

**EFFECT OF GUARANTOR'S QUALITIES ON RECOVERY OF NON-
PERFORMING LOANS AMONG SACCOS IN NAKURU COUNTY**

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**A Project Submitted to the Institute of Postgraduate Studies of Kabarak University
in Partial Fulfillment of the Requirements for the Award of Master of Science in
Finance (Finance and Investment Analysis) Degree**

KABARAK UNIVERSITY

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The research project entitled **“Effect of Guarantor’s Qualities on Recovery of Non-Performing Loans among Saccos in Nakuru County”** written by **Charles Kimutai Cheruiyot** is presented to the Institute of Postgraduate Studies of Kabarak University.

We have reviewed the thesis and recommend it be accepted in partial fulfilment of the requirement for the award of the degree of Master of Science in Finance (Finance and Investment Analysis).

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DEDICATION

This research project is dedicated to my parents, who have been a source of inspiration throughout my educational journey. I also extend special appreciation to my wife, Eddah Cheruiyot, and our children, Brian, Beryl, and Adrian, for their unwavering support and encouragement.

ACKNOWLEDGEMENTS

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ABSTRACT

SACCOS play a crucial role in providing financial services to the marginalized poor, although they face several challenges. One significant challenge is the high rate of loan default. In Nakuru County, SACCOS experiences a higher default rate compared to microfinance and commercial banks. Therefore, this study aimed to evaluate how the qualities of guarantors affect the recovery of non-performing loans among SACCOS in Nakuru County. Specifically, the study aimed to analyze the impact of guarantor deposit, the type of guarantor, the duration of guarantor membership, and the number of guarantors on loan recovery. The study was guided by theories of information asymmetry, adverse selection, and moral hazard. The study utilized a descriptive design, focusing on 22 SACCOS within Nakuru County. The unit of analysis was 22 SACCOS in Nakuru County while the unit of observation was 56 credit and recovery officers. Given the manageable size of the target population, the researcher opted for a census approach, including all 56 employees in the study. The study collected data using questionnaires. The study conducted a pilot study in Kericho where 6 questionnaires were issued. Cronbach's alpha coefficient was employed to assess research dependability. Both descriptive and inferential statistics were utilized to analyze quantitative data. Based on the findings, the study concluded that there is a positive and significant correlation between guarantor deposits and the recovery of non-performing loans among SACCOS in Nakuru County ($r=0.603$, $p=0.000$). Additionally, the study found a positive correlation between the type of guarantor and the recovery of non-performing loans among SACCOS in Nakuru County ($r=0.753$, $p=0.000$). Furthermore, the study concluded that there is a positive and statistically significant correlation between duration of guarantor membership and the recovery of non-performing loans among SACCOS in Nakuru County ($r=0.690$, $p=0.012$). Finally the study concluded that there is a statistically significant correlation between the number of guarantors and the recovery of non-performing loans among SACCOS in Nakuru County ($r=0.729$, $p=0.014$). The study recommended that SACCOS should adjust the required deposit amounts to better align with the borrower's loan size. The study also recommended that new policies be formulated to classify guarantors more distinctly. SACCOS could benefit from establishing clear criteria for differentiating between Class A and Class B guarantors. It was recommended that this classification ensure higher-risk loans were matched with guarantors better equipped to guarantee repayment. Additionally, practical interventions were recommended to increase loan recovery. These included promoting long-term guarantor memberships and requiring multiple guarantors for higher-risk loans.

Keywords: *Guarantor's Deposit, Type of Guarantor, Number of Guarantors, Duration of Guarantor Membership, Recovery of Non-Performing Loans.*

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LIST OF ABBREVIATIONS AND ACRONYMS

CBK	Central Bank of Kenya
CDOs	Collateralized Debt Obligations
LMI	Lenders Mortgage Insurance
LVR	Loan to Value Ratio
NACOSTI	National Commission for Science, Technology and Innovation
NPL	Non-Performing Loan
PCGs	Partial Credit Guarantee Schemes
SACCOs	Savings and Credit Cooperative Societies
SADC	Southern African Development Community
SASRA	Sacco Societies Regulatory Authority
SMEs	Small and Medium Enterprises
SPSS	Statistical Package for Social Sciences
USA	United State of America

OPERATIONAL DEFINITION OF KEY TERMS

Duration of Guarantor Membership: Refers to the length of time for which an individual is obligated to serve as a guarantor for a loan, (Okorie, & Iheanacho, 2018). In this study duration of guarantors' membership was measured by less than 1 year, 1-5 years and more than 5 years.

Guarantor: A guarantor is a person who vouches for the borrower's ability to repay the loan and agrees to pay back the loan if the borrower defaults, (Kyengo 2021). In this study, guarantors will be measured by guarantor's deposit, type of guarantor, duration of guarantor membership, and number of guarantors.

Guarantor's Deposit: Refers to a certain amount of money or an asset provided by the guarantor as a security or collateral when guaranteeing a loan on behalf of a borrower, (Ayyagari, 2018). In this study, guarantors deposit was assessed 1000-50,000 (Ksh), 51,000-100,000 (Ksh) and more than 100,000 (Ksh).

Loan Recovery: Refers to the process undertaken by SACCOS to retrieve the outstanding loan amounts from borrowers who have defaulted on their loan payments, (Nyagah, Gathogo & Kibet 2017).

Non-Performing Loans: These are loans that have become delinquent, meaning the borrowers have failed to make the required loan payments for a specified period of 90 days, (Kinyua & Kinyanjui, 2017). In this study, loan was measured by amount of non-performing loan recovered.

Number of Guarantors: Refers to the count of individuals who jointly assume the responsibility of guaranteeing a loan on behalf of a borrower, (Kimando, 2018). In this study the number of guarantor's was assessed by less than 5 guarantors and more than 5 guarantors.

Savings and Credit Cooperative Societies: Member-owned, democratically operated local financial service firms are crucial to Kenyan SMEs' financial existence, (Steel, 2018).

Type of Guarantor: Refers to the category or nature of the individual who agrees to act as a guarantor for a borrower's loan, (Holden 2016). In this study type of guarantor was assessed by type Class A and Class B

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The issue of non-performing loans (NPLs) continues to be a significant challenge for many financial institutions worldwide, including Savings and Credit Cooperative Societies (SACCOs). Non-performing loans, which are loans in default or close to being in default, have the potential to erode the financial stability of these institutions and limit their ability to provide credit to other borrowers, (Aduda & Musyoka, 2020). The increasing rate of NPLs has necessitated the development of strategies aimed at improving loan recovery, and one such strategy is the use of guarantors. Guarantors play a crucial role in mitigating credit risks by ensuring that borrowers fulfill their obligations, (Wambugu & Ndirangu, 2019). However, the effectiveness of guarantors in loan recovery depends largely on certain qualities or characteristics, including the amount of the guarantor's deposit, the type of guarantor, the duration of guarantor membership, and the number of guarantors involved in the loan. These qualities are believed to influence the likelihood of loan repayment and, consequently, the recovery of non-performing loans (Mutua, 2020; Njoroge, 2021).

In the context of SACCOS, guarantors are often required as a form of collateral to secure loans, especially for borrowers who may not have the necessary financial assets to offer as security. The ability of a guarantor to influence the borrower's repayment behavior is critical to ensuring the recovery of NPLs, (Gitonga, & Kamau, 2022). Guarantor's deposit amount can have a significant impact on loan recovery, with larger guarantor deposits leading to a higher probability of timely repayment (Kamau & Wachira, 2021). Additionally, the classification of guarantors, such as whether they are members of the SACCO or external guarantors, also plays a role in determining the recovery of non-

performing loans. Oluoch (2022) revealed that SACCOS tend to prefer guarantors who are long-term members, as these individuals are seen as more reliable and less likely to default.

Guarantors offer lenders the assurance that loans will be repaid, even if borrowers are unable to fulfill their obligations. This is particularly crucial for lenders seeking to minimize risk exposure and prevent potential losses (Batrymenko, 2017). In the event of borrower default, lenders have the option to pursue guarantors for repayment, a critical aspect of loan recovery that allows lenders to mitigate losses (Edelberg, 2018). Guarantors agree to share legal responsibility for repayment, stepping in only after lenders exhaust efforts to collect from the primary borrower. A loan guarantor needs to have a solid credit history, stable income, and sufficient assets (Manove & Padilla, 2019). Additionally, the guarantor agreement should clearly outline when the guarantor will assume the borrower's obligation.

The qualities of a guarantor significantly impact loan recovery processes, primarily by enhancing the lender's confidence in the borrower's ability to repay. A financially stable guarantor is essential, as their income and assets serve as a backup for the loan amount in the event of default. Lenders typically evaluate the guarantor's creditworthiness and financial history to ensure they have the capacity to honor the repayment obligation. (Chatterjee et al., 2021).

In addition to financial stability, the reliability of a guarantor plays a crucial role in loan recovery. A guarantor who has a proven track record of fulfilling financial obligations fosters trust with the lender, increasing the likelihood of successful recovery, (Jappelli, & Pagano, 2020). Effective communication skills are also vital; a guarantor who can engage openly with both the lender and the borrower can facilitate negotiations and address potential issues proactively. This proactive approach can prevent defaults from

escalating and aid in establishing alternative repayment plans, thereby improving recovery outcomes (Bennett & Henson, 2021).

Internationally, guarantors serve as a type of collateral for various lending institutions. In India, the utilization of guarantors as collateral is regulated by the Indian Contract Act (Kavanamur, 2018). According to the Act, the guarantor's obligations under the contract of guarantee are terminated if the creditor and principal debtor come to an agreement that releases the principal debtor. Any action or omission by the creditor that releases the principal debtor is considered valid. Consequently, if the principal debtor is discharged, the guarantor is also released from their obligations, (Holden, 2016).

SACCOs play a crucial role in promoting financial inclusion and empowering communities in Bangladesh. Within the framework of SACCO lending, guarantors serve as essential stakeholders, providing a layer of security and risk mitigation for both SACCOs and borrowers. When borrowers are unable to repay their loans, guarantors become liable for the outstanding debt, thereby reducing SACCO's exposure to credit risk (Basu, Devine., & Wood, 2018). This risk-sharing arrangement enhances SACCO's confidence in extending credit to borrowers, particularly those with higher credit risk profiles (Islam, 2019).

SACCOs in China play a significant role in providing financial services to underserved communities, particularly in rural areas where access to formal banking services may be limited. One of the primary functions of guarantors in SACCO lending in China is to facilitate access to credit for borrowers, especially those who may not meet traditional lending criteria. In rural areas where formal credit channels are scarce, SACCOs play a crucial role in providing much-needed financial services. Guarantors assure SACCOs by guaranteeing the repayment of loans on behalf of borrowers, thereby increasing the likelihood of loan approval (Zhang & Zhou, 2023). Guarantors also play a pivotal role in

mitigating credit risk for SACCOs in China. By agreeing to be guarantors for borrowers, individuals assume responsibility for loan repayment in the event of default. This risk-sharing arrangement reduces SACCO's exposure to credit risk and enhances its confidence in extending credit to borrowers (Liu & Yuan, 2023).

In South Africa, SACCOs have emerged as a popular avenue for individuals and small businesses to access affordable credit and savings opportunities (Malua, 2018). However, a common requirement for accessing credit from these cooperatives is the need for a guarantor. This practice is widespread among SACCOs in South Africa and is typically applied to loans exceeding a certain threshold or when the borrower's creditworthiness is uncertain. The guarantor, usually someone with a solid credit history, agrees to put their own assets at risk to secure the loan. This practice is particularly crucial in SACCOs because these cooperatives are owned and operated by their members (Kim, Watts & Pronyk, 2017). Consequently, the risk of default is borne by the members themselves, emphasizing the importance of ensuring that only borrowers with a high likelihood of repayment are granted loans.

In Nigeria, the practice of requiring guarantors is also widespread among savings and credit cooperatives (SACCOs). Guarantors are typically mandated for loans that exceed a certain threshold or for borrowers with uncertain creditworthiness (Ololade & Olagunju, 2019). The chosen guarantor is typically an individual with a solid credit history, willing to stake their assets to secure the loan. SACCOs in Nigeria have instituted various measures to regulate the use of guarantors. For instance, they may conduct credit checks on guarantors and request proof of income and assets. These steps are taken to ensure that the guarantor is financially capable of fulfilling their obligation in case of borrower default (Oluyombo, 2019).

Moreover, certain SACCOs in Nigeria stipulate that guarantors must be members of the cooperative. This requirement aims to guarantee that the guarantor is personally invested in both the borrower's success and that of the cooperative. Additionally, it serves to cultivate a sense of community and accountability among members. Another strategy adopted by SACCOs in Nigeria to address the matter of guarantorship is the adoption of insurance policies. These policies are designed to safeguard both the borrower and the guarantor in case of default, thereby mitigating the risk of financial loss and preserving interpersonal relationships (Okorie & Iheanacho, 2018).

In Kenya, guarantors play a pivotal role in the credit risk management of SACCOs, reducing the likelihood of loan default and enhancing the prospects of loan repayment. SACCOs in Kenya employ various methods of utilizing guarantors during loan processing. Initially, the guarantor is typically an individual with a favorable credit history, willing to risk their assets to secure the loan. They are required to endorse a legal agreement stipulating their obligations should the borrower default (Wambua, 2018). Furthermore, SACCOs in Kenya mandate that guarantors must also be members of the cooperative. This requirement ensures that the guarantor is personally invested in both the borrower's success and that of the cooperative, fostering a sense of community and accountability among members. In instances where a borrower defaults on a loan, SACCOs in Kenya typically rely on the guarantor to recover the outstanding debt (Njeru., Njeru & Ondabu, 2019).

