

**CREDIT RISK MANAGEMENT AND LOAN PERFORMANCE OF DEPOSIT  
TAKING SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN KENYA.**

**JOTHAM GITONGA BAARIU**

**D53/OL/EMB/26238/2015**

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

**MAY, 2024**

## **DECLARATION**

This project is my original work and has never been submitted for a degree in any other university.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**JOTHAM GITONGA BAARIU**

**D53/OL/EMB/26238/2015**

Supervisor:

The project work is submitted for examination with my approval as the University appointed supervisor.

Signature \_\_\_\_\_ Date \_\_\_\_\_

**Dr. Charity Njoka**

**Department of Accounting and Finance**

**Kenyatta University**

## **DEDICATION**

This project is dedicated to my family and parents who helped me to complete this research through inspiration, financial support, encouragement, understanding and prayers. I owe it to the All-Powerful God for giving me the insight to travel along this path.

## **ACKNOWLEDGEMENT**

I praise God Almighty for His grace and strength. Dr. Charity Njoka, my supervisor, guided me through the notion of creating this project, and I am grateful for her assistance. I want to thank my wife Janet for always being there for me, for being concerned while I worked late into the night on the project, and for being understanding in general. My children, Prince and Peace, who constantly sat around me and gave me affection, kept me fresh for an extra hour of focus, I am glad. I owe a great deal to my parents, who have always been financially and morally supportive of me. I thank my colleagues for their encouragement and constructive feedback while I worked on the project. Thank you all so much.

## TABLE OF CONTENTS

<b>DECLARATION.....</b>	<b>ii</b>
<b>DEDICATION.....</b>	<b>iii</b>
<b>ACKNOWLEDGEMENT.....</b>	<b>iv</b>
<b>TABLE OF CONTENTS .....</b>	<b>v</b>
<b>LIST OF TABLES .....</b>	<b>xi</b>
<b>LIST OF FIGURES .....</b>	<b>xii</b>
<b>OPERATIONAL DEFINITION OF TERMS.....</b>	<b>xiii</b>
<b>ABBREVIATION AND ACRONYMS .....</b>	<b>xv</b>
<b>ABSTRACT.....</b>	<b>xvi</b>
<b>CHAPTER ONE .....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.1 Background to the study .....	1
1.1.1 Credit Risk Management .....	3
1.1.2 Loan Performance .....	6
1.1.3 Deposit-Taking SACCOs in Kenya .....	7
1.1.4 Deposit Taking SACCOs in Meru County .....	9
1.2 Statement of the Problem.....	10
1.3 Objectives of the Study.....	11
1.3.1 Specific Objectives.....	11
1.4 Research Hypotheses .....	11

1.5 Significance of the study .....	12
1.6 Scope of the Study .....	12
1.7 Limitations .....	13
1.8 Organization of the study .....	14
<b>CHAPTER TWO .....</b>	<b>15</b>
<b>LITERATURE REVIEW .....</b>	<b>15</b>
2.1 Introduction.....	15
2.2 The Theoretical Review .....	15
2.2.1 Portfolio Theory.....	15
2.2.2 Agency Theory.....	16
2.2.3 Credit Default Theory .....	17
2.3 Empirical Review.....	19
2.3.1 Lending Requirements and Loan Performance .....	19
2.3.2 Loan Recovery and Loan Performance .....	20
2.3.3 Credit Monitoring and Loan Performance.....	21
2.4 Summary of Literature Review and Research Gaps .....	23
2.5 Conceptual Framework.....	26
<b>CHAPTER THREE .....</b>	<b>27</b>
<b>RESEARCH METHODOLOGY .....</b>	<b>27</b>
3.1 Introduction.....	27
3.2 Research Design.....	27

3.3 Target Population.....	27
3.4 Sampling Technique and Sample Size.....	28
3.5 Data Collection Instruments .....	29
3.6 Data Collection Procedures.....	30
3.7 Reliability and Validity of Research Instrument .....	30
3.7.1 Validity .....	30
3.7.2 Reliability.....	30
3.8 Empirical Model .....	31
3.9 Data Analysis and Presentation .....	32
3.10 Diagnostic Tests.....	32
3.10.1 Normality Test.....	32
3.10.2 Multicollinearity Test.....	32
3.10.3 Heteroscedasticity Test .....	33
3.11 Ethical Considerations .....	33
<b>CHAPTER FOUR.....</b>	<b>34</b>
<b>RESEARCH FINDINGS AND DISCUSSIONS .....</b>	<b>34</b>
4.1 Introduction.....	34
4.2 Response Rate.....	34
4.3 Reliability Test.....	35
4.4 Demographic Information.....	35
4.4.1 Gender Response Rate .....	35

- 4.4.2 Education Level .....36
- 4.4.3 Work Duration in the Institution.....37
- 4.4.4 Position in the SACCO .....37
- 4.4.5 Work Duration in the Current Position.....38
- 4.5 Descriptive Analysis .....39
  - 4.5.1 Lending Requirements .....39
    - 4.5.1.1 Approach used in Credit Risk Analysis .....39
    - 4.5.1.2 Credit Analysis and Assessment.....40
    - 4.5.1.3 Evaluating Clients on Loan to be awarded .....41
    - 4.5.1.4 Credit Manual .....42
  - 4.5.2 Loan Recovery Process.....43
    - 4.5.2.1 Debt Recovery Department.....44
    - 4.5.2.2 Loan Default Timing.....44
    - 4.5.2.3 Debt Recovery Methods .....45
    - 4.5.2.4 Credit Reference Bureau.....46
    - 4.5.2.5 Debt Recovery Policies.....47
  - 4.5.3 Credit Monitoring .....48
    - 4.5.3.1 Loan Monitoring Practice .....48
    - 4.5.3.2 Default Rate .....49
    - 4.5.3.3 Aspects of Credit Monitoring .....50
  - 4.5.4 Loan Performance.....51

