATED NWDT-SACCO	0.27
100	RELI REGULATED NWDT-SACCO	0.75
101	RELIEF REGULATED NWDT-SACCO	0.47
102	REMBO REGULATED NWDT-SACCO	0.19
103	ROYAL MEDIA REGULATED NWDT-SACCO	0.26
104	RUBANI REGULATED NWDT-SACCO	0.33
105	SAUTI REGULATED NWDT-SACCO	0.36
106	SAWA REGULATED NWDT-SACCO	0.36
107	SHELLOYEES REGULATED NWDT-SACCO	0.76
108	SMART SAVERS REGULATED NWDT-SACCO	0.61
109	STOKE-UK DIASPORA REGULATED NWDT-SACCO	0.05
110	TAA REGULATED NWDT-SACCO	0.78
111	TEAL REGULATED NWDT-SACCO	0.21
112	TETRAPACK REGULATED NWDT-SACCO	0.15
113	THE STANDARD REGULATED NWDT-SACCO	0.18
114	TOTAL REGULATED NWDT-SACCO	0.6

115	TRANSGLOB REGULATED NWDT-SACCO	0.12
116	UAMINIFU REGULATED NWDT-SACCO	0.85
117	UBORA REGULATED NWDT-SACCO	1
118	UKAGUZI REGULATED NWDT-SACCO	2.44
119	UMOJA WENDANI REGULATED NWDT-SACCO	1.74
120	UNBOUND REGULATED NWDT-SACCO	0.64
121	UNGA REGULATED NWDT-SACCO	0.23
122	UNITED WOMEN REGULATED NWDT-SACCO	4.35
123	UOKOAJI REGULATED NWDT-SACCO	0.38
124	USIU-AFRICA REGULATED NWDT-SACCO	0.25
125	UTABIBU REGULATED NWDT-SACCO	1.31
126	UTAFITI REGULATED NWDT-SACCO	0.79
127	UWEZO REGULATED NWDT-SACCO	0.24
128	VEGPRO REGULATED NWDT-SACCO	0.2
129	VERONA HURUMA REGULATED NWDT-SACCO	2.39
130	VISION REGULATED NWDT-SACCO	1.11
131	WASADO REGULATED NWDT-SACCO	0.14
132	WASKOM REGULATED NWDT-SACCO	0.39
	TOTAL	**103.35**

Source: SACCO Supervision Annual Report (2022), by SASRA

Appendix IV: List of SACCOs Sampled for Pilot Study

	NAME OF REGULATED NWDT-SACCO SOCIETY	TOTAL ASSETS
		(Kshs. Billion)
1	JOGOO REGULATED NWDT-SACCO	1.14
2	FORWARD REGULATED NWDT-SACCO	1.18
3	BAT REGULATED NWDT-SACCO	1.31
4	FINNLEMM REGULATED NWDT-SACCO	1.94
5	BALOZI REGULATED NWDT-SACCO	4.41
6	CIC REGULATED NWDT-SACCO	0.2
7	DHL REGULATED NWDT-SACCO	0.24
8	PEFA NAIROBI REGULATED NWDT-SACCO	0.36
9	DHAMINI REGULATED NWDT-SACCO	0.51
10	FAMILY REGULATED NWDT-SACCO	0.59
11	POST BANK REGULATED NWDT-SACCO	0.67
12	PCEA REGULATED NWDT-SACCO	0.89
13	BIBLIA REGULATED NWDT-SACCO	1.26

Appendix V: Research License

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR
SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **570479**

Date of Issue: **11/October/2023**

RESEARCH LICENSE

This is to Certify that Ms.. Lilian Akinyi Oluoch of Kenyatta University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev:2014) in on the topic: Risk Management Strategies and Performance of Non-Withdrawable Deposit Taking Saccos in Nairobi City County, Kenya for the period ending : 11/October/2024.

License No: **NACOSTI/P/23/30295**

570479

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.

See overleaf for conditions