SACCOs in Kenya play a crucial role in providing financial services to individuals, especially in rural and underserved areas. Within the SACCO lending framework, guarantors serve essential functions, contributing to the viability and sustainability of lending operations. One of the primary functions of guarantors in SACCOs in Kenya is to facilitate access to credit for borrowers. SACCOs often require borrowers to provide

guarantors who are willing to guarantee the repayment of loans on behalf of the borrower. By agreeing to serve as guarantors, individuals increase the likelihood of loan approval for borrowers who may not meet traditional lending criteria, thereby enhancing access to credit, especially for those with limited collateral or credit history. Guarantors play a vital role in mitigating credit risk for SACCOs in Kenya. When borrowers default on their loans, guarantors become liable for the repayment of the outstanding debt. This risk-sharing arrangement reduces the SACCO's exposure to credit risk and enhances its confidence in extending credit to borrowers. Guarantors provide an additional layer of security, thereby increasing SACCO's capacity to lend to a broader range of clients while maintaining prudent risk management practices (Jack, Kremer & Suri, 2023).

1.1.2 Recovery of Non-Performing Loans

Recovering loans is a critical component of the lending industry, as unpaid loans can substantially affect the financial stability of lenders (Bol, 2015). The initial phase of loan recovery involves initiating communication with the borrower. Lenders are encouraged to foster positive relationships with their clients, and consistent communication can aid in averting defaults. In cases where borrowers have begun missing payments, prompt contact should be made to ascertain the reasons for the default and propose potential remedies. Communication channels may include telephone calls, electronic mail, or written correspondence (Kimando, 2018).

Ensuring the effective recovery of non-performing loans is paramount for lenders like SACCOs. Maintaining financial stability is one of the key reasons why this is crucial for SACCOs. These institutions depend on the interest accrued from loans to sustain their activities and distribute dividends to their members. The inability to recover non-performing loans can jeopardize financial stability, potentially causing liquidity challenges and even forcing closure. Hence, effective recovery of non-performing loans

is vital to guarantee a steady income stream for SACCOs to sustain their operations (Shrimali, Srinivasan, Goel, & Nelson, 2017).

Non-performing loans (NPLs) exert significant effects on SACCOs, with one of the primary consequences being financial instability. As highlighted by Wainaina (2018), NPLs can precipitate a decline in the financial well-being of SACCOs, manifested through diminished liquidity and profitability. Moreover, meeting financial commitments such as disbursing dividends to members becomes challenging in the face of NPLs, exacerbating financial instability and potentially eroding public trust in the sector.

Additionally, NPLs impede the growth trajectory of SACCOs. As noted by Kinyua and Kinyanjui (2017), SACCOs may be compelled to curtail their lending activities in response to NPLs, thereby restricting access to credit for both members and the broader community. This constriction in credit availability can impede economic expansion and development. Furthermore, NPLs encumber SACCOs' capacity to embark on new ventures and expand their operations, further hampering their growth prospects.

Another consequence of NPLs within SACCOs is the escalation of costs. As elucidated by Wanyoike et al. (2019), managing and recovering NPLs can entail substantial expenses for SACCOs. These may encompass legal fees, debt collection expenses, and the financial outlay associated with writing off non-performing loans. Such expenditures can exert a detrimental impact on the financial performance of SACCOs, diminishing their profitability and long-term viability. Moreover, NPLs can tarnish the reputation and standing of SACCOs in the eyes of the public. According to insights from Nyagah Gathogo and Kibet (2017), the presence of NPLs can undermine the credibility of SACCOs, eroding public trust in the sector. This erosion of confidence may lead to a decline in membership and deposits, compounding the financial challenges confronting

SACCOs. Furthermore, a tarnished reputation may impede SACCO's ability to attract new members and expand its operations, thus impeding its growth trajectory.

1.2 Statement of the Problem

An effective loan recovery process is essential for Saccos to maintain financial stability, minimize risks, maintain the confidence of members, and ensure that loans are available to members when they need them. An effective loan recovery process ensures that Saccos remains sustainable and continues to provide much-needed financial services to its members. Ideally, when borrowers default on their loan obligations, SACCOS often turns to guarantors to cover the outstanding debt. One of the major challenges facing Saccos in Kenya is loan recovery (Gatimu, Muturi, & Oluoch, 2018). The recovery of non-performing loans among savings and credit cooperatives in Kenya has been a persistent challenge, affecting the financial stability of these institutions. Despite SACCOs being a critical source of credit for many Kenyans, the rising number of non-performing loans poses a serious threat to their sustainability. A non-performing loan is one where the borrower has not made scheduled payments for a certain period, often 90 days or more. As of 2023, the non-performing loan ratio among SACCOs had reached an alarming rate of 10.3%, a significant rise from the 9.2% reported in 2022 (SASRA, 2023).

This growing trend has forced SACCOs to allocate more resources to loan recovery efforts, which strains their financial health and limits their ability to extend credit to new borrowers. One of the main contributors to the surge in non-performing loans in SACCOs is the failure of guarantors to honor their obligations when the primary borrower defaults. In SACCO loan structures, guarantors play a critical role, offering a safety net for lenders. However, issues often arise when guarantors lack financial stability or are unwilling to meet their responsibilities, complicating loan recovery. A

report by the Sacco Societies Regulatory Authority indicated that about 40% of loan defaults in SACCOs were linked to guarantors' inability to meet obligations (SASRA, 2024). The financial instability of guarantors, combined with the emotional and personal conflicts that arise when SACCOs pursue repayment, has significantly hampered recovery efforts. This upswing underscores the pervasive issue of NPLs within SACCOs in the region, prompting the study into the impact of guarantors on the recovery of non-performing loans among SACCOs in Nakuru County.

1.3 Objectives of the Study

1.3.1 General Objectives of the Study

The main objective of the research was to assess the effect of guarantor's qualities on the recovery of non-performing loans among SACCOS in Nakuru County.

1.3.2 Specific Objectives of the Study

- i. To assess the effect of guarantor's deposit on recovery of non-performing loans among SACCOS in Nakuru County
- ii. To establish the effect of type of guarantor on recovery of non-performing loans among SACCOS in Nakuru County
- iii. To determine the effect of the duration of guarantor membership on the recovery of non-performing loans among SACCOS in Nakuru County
- iv. To examine the effect of the number of guarantors on the recovery of non-performing loans among SACCOS in Nakuru County.

1.4 Research Hypothesis

H₀₁: Guarantor's deposit has no statistically significant effect on the recovery of non-performing loans among SACCOS in Nakuru County.

H0₂: The type of guarantor has no statistically significant effect on the recovery of non-performing loans among SACCOS in Nakuru County

H0₃: Duration of guarantor membership has no statistically significant effect on recovery of non-performing loans among SACCOS in Nakuru County

H0₄: The number of guarantors has no statistically significant effect on the recovery of non-performing loans among SACCOS in Nakuru County

1.5 Justification for the Study

Non-performing loans (NPLs) pose a considerable challenge to the financial stability and sustainability of SACCOs, as they affect liquidity, profitability, and the overall health of the institution. Understanding the factors influencing the recovery of NPLs, particularly the quality of guarantors is essential for SACCOs to develop effective strategies for managing credit risk and improving loan recovery rates. Firstly, assessing the effect of a guarantor's deposit on the recovery of non-performing loans provides insights into the financial commitment of guarantors and their willingness to fulfill their obligations. Guarantors who make substantial deposits are more likely to have the financial capacity to honor their guarantees, thereby increasing the likelihood of loan recovery for SACCOs. By understanding the relationship between a guarantor's deposit and loan recovery, SACCOs can establish minimum deposit requirements for guarantors and incentivize higher deposits to enhance loan recovery efforts.

Secondly, examining the effect of the type of guarantor on loan recovery sheds light on the importance of selecting qualified and reliable guarantors. Different types of guarantors, such as individual members, corporate entities, or government agencies, may have varying levels of creditworthiness and ability to fulfill their guarantees. SACCOs need to identify the most suitable types of guarantors for different loan products and borrower profiles to optimize loan recovery rates and minimize credit risk. Lastly

determining the effect of the duration of guarantor membership on loan recovery highlights the importance of establishing long-term relationships and trust between SACCOs and their members. Guarantors who have been members of the SACCO for an extended period are likely to have a deeper understanding of the institution's values, policies, and financial stability. Their commitment and loyalty to the SACCO can positively influence loan recovery efforts, as they are more invested in the success of the institution and the welfare of fellow members.

1.6 Significant of the Study

The findings of this study hold significant implications for various stakeholders, with primary relevance to policymakers within the SACCO sector. Policymakers are tasked with crafting regulations governing SACCO operations, and insights gleaned from the study on the impact of guarantor quality on NPL recovery can inform their decision-making. By understanding the effectiveness of quality guarantors in NPL recovery, policymakers can refine existing policies and regulations, particularly those pertaining to the use of guarantors as collateral. Moreover, the study aids in identifying areas necessitating improvement to enhance SACCO operations.

Furthermore, SACCO management stands to benefit substantially from the study's findings. Charged with ensuring organizational efficiency and effectiveness, management can leverage insights into the efficacy of guarantor qualities in NPL recovery to enhance policies and procedures. This includes pinpointing areas for improvement in the loan recovery process and adopting best practices to optimize operations.

Lastly, researchers and academicians have much to gain from this study. It presents an opportunity to delve into the effectiveness of guarantor qualities in NPL recovery among SACCOs, laying the groundwork for the development of theoretical frameworks and models. Academicians can utilize these findings to create case studies and educational materials for training both students and practitioners in the financial sector, thereby enriching knowledge dissemination and professional development.

1.7 Scope of the Study

This research aimed to examine how the quality of guarantors influences the recovery of non-performing loans among SACCOs in Nakuru County. Specifically, it investigated the impact of various factors such as guarantor's deposit, type of guarantor, duration of guarantor membership, and the number of guarantors on NPL recovery within SACCOs in the region. The study targeted 56 credit and recovery officers from 22 SACCOs in Nakuru County, with a manageable number of respondents prompting the use of a census approach, encompassing all 56 employees. Spanning 12 months, the study was executed within an estimated budget of Ksh130, 200.00.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section introduces the theoretical structure, empirical review, literature summary, study gaps, and conceptual basis that will guide the study.

2.2 Theoretical Review

This study is anchored on three primary theories: Information Asymmetry, Adverse Selection, and Moral Hazard. These theories provide a framework for understanding the impact of guarantor qualities on the recovery of non-performing loans (NPLs) within SACCOs in Nakuru County.

2.2.1 Information Asymmetry Theory

The Information Asymmetry Theory was first introduced by George Akerlof in 1970, with a focus on the imbalances in information between two parties during economic transactions (Akerlof, 1970). This theory suggests that when one party (often the seller) has more information than the other, it can lead to inefficiencies in the market. Akerlof illustrated this with his famous "market for lemons" analogy, highlighting how sellers may offer substandard products, exploiting buyers who lack crucial information. This theory has since been expanded upon by various scholars to explore different forms of market inefficiencies in diverse contexts, particularly in finance.

Several scholars have built upon Akerlof's initial work. Spence (2009) emphasized the role of signaling in mitigating information imbalances, where the party with superior information may provide signals, such as reputation or warranties, to assure the other party. Stiglitz (2002) further expanded the theory by exploring screening mechanisms that can help buyers gather more information about sellers, thus reducing the risk of

market inefficiencies. Similarly, Arrow (1985) argued that information asymmetry plays a significant role in the healthcare and insurance sectors, impacting decision-making by service providers.

A major strength of the Information Asymmetry Theory lies in its ability to explain how and why markets fail due to the lack of transparency between parties. In the context of loan recovery, particularly with guarantors, the theory highlights the importance of assessing the information lenders have about the guarantor's creditworthiness. If lenders possess sufficient information about the guarantor's financial stability and willingness to fulfill their obligations, this can reduce the risks associated with non-performing loans (Pandey & Sharma, 2020). The theory also underscores how lenders can use various signaling mechanisms, such as guarantor vetting processes, to bridge the information gap and enhance loan recovery.

However, the theory has faced significant critiques. Critics like Holmstrom and Milgrom (1991) argue that the theory's assumption of rational and self-interested market participants may not always align with real-world behavior. People often act irrationally due to cognitive biases, and information imbalances might not always lead to market failures (Tirole, 2006). Moreover, empirical studies, such as those by Laffont and Martimort (2002), suggest that institutional and regulatory frameworks can play a substantial role in correcting information asymmetry, thus challenging the theory's notion that it inevitably results in inefficiency. Despite these critiques, Information Asymmetry theory remains a crucial lens for examining financial transactions and loan recoveries, particularly in SACCOs. Thus, the theory sheds light on the relevance of assessing the duration of guarantor membership in enhancing NPL recovery among SACCOs in Nakuru County.

2.2.2 Adverse Selection Theory

Adverse Selection Theory, introduced by Akerlof in 1970, deals with the challenge of hidden characteristics in economic transactions, where one party possesses more information about their qualities than the other (Akerlof, 1970). This theory is particularly relevant in markets where buyers or sellers with more favorable characteristics are systematically excluded due to the inability of the opposite party to differentiate between good and bad actors. In financial markets, adverse selection occurs when lenders cannot accurately assess the riskiness of borrowers or guarantors, leading to suboptimal lending decisions.

Scholars have since expanded on Akerlof's concept of adverse selection. Stiglitz and Weiss (1981) demonstrated how interest rate caps in lending markets could exacerbate adverse selection, where only high-risk borrowers accept loans at higher interest rates. Rothschild and Stiglitz (1976) explored how insurance markets are particularly vulnerable to adverse selection, as buyers with higher risks are more likely to seek insurance, leaving insurers with a disproportionate number of high-risk clients. Additionally, Dionne (2013) pointed out that adverse selection is often mitigated through screening processes, such as credit checks, which help lenders gain more information about borrowers before making lending decisions.

The strength of Adverse Selection Theory is its applicability across a wide range of market situations. In the context of NPL recovery, the theory explains why guarantor deposits may not always guarantee loan repayment. If lenders cannot distinguish between low-risk and high-risk guarantors, they may extend credit to individuals backed by guarantors who are ill-equipped to manage default situations (Van den Berg & Massen, 2020). The theory underscores the need for robust guarantor evaluation

processes to ensure that lenders can differentiate between those likely to fulfill their obligations and those who are not.