4.5.4.1 Loan Performance Trend .....	51
4.5.4.2 Credit Risk Management Practices .....	52
4.6 Diagnostic Tests.....	53
4.6.1 Normality Test .....	53
4.6.2 Multicollinearity Test.....	54
4.6.3 Heteroskedasticity Test .....	54
4.7 Inferential Statistics .....	55
4.7.1 Correlation Analysis .....	55
4.7.2 Regression Analysis.....	56
4.7.3 Model Summary.....	56
4.7.4 ANOVA.....	57
4.7.5 Regression Coefficients .....	57
4.8 Study Hypotheses.....	59
<b>CHAPTER FIVE .....</b>	<b>61</b>
<b>SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>61</b>
5.1 Introduction.....	61
5.2 Summary of Findings.....	61
5.2.1 Lending Requirements and Loan Performance.....	61
5.2.2 Loan Recovery Process and Loan Performance .....	62
5.2.2 Credit Monitoring and Loan Performance .....	62
5.3 Conclusions.....	63

5.4 Recommendations.....	64
5.5 Recommendation for Further Research .....	65
References.....	67
<b>APPENDICES.....</b>	<b>72</b>
Appendix I: Introduction Letter .....	72
<b>Appendix II: Research Questionnaire .....</b>	<b>73</b>
<b>Appendix III: Deposit Taking SACCOs .....</b>	<b>79</b>
<b>Appendix IV: Approval of Research Project Proposal .....</b>	<b>80</b>
<b>Appendix V: NACOSTI Permit.....</b>	<b>81</b>

## LIST OF TABLES

Table 2.1: Summary of Literature Review and Research Gaps.....	24
Table 3.1: Target Population.....	28
Table 3.2: Sample Size .....	29
Table 3.3: Operationalization of Construct.....	<b>Error! Bookmark not defined.</b>
Table 4.1: The Response Rate .....	34
Table 4.2: Reliability and Validity Statistics .....	35
Table 4.3: Lending Requirements.....	41
Table 4.4: Debt default timing .....	45
Table 4.5: Debt Collection.....	47
Table 4.6: Credit Monitoring .....	50
Table 4.7: Loan Performance Indicators.....	52
Table 4.8: Multicollinearity .....	<b>Error! Bookmark not defined.</b>
Table 4.9: Correlation Results .....	55
Table 4.10: Model Fitness Results.....	57
Table 4.11: ANOVA.....	57
Table 4.12: Regression of Coefficient .....	57

## LIST OF FIGURES

Figure 2.1: Conceptual Framework .....	26
Figure 4.1: Gender Response Rate.....	36
Figure 4.2: Level of Education .....	36
Figure 4.3: Duration worked in the institution.....	37
Figure 4.4: Position in the SACCO.....	38
Figure 4.5: Duration in the Current Position .....	39
Figure 4.6: Approach used before awarding credit.....	40
Figure 4.7: Extent of credit analysis and assessment.....	40
Figure 4.8: Credit Manual.....	43
Figure 4.9: Debt Collection Department.....	44
Figure 4.10: Loan recovery .....	46
Figure 4.11: Credit Reference Bureau .....	46
Figure 4.12: Loan Monitoring.....	48
Figure 4.13: Default Rate.....	49
Figure 4.14: Loan Trend .....	51
Figure 4.15: Normality Test.....	54

## OPERATIONAL DEFINITION OF TERMS

- Credit Management:** Refers to procedures and techniques used by SACCOs to maintain ideal credit levels and efficient administration.
- Credit Monitoring:** These are SACCOs' follow-up measures that ensure loans are paid on time and internal policy guidelines are followed. This is conducted by frequent review of credit repayment and loan policies.
- Credit Risk Management:** This is the process of managing, preventing, or minimizing the risk of customers' not repaying their loans as per the institution's laid down terms and conditions.
- Credit Risk:** The possibility that a borrower would default a loan due to failure to make required payments, which can result in the loss of principal and interest, as well as cash flow interruption and higher collection fees.
- Debt Recovery:** These are the mechanisms put in place by SACCOs to ensure collection and repayment of defaulted amount by use of legal means or debt recovery policies in place.
- Deposit Taking SACCOs:** It is a cooperative that is governed by the SACCO Society Regulatory Authority (SASRA) and has been granted permission under the SASRA Act to collect deposits and provide back and front office services.
- Lending Requirements:** These are necessary conditions set by the management which must be fulfilled by members before loan disbursement. This

includes; credit history, collateral requirements and borrowers' integrity.

**Loan Performance:** This is the process of producing gains from loans disbursement to members. This is measured through loan performance trends, increase in the amount of loans disbursed, decrease in level of non-performing loans, repayments of loans within scheduled time, increase in loan products or increase in profitability of the SACCO.

**Non-Deposit Taking SACCOs:** These are cooperatives which provide back-office services and are not subject to SASRA Regulations. Members save and borrow but payments to members are made through other bank accounts.

**Savings and credit Co-operative Societies:** Individual members enter these organizations by voluntarily collecting resources in secure and secure sources and providing or providing members with fair and easily accessible credit capabilities.