Critics of Adverse Selection Theory argue that the model often assumes markets are more simplistic than they are in reality. For instance, Holmstrom (2014) contends that the theory overlooks other market factors, such as social dynamics and relationship-based lending, which can help mitigate the effects of adverse selection. Further critiques by Hellwig (2000) suggest that adverse selection may not always result in market failures, as market participants often devise strategies, such as screening, to counteract the effects. Additionally, Gehrig (1993) points out that adverse selection models often assume that lenders and borrowers act rationally, which may not align with the complexities of real-world economic behavior. Despite these criticisms, the theory remains central to understanding the role of guarantor deposits in NPL recovery. Thus, the theory aids in understanding the ramifications of guarantor deposits on NPL recovery among SACCOs in Nakuru County.

2.2.3 Moral Hazard Theory

Moral Hazard Theory, developed by Frank Knight in the 1970s, explores how one party's actions can change when they are insulated from the consequences of their behavior (Knight, 1921). The theory is particularly relevant in insurance and lending markets, where individuals who do not bear the full cost of their actions may engage in riskier behavior. In the context of lending, borrowers who have guarantors or collateral backing them might be more willing to default, knowing that they will not bear the full financial burden (Kim, 2013).

The concept of moral hazard has been explored by numerous scholars. Holmstrom (1979) emphasized the principal-agent problem as a form of moral hazard, where agents

(borrowers) act in their self-interest while principals (lenders) bear the risk. Arrow (1970) discussed the role of moral hazard in healthcare, highlighting how insured individuals may consume more healthcare services than necessary because they are not responsible for the full cost. Additionally, Shavell (2016) argued that moral hazard could be mitigated through monitoring and incentive structures, such as performance-based contracts, which align the interests of borrowers and lenders.

One of the key strengths of Moral Hazard Theory is its ability to explain risk-taking behavior in financial markets. In SACCOs, moral hazard plays a significant role in NPL recovery, as borrowers with guarantors may feel emboldened to take greater risks, believing that the guarantor will cover their losses in case of default (Bester, 1994). The theory emphasizes the importance of aligning incentives between borrowers and guarantors, ensuring that both parties are equally responsible for loan recovery. This can help mitigate the potential for moral hazard and improve the financial health of SACCOs.

However, the theory has also faced significant criticism. Critics such as Shavell (2016) argue that the theory assumes borrowers are always rational and driven solely by self-interest, which may not account for social and psychological factors that influence behavior, such as trust, reputation, and fairness (Laffont & Martimort, 2002). Moreover, Holmstrom and Tirole (2014) contend that moral hazard is difficult to measure in real-world scenarios, making it challenging for policymakers to design effective interventions. Finally, critics like Kaplan and Stromberg (2003) assert that moral hazard theory often overlooks the role of institutional and regulatory frameworks, which can reduce risk-taking behavior by enforcing stricter lending and borrowing rules. Despite these critiques, Moral Hazard Theory remains highly relevant in analyzing the relationship between guarantors and loan defaults in SACCOs. This theory finds

relevance in SACCOs, where lenders may assume greater risk by extending loans to borrowers more likely to default, buoyed by the belief that they are protected by guarantors.

2.3 Empirical Literature Review

2.3.1 Guarantor's Deposit on Recovery of Non-performing Loans

The guarantor's deposit is a critical component in the recovery of non-performing loans among SACCOs. When members apply for loans, they often require a guarantor, who may be required to deposit a certain amount as collateral. This deposit serves as a financial assurance for the SACCO, providing a cushion against potential defaults, (Afolabi, 2019). In instances of loan default, the SACCO can utilize the guarantor's deposit to recover part of the outstanding amount, thereby mitigating losses (Muriuki & Karani, 2020). This mechanism not only incentivizes guarantors to ensure that borrowers honor their repayment obligations but also enhances the financial stability of the SACCO.

Moreover, the presence of a guarantor's deposit can significantly influence the lending decisions made by SACCOs. Studies have shown that lenders are more likely to extend credit to borrowers who have strong guarantors with substantial deposits (Ongore & Kusa, 2019). This relationship is crucial in improving the overall loan recovery rates within SACCOs, as it reduces the risk associated with lending. A robust deposit system also encourages responsible borrowing and reduces instances of moral hazard, where borrowers may take undue risks knowing that their debts are secured by others (Afolabi, 2019). Thus, the guarantor's deposit acts as a dual mechanism of protection for both lenders and borrowers.

While the guarantor's deposit is beneficial for recovery, it is essential to consider the psychological and social dynamics involved. In many cases, individuals may be hesitant to serve as guarantors due to the fear of losing their deposits in the event of a default (Kivuva & Muli, 2017). This hesitation can limit the availability of willing guarantors, thereby impacting the loan recovery process negatively. Therefore, SACCOs must establish clear communication and policies regarding the role and importance of guarantor deposits, ensuring that both lenders and guarantors understand their implications on loan recovery.

Koech and Ondiek (2023) undertook a study on the impact of guarantor deposits on loan recovery in SACCOS. The study adopted a cross-sectional survey design, collecting data from 380 members of 38 SACCOS in Kenya. The study used regression analysis to examine the effect of guarantor deposits on loan recovery. The study found that guarantor's deposits significantly improved loan recovery in SACCOS. The study also found that the amount of the guarantor's deposit had a significant positive effect on loan recovery.

Pascual (2018) researched the effect of guarantor deposits on loan recovery in microfinance institutions. The study adopted a case study approach, collecting data from three microfinance institutions in the Philippines. The study used semi-structured interviews and focus group discussions to collect data. The study found that the use of guarantor deposits positively influenced loan recovery in microfinance institutions. The study also found that the use of guarantors improved the quality of the loan portfolio, reducing the incidence of non-performing loans.

Oyegunle (2019) conducted a study on the effect of guarantor deposits on loan recovery in Nigerian banks Research. The study adopted a survey design, collecting data from 400

bank customers in Nigeria. The study used structural equation modeling to analyze the data. The study found that the use of guarantor's deposits significantly improved loan recovery in Nigerian banks. The study also found that the trust between the borrower, guarantor, and lender significantly influenced loan recovery.

Ayuba (2022) conducted a study on the effect of guarantor's deposits on loan recovery in Nigerian microfinance institutions. The study adopted a survey design, collecting data from 384 microfinance institution customers in Nigeria. The study used descriptive statistics and regression analysis to analyze the data. The study found that the use of guarantor deposits significantly improved loan recovery in Nigerian microfinance institutions. The study also found that the use of guarantors increased borrowers' creditworthiness and improved their ability to access credit.

2.3.2 Type of Guarantor on Recovery of Non-performing Loans

The type of guarantor plays a significant role in the recovery of non-performing loans among SACCOs. Guarantors can be categorized into different types based on their relationship with the borrower, such as family members, friends, or professional associates, (Lucian, 2017). Each type of guarantor carries distinct implications for loan recovery. For instance, family members or close friends may be more invested in ensuring the borrower repays the loan to avoid straining personal relationships, potentially leading to higher recovery rates (Okoth, 2019). In contrast, professional associates might prioritize the financial implications of the guarantee but may lack the same emotional connection.

Moreover, the financial stability of the guarantor is a critical factor in recovery. A guarantor with a solid financial background and a good credit history is likely to enhance the loan's credibility, thus improving recovery prospects for SACCOs (Mugo, 2020).

Conversely, if a guarantor is financially unstable or has a history of defaults, their involvement may pose additional risks to the lending institution. Therefore, SACCOs often assess the financial health and reliability of potential guarantors before approving loans, ensuring that the types of guarantors associated with loans are conducive to effective recovery strategies.

Lastly, the social dynamics surrounding the type of guarantor can impact borrowers' behavior. Borrowers with professional guarantors may feel a higher level of accountability, knowing that their default could harm the guarantor's reputation and financial standing (Mwaniki & Mburu, 2018). This understanding may incentivize timely repayments, thereby enhancing the overall recovery rates for SACCOs. Consequently, recognizing the type of guarantor in loan agreements can significantly influence repayment behaviors and, ultimately, the recovery of non-performing loans.

Oluoch, (2018) researched on the effect of guarantor type on loan recovery in SACCOs in Kisumu County, Kenya. The study adopted a descriptive survey design. The study found that the use of SACCO members as guarantors significantly improved loan recovery rates compared to non-members. The study also found that the use of non-member guarantors led to a higher rate of default.

Oladejo, (2020) researched the effect of guarantor type on loan recovery in microfinance banks in Nigeria. Cross-sectional survey Findings: The study found out that the use of group guarantors led to a higher loan recovery rate compared to using individual guarantors. The study also found that the use of multiple guarantors did not significantly improve loan recovery rates.

Nyawade, (2022) conducted a study on the effect of guarantor type on loan recovery in rural and urban microfinance institutions in Kenya. The study found out that the use of

community-based guarantors led to a higher loan recovery rate in rural microfinance institutions, while the use of institutional-based guarantors led to a higher loan recovery rate in urban microfinance institutions. The study also found out that using multiple guarantors improved loan recovery rates in both rural and urban microfinance institutions.

2.3.3 Duration of Guarantor Membership on Recovery of Non-performing Loans

The duration of a guarantor's membership within a SACCO can significantly influence the recovery of non-performing loans. Longer membership durations often correlate with a deeper understanding of the SACCO's operations, financial stability, and the importance of loan repayment, (Remez, 2016). Guarantors who have been members for an extended period may feel a greater sense of responsibility toward maintaining the SACCO's reputation and financial health, motivating them to ensure that loans are repaid (Kihoro & Gikonyo, 2019). This commitment is crucial in enhancing the chances of recovering non-performing loans, as these guarantors are likely to engage in proactive measures to assist borrowers.

Furthermore, long-standing members typically have stronger relationships with the SACCO and its members, which can facilitate effective communication and negotiation during loan recovery processes. According Megeso (2019) personal relationships built over time can lead to informal agreements and resolutions that benefit both the borrower and the guarantor. This social capital can prove invaluable in contexts where formal recovery methods may fail. Consequently, the duration of a guarantor's membership can positively impact the willingness to intervene and support borrowers facing repayment challenges.

In addition, the duration of membership also provides an opportunity for SACCOs to assess the reliability of guarantors based on their past behavior and involvement within the cooperative, (Karanja, 2020). Members who have demonstrated consistent participation and responsibility over the years are often viewed as more reliable guarantors. As a result, SACCOs may prioritize loans guaranteed by long-term members, recognizing the potential for improved recovery rates associated with their involvement. This understanding emphasizes the importance of not only evaluating the guarantor's current financial status but also considering their tenure and history within the organization, (Mutua, 2021).

Zhang (2018) conducted a study on the effect of duration of guarantor-ship on Loan Recovery in Rural Credit Cooperatives in China. The study adopted a Cross-sectional survey. The study found out that the use of guarantors who had been members of the rural credit cooperative for more than three years significantly improved loan recovery rates compared to using new members. The study also found out that using multiple guarantors did not significantly improve loan recovery rates.

Sultana (2019) conducted a study on the effect of duration of guarantorship on loan recovery in MFIs in Bangladesh. The study found out that the use of guarantors who had been members of the microfinance institution for more than three years led to a higher loan recovery rate compared to using new members. The study also found that using multiple guarantors did not significantly improve loan recovery rates.

Yulianti (2022) conducted a study on the effect of duration of guarantorship on loan recovery in Rural Banks in Indonesia. The study found out that the use of guarantors who had been members of the rural bank for more than four years led to a higher loan

recovery rate compared to using new members. The study also found that using multiple guarantors did not significantly improve loan recovery rates.

2.3.4 Number of Guarantors on Recovery of Non-performing Loans

The number of guarantors involved in a loan agreement significantly influences the recovery of non-performing loans among SACCOs. When a loan is backed by multiple guarantors, it creates a stronger safety net for the lending institution, as the risk of default is distributed among more individuals (Brock & Mazzotta, 2021). This collective responsibility encourages guarantors to monitor the borrower more closely and take proactive measures to ensure repayment, thus improving recovery rates. A study by Muli and Kivuva (2020) highlights that loans with multiple guarantors tend to have lower default rates compared to those with a single guarantor, as the shared accountability among guarantors enhances the likelihood of timely repayments.

Moreover, the presence of multiple guarantors can enhance the financial credibility of the loan application, making it more attractive to SACCOs. Lenders often view loans with several guarantors as lower-risk propositions, leading to more favorable lending terms, such as lower interest rates or larger loan amounts (Ngumi & Muriithi, 2018). This perception not only benefits borrowers but also ensures that SACCOs can better manage their risk exposure. By diversifying the guarantee base, SACCOs can improve their loan portfolios, which ultimately contributes to the overall financial health of the organization.

However, relying on multiple guarantors may also introduce complexities, particularly regarding communication and coordination among them. In cases of default, it can become challenging to determine accountability and negotiate repayment strategies among several guarantors (Nangami, 2019). Therefore, while having multiple guarantors

can enhance recovery prospects, SACCOs must implement clear policies and communication strategies to manage these relationships effectively. By fostering an understanding of the roles and responsibilities of each guarantor, SACCOs can mitigate potential disputes and facilitate smoother recovery processes.

Azizi, (2018) conducted a study on the effect of the number of guarantors on loan recovery in Agricultural Cooperatives in Iran. The study adopted a case study research design. The study found out that the use of multiple guarantors significantly improved loan recovery rates compared to using a single guarantor. The study also found that using guarantors who had been members of the cooperative for a longer period significantly improved the loan recovery rate.

Li, (2019) conducted a study on the effect of the number of guarantors on loan recovery in Rural Credit Cooperatives in China. The study adopted a Quasi-experimental research design. The study found out that the use of multiple guarantors significantly improved loan recovery rates compared to using a single guarantor. The study also found out that using guarantors who had a higher level of education significantly improved loan recovery rates.

Nsengiyumva, (2022) conducted a study on the effect of the number of guarantors on loan recovery in Savings and Credit Cooperatives in Rwanda. The study adopted a Cross-sectional survey design. The study found out that the use of multiple guarantors significantly improved loan recovery rates compared to using a single guarantor. The study also found out that using guarantors who had a higher level of education significantly improved loan recovery rates.

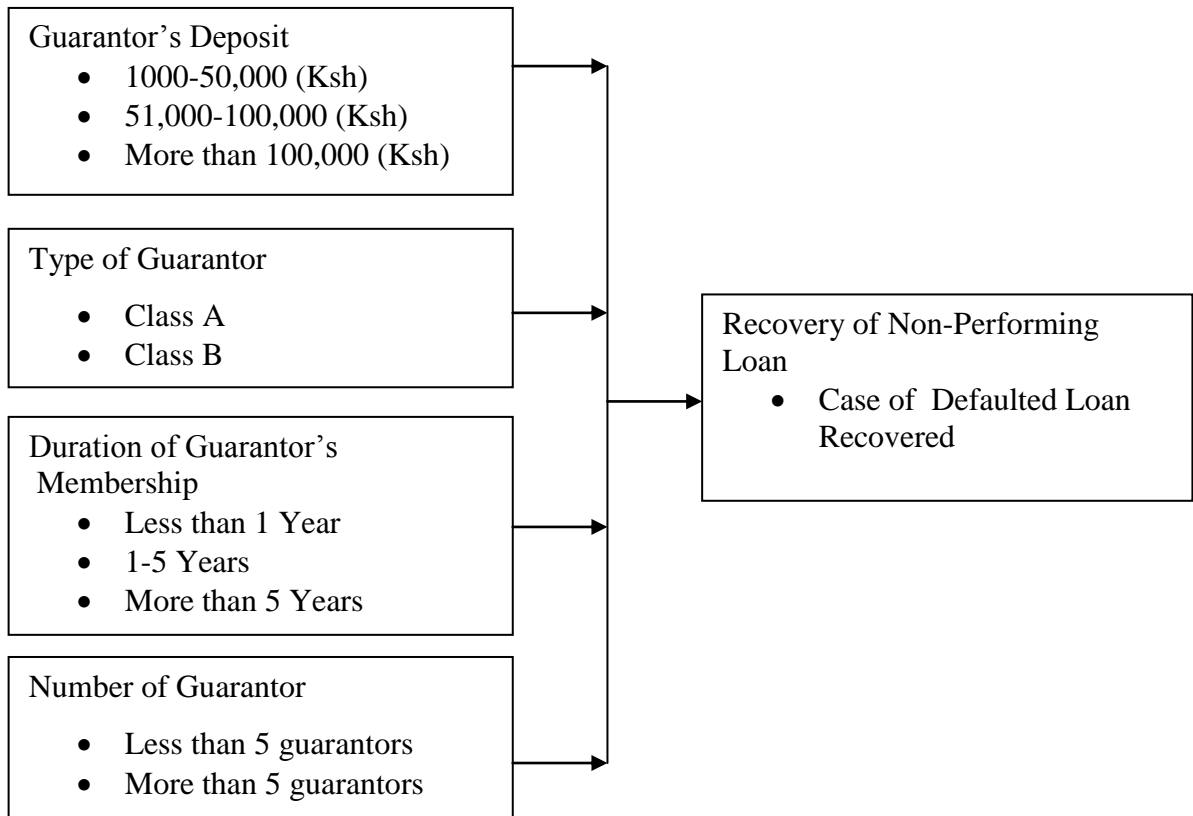
2.4 Conceptual Framework

Figure 1

Conceptual Framework

Independent Variable

Dependent Variable



Source: Author (2024)

Deposits are the amount of shares a guarantor can guarantee a borrower. Sacco deposits are equity. Deposits are financial assets that distribute dividends equally if leftover profits are declared. A guarantor guarantees a borrower the amount of deposit he/she has. In case the borrower defaults the amount of deposit he/she guaranteed the borrower is deducted from him/her. A guarantor is responsible for the loan portion equal to deposits. The guarantor must pay the loan amount if the borrower defaults (Ashworth, & Landy, 2017).

A guarantor's deposit refers to a financial guarantee provided by a member of the Sacco to secure a loan taken by another member. Essentially, a guarantor's deposit is a form of collateral that the Sacco can use in the event that the borrower is unable to repay the loan (Haurin, & Patric, 2016). When a member applies for a loan from a Sacco, the Sacco may require the member to provide a guarantor. The guarantor is typically another member of the Sacco who has a good credit history and is willing to guarantee the loan. In addition to providing a guarantee, the guarantor may also be required to provide a guarantor's deposit.

In a Sacco set, there are two classes of guarantors; guarantor class A and B. Guarantors class A are the original shareholders of the Sacco while guarantor class B are the business shareholders. For instance, in Cosmopolitan Sacco, guarantors class A are the teachers, in Stima Sacco guarantor class A is the Kenya power employees while guarantors class B are the businesspeople in those respective Saccos, (Batrymenko, 2017). The original shareholders can guarantee up to six borrowers while the business shareholders can guarantee up to 3 borrowers.

The duration of the guarantor membership refers to the length of time that a guarantor is legally obligated to the lender. The duration of the guarantor membership can have a significant impact on loan recovery (Fagha, 2018). Short-term guarantor membership refers to a guarantor's legal obligation to the lender for a limited period. Short-term guarantor membership is often used for loans that have a short repayment period. The guarantor's legal obligation to the lender ends once the loan has been repaid. The presence of short-term guarantors can have a positive impact on loan recovery. Short-term guarantors are more likely to fulfill their obligation to the lender because their legal obligation is limited to a short period. Therefore, loans with short-term guarantors are more likely to be recovered than loans without guarantors.

The number of guarantors in a loan agreement can have a significant impact on loan recovery (Leopoldo, 2019). When a loan agreement has a single guarantor, the guarantor bears the entire responsibility for repaying the loan if the borrower defaults. The presence of a single guarantor can have both positive and negative impacts on loan recovery. On the positive side, a single guarantor simplifies the loan recovery process. The lender only needs to pursue the single guarantor to recover the loan. This makes the loan recovery process more efficient and less time-consuming (Hrebiniak, 2018). On the negative side, a single guarantor is more vulnerable to financial risks. If the guarantor becomes insolvent or fails to repay the loan, the lender has limited recourse to recover the loan. This increases the lender's risk exposure and reduces the likelihood of loan recovery.

2.5 Research Gaps

Table 1

Research Gaps

Author	Focus of the Study	Findings of the study	Gaps of the study Methodology gaps	How to address the gaps
Koech and Ondiek (2023)	Impact of guarantor's deposits on loan recovery in SACCOS	Guarantor's deposits significantly improved loan recovery in SACCOS	However, there was a limited exploration of the specific mechanisms through which the amount of guarantor's deposit influences loan recovery rates. The study also used a cross-sectional survey design with 380 members of 38 SACCOS in Kenya.	The current study focused on the effect of guarantor's deposit on recovery of non-performing loans among SACCOS in Nakuru County.
Pascual (2018)	Effect of guarantor's deposits on loan recovery in microfinance institutions	Use of guarantor's deposits positively influenced loan recovery in microfinance institutions	However, the study failed to deeply explore the underlying mechanisms by which the use of guarantor's deposits improves loan recovery rates. The study was conducted in microfinance institutions in Philippines thus the findings may not be generalized in Kenyan context.	The current study focused on the recovery of non-performing loans among SACCOS in Nakuru County, thus the addressing the gap created by Pascual's study.
Oyegunle (2019)	Effect of guarantor's deposits on loan recovery in Nigerian banks	Guarantor's deposits significantly improved loan recovery in Nigerian banks	However, the study adopted survey design with 400 bank customers in Nigeria and had limited discussion on how trust dynamics between borrowers,	The current study adopted descriptive design and census technique to incorporate all the 56 target employees and focused on the of guarantor's deposit on

			guarantors, and lenders influence loan recovery rates.	recovery of non-performing loans among SACCOS in Nakuru County
Ayuba (2022)	Effect of guarantor's deposits on loan recovery in Nigerian microfinance institutions	Guarantor's deposits significantly improved loan recovery in Nigerian microfinance institutions	However, the study examined the effect of guarantor's deposits on loan recovery in Nigerian microfinance institution using a survey design with 384 microfinance institution customers in Nigeria	The current study addressed the gap by focusing on recovery of non-performing loans among SACCOS in Nakuru County.
Oluoch (2018)	Effect of guarantor type on loan recovery in SACCOS in Kisumu County, Kenya	SACCO members as guarantors significantly improved loan recovery rates compared to non-members	The focused-on SACCO members as guarantors whether they improve loan recovery rates compared to non-members.	The current study addressed the gap by focusing on class A and class B guarantors to assess the loan recovery among SACCOS in Nakuru County
Oladejo (2020)	Effect of guarantor type on loan recovery in microfinance banks in Nigeria	Group guarantors led to higher loan recovery rates compared to individual guarantors	However, the study mainly focused on Group guarantors and whether they led to higher loan recovery rates compared to individual guarantors on loan recovery in rural and urban microfinance institutions in microfinance Nigeria.	The current study addressed the gap by focusing on type of guarantor on recovery of non-performing loans among SACCOS in Nakuru County Specifically, Class A and B guarantors

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The research methodology serves as a structured approach to effectively addressing the research problem at hand. This chapter outlines the research design, target population, sampling techniques, and research instruments utilized. It encompasses the pilot study, data collection methods, analysis procedures, and interpretation of findings.

3.2 Research Design

A research design is a structured plan or framework that outlines how a research study will be conducted. It specifies the research objectives, the methodology to be used, the data collection techniques, and the analysis processes. The design serves as a blueprint, guiding researchers in collecting, analyzing, and interpreting data to answer specific research questions or hypotheses, (Creswell, 2014). The research adopted a descriptive design, employing a survey approach to gather data from the entire study population. This methodology offers several benefits, including the avoidance of complexities associated with utilizing data from multiple time points, thereby enabling a thorough exploration, description, and validation of research findings. Moreover, it streamlines the research process, saves valuable time, and facilitates the acquisition of comprehensive insights pertinent to the study. Additionally, the analytical process does not necessitate assumptions regarding the stability of relationships between variables over time (Maxwell, 2012).

3.3 Location of the Study

The study was conducted among Saccos in Nakuru County. Nakuru County boasts a vibrant SACCO sector, with numerous cooperatives catering to various economic sectors and community groups. The diversity of SACCOs provides ample opportunities to study different organizational structures, membership compositions, and lending practices, offering valuable insights into the role of guarantors in loan recovery across various SACCO models. Nakuru County comprises both urban centers, such as Nakuru Town, and rural areas with agricultural and pastoralist communities. This diversity in demographics and economic activities allows for a comprehensive analysis of the effect of guarantor quality on loan recovery across different settings. Understanding how guarantor dynamics vary between urban and rural SACCOs can inform tailored strategies for improving loan recovery rates in each context.

3.4 Population of the Study

According to Novikov & Novikov (2013), the population of the study is the total of units or objects that display similar attributes and can be used to determine a specific problem under study. The unit of analysis was 22 SACCOs in Nakuru County while the unit of observation was 56 credit and recovery officers. Table 2 shows the target population distribution.

Table 2*Targeted Population*

SACCOS	Credit Officers
1. Boresha Sacco	2
2. Unison Sacco	2
3. Waumini Sacco	2
4. Biashara Sacco	2
5. Vision African Sacco Society Limited	2
6. Cosmopolitan Sacco	6
7. Mwalimu National Sacco	3
8. Imarisha Sacco	2
9. Stima Sacco	3
10. Harambee Sacco	2
11. Afya Sacco	2
12. Kenya Police Sacco	4
13. Egerton Sacco	2
14. Tai Sacco	3
15. Wananchi Sacco	2
16. Un-County Sacco	2
17. Skyline Sacco	2
18. Ndege Chai Sacco	2
19. Taifa Sacco	2
20. Unaitas Sacco	3
21. Tower Sacco	3
22. Ukulima Sacco	3
Total	56

Source: SASRA (2011)

3.5 Sampling Procedure and Sample Size

As outlined by Kull (2009), sampling entails the selection and analysis of a subset of individuals, subjects, or events from a larger population to gain insights into the entire population. This subset, known as a sample, represents a smaller version of the target

population. Given the manageable size of the target population, the researcher opted for a census technique, encompassing all the 56 target employees in the study.

3.6 Instrumentation

In this study, questionnaires served as the primary data collection instruments, comprising close-ended questions. Questionnaires were chosen due to their effectiveness in gathering comprehensive data and allowing respondents to express their opinions on the research problem. According to Kothari (2012), information garnered from questionnaires is perceived as unbiased and uninfluenced by the researcher, thereby enhancing the accuracy and validity of the data collected. Moreover, the questionnaire method affords respondents the freedom to express their views and opinions objectively. As noted by Hannes, Lockwood, and Pearson (2014), questionnaires provide a standardized and impersonal format, ensuring uniformity in data collection and enabling respondents to maintain anonymity and confidentiality while completing them at their convenience (Simmons, Nelson & Simonsohn, 2011).

3.6.1 Pilot Test

A pilot test was undertaken to evaluate the validity of the questions and the anticipated reliability of the collected data. This step is crucial in reviewing the instrument and preventing unnecessary expenditure on a full-scale survey that may yield irrelevant results (Teijlingen & Hundley, 2010). The pilot study was conducted in neighboring Kericho County, where six questionnaires were distributed among four savings and credit cooperative societies: Kimbilio Daima Sacco, Kenya Highlands Sacco, Partners Sacco, and Simba Chai Sacco. Kericho County has a comparable socio-economic environment to Nakuru County, particularly in terms of the activities of SACCOs and the use of guarantors for loans. This similarity provided an opportunity to test the research

instrument in a context that closely mirrored the conditions expected in the main study, thereby ensuring that the feedback from the pilot study would be relevant and applicable to the final research. The pilot results helped to refine the questionnaires by identifying unclear questions and improving reliability. Feedback from six questionnaires distributed across four SACCOs in Kericho County enabled necessary revisions before the main survey. Data from the pilot study was excluded from the final research.

3.6.2 Validity of the Instrument

Validity refers to the degree to which an instrument effectively measures what it intends to measure. Data needs to be both reliable and accurate. When a measurement is deemed valid, it inherently implies reliability as well (Kimberlin & Winterstein, 2013). There are three types of validity. Content validity, construct validity, and criterion validity, however, the study adopted content validity. This refers to whether the items in your instrument adequately represent the content domain you're studying. Content validity was achieved by issuing the questionnaire to the supervisor who acted as the expert to review and validate the items

3.6.3 Reliability Test of the Instrument

Reliability is the capacity of an instrument of measurement to produce similar response in similar circumstances, over a given period of time, (Yin, 2018). There are various types of reliability however the study conducted internal consistency reliability. Internal consistency reliability is a measure used to assess the extent to which different items or questions within a measurement instrument are consistent in measuring the same underlying construct or concept. It evaluates whether the items in the instrument are interrelated and measures the same thing consistently. Internal consistency was achieved by determining the Cronbach's alpha coefficient. For the instrument to be considered reliable the Cronbach value should be in the range of 0.7-1. After analysis the Cronbach

value for all the variables were in the range of 0.7-1 which means that the questionnaires used to collect data were reliable.