## **ABBREVIATION AND ACRONYMS**

<b>ANOVA</b>	-Analysis of Variance
<b>ATMs</b>	-Automated Teller Machines
<b>CRB</b>	-Credit Reference Bureau
<b>DT-SACCOs</b>	-Deposits Taking SACCOS
<b>FOSA</b>	-Front Office Savings Accounts
<b>GDP</b>	-Gross Domestic Product
<b>ICA</b>	-International Credit Alliance
<b>LP</b>	-Loan Performance
<b>MFI</b>	-Microfinance Institutions
<b>NGO</b>	-Non-Governmental Organizations
<b>NPL</b>	-Non-Performing Loan
<b>PAT</b>	-Profit after Tax
<b>SACCO</b>	-Savings and Credit Cooperative Societies
<b>SASRA</b>	-Sacco Society Regulatory Authority
<b>WOCCU</b>	-World Council of Credit Union

## ABSTRACT

Savings and Credit Cooperative Societies play an important role in providing financial services to many Kenyans. SACCOs have been identified as crucial growth engines in many countries across the world. This was evidenced from the increase in the substandard, doubtful and loss categories of the loan portfolio, which together constitute the Non-Performing Loans (NPLs) portfolio thus an indication that loans were not being serviced in accordance with their contractual obligations. The issue of credit risk has dominated the financial world. The goal of this study was to determine credit risk management and loan performance of deposit-taking SACCOs in Kenya. Specifically, the research assessed the influence of lending requirements, debt recovery processes and credit monitoring on loan performance in Deposit- Taking SACCOs in Kenya. The anchoring theories included portfolio theory, agency theory, credit default theory and loanable fund theory. To examine the connection between credit risk management and loan performance, this study used a causal approach research design with a target population of the study was 11 SACCOs in Meru County selected using purposive sampling. The sample size was the 44 managers from the 11 DT-SACCOs who were involved directly on credit management and were the primary respondents. The study employed primary data acquired from the questionnaires and responses were analyzed using both descriptive and inferential statistics. Findings revealed majority of respondents considered the ability of customers to generate sufficient cash flow, customer's collateral, borrower's moral character and borrower's credit history before granting a loan. Result showed that revealed a strong and positive relationship between the lending requirement and loan performance. Further, the findings revealed fines for late payments were mostly known by customers, sale of the properties of the customer in the case of loan default, use of legal means in loan collection and debt collection policies greatly helped in efficient credit management. The regression analysis's findings also demonstrated a strong and positive correlation between loan performance and the loan recovery procedure. The majority of respondents, according to descriptive data, thoroughly investigated applicants' creditworthiness, regularly verified clients' credit status, and followed internal policies to guarantee on-time loan repayments. The regression study demonstrated a strong and favorable correlation between credit monitoring and loan performance. The study concluded that lending requirements, loan recovery processes, credit monitoring, and loan performance were positively and significantly correlated. The study recommends DT-SACCOs should have a credit risk management policy which guarantees loan repayment, accurate estimation of loan defaults and suitable mitigation measures. The study further recommends regular credit risk monitoring of loan portfolio and use the services of a credit reporting agency to determine the creditworthiness of borrowers to minimize default rates.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the study

The 2017 International Co-operative Alliance's World Cooperative Monitor reported that the revenue of the top 300 cooperatives worldwide increased by 11.6% in 2014, reaching \$2.2 trillion. This amount is similar to the gross domestic product (GDP) of Brazil (Gotz, 2017). The combined revenue of around 2,000 cooperatives in the 65 nations examined by the Monitor amounts to \$2.6 billion. The statistical report for 2014 by the World Council of Credit Unions (WOCCU) documented a grand total of 57,000 Credit Unions (also known as SACCOs) distributed throughout 105 nations and 6 continents. The global Credit Union system holds a total of \$1.5 trillion in savings and has assets of \$1.8 trillion, with \$1.2 trillion of that amount being in the form of loans.

The global Credit Union system has an average penetration rate of 9.2 percent, according to Musengamana (2019). SACCOs in developing countries, particularly in Kenya, are facing challenges with declining financial performance. To address this, they are adopting strategies such as loan appraisal, interest rates on loans, loan follow-up procedures, and considering customer characteristics. These measures aim to improve their financial competitiveness (SASRA, 2017). To minimize incidents of nonperforming loans, SACCOs can use loan appraisal interventions such as establishing robust financial systems, adhering to internal loan approval procedures, and conducting thorough assessments of business potential prior to loan approval (Mungai, 2019).

A cooperative is an independent group of volunteers that works to fulfill common economic, cultural, and aspirational needs through cooperatively owned and democratically run

businesses (Ammirato, 2024). The primary goals of cooperatives are to pool scarce resources, cut out intermediaries, and pursue common goals and interests, according to the Ministry of Cooperative Development and Marketing (Etefa, 2021). Cooperatives are a good way to help people improve their socioeconomic situation. They are institutions that rely on the comradery and care among their members for their strength and legitimacy. In order to mobilize savings and offer credit to members, Savings and Credit Cooperative Societies (SACCOs) established a credit union.

Rochdale Pioneers' Equitable Society that was established in 1844 in Britain is the first and most famous Co-operative enterprise in the world because it developed democratic and egalitarian business policies that later became the foundation of Co-operative values and principles around the world (KLB, 2019). The International Co-operative Alliance (ICA) was established in 1895 as the global custodian of Co-operative values and principles. These principles include autonomy and independence for cooperative members, democratic member control, economic involvement, voluntary and open membership, cooperation among cooperative members, education, training, and information, as well as a general concern for the community.

According to the World Bank (2020), Kenya's credit sector remained stable, while it grew significantly due to SACCO's importance in the economy. With over 14 million members and over 16,000 SACCO associations in Kenya, it is the largest SACCO movement in Africa. According to the World Bank (2016), Kenya accounts for almost 62 percent of all SACCO savings and 65 percent of SACCO loans in Africa, making it the most prominent SACCO movement in Africa.

With more than Kes.102 billion in accumulated savings, which accounts for around 31% of the nation's total savings and 67% of all savings in Africa, Kenya currently leads the continent's

cooperative movements (Wafula, 2021). With 3,500 SACCOS and 4.6 million members overall, Kenya also has the most cooperative savings societies and individual members in all of Africa. 2,676 of these SACCOS are currently active, compared to 1,310 SACCOS in Uganda, some of which are not (Wafula, 2021).

Deposit Taking SACCOs loan processing is an active company considering the detection of non-performing loans of members. Musengamana, (2019) point out that “members' share of capital and contributions in relation to members' loan repayments make a large contribution to their income. The creditworthiness of a financial institution enhances an investor's ability to take advantage of the desired profitable venture. Karmelavičius, & Ramanaukas, (2019) shows that these financial institutions depend on credit creation as their main source of income.

Budianto & Dewi, (2023) defines credit risk as an unfavorable event caused by the customer (borrower) not repaying the required funds on time. Studies indicate the likelihood that the borrower will not fulfill its contractual obligations. Essentially, the lender bears the risk, which might include things like principle loss, interest, cash flow volatility, and the expense of extending accumulated debt.

### **1.1.1 Credit Risk Management**

This is the procedure used to manage, prevent, or reduce the danger that consumers won't repay their loans in accordance with the institution's established terms and conditions. In the modern corporate world, risk management is regarded as an essential component of good management practices. The systematic application of control rules, strategies, and practices is needed for the activities of risk identification, evaluation, evaluation, treatment, and tracking (Chorus & Welker, 2021). Recognizing, measuring, monitoring, and controlling credit risk is described as identifying, measuring, monitoring, and controlling hazards associated with the probability of default (Budianto & Dewi, 2023).

The systems, procedures, and controls implemented by DT SACCO to ensure effective payment collection, with the ultimate purpose of decreasing the risk of default, are referred to as credit risk management (Lundqvist & Vilhelmsson, 2018). The loan terms, debt collection mechanisms, and credit monitoring are the subject of this research. According to Xu et al., (2017) a financial institution must have a well-designed and sustainable operational risk management system in order to achieve economic growth.

Lending requirements are necessary conditions which are set to members to fulfill before disbursement. This includes credit history, personal information, business experience, business plan, financial statements, collateral and many more. According to Tarimo (2020), the most significant criterion is the organization's procedure for implementing its lending policy. Institutions should have adequate procedures and processes that are documented and defined in enough detail to provide operational direction to employees.

Various controls and restrictions in the credit process must be established, such as complete loan and legal paperwork, verify loan payments, apply waivers limitations, and follow up on loan exceptions. According to the Bank for International Settlements (2018), operating procedures should be reviewed and modified frequently to reflect new operations and products, credit methodologies, and system changes.

Credit terms are also a process used by financial institutions to determine a borrower's creditworthiness (Vladislava, 2020). The institution must conduct a comprehensive assessment of the creditworthiness of its debtors. This should include, where appropriate, an analysis of the debtor's financial situation, reflected in various financial and monetary sources such as statements, previous payments, quality and integrity of management and relevant industry and macroeconomic data. In the case of corporate debtors, adequate control must be exercised over

the shareholders and directors of the company. Institutions must classify affiliated obligors as appropriate and conduct group credit assessments (Momanyi & Njiru, 2016).

Debt recovery process is the collection of the amount which continues to go unpaid or has defaulted using an institution establishments or use of the third party. Recovery forms the backbone of every lending institution and consequently the institution success depends much on how the recovery process being controlled. Hence, loan recovery is based on characteristics of client's financial status, financial sector, economic and competitive circumstances (Johnson et al, 2021).

For long, great loan recovery managers have focused their effort on issuer carefully monitoring loan per structure and approving loans (Abebe, 2020). Gatimu et al., (2018) argue that in many countries, recovery rates and resilience scores can vary and fall due to increased failure rates in recessions. The focus on verification of defaults has changed with the increasing number of studies on estimated recovery rates and the relationship between recovery rates and non-compliance.

Credit monitoring is a follow-up action taken by the institution to ensure that loans are repaid within a certain timeframe and national guidelines are met. This is indicated by frequent credit checks, credit standards and credit report data (Makori & Sile, 2017). When a financial institution extends credit to a customer, it runs the risk of default. The institutions should have a system in place for credit monitoring before and after disbursement. External rating by credit bureaus and market price are key in credit monitoring.

The methods, practices, and controls used by DT SACCO to ensure efficient client payment collection and lower the risk of default are referred to as credit monitoring (OLWENY,2019). Credit monitoring ensures a thorough examination of the applicant's creditworthiness, internal company guidelines and the degree of insolvency. To evaluate if lines of credit are being used

as intended, DT SACCO must keep track of how much money is being spent. Many businesses fail as a result of an inadequate credit monitoring approach. Many small organizations, for example, lack the means and skills to maintain effective management systems (Karim et al., 2021).

### **1.1.2 Loan Performance**

This is the process of producing gains from loans disbursement to members. This is measured through loan performance trends, increase in the amount of loans disbursed, decrease in level of non-performing loans, repayments of loans within scheduled time, increase in loan products or increase in profitability of the SACCO. Sacco's management have a set of practices to ensure loans are paid with interest on time so as to suffer liquidity risk. Loan book and Non-performing loans are among the ways of measuring loan performance of SACCOs. The credit stability of credit institutions in terms of the presentation of their loans to diverse sectors is referred to as loan performance.

Loan performance refers to how loans are meant to work and how they compare to actual payments in terms of payment schedules. This is linked to on-time and consistent interest payments and loan repayments. Non-performance of funds received can be caused by unfavorable circumstances that can affect the borrower's ability to repay (Muriithi, 2024). Technology advancements and improved management control systems enhance risk management. According to Olweny, (2019), the portfolio manager can now get an early indicator of increasing risk, which assists him in determining the initial overall management and control of the loan portfolio.