The questionnaires underwent coding, followed by the administration of Cronbach's Alpha Test. Table 4.2 illustrates that all five variables yielded Cronbach's Alpha values exceeding 0.7. During the pilot study, the Cronbach Alpha values were recorded as 0.715, 0.705, 0.731, 0.714, and 0.722 respectively. Thus, the guarantor's deposit, type of guarantor, duration of guarantor membership, number of guarantors, and recovery of non-performing loans all demonstrated Cronbach values surpassing the 0.7 threshold. As per George and Mallery (2018), Cronbach correlation coefficients equal to or greater than 0.7 are deemed acceptable. Additionally, Field (2018) notes that Cronbach's $\alpha > 0.7$ indicates that the research instrument offers a reliable measure for research purposes. It's noteworthy that the results of the pilot test were excluded from the final data analysis of the study.

Table 3

Reliability Test Results

Variable	No. of Items	Cronbach's Alpha Value
Guarantor's Deposit	6	.715
Type of Guarantor	5	.705
Duration of Guarantor Membership	6	.731
Number of Guarantors	5	.714
Recovery of Non-Performing Loans	3	.722

3.7 Data Collection Procedures

Palinkas, Horwitz, Green, Wisdom, Duan & Hoagwood (2015) define the data collection procedure as the systematic process of gathering essential information for the research endeavor. To afford respondents ample time to provide thoughtful responses, physical

administration of questionnaires was employed, followed by subsequent collection. Each questionnaire was accompanied by a covering letter delineating the research objectives and assuring the confidentiality of respondent responses to facilitate the acquisition of pertinent data and information. The collection of completed questionnaires occurred according to the mutually agreed-upon timeframes set by each respondent.

3.8 Data Analysis and Presentation

Data analysis encompassed condensing the gathered information into a manageable format, crafting summaries, identifying trends, and employing statistical methodologies (Edward & Smith, 2013). Prior to commencing the data entry process, all questionnaires underwent sorting, and the researcher meticulously reviewed and summarized the data. The collected data predominantly comprised quantitative data. Quantitative data analysis was conducted using the Statistical Package for Social Sciences (SPSS) version 24. The analysis entailed both descriptive and inferential statistics. Descriptive statistics included percentages, frequencies, measures of central tendency (mean), and measures of dispersion (standard deviation). Inferential statistics involved correlation and regression analyses.

The multivariate regression model was;

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_3X_3 + \epsilon$$

Where:

Y = Recovery of Non-Performing Loans among Saccos in Nakuru County)

β_0 = Constant Term;

$\beta_1, \beta_2, \beta_3$ and β_4 = Beta coefficients;

X_1 = Guarantor's Deposit

X_2 = Type of Guarantor

X_3 = Duration of Guarantor's Membership

X_4 = Number of Guarantors

ε =Error term

3.9 Diagnostic Tests

The study undertook preliminary diagnostic tests to ensure the suitability of correlation and multiple linear regressions. The preliminary diagnostic tests undertaken included normality tests, multicollinearity tests, and Autocorrelation Test.

Multicollinearity is a phenomenon in which one predictor variable in a multiple regression model can be linearly predicted from the others with a substantial degree of accuracy, (Wang & Zhang 2014). Variance Inflation Factor (VIF) was used to check the Multicollinearity of the data,

Normality tests are used to determine if a data set is well-modeled by a normal distribution and to compute how likely it is for a random variable underlying the data set to be normally distributed, (Pepe, 2016). Normality tests were tested by determining Kolmogorov- Smirnov values.

Finally, the study conducted an autocorrelation test. Autocorrelation denotes the correlation of a variable with its past values over time. Its presence suggests that the current value of the variable is linked to its previous values, (Baker & Korte, 2017). This phenomenon can distort the estimates of regression coefficients, potentially attributing the effects of independent variables to the autocorrelated error term instead of the genuine relationship between the variables.

3.10 Ethical Considerations

The researcher first forwarded the document to KUREC for ethical review after which he got consent from the relevant authorities before the commencement of the study. With

the consent from KUREC, the researcher sought permission from the targeted Saccos within Nakuru County. Upon obtaining consent from the university, NACOSTI, and the Saccos, the researcher proceeded to solicit consent from the chosen respondents, accompanied by the distribution of consent forms and questionnaires. This collaborative effort ensured that the research study adhered to all necessary rules and regulations, thereby facilitating the smooth completion of the study while upholding ethical standards and regulations. Voluntary participation ensures that individuals engage in the research of their own accord, without any coercion or external pressure. Participants retain the freedom to decide whether or not to take part in the study at any stage, without facing any consequences or repercussions. Therefore, participants have the autonomy to respond to the research questions based on their discretion and willingness.

Confidentiality ensures that information remains private and is only accessible to the researcher. Employees were assured of the confidentiality of their information, which boosted respondent response rates. The researcher securely stored all collected data to prevent unauthorized access. Privacy rights were respected by not requiring the employees to provide their names on the questionnaire. This upholds the ethical standard of respecting individuals' sensitivity towards their private information in research. The researcher locked the collected data in safe office boxes for one month during data analysis. After data was analyzed, the filled questionnaires were shredded to destroy private, confidential and sensitive information.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter focuses on examining the impact of guarantor quality on the recovery of non-performing loans within SACCOS in Nakuru County. It begins by presenting and analyzing respondent profiles, followed by both descriptive and inferential analyses related to the study objectives. Furthermore, the chapter discusses the implications of the findings of the study.

4.2 Response Rate

Out of 56 distributed questionnaires, 50 were completed and returned, resulting in an 89% response rate. The 11% non-response rate accounted for 6 non-responded. This high response rate indicates a substantial sample size, deemed adequate for the research, (Barbie, 2014) notes the advantage of a high response rate in minimizing non-response bias compared to lower rates.

Table 4

Response Rate

Sampled No. of respondents	No. of Questionnaires Returned	Response Rate (%)
56	50	89

4.3 Demographic Profile of the Respondents

The demographic profile of the respondents was analyzed based on gender, age, education level, and length of service in the organization.

4.3.1 Gender of the Respondents

The composition of employees in terms of their gender was sought out. The results of the analysis are indicated in Table 5.

Table 5

Gender of the Respondents

Gender	Frequency	Percentage
Male	31	62
Female	19	38
Total	50	100

From the analysis, 62% of the respondents were male while 38% were female. This implies that most of the credit and recovery officers were male. Having a gender-balanced workforce ensures that the SACCO reflects the diversity of its membership base and the broader community it serves. Gender diversity, as noted by Kabeer (2021), brings varied perspectives that could enhance the effectiveness of recovery strategies. Including more female officers might provide a more inclusive, balanced approach, potentially leading to more efficient recovery outcomes and better engagement with both borrowers and guarantors. This balance could also improve the SACCO's ability to manage interpersonal conflicts arising during recovery processes.

4.3.2 Age of the Respondents

The study sought to find out the age of the respondents. Table 6 illustrates the findings.

Table 6*Age of the Respondents*

Age	Frequency	Percentage
18-30 years	6	12
31-40 years	20	40
41-50 years	14	28
50 Years and above	10	20
Total	50	100.0

Based on the findings, 12% of the credit and recovery officers were in the age bracket of 18-30 years, 40% were in the age bracket of 31-40 years, 28% were in the age bracket of 41-50 years while 20% were in the age bracket of 50 years and above. This implies that majority of the credit recovery officers were in the age bracket of 31-40 years. Older employees in SACCOs often bring years of experience and expertise to their roles, which can positively influence their performance and productivity (Ninsiima, 2018). Their deep understanding of financial principles, industry regulations, and customer needs allows them to navigate complex situations more effectively and make informed decisions. Younger employees may be more adaptable to technological advancements and changes in the financial industry, which can enhance their performance and productivity.

4.3.3 Highest Education Qualification Attained

The study sought to find out the education level of the respondents. Table 7 illustrates the findings.

Table 7*Highest Education Qualification Attained*

Highest Education	Frequency	Percentage
Diploma	17	34
First Degree	23	46
Postgraduate Degree	10	20
Total	50	100

From the findings 34% of the credit recovery officers stated that they had a diploma as their highest education qualification, 46% stated that credit recovery officers had a first degree as their highest education qualification while 20% of credit recovery officers had a postgraduate degree as their highest education qualification. The efficiency of credit recovery officers is influenced by their level of education, with those possessing higher education generally performing better (Naibei & Koskei, 2017).

4.3.4 Length of Service in the Saccos

The researcher sought to determine the duration the respondents have been employed in their Saccos. Table 8 illustrates the findings.

Table 8*Length of Service in the Saccos*

Length of Service	Frequency	Percentage
Less than 5 Years	11	22
6-10 Years	21	42
11-20 Years	16	32
More than 20 Years	2	4
Total	50	100

From the findings 22% of the credit recovery officers stated that they had served in the current organization for less than 5 years, 42% had served in the current organization for 6-10 years, 32% had served in the current organization for 11-20 years while 4% had served in the current organization for more than 20 years. This implies that the majority of credit recovery officers had served in the current organization for 6-10 years followed by 11-20 years. Experienced employees are more likely to possess the knowledge and skills necessary for effective financial management. This includes budgeting, risk assessment, investment management, and regulatory compliance (Kiswili, Amuhaya, Noor, & Anaya, 2019). With their expertise, they can ensure that SACCO's financial resources are managed prudently and responsibly.

4.4 Descriptive Statistics for the Study Variables

4.4.1 Guarantor's Deposit on Recovery of Non-Performing Loans

The researcher sought to determine the effect of Guarantor's deposit on recovery of non-performing loans among SACCOS in Nakuru County. The findings of the study are shown in Table 9.

Table 9*Guarantor's Deposit on Recovery of Non-Performing Loans*

Guarantor's Deposit Statement	SA (5)	A (4)	N (3)	D (2)	SD (1)	N	Mean	Std
The guarantor's deposit amount of 1000-50,000 (Ksh) positively influences the borrowers' loan repayment behavior.	46%	44%	4%	6%	0%	50	4.64	0.88
The guarantor's deposit amount of 51,000-100,000 (Ksh) encourages borrowers to be more responsible in repaying their loans.	43%	52%	2%	3%	0%	50	4.82	0.77
Guarantor's deposits exceeding 100,000 (Ksh) significantly reduce the risk of loan default by borrowers.	41%	52%	2%	5%	0%	50	4.46	0.57
The amount of the guarantor's deposit significantly impacts borrowers' commitment to repaying their loans.	47%	36%	7%	10%	0%	50	4.17	0.64
A higher guarantor's deposit requirement improves the likelihood of borrowers repaying their loans on time	52%	33%	6%	9%	0%	50	4.23	0.64
The guarantor's deposit should be tailored to the borrower's loan amount to ensure better loan recovery.	56%	34%	4%	6%	0%	50	4.45	0.88

Key: SA=Strongly Agree (5), S=Agree (4), N=Neutral (3), D=Disagree (2), SD=Strongly Disagree (1)

From the findings, most participants agreed (mean = 4.64; standard deviation = 0.876) that the guarantor's deposit amount of 1,000-50,000 (Kshs) positively influences the borrowers' loan repayment behavior. In addition, majority of respondents agreed (mean =4.82; standard deviation = 0.765) that the guarantor's deposit amount of 51,000-100,000 (Kshs) encourages borrowers to be more responsible in repaying their loans. Further majority of them agreed with a (mean = 4.46; standard deviation = 0.567) that guarantors' deposits exceeding 100,000 (Kshs) significantly reduce the risk of loan default by borrowers. The study agrees with Scott (2014) findings which noted that deposits from guarantors can serve as a measure of their commitment to the borrower's repayment. Higher deposits might indicate a stronger commitment on the part of the guarantor, as they are willing to put a significant amount of money at risk to vouch for the borrower's reliability.

It was also noted that most of the respondents agreed (mean = 4.17; standard deviation = 0.641) that the amount of the guarantor's deposit significantly impacts borrowers' commitment to repaying their loans. In addition, majority of respondents (mean = 4.23; standard deviation = 0.643) agreed that a higher guarantor's deposit requirement improves the likelihood of borrowers repaying their loans on time. From the findings, majority of respondents agreed with a (mean=4.45; standard deviation=0.876) that the guarantor's deposit should be tailored to the borrower's loan amount to ensure better loan recovery. This is in line with Onsong, (2012) who noted that enquiring guarantor deposits can serve as an additional layer of protection for SACCOs against credit risk.

It encourages SACCOs to conduct thorough credit assessments of both the borrower and the guarantor before disbursing loans. This diligence in risk assessment can lead to better loan underwriting decisions and lower rates of NPLs. The presence of guarantor deposits signals to lenders and investors that the SACCO has implemented measures to mitigate

credit risk effectively. This can enhance their confidence in SACCO's loan portfolio and overall financial stability, making them more willing to provide additional funding or investment capital.

4.4.2 Type of Guarantor on Recovery of Non-Performing Loans

The second objective examined the effect of the type of guarantor on the recovery of non-performing loans among SACCOS in Nakuru County. The results were as shown in Table 10.