The strong recovery rate of SACCO's loan portfolio is critical to its long-term viability and development. As a result, the policy and implementation of corrective and disciplinary measures are indisputably crucial and must be adhered to firmly and consistently as dictated

by the loan portfolio analysis results. SACCO's management and loan officers are directly responsible for enforcing collection actions as well as its policies and procedures. The degree of legitimacy of the loan and the conditions under which payments are permitted will determine the policies and procedures for carrying out lending and collection activities. As a result, debt collection policies and procedures are stressed as actions and disciplines that complement the activities of delivering and maintaining the primary loan portfolio (Maina & Njeru, 2023).

The most common reasons for default include when credit institutions are not serious about repaying loans, borrowers are reluctant to repay loans, credit institution employees have no profit obligations to shareholders, customer life is full of unexpected crises such as illness or death in the family, when the loan is too large for the company's financial needs, additional funds can be used for personal use, and when the loan is made without proper company valuation (Norell, 2001). According to Wakuloba (005), the primary reasons for default include poor business performance, fund diversion, and internal issues. Several risk management tactics employed by financial organizations are listed by Huizinga and Demirguc (2010), including risk transfer to other nations, risk aversion, risk reduction, and more. Good credit management, according to the author, necessitates good corporate governance, risk management, and rules and processes.

### **1.1.3 Deposit-Taking SACCOs in Kenya**

These are cooperatives that are governed by the SACCO Society Regulatory Authority (SASRA) and has been granted permission under the SASRA Act to collect deposits and provide back and front office services. The SASRA Supervisory Report (2021), 175 DT-SACCOs were licensed. 5.47 million People made up the entire DT-SACCO system dispersed across the 175 DT-SACCOs in 2020 as opposed to the 4.5 million people reported in 2019. This rise in membership was mainly due to the three (3) additional licensed DT-SACCOs that

were added in 2020. However, a significant chunk of the DT-SACCO system's total membership 25.09% was apparently dormant in 2020, which suggests that these members had not transacted with their DT-SACCOs for at least six (6) months.

Licensed DT SACCOs continue to grow impressively in all major performance metrics of total assets, total deposits, and gross loans, according to a new SASRA report. In 2019, the overall assets portfolio surpassed the half-trillion-dollar mark, reaching Kes 556.71 billion. The gross loan portfolio has grown to Kes 419.55 billion while the net loans and credit advances were Kes 400.16 billion while the total deposits grew to Kes 380.44 billion. In 2020, the DT-SACCOs reported an increase in gross loans to Kes 474.77 billion, reflecting a growth rate of 13.16 percent, compared to Kes 419.55 billion, showing a growth rate of 12.09 percent in 2019. The net loans and advances, on the other hand, climbed by 12.60% to Kes 450.58 billion in 2020, up from Kes 400.16 billion in the year before, an increase of 11.46%.

According to the Financial Sector Stability Report for Kenya for 2018, total SACCO deposits accounted for 5.55 percent of nominal national GDP in 2018, with this proportion predicted to rise to roughly 5.72 percent in 2019, emphasizing the importance of SACCO deposits in the economy. The Non-Performing Loans (NPL) ratio fell from 6.30% in 2018 to 6.15% in 2019 signifying improved loan collection practices, while the external borrowing ratio registered a marked reduction from 4.11% recorded in 2018 to 3.11% in 2019. This is a demonstration that many deposits taking SACCOs are gradually reducing their external debt portfolio and are relying on internally generated funds to fund their assets.

According to the Ministry of Cooperative Development and Marketing (2007), all cooperatives are affiliated with the highest national body called the Kenya Cooperative Alliance (CAK), while individual Savings and Loans Cooperatives (SACCOs) are affiliates of the Kenya Savings and Loans Union Business Cooperative (KUSCCO). According to Ministry of

Industrialization (2015) figures, almost 50% of Kenyans profit directly or indirectly from over 19,000 registered Co-operatives with approximately 14 million members. These cooperatives directly employ about 550,000 people and indirectly employ another 2 million people, contributing around 45 percent of GDP.

The SACCO sub-sector alone has consistently mobilized a large amount of savings in Kenya, now accounting for 33% of total savings. The Department of Cooperative Marketing and Development (2017) reports that from the middle of the 1970s, SACCO has grown significantly, with assets and deposits increasing on average by 36% annually. SACCO has also provided jobs for Kenyans, assisting the government in achieving the Vision 2030 goals.

Muriithi, (2024) describes SACCO as a sub-sector in two approaches because of the outreach of credit services to members and the regulatory framework. The Cooperative Services Act, CAP 490, rules and regulates public savings and loan cooperatives (commonly known as SACCOs), which do not take deposits. You can use basic banking services like deposit payment. ATMs and front office savings accounts are examples of quasi-banking services that are channeled through the Companies Act of 2008, which also licenses and supervises payment services. The general tendency is that they began as no deposit claims and expanded to include a variety of member loan offerings.

#### **1.1.4 Deposit Taking SACCOs in Meru County**

Meru is unique in its nature because it has all SACCOs which have grown vastly in all sectors of the economy being rich in agriculture. There are some formed by tea farmers like Nyambene Arimi, coffee based like Dhabiti, milk based like Capital, teachers based like Solution, transport based like Menya, Business based like Meru Traders, church based like MMH, and Miraa based like Mwenge Miraa.

The first SACCOs in Meru County were Imenti, Ntethio and Kagumone which were all created in the early 1970s. Some of them have now broadened their scope of services and activities. According to a 2016 report by the Meru County Cooperation Task Force, Menya and Menany SACCO, both in the transportation industry, have opened their own gas stations in Meru.

Meru County by the end of 2020 had 169 SACCOs, 11 of which were fully established in the DT-SACCOs, with 257,677 members and KES registered capital of 1,161,482,932 on the sale of Kes 974,557,421. At that time, they had Kes 8,121,311,849 in savings. To date, these SACCOs have provided loans amounting Kes 6,603,192,779 (Annual Report of the Meru County Cooperative Directorate, 2020).