Table 10

Type of Guarantor on Recovery of Non-Performing Loans

Type of Guarantor	SA (5)	A (4)	N (3)	D (2)	SD (1)	N	Mean	Std
Class B guarantors usually guarantee a smaller number of borrowers compared to Class A guarantors	47%	43%	2%	8%	0%	50	4.22	0.45
Saccos prefer Class A guarantors compared to Class B guarantors	56%	34%	3%	7%	0%	50	4.46	0.32
Class A guarantors are considered less risky and hence they have a positive effect on loan recovery	47%	33%	13%	7%	0%	50	4.20	0.43
Class A guarantors can guarantee a high number of borrowers which result to high loss to the Sacco in case several borrowers default	59%	31%	3%	7%	0%	50	4.02	0.52
The type/classification of guarantor affect the recovery of non-performing loans among SACCOS	48%	48%	2%	2%	0%	50	4.26	0.23

Key: SA=Strongly Agree (5), S=Agree (4), N=Neutral (3), D=Disagree (2), SD=Strongly Disagree (1)

From the findings, the respondents (mean=4.22; standard deviation=0.453) agreed that majority of Class B guarantors usually guarantee a smaller number of borrowers compared to Class A guarantors. Further, the respondents agreed (mean 4.46; standard deviation= 0.321) that Saccos prefers Class A guarantors compared to Class B guarantors. The respondents also agreed (mean= 4.20; standard deviation= 0.432) that Class A guarantors are considered less risky and hence they have a positive effect on loan recovery. The findings agree with Copisarow, (2013) who noted that Class A guarantors are often chosen based on their strong financial position, stable income, solid credit history, and overall credibility. From the study, the respondents (mean= 4.02; standard deviation= 0.521) agreed that most Class A guarantors can guarantee a high number of borrowers which result in a high loss to the Sacco in case several borrowers' default. SACCOS prefer Class A guarantors over Class B guarantors due to their higher financial stability, better credit histories, and stronger repayment capacity. Class A guarantors are perceived as having lower credit risk, making them more desirable as guarantors for loans. Their involvement provides greater assurance to the SACCO regarding the repayment of loans.

Finally, majority of the respondents (mean = 4.26; standard deviation = 0.231) agreed that the type/classification of guarantor affects the recovery of non-performing loans among SACCOS. This matches Mohamed, (2016) who noted that the classification of guarantors significantly influences the recovery of non-performing loans within SACCOS. Loans guaranteed by Class A guarantors are generally associated with higher recovery rates due to the lower credit risk associated with these guarantors. In contrast, loans guaranteed by Class B guarantors may face greater challenges in recovery due to the higher credit risk associated with these guarantors.

4.4.3 Duration of Guarantor Membership on Recovery of Non-Performing Loans

The third objective of the study sought to establish the effect of the duration of guarantor membership on the recovery of non-performing loans among SACCOS in Nakuru County. The findings is indicated in Table 11.

Table 11

Duration of Guarantor Membership on Recovery of Non-Performing Loans

Statement on duration of Guarantor Membership	SA (5)	A (4)	N (3)	D (2)	SD (1)	N	Mean	Std
Loans with guarantors having duration of less than 1 year are more prone to becoming non-performing.	52%	38%	8%	2%	0%	50	4.28	0.53
A duration of 1-5 years for guarantors significantly enhances the likelihood of loan recovery.	49%	31%	14%	6%	0%	50	4.62	0.32
Loans with guarantors committed for more than 5 years exhibit better borrower repayment behavior.	51%	44%	1%	4%	0%	50	4.40	0.76
Borrowers feel more confident and secure in taking loans with guarantors committed for less than 1 year.	60%	16%	12%	9%	0%	50	4.32	0.47
Loans requiring guarantors committed for 1-5 years are perceived as more reliable by borrowers.	51%	44%	1%	4%	0%	50	4.42	0.75
Guarantors committed for more than 5 years may encourage borrowers to be more diligent in repaying their loans.	63	32	0	3	2	50	4.604	0.67

Key: SA=Strongly Agree (5), S=Agree (4), N=Neutral (3), D=Disagree (2), SD=Strongly Disagree (1)

From the findings, the respondents (mean = 4.28; standard deviation = 0.534) agreed that loans with guarantors having a duration of less than 1 year are more prone to becoming non-performing. Further, the respondents agreed (mean = 4.62; standard deviation = 0.323) that a duration of 1-5 years for guarantors significantly enhances the likelihood of loan recovery. The respondents also agreed (mean = 4.40; standard deviation = 0.764) that loans with guarantors committed for more than 5 years exhibit better borrower repayment behavior. The findings are in line with Otero, (2016) who observed that guarantors who commit to a loan for more than five years are likely to have a stronger and more enduring connection to the borrower. This extended commitment indicates a deeper level of trust, responsibility, and possibly a closer personal or business relationship between the borrower and guarantor.

From the study, the respondents (mean= 4.32; standard deviation= 0.472) agreed that borrowers feel more confident and secure in taking loans with guarantors committed for less than 1 year. Borrowers may feel more confident and secure when they have guarantors committed for a shorter duration, such as less than 1 year. Shorter commitment periods may signal to borrowers that the loan is for a specific short-term purpose and that the guarantor's involvement is temporary. This temporary support may provide borrowers with the reassurance they need to take out the loan, especially if they anticipate resolving their financial needs within a short timeframe.

Majority of the respondents (mean 4.42; standard deviation= 0.745) agreed that loans requiring guarantors committed for 1-5 years are perceived as more reliable by borrowers. Guarantors committed for 1-5 years provide a moderate to long-term assurance to borrowers and lenders alike. Borrowers may perceive loans with guarantors committed for this duration as more reliable and stable. The longer commitment period suggests a significant level of support from guarantors, which can enhance borrowers'

confidence in their ability to repay the loan successfully. Finally, majority of the participants strongly agreed that guarantors committed for more than 5 years may encourage borrowers to be more diligent in repaying their loans (mean=4.604, SD=0.670). This concurs with Abafita (2016) who noted that long-term commitment from guarantors suggests a deeper level of trust and relationship between the guarantor and the borrower. This stronger bond can motivate borrowers to maintain their end of the agreement and fulfill their repayment obligations responsibly.

4.4.4 Number of Guarantors on Recovery of Non-Performing Loans

The researcher sought to assess the effect of the number of guarantors on recovery of non-performing loans. The findings is indicated in Table 12.

Table 12

Number of Guarantors on Recovery of Non-Performing Loans

Statements on the Number of Guarantors	SA (5) %	A (4) %	N (3) %	D (2) %	SD (1) %	N	Mean	Std.
Loans with less than 5 guarantors are more likely to result in non-performing loans.	58	24	8	4	6	50	4.177	0.912
Having more than 5 guarantors increases the chances of loan recovery for the SACCOS.	40	48	4	8	0	50	3.984	1.032
Loans with multiple guarantors are more likely to be recovered compared to loans with a single guarantor.	50	34	8	4	4	50	4.145	0.921
The number of guarantors should be proportional to the loan amount for better loan recovery outcomes.	54	36	2	5	3	50	4.563	0.608
Loans with a higher number of guarantors exhibit better repayment behavior by the borrowers.	48	40	3	5	4	50	4.181	0.513

Key: SA=Strongly Agree (5), S=Agree (4), N=Neutral (3), D=Disagree (2), SD=Strongly Disagree (1)

From the findings majority of the respondents agreed that loans with less than 5 guarantors are more likely to result in non-performing loans (mean=4.177, SD=0.912). Having fewer guarantors for a loan increases the risk for SACCO because there are fewer individuals obligated to ensure repayment in case of default by the borrower. If the borrower encounters financial difficulties or defaults on the loan, the burden of repayment falls on a smaller pool of guarantors. This increases the likelihood of non-performing loans as the SACCO may face challenges in recovering the outstanding amount from a limited number of guarantors. The respondents further agreed that having more than 5 guarantors increases the chances of loan recovery for the SACCOs (mean = 3.984, SD=1.032). The outcomes are same as Tippins & Sohi (2013) which noted with more guarantors, the risk associated with loan default is distributed among multiple parties. If one guarantor faces financial difficulties, the burden doesn't fall solely on them, potentially improving the overall chances of recovery. Multiple guarantors may collectively encourage the borrower to repay the loan. The borrower might feel a stronger sense of accountability when they know that several individuals are vouching for their repayment.

On the same note, the respondents also agreed that loans with multiple guarantors are more likely to be recovered compared to loans with a single guarantor (mean 4.145, SD=0.921). Loans with multiple guarantors offer greater security and recourse for the SACCO in the event of borrower default. With multiple guarantors, there are several individuals legally obligated to ensure repayment, which enhances the SACCO's ability to recover the outstanding loan amount. In contrast, loans with a single guarantor rely solely on that individual's ability to repay, making them more susceptible to non-performing status if the guarantor defaults or is unable to fulfill their obligation.

The study also agreed the number of guarantors should be proportional to the loan amount for better loan recovery outcomes (mean= 4.563, SD= 0.608). Moreover, the respondents agreed that loans with a higher number of guarantors exhibit better repayment behavior by the borrowers (mean=4.181, SD=0, 513). The study agrees with Scott (2014) findings which noted that with multiple guarantors involved, borrowers might feel a stronger sense of obligation to repay the loan. The awareness that several individuals have committed to support the borrower's repayment could lead to enhanced borrower accountability. A higher number of guarantors creates social pressure for the borrower to uphold their reputation and maintain their credibility with a larger group of individuals.

4.4.5 Recovery of Non-Performing Loans among SACCOS

The dependent factor established the recovery of non-performing loans among SACCOS in Nakuru County. The respondents were asked to indicate the aspect of recovery of non-performing loans among SACCOS in Nakuru County. Table 13 has the outcomes.

Table 13

Recovery of Non-Performing Loans among SACCOS

Statement on Recovery of Non-Performing Loans	SA (5) %	A (4) %	N (3) %	D (2) %	SD (1) %	N	Mean	Std
There is a decrease in non-performing loans	68	23	2	4	3	50	4.258	0.886
Their use of a guarantor is very effective in recovering non-performing loans	69	21	0	5	5	50	4.403	0.557
The loan portfolio of the Sacco has grown over the years	40	55	0	2	3	50	4.145	0.807

Key: SA=Strongly Agree (5), S=Agree (4), N=Neutral (3), D=Disagree (2), SD=Strongly Disagree (1)

The findings discovered a decrease in non-performing (mean=4.258, standard deviation =0.886). On whether their use of a guarantor is very effective in recovering non-performing loans, majority of the respondents agreed (mean=4.403, standard deviation =0.557). The respondents further agreed that the loan portfolio of Sacco has grown over the years (mean=4.145, standard deviation=0.807). The findings of the study are in line with Tangem, (2014) findings which revealed that a growing loan portfolio indicates that more members are actively engaging with Sacco's services. Members are accessing credit for various purposes, which reflects a healthy demand for financial assistance. A larger loan portfolio means that Sacco is fulfilling its primary purpose of providing financial services to its members. This growth reflects Sacco's ability to meet its members' diverse financial needs.

4.5 Diagnostic Test

In justifying the usage of the regression model pre-estimation tests were carried out.

4.5.1 Normality Assumptions Test

The study conducted a normality test to evaluate whether the data is normally distributed. The outcomes of the normality test in Table 14.

Table 14

Normality Assumption Test Results

Variable	Kolmogorov- Smirnov	Sig
Guarantor's Deposit	.282	.667
Type of Guarantor	.228	.877
Duration of Guarantor Membership	.236	.912
Number of Guarantors	.174	.871
Recovery of Non-Performing Loans	.236	.877

Normality assumption test results in Table14 established that the data was normally distributed since the significance values for Kolmogorov-Smirnov were greater than 0.05. It indicated; that the guarantor's deposit had a Kolmogorov-Smirnov significance value of $p=.282>0.05$. The type of guarantor had a Kolmogorov-Smirnov significance value of $p=.228>0.05$. The duration of guarantor membership had a Kolmogorov-Smirnov significance value of $p=.236>0.05$. The number of guarantors had a Kolmogorov-Smirnov significance value of $p=.174>0.05$.

The performance of recovery of non-performing loans had a Kolmogorov-Smirnov significance value of $p=.236>0.05$. Since the p-values were greater than the significance level (0.05), this implies that the data were normally distributed. This is in line with Freeman (2017) who argues that when the sig value is less than the 0.05 threshold data is normally distributed.

4.5.2 Multicollinearity Test

The study conducted a multicollinearity assumption test to regulate if variables are correlated. Multicollinearity occurs when two or more independent variables are extremely connected. When multicollinearity is present in a regression model, it can be difficult to determine the unique contribution of each independent factor to the outcomes in Table 15.

Table 15

Multicollinearity Assumption Test Results

Variables	Tolerance	VIF
Guarantor's Deposit	.162	6.172
Type of Guarantor	.363	2.755
Duration of Guarantor Membership	.889	1.125
Number of Guarantors	.775	1.290
Recovery of Non-Performing Loans	.592	1.689

From the finding the acceptance and VIF level for the guarantor's deposit (tolerance=0.162 and VIF=6.172), for type of guarantor (tolerance=0.363 and VIF=2.755), for duration of guarantor membership (tolerance=0.889 and VIF=1.125) for number of guarantors (tolerance=0.775 and VIF=1.290) and recovery of non-performing loans (tolerance=0.592 and VIF=1.689).

The study results imply that all tolerance values for the five variables under study were all above 0.10 and VIF values all less than 10. This implies that the data used had no Multicollinearity. This is in line with Fox, (2015) who argued that for the research to be accepted the Tolerance for all independent variables should be more than 0.1 and VIF is recommended to be below 10.

4.5.3 Autocorrelation Assumption Test

Autocorrelation refers to the correlation of a variable with itself over time. When autocorrelation is present it suggests that the current value of the factor is related to its past values. This can cause biased estimates of the regression coefficients, as the effect of the independent variables may be attributed to the auto-correlated error term rather than the true relationship between the variables. The results of the test of autocorrelation assumption are presented in Table 16.

Table 16

Autocorrelation Assumption Test Results

Variable	Durbin-Watson
Guarantor's Deposit	1.342
Type of Guarantor	2.145
Duration of Guarantor Membership	2.234
Number of Guarantors	1.345
Recovery of Non-Performing Loans	1.987

The results as indicated in Table 16 revealed that the Durbin- Watson statistic value of guarantor's deposit was 1.342. In addition, the Durbin-Watson statistic value for type of guarantor was 2.145. Further, the results indicated that the Durbin-Watson statistic value for duration of guarantor's membership was 2.234 and for the number of guarantors was 1.345, and for the recovery of non-performing loans was 1.987. This infers those variables had no autocorrelation because it meets the threshold of Durbin-Watson. This is in line with Stock and Watson (2017) who suggest that values around 2 indicate no autocorrelation, while values below 2 suggest positive autocorrelation, and values above 2 indicate negative autocorrelation.

4.6 Correlation Analysis

The researcher undertook correlation analysis to find the nature and strength of the relationships between the independent on the dependent variables.

4.6.1 Guarantor's Deposit on Recovery of Non-Performing Loans

Table 17

Correlation between Guarantor's Deposit and Recovery of Non-Performing Loans

		Guarantor's Deposit
Recovery of Non-Performing Loans	Pearson Correlation	.603**
	Sig. (2-tailed)	.000
	N	50

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

The study conducted a correlation analysis between guarantor's deposit and recovery of non-performing loans among SACCOS in Nakuru County. The findings indicated that $r=0.603$ and $p=0.000$. This indicated that there exists a moderate positive and significant relationship between guarantor's deposit and recovery of non-performing loans among SACCOS in Nakuru County. Therefore, the findings imply that the guarantor's deposit

enhances the recovery of non-performing loans among SACCOS in Nakuru County. This agrees with those of Kiptui (2017) who instituted guarantor's deposits significantly improved loan recovery in SACCOS. It also instituted that the amount of the guarantor's deposit had a noteworthy positive result on loan recovery.

4.6.2 Type of Guarantor on Recovery of Non-Performing Loans

Table 18

Correlation between Type of Guarantor and Recovery of Non-Performing Loans

		Type of Guarantor
Recovery of Non-Performing Loans	Pearson	.753*
	Correlation	
	Sig. (2-tailed)	.000
	N	50

The outcomes indicated $r=0.753$ and $p=0.000$ revealing a positive and significant connection of type of guarantor and recovery of non-performing loans among SACCOS in Nakuru County. The findings implied that the type of guarantor enhances recovery of non-performing loans among SACCOS in Nakuru County. According to Oluoch, (2018) who founds that found that the use of SACCO members as guarantors significantly improved loan recovery rates compared to non-members. The author also instituted that the use of non-member guarantors led to a higher rate of default.

4.6.3 Duration of Guarantor Membership on Recovery of Non-Performing Loans

Table 19

Correlation between Duration of Guarantor Membership and Recovery of Non-Performing Loans

		Duration of Guarantor Membership
Recovery of Non-Performing Loans	Pearson	.690**
	Correlation	
	Sig. (2-tailed)	.012
	N	50

The findings revealed $r=0.690$ and $p=0.012$. The p-value was less than the significant level of 0.05 meaning that there is a positive statistically significant relationship between the duration of guarantor membership and recovery of non-performing loans among SACCOS in Nakuru County.

This implies that the duration of guarantor membership enhances the recovery of non-performing loans among SACCOS in Nakuru County. The study findings disagree with those of Zhang (2018) which found that use of guarantors who had been members of the rural credit cooperative for more than three years significantly improved loan recovery rates compared to using new members. The study also found that using multiple guarantors did not significantly improve loan recovery rates.

4.6.4 Number of Guarantors and Recovery of Non-Performing Loans

Table 20

Correlation between Number of Guarantors and Recovery of Non-Performing Loans

		Number of Guarantors
Recovery of Non-Performing Loans	Pearson Correlation	.729**
	Sig. (2-tailed)	.014
	N	50

The study further sought to establish the nature of the relationship between the number of guarantors and the recovery of non-performing loans among SACCOS in Nakuru County. The findings indicated that $r=0.729$ and $p=0.014$. The $p < 0.05$ hence a statistically significant relationship between the number of guarantors and recovery of non-performing loans among SACCOS in Nakuru County. This implies that the number of guarantors enhances the recovery of non-performing loans among SACCOS in Nakuru County. The findings are in line with Obasi, (2017) which found that the use of multiple guarantors significantly improved loan recovery rates compared to using a

single guarantor. Also, using guarantors who had a higher level of education and income significantly improved loan recovery rates.

4.7 Regression Analysis

The researcher conducted a regression model summary to assess how well the independent variables, explain the variation in the recovery of non-performing loans.

Table 21

Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.857 ^a	.734	.725	.38742

a. Predictors: (Constant), Guarantor's Deposit, Type of Guarantor, Duration of Guarantor Membership and Number of Guarantors

b. Dependent Variable: Recovery of Non-Performing Loans among SACCOS

Regression analysis was employed to assess the relationship between independent and dependent variables, as detailed in Table 4.18. Results indicate that 73.4% of the variation in the recovery of non-performing loans among SACCOS in Nakuru County can be explained by the independent variables examined in this study. The remaining 26.6% of variation is attributed to factors not addressed in this research.

The ANOVA table presents an F statistic of 30.9895. With the calculated F value exceeding the critical F statistic, it suggests the model's statistical significance. Thus, there is strong evidence supporting the significance of the regression results.

Table 22*ANOVA of the Regression Model*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	49.609	4	12.402	30.9895	.000 ^b
	Residual	18.011	45	0.4002		
	Total	67.620	49			

a. Predictors: (Constant), Guarantor's Deposit, Type of Guarantor, Duration of Guarantor Membership and Number of Guarantors

b. Dependent Variable: Recovery of Non-Performing Loans among SACCOS in Nakuru County

The variation observed in the results is deemed insignificant, implying minimal differences in outcomes with changes in study units (population). Therefore, the model adequately fits the data.

Table 23*Regression Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1(Constant)	.445	.344		1.293	.198
Guarantor's Deposit	.297	.101	.256	2.941	.004
Type of Guarantor	.744	.095	.672	7.824	.000
Duration of Guarantor Membership	.405	.132	.260	3.067	.003
Number of Guarantors	.262	.082	.277	3.206	.002

Dependent Variable: Recovery of Non-Performing Loans among SACCOS

The study utilized regression analysis to determine the regression coefficients linking the variables, as depicted by the equation provided below:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

Where Y represents the recovery of non-performing loans, X_1 represents the guarantor's deposit, X_2 represents the type of guarantor, X_3 represents the duration of guarantor membership and X_4 represents the number of guarantors. β_0 represents Constant, which defines the value of non-performing loans' recovery without including predictor variables. The given equation was answered by Unstandardized Coefficients (β) values.

The results indicate that the guarantor's deposit, type of guarantor, duration of guarantor membership, and number of guarantors have a positive relationship with the recovery of non-performing loans among SACCOS in Nakuru County, Thus,

$$Y = 0.445 + 0.297X_1 + 0.744X_2 + 0.405X_3 + 0.262X_4 + \varepsilon$$

The value of recovery of non-performing loans among SACCOS without the influence of the predictor variables is 0.445. This explains that, at any given time, the recovery of non-performing loans among SACCOS in Nakuru County will be 0.445 holding other factors constant at 0. The results also illustrate that, a unit change in the guarantor deposit would result in a 0.297 times change in the recovery of non-performing loans among SACCOS in Nakuru County, a unit increase in the type of guarantor would result in a 0.744 times increase in the recovery of non-performing loans among SACCOS in Nakuru County, a unit increase in duration of guarantor would result to 0.405 times increase in recovery of non-performing loans among SACCOS in Nakuru County, a unit increase in number of guarantors would result to 0.262 times increase in recovery of non-performing loans among SACCOS in Nakuru County.

4.7 Hypothesis Testing

The testing hypothesis was sought:

Guarantor's deposit has no statistically significant effect on the recovery of non-performing loans among SACCOS in Nakuru County. The p-value was $0.004 < 0.05$ significant level. Therefore, based on the rule of significance, the study rejects the null hypothesis (H_{01}) and concludes that the guarantor's deposit has a statistically significant effect on the recovery of non-performing loans among SACCOS in Nakuru County. This agrees with Pascual (2018) who found that the use of guarantor's deposits positively influenced loan recovery in microfinance institutions. The use of guarantors was also found to improve loan portfolio quality reducing the incidence of non-performing loans.

The type of guarantor does not statistically affect SACCOS in Nakuru County's failed loan recovery. The data showed p-value $0.000 < 0.05$. Based on the rule of significance, the analysis rejects the null hypothesis (H_{02}) and concludes that the type of guarantor affects SACCOS in Nakuru County's not performing loan recovery. The study findings are in line with those of Oladejo, (2020) who found that education found that the use of group guarantors led to a higher loan recovery rate compared to using individual guarantors. The study also found that the use of multiple guarantors did not significantly improve loan recovery rates.

Duration of guarantor membership has no statistically significant effect on recovery of non-performing loans among SACCOS in Nakuru County. The data showed a p-value of $0.003 < 0.05$. Based on the threshold of significance, the study accepts the null hypothesis.

SACCOS in Nakuru County recover failed loans more with longer guarantor participation. The study findings are in line with those of Gidado (2020) who found that the use of guarantors who had been members of the commercial bank for more than five

years significantly improved loan recovery rates compared to using new members. The study also found that using multiple guarantors did not significantly improve loan recovery rates.

Number of guarantors does not significantly affect SACCOS in Nakuru County ineffective loan recovery. The data showed $p\text{-value } 0.002 < 0.05$. Per the criterion of significance, the analysis rejects the null hypothesis (H_0) and concludes that SACCOS in Nakuru County recover failed loans with a significantly greater number of guarantors. The findings are in line with Nsengiyumva, (2022) who found that the use of multiple guarantors significantly improved loan recovery rates compared to using a single guarantor. The study also found that using guarantors who had a higher level of education significantly improved loan recovery rates.

Table 24*Summary Table*

Hypothesis	Hypotheses	Findings	Decision
To assess the effect of guarantor's deposit on recovery of non-performing loans among SACCOS in Nakuru County	H0 ₁ : Guarantor's deposit has no statistically significant effect on the recovery of non-performing loans among SACCOS in Nakuru County.	p=0.004<0.05	Reject Null Hypothesis
To establish the effect of type of guarantor on recovery of non-performing loans among SACCOS in Nakuru County	H0 ₂ : The type of guarantor has no statistically significant effect on the recovery of non-performing loans among SACCOS in Nakuru County	p=0.000<0.05	Reject Null Hypothesis
To determine the effect of the duration of guarantor membership on the recovery of non-performing loans among SACCOS in Nakuru County	H0 ₃ : Duration of guarantor membership has no statistically significant effect on recovery of non-performing loans among SACCOS in Nakuru County	p=0.003<0.05	Reject Null Hypothesis
To examine the effect of the number of guarantors on the recovery of non-performing loans among SACCOS in Nakuru County.	H0 ₄ : The number of guarantors has no statistically significant effect on the recovery of non-performing loans among SACCOS in Nakuru County	p=0.002<0.05	Reject Null Hypothesis

CHAPTER FIVE

SUMMARY OF FINDINGS CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The final section summarizes the study's main findings and draws inferences and examines implications. It concludes with the research proposals. The main aim of this study was to assess the effect of guarantor quality on the recovery of non-performing loans among SACCOS in Nakuru County.

5.2 Summary of the Findings

The study sought to determine the summary of key major findings of the study. The summary was categorized in terms of specific objectives.

5.2.1 Guarantor's Deposit on Recovery of Non-Performing Loans

It was revealed that the guarantor's deposit amount of 1-50,000 (Kshs) positively influences the borrowers' loan repayment behavior. Moreover, the guarantor's deposit amount of 51,000-100,000 (Kshs) encourages borrowers to be more responsible in repaying their loans. It also agreed that guarantor's deposits exceeding 100,000 (Kshs) significantly reduce the risk of loan default by borrowers. The amount of the guarantor's deposit significantly impacts borrowers' commitment to repaying their loans. A higher guarantor's deposit requirement was instituted to improve the likelihood of borrowers repaying their loans on time. The guarantor's deposit should be tailored to the borrower's loan amount to ensure better loan recovery. The findings that there exists a moderate positive and significant relationship between guarantor's deposit and recovery of non-performing ($r=0.603$ and $p=0.000$).

5.2.2 Type of Guarantor on Recovery of Non-Performing Loans

From the analysis, the study revealed that Class B guarantors usually guarantee a smaller number of borrowers compared to Class A guarantors. Moreover, Saccos prefers Class A guarantors compared to Class B guarantors. The study also revealed that Class A guarantors are considered less risky and hence they have a positive effect on loan recovery. The Class A guarantors can guarantee a high number of borrowers which result to high loss to the Sacco in case several borrowers' default. The study also revealed that the type/classification of guarantor affects the recovery of non-performing loans among SACCOS. The findings indicated that there was a positive and significant connection of type of guarantor and recovery of non-performing loans among SACCOS in Nakuru County, ($r=0.753$ and $p=0.000$)

5.2.3 Duration of Guarantor Membership on Recovery of Non-Performing Loans

From the analysis the study revealed that loans with guarantors having duration of less than 1 year are more prone to becoming non-performing. It further, revealed that a duration of 1-5 years for guarantors significantly enhances the likelihood of loan recovery. Moreover, loans with guarantors committed for more than 5 years exhibit better borrower repayment behavior. It further revealed that borrowers feel more confident and secure in taking loans with guarantors committed for less than 1 year. The study also revealed that loans requiring guarantors committed for 1-5 years are perceived as more reliable by borrowers. It moreover revealed that guarantors committed for more than 5 years may encourage borrowers to be more diligent in repaying their loans. The findings indicated that there was a positive statistically significant relationship between the duration of guarantor membership and recovery of non-performing loans among SACCOS in Nakuru County ($r=0.690$ and $p=0.012$).

5.2.4 Number of Guarantors on Recovery of Non-Performing Loans

From the analysis the study revealed that loans with less than 5 guarantors are more likely to result in non-performing loans. The study further revealed that having more than 5 guarantors increases the chances of loan recovery for the SACCOS. Moreover, loans with multiple guarantors are more likely to be recovered compared to loans with a single guarantor. The study also revealed that the number of guarantors should be proportional to the loan amount for better loan recovery outcomes. Finally, the study revealed that loans with a higher number of guarantors exhibit better repayment behavior by the borrowers. The study revealed that there was a statistically significant relationship between the number of guarantors and recovery of non-performing loans among SACCOS in Nakuru County with $r=0.729$ and $p=0.014$.

5.3 Conclusions

The researcher concluded the following from the summaries.