When compared to other financial institutions in Meru County, SACCOs have a higher percentage of loan defaults (Mutembei & Gitonga, 2022). Failure to manage credit risk could spell doom for every SACCO (Maina & Njeru, 2023). Despite the fact that significant study has been done in Kenya on SACCOs, Meru County has been mostly ignored. As a result, SACCO's leadership in the area tries to foster a vibrant economy in the area, which is active with small and medium-sized enterprises and agricultural activities.

## **1.2 Statement of the Problem**

Deposit Taking Savings and Credit Cooperative Societies (DT-SACCOs) in Kenya serve as vital financial intermediaries, providing access to credit and other financial services to individuals and businesses, particularly in rural areas like Meru County. Effective credit risk management is essential for the stability and sustainability of DT-SACCOs, ensuring prudent lending practices and maintaining the integrity of their loan portfolios.

Despite the critical role of DT-SACCOs in fostering financial inclusion and economic development in Meru County, there exists a gap in understanding the intricacies of credit risk management practices and their impact on loan performance within this specific region.

Various factors, including socio-economic dynamics, regulatory frameworks, and market conditions unique to Meru County, influence the effectiveness of credit risk management strategies adopted by DT-SACCOs and ultimately affect their loan performance outcomes. The extent of credit risk exposure faced by DT-SACCOs in Meru County remains unclear, necessitating an examination of factors contributing to credit risk, such as borrower characteristics, loan portfolio composition, and macroeconomic conditions. Assessing loan performance metrics is essential for gauging the financial health and sustainability of DT-SACCOs in Meru County. It is in the light of the aforementioned research gaps that this research sought to examine the impact of credit risk management on deposit-taking SACCO loans performance in Meru County, Kenya.

### **1.3 Objectives of the Study**

The study's overall goal was to establish the effect of credit risk management on loan performance of deposit-taking SACCO's in Meru County, Kenya.

#### **1.3.1 Specific Objectives**

- i. To examine whether lending requirements affects deposit taking SACCOs loan performance in Meru County, Kenya.
- ii. To determine whether loan recovery affects deposit taking SACCOs loan performance in Meru County, Kenya.
- iii. To establish whether credit monitoring affects deposit taking SACCOs loan performance in Meru County, Kenya.

#### **1.4 Research Hypotheses**

H<sub>01</sub>: Lending requirements have no significant effect on deposit taking SACCOs loan performance in Meru County, Kenya.

H<sub>02</sub>: Loan recovery has no significant effect on deposit taking SACCOs loan performance in Meru County, Kenya.

H<sub>03</sub>: Credit monitoring has no significant effect deposit taking SACCOs loan performance in Meru County, Kenya.

### **1.5 Significance of the study**

The emphasis on SACCOs is on the grounds that they contribute extraordinarily to the financial development and improvement of any economy on the world. It well helps deposits taking SACCOs management and members in understanding how they can embrace prudent credit risks management to foster sustained performance.

The government and policy makers, such as SASRA, will benefit from this research by having a better knowledge of how credit risk management affects performance and what steps may be done to promote loan performance and, consequently, growth and development. Researchers must comprehend what is going on in the sub-sector in order to determine the best options for better credit risk management.

Finally, scholars and academia will receive reference study resources that will be extremely beneficial to students and instructors. The researcher will earn a certificate after completing an academic requirement, enhancing Kenyatta University's credibility in the eyes of the public and the rest of the globe.

### **1.6 Scope of the Study**

The impact of credit risk management on the loan performance of Kenyan deposit-taking SACCOs was the main subject of this study. The survey was limited to the concerns raised in the objectives. This ensured that all of the study's analyses contribute to the attainment of the study's principal goal. The scope was limited to 11 deposit taking SACCOs in Meru County

through purposive sampling and random sampling as it fairly represented the whole population of Farmer-based SACCOs, Teacher-Based SACCOs and Community-Based SACCOs. This was thought to be sizable enough to offer a broad perspective of the entire population and make a solid foundation for legitimate and trustworthy conclusions. The study covered the period from 2017 to 2023.

### **1.7 Limitations**

The survey faced various challenges that impacted the management of the questionnaire due to the busy schedule of respondents. Because the desired manner of data collection was to give the respondent a questionnaire and have them return it right away, this was not practical, necessitating frequent visits to the institution.

As a result, the restriction affected the number of respondents and survey time. Some responders were hesitant to share information for fear of being intimidated or harming the institution's image. Despite the limitations, the researcher was able to persuade the respondent to obtain the required information through the NACOSTI research permit.

This study was restricted scope of data collection, focusing solely on 11 Savings and Credit Cooperative Societies (SACCOs) within Meru County. As such, the generalization of the findings was severely limited. Meru County represented just one region within Kenya, and its SACCOs was not be fully representative of the diverse range of DT-SACCOs operating across the country. Therefore, caution must be exercised in extrapolating the study conclusions to the entire population of DT-SACCOs in Kenya. The unique characteristics, demographics, and economic dynamics of Meru County significantly influenced credit risk management practices and loan performance, potentially skewing the results and impeding their applicability on a broader scale.

## **1.8 Organization of the study**

The first section described the concepts, purpose, meaning, and scope. Literature on how credit risk management affects loan performance was reviewed in second chapter. Chapter three entails research methodology. Chapter 4 detailed the study's findings, while Chapter 5 summarized the study's results and provided conclusion and recommendation.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

A theoretical review of credit risk management and deposit-taking SACCO loan performance was included in this chapter, as well as an empirical review of previous studies relevant to the current research. The conceptual framework is further presented.

#### **2.2 The Theoretical Review**

Theories anchoring the study are discussed in this section.

##### **2.2.1 Portfolio Theory**

Harry Markowitz (1952) is credited with developing the modern portfolio theory. According to this hypothesis, having a diversified asset portfolio reduces the risk encountered by investors. In terms of risk management, the premise of portfolio theory is that markets are effectively and accurately controlled, while investors are rational (Chijoriga, 1997). The idea aims to maximize the return anticipated from a portfolio with a specified level of risk by carefully selecting the ratios of different assets. Expected returns should take market imperfections into account. The idea of portfolio management suggests a method for successfully striking a balance between the objectives of generating attractive loan assets and avoiding excessive risk concentration.

SACCO for Deposits has successfully applied Earnings at Risks and Value at Risk methodologies in recent years to evaluate risks using portfolio theory. This assists in reducing exposure to financial hazards when interest rates change. SACCOs have improved their ability to manage credit risk in their portfolio health and increase risk through the use of credit derivatives. This study focused on how management allocates risk in member loan repayments, which in turn represents loan performance, and how credit risk is managed. As a result,

portfolio theory creates a conceptual link between loan performance and credit risk management.

### **2.2.2 Agency Theory**

Ross and Mitnick (1973) were the early proponents of agency theory. It was created as a tool for evaluating conflict amongst various parties. According to this theory, an agent and a manager have a conflict of interest when it comes to managing their resources (Tipuric, 2008). The agency idea describes a reciprocal relationship between two countries that can work together to improve fundamental welfare through trust. This principle applies when the principal gives the agent instructions to complete duties on his behalf.

Agency theory reduces SACCO to two, owner/shareholder, and manager. Employees and managers may have an interest in the SACCO, according to the idea, but shareholders and owners want managers and employees to make decisions in their best interests. Agents, according to Padilla (2002), are not always capable of making decisions that are in the principal's best interests. Managers have vested interests, which means they may break agreements, pass up opportunities, and act in ways that benefit them rather than the company's owners (Bhimani, 2008). As a result, agency theory can be used to describe how participants in a management organization relate to one another. The theory, on the other hand, was utilized to align the objectives of the management and the objectives of the principal.

Jenson and Meckling (1976) observed that agency theory describes selfish, individualistic behavior associated with rewards and punishments and prioritizing profitable actions. Because they are held accountable for their tasks and duties, managers and employees, according to this view, contribute significantly to a good governance structure.

This theory has received criticism for rejecting the stewardship theory's premises and for failing to provide evidence in favor of the notion that managers make an effort to appease shareholders

who are preoccupied with their own goals and personal interests. Donaldson and Davis (1991) support the manager's theory, arguing that the division of ownership and control in a company does not lead to a significant conflict of interest between stakeholders.

Theory was vital in determining the impact of SACCO motivations and managerial motives, which are critical for ensuring good risk management methods. It is expected of management to behave in the interests of shareholders. According to the current study, managers were expected to implement credit risk management practices that ensure loan presentation and thereby protect the shareholders' interest. The theory of agency could be beneficial in this research as it offered a conceptual framework for the correlation between the management of credit risk and the performance of loans.

### **2.2.3 Credit Default Theory**

Melton (1974) advanced the principle of credit default, which is said to be a default event arising from the evolution of firm assets, modeled by a constant parameter diffusion process. These models are often constructed structural models based on characteristics that are relevant to a particular publisher. Credit default theory, according to Wilson (2007), is a systematic study of the reasons that directly contribute to the consequences of credit defaults.

Credit default theory establishes a direct causal link between the macroeconomic factors of changes in the credit environment and their microeconomic impact on changes in personal or corporate credit conditions. Most existing credit default theories fail to meet this causal requirement. As Kenan (1999) found, credit default is a loan default by a business, person, or entity. An asset model with exogenously determined default losses represents the evolution of this category.

This theory was crucial in explaining the causal effects of the varying loan performance of a company. NPLs are a clear indication of poor loan performance of the credit cooperatives

(Wilson Sy, 2007). The theory was essential as it highlighted the possible source of credit default which is presented as the loan failure of an entity and also suggests a systematic cause of credit default all which are set to be examined in the current study. Hence, the theory underpins the credit risk management practices used in this study including lending requirements, loan recovery and credit monitoring.

#### **2.2.4 Loanable Funds Theory**

The theory is attributed to Knut Viksel (1851) Interest rates are said to be determined by credit supply and demand, with borrowing and interest rates having an inverse connection. The quantity of the change in demand and supply of leverage determines the percentage produced when those variables change. Local firms, consumers, governments, and foreign borrowers, according to this view, are the sources of loan demand. While domestic savings increase supply, money dispersion balances the printing of money in the banking system and foreign borrowing (Gorder 2009).

This theory is based on the assumption that the credit market is a completely integrated (not segmented) market with perfect mobility of funds between markets and that the market is entirely competitive, with each borrower and lender having a "collector" and only net interest being paid in the market. Competitive forces must also clear the market fairly quickly, so that a uniform interest rate is the clearing (or equilibrium) rate (Sen, 2012). Based on the assumptions above, the determination of the interest rate can be easily explained after clarifying the supply and demand for loanable funds. Here it is emphasized that the theory of borrowed money is an improvement from the classical theory of saving and investing for interest rates because apart from the real factors of saving and investing; when computing the interest rate, it also considers the monetary elements of accumulation, disposal, and expansion in the money supply. It mixes monetary and non-monetary aspects in this way (Sen, 2012).

Interest rates are crucial, according to Ingram (2011), since they encourage cash flow in the economy. People are more willing to borrow from banks to pay for items like houses and vehicles when interest rates are low. The idea was applicable to this study since interest rates are a necessary element in determining the economy's credit needs. In our current study, the interest rate, which borrowers pay as a risk premium for taking out a loan, affects the demand for loanable funds. Therefore, the theory supports the variability of credit terms in this study.