Regarding the guarantor's deposit, the study concluded that the amount of the guarantor's deposit significantly impacts borrowers' commitment to repaying their loans. The study also concluded that a higher guarantor's deposit requirement improves the likelihood of borrowers repaying their loans on time. Moreover, the study also concluded that the guarantor's deposit should be tailored to the borrower's loan amount to ensure better loan recovery.

From the findings on hypothesis testing, the study concluded that p -value was $0.004 < 0.05$ significant level. Therefore, based on the rule of significance, the study rejects the null hypothesis (H_{01}) and concludes that the guarantor's deposit has a statistically significant effect on the recovery of non-performing loans among SACCOS in Nakuru County.

Regarding the type of guarantor, the study concluded that Class A guarantors can guarantee a high number of borrowers which results in a high loss to Sacco in case several borrowers' default. The study also concluded that the type/classification of guarantor affects the recovery of non-performing loans among SACCOS.

From the findings on hypothesis testing, the study concluded that $p\text{-value } 0.000 < 0.05$. Based on the rule of significance, the analysis rejects the null hypothesis (H_{02}) and concludes that the type of guarantor affects SACCOS in Nakuru County's not performing loan recovery.

Regarding the duration of guarantor membership, the study concluded that borrowers feel more confident and secure in taking loans with guarantors committed for less than 1 year. The study also concluded that loans requiring guarantors committed for 1-5 years are perceived as more reliable by borrowers. The study also concluded that guarantors committed for more than 5 years may encourage borrowers to be more diligent in repaying their loans. From the findings on hypothesis testing, the study concluded that $p\text{-value of } 0.003 < 0.05$. Based on the threshold of significance, the research accepts the null hypothesis (H_{03}) and concludes that SACCOS in Nakuru County recover failed loans more with longer guarantor participation.

The study concluded that loans with multiple guarantors are more likely to be recovered compared to loans with a single guarantor. Moreover, the number of guarantors should be proportional to the loan amount for better loan recovery outcomes. From the findings on hypothesis testing, the study concluded that $p\text{-value } 0.002 < 0.05$. Per the criterion of significance, the analysis rejects the null hypothesis (H_{04}) and concludes that SACCOS in Nakuru County recover failed loans with a significantly greater number of guarantors

5.4 Recommendations

In the light of the foregoing findings, the study made recommendations to existing policy that needs enhancement, Non-existent policies that need to be formulated and Practical interventions:

5.4.1 Policy Recommendations

The study recommended that existing policies regarding guarantor deposits be enhanced. SACCOS were advised to adjust the required deposit amounts to better align with the borrower's loan size. Implementing a tiered deposit system was suggested to help mitigate the risks of default, as higher guarantor deposits had been shown to encourage borrowers to repay their loans more responsibly. By tailoring the guarantor's deposit to the loan amount, SACCOS were expected to improve the overall recovery of non-performing loans.

The study also recommended that new policies be formulated to classify guarantors more distinctly. SACCOS could benefit from establishing clear criteria for differentiating between Class A and Class B guarantors. It was recommended that this classification ensure higher-risk loans were matched with guarantors better equipped to guarantee repayment. Class A guarantors, for instance, should only have been allowed to guarantee a limited number of borrowers to prevent excessive loss in the event of defaults by multiple borrowers.

Additionally, practical interventions were recommended to increase loan recovery. These included promoting long-term guarantor memberships and requiring multiple guarantors for higher-risk loans. The study found that guarantors with longer membership durations contributed to better loan recovery, and loans with multiple guarantors were more likely to be repaid. Therefore, it was recommended that SACCOS encourage guarantors to

commit to longer membership periods and revise their loan approval processes to incorporate multiple guarantors for larger or higher-risk loans. These interventions were expected to significantly improve the recovery of non-performing loans among SACCOS.

5.4.2 Suggestions for Further Studies

The researcher suggests that further studies should be conducted on the various factors that contribute to a guarantor's quality, such as credit history, financial stability, and social capital. Develop a comprehensive measurement framework to assess and quantify the quality of guarantors in SACCOS.

The researcher further suggests that another study should focus on how the credit history of a guarantor influences the recovery of non-performing loans. Analyze whether guarantors with positive credit histories have a more significant impact on recovery rates compared to those with poor credit histories.

Moreover, another study should focus on the relationship between the financial stability of guarantors and the recovery of non-performing loans. Evaluate whether financially stable guarantors are more likely to fulfill their obligations, leading to higher recovery rates.

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APPENDICES

Appendix I: Research Questionnaire

Kabarak University's MS in Finance (Finance and Investment Analysis Option) student. I created the following topic-related questionnaire. Please answer all questions as best you can. This questionnaire's data will solitarily be used for the study.

Instructions: Indicate with a tick (√) or mark (X) in the space(s) provided.

Section A: General Information

Section A. Respondents Details

1. Gender

Male ()

Female ()

2. Your age bracket

18-30 years ()

31-40 years ()

41-50 years ()

50 Years and above ()

3. Highest education qualification attained

Diploma ()

First Degree ()

Post Graduate ()

4. How long have you been working in this organization?

Less than 5 years ()

6-10 Years ()

11 – 20 Years ()

More than 20yrs ()

Section B: Guarantor's Deposit

Rate the following features of the guarantor's deposit on SACCOS' non-performing loan recovery. 1-strongly disagree, 2-disagree, 3-neutral, 4-agree, 5-strongly agree.

	Guarantor's Deposit	5	4	3	2	1
1.	The guarantor's deposit amount of 1,000-50,000 (Ksh) positively influences the borrowers' loan repayment behavior.					
2.	The guarantor's deposit amount of 51,000-100,000 (Ksh) encourages borrowers to be more responsible in repaying their loans.					
3.	Guarantor's deposits exceeding 100,000 (Ksh) significantly reduce the risk of loan default by borrowers.					
4.	The amount of the guarantor's deposit significantly impacts borrowers' commitment to repaying their loans.					
5.	A higher guarantor's deposit requirement improves the likelihood of borrowers repaying their loans on time					
6.	The guarantor's deposit should be tailored to the borrower's loan amount to ensure better loan recovery.					

Section C: Type of Guarantor

Rate the following items, kind of guarantor on SACCO non-performing loan recovery from 1-5: 1-strongly disagree, 2-disagree, 3-neutral, 4-agree, 5-strongly agree.

	Type of Guarantor	5	4	3	2	1
1.	Class B guarantors usually guarantee a smaller number of borrowers compared to Class A guarantors					
2.	Saccos prefer Class A guarantors compared to Class B guarantors					
3.	Class A guarantors are considered less risky and hence they have a positive effect on loan recovery					
4.	Class A guarantors can guarantee a high number of borrowers which results in high loss to Sacco in case several borrowers default					
5.	The type/classification of guarantor affects the recovery of non-performing loans among SACCOS					

Section D: Duration of Guarantor Membership

How much do you agree with the following assertions about SACCO non-performing loan recovery and guarantor membership duration? 1-strongly disagree, 2- disagree, 3- neutral, 4- agree, 5-strongly agree.

	Duration of Guarantor Membership	5	4	3	2	1
1.	Loans with guarantors having duration of less than 1 year are more prone to becoming non-performing.					
2.	A duration of 1-5 years for guarantors significantly enhances the likelihood of loan recovery.					
3.	Loans with guarantors committed for more than 5 years exhibit better borrower repayment behavior.					
4.	Borrowers feel more confident and secure in taking loans with guarantors committed for less than 1 year.					
5.	Loans requiring guarantors committed for 1-5 years are perceived as more reliable by borrowers.					
6.	Guarantors committed for more than 5 years may encourage borrowers to be more diligent in repaying their loans.					

Section E: Number of Guarantors

How much do you agree with the following assertions about SACCO's non-performing loan recovery and number of guarantors 1-strongly disagree, 2- disagree, 3- neutral, 4- agree, 5-strongly agree.

	Number of Guarantors	5	4	3	2	1
1.	Loans with less than 5 guarantors are more likely to result in non-performing loans.					
2.	Having more than 5 guarantors increases the chances of loan recovery for the SACCOS.					
3.	Loans with multiple guarantors are more likely to be recovered compared to loans with a single guarantor.					
4.	The number of guarantors should be proportional to the loan amount for better loan recovery outcomes.					
5.	Loans with a higher number of guarantors exhibit better repayment behavior by the borrowers.					

Section E: Recovery of Non-Performing Loans Among SACCOS

In your opinion indicate your level of agreement with the statements below relating to on recovery of non-performing loans among SACCOS. Use a scale of 1-5, where 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree.

	Recovery of Non-Performing Loans	5	4	3	2	1
1.	There is a decrease in the amount of non-performing loans					
2.	The use of guarantor is very effective in recovering non-performing loans					
3.	The loan portfolio of the Sacco has grown over the years					

Appendix II: List of Saccoss in Nakuru County

1. Afya Sacco
2. Biashara Sacco
3. Boresha Sacco
4. Cosmopolitan Sacco
5. Egerton Sacco
6. Harambee Sacco
7. Imarisha Sacco
8. Kenya Police Sacco
9. Mwalimu National Sacco
10. Ndege Chai Sacco
11. Skyline Sacco
12. Stima Sacco
13. Tai Sacco
14. Taifa Sacco
15. Tower Sacco
16. Ukulima Sacco
17. Unaitas Sacco
18. Un-County Sacco
19. Unison Sacco
20. Vision African Sacco Society Limited
21. Wananchi Sacco
22. Waumini Sacco

Appendix III: KUREC Approval Letter



KABARAK UNIVERSITY RESEARCH ETHICS COMMITTEE

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OUR REF: KABU01/KUREC/001/01/11/23

Date: 23rd November, 2023

Charles Cheruiyot Kimutai,
REG No. GMF/NE/018/01/22
Kabarak University

Dear Charles,

RE: EFFECT OF GUARANTOR'S QUALITY ON RECOVERY OF NON-PERFORMING LOANS AMONG SACCOS IN NAKURU COUNTY

This is to inform you that **KUREC** has reviewed and approved your above research proposal. Your application approval number is **KUREC-011123**. The approval period is **23/11/2023 – 23/11/2024**.

This approval is subject to compliance with the following requirements:

- i. All researchers shall obtain an introduction letter to NACOSTI from the relevant head of institutions (Institute of postgraduate, School dean or Directorate of research)
- ii. The researcher shall further obtain a RESEARCH PERMIT from NACOSTI before commencement of data collection & submit a copy of the permit to **KUREC**.
- iii. Only approved documents including (informed consents, study instruments, MTA Material Transfer Agreement) will be used
- iv. All changes including (amendments, deviations, and violations) are submitted for review and approval by **KUREC**.
- v. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **KUREC** within 72 hours of notification;
- vi. Any changes, anticipated or otherwise that may increase the risk(s) or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to **KUREC** within 72 hours;
- vii. Clearance for export of biological specimens must be obtained from relevant institutions and submit a copy of the permit to **KUREC**;
- viii. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal and;
- ix. Submission of an executive summary report within 90 days upon completion of the study to **KUREC**

Sincerely,

Prof. Jackson Kitetu PhD.
KUREC-Chairman



Cc Vice Chancellor
DVC-Academic & Research
Registrar-Academic & Research
Director-Research Innovation & Outreach
Institute of Post Graduate Studies

As members of Kabarak's University family, we purpose at all times and in all places, to set apart in one's heart, Jesus as Lord.
(1 Peter 3:15)



Kabarak University is ISO 9001:2015 Certified

Appendix IV: NACOSTI Research Letter


REPUBLIC OF KENYA


**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION**

Ref No: 990645 **Date of Issue: 15/December/2023**

RESEARCH LICENSE



This is to Certify that Mr. CHARLES KIMUTAI CHERUIYOT of Kabarak University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nakuru on the topic: **EFFECT OF GUARANTOR'S QUALITY ON RECOVERY OF NON-PERFORMING LOANS AMONG SACCOS IN NAKURU COUNTY for the period ending : 15/December/2024.**

License No: NACOSTI/P/23/31809

990645
Applicant Identification Number


**Director General
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SCIENCE, TECHNOLOGY &
INNOVATION**

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Appendix V: Evidence of Conference Participation



Appendix VI: List of Publication



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EFFECT OF TYPE OF GUARANTOR ON RECOVERY OF NON-PERFORMING LOANS AMONG SACCOS IN NAKURU COUNTY

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ABSTRACT

SACCOS play a crucial role in providing financial services to the marginalized poor, although they face several challenges. One significant challenge is the high rate of loan default. In Nakuru County, SACCOS experiences a higher default rate compared to microfinance and commercial banks. Therefore, this study aimed to analyze the effect of the type of guarantor on recovery of non-performing loans among SACCOS in Nakuru County. The study was guided by information asymmetry theory. The study utilized a descriptive design, focusing on 22 SACCOS within Nakuru County. The unit of analysis was 22 SACCOS in Nakuru County while the unit of observation was 56 credit and recovery officers. Given the manageable size of the target population, the researcher opted for a census approach, including all 56 employees in the study. The study collected data using questionnaires. The study conducted a pilot study in Kericho where 6 questionnaires were issued. Cronbach's alpha coefficient was employed to assess research dependability. Both descriptive and inferential statistics were utilized to analyze quantitative data. Based on the findings, the study concluded that there is a positive and significant correlation between the type of guarantor and the recovery of non-performing loans among SACCOS in Nakuru County ($r=0.753$, $p=0.000$). The study recommended that new policies be formulated to classify guarantors more distinctly. SACCOS could benefit from establishing clear criteria for differentiating between Class A and Class B guarantors. It was recommended that this classification ensure higher-risk loans were matched with guarantors better equipped to guarantee repayment. Additionally, practical interventions were recommended to increase loan recovery. These included promoting long-term guarantor memberships and requiring multiple guarantors for higher-risk loans.

Key Words: Type of Guarantor, Recovery of Non-Performing Loans and SACCOS in Nakuru County

CITATION: Cheruiyot, C. K., Kibati, P., & Cheruiyot, P. (2024). Effect of type of guarantor on recovery of non-performing loans among SACCOS in Nakuru County. *The Strategic Journal of Business & Change Management*, 11 (4), 1077 – 1084. <http://dx.doi.org/10.61426/sjbc.v11i4.3140>