## **2.3 Empirical Review**

This entails studies of previous reviewed literature. These researches are critically analyzed and research gaps outlined.

### **2.3.1 Lending Requirements and Loan Performance**

Ahmed and Malik (2015) investigated credit efficacy and credit risk management. This article's main objective is to review how credit risk management strategies, encompassing aspects like credit terms and policies, client assessment, credit risk taking, and control policies, affect loan performance. Data were collected from 157 credit managers at microfinance banks Islamabad and Rawalpindi. The main data collection tool used for data collection is a questionnaire. Loan length had a significant and beneficial impact on loan performance. The loan's performance is unaffected. There is a contextual gap because the prior investigation was carried out in Pakistan rather than Kenya.

Soke Fun Ho and Yusoff (2016) examined the credit risk management strategies of several Malaysian financial institutions. This study's primary objective is to examine the credit management procedures used by a few Malaysian financial institutions. The data show that the majority of losses incurred by lenders and banks are due to catastrophic failures caused by customers' failure to meet their commitments relating to loans, trading, settlements, and other loan operations. According to the findings, a poor portfolio might attract liquidity and credit

risk, harming the company's performance. The study advised careful investigation of the loan granted and careful assessment of the customer's capacity to fulfill the loan obligation.

Njenga (2014) looked at how credit risk management affects loan performance. The study focuses on nine MFIs that are within Kenya's Central Bank's regulatory umbrella. Some loan officers put too much faith in their clients, failing to properly control credit risk when disbursing loans. However, this has resulted in a rise in non-performing loans, which have resulted in low loan repayments and, as a result, poor loan performance. The investigation recommends developing credit risk management principles and putting credit protocols in place in the microfinance industry in order to reduce nonperforming loans to microfinance organizations for deposits and to actively participate in the legislation regarding credit risk management practices for microfinance organizations in Kenya. Since the current study concentrated on lending criteria and their impact on loan performance, the study did not especially focus on lending requirements as a practice of credit risk management.

### **2.3.2 Loan Recovery and Loan Performance**

Gizaw et al. (2015) looked into the profitability of Ethiopian commercial banks. The purpose of this study was to investigate the relationship between credit risk and Ethiopian commercial banks' profitability. The annual reports of eight top-tier commercial banks as well as the Ethiopian National Bank during a 12-year period were used to compile the data. The bank's annual report serves as an additional source of data. According to the results, factors such as capital adequacy, non-performing loans, allowance for loan losses, and credit risk have a big impact on how profitable commercial banks are in Ethiopia. There is a conceptual gap because this study focuses on profitability rather than credit effectiveness as the current study does. Due to the fact that the research was done in Ethiopia and not Kenya, there is also a significant gap.

In Nairobi City, Kenya, Maiti (2015) looked into how credit policies affected the availability of savings loans and deposit-taking credit unions. The study covered 40 SACCOs that were registered under SASRA regulation. When assessing customer loan levels, regulated SACCOs have established credit requirements such as credit standards and credit ratios, according to the report. The report claims that regulated SACCOs also created a collection strategy that took into account total loans as well as non-performing loans. The regression results reveal that implementing a collection policy (default rate) from a regulated SACCO results in a large rise in ROA, implying that reducing non-performing loans to total loans will result in a considerable gain in profitability. The results show that the association between credit criterion and return on investment is robust and statistically significant. According to the report, adopting and implementing credit standards will greatly boost the return on investment for regulated SACCO.

Kipsang (2020) looked on how loan performance for Kenyan fintech businesses was impacted by debt recovery techniques. The study's main goals are to find out how fines, negative credit reports, and credit limit decreases affect loan performance. This study uses a descriptive approach to design research that includes different research elements. The results showed a significant and favorable correlation between fines and loan execution. The results also show a large and favorable link between subpar loan performance and high credit costs. There is a methodological gap in this study since it employs a descriptive research design rather than a causal research technique, which is better suited for identifying causal relationships between variables.

### **2.3.3 Credit Monitoring and Loan Performance**

Pyle (2017) analyzes credit risk management in accordance with regulatory requirements to measure risk and capital. Studies show that credit institutions must meet future regulatory

requirements for risk and capital measurement. This study shows that in order to allocate resources to tasks with the optimal risk/reward ratio, credit managers must carry out extensive risk evaluations. In order to keep within the boundaries established by available liquidity from lenders, consumers, and regulators, the study indicates that managers must evaluate the amount of prospective losses. This requires proper evaluation of the customer and loan to make the right decision. The study recommends that mechanisms are needed to monitor positions and encourage appropriate risk taking by entities and individuals. There is a substantive gap because the study did not focus on the SACCO DT in Kenya.

Nagarajan (2014) notes that risk management is a dynamic process that is best established over time and tested under risk in his study of credit risk management techniques for microfinance firms in Mozambique. The study's findings advise credit institutions to carefully manage their portfolios and cash flows in order to reduce risk loss, as well as to provide customers with a strong institutional foundation, knowledgeable staff, and a client-discipline-promoting environment through efficient stakeholder coordination. This study was carried out in Mozambique, which has a different environment than Kenya and hence has contextual gaps.

Bosco (2019) highlighted that credit risk management for microfinance firms in Rwanda is a dynamic process that requires progressive development and comprehensive evaluation in order to effectively address possible hazards. The report suggests that credit institutions should diligently monitor their portfolios and cash flows in order to limit the risk of incurring losses. In addition, it proposes that institutions should construct a robust institutional framework, hire competent personnel, and foster an environment that promotes client discipline through effective coordination with stakeholders. The study was carried out in Rwanda, a country that differs significantly from Kenya, leading to contextual discrepancies.

## **2.4 Summary of Literature Review and Research Gaps**

In Kenya DT SACCOs are a leading source of the credit for social economic development among people in rural and urban set-up. They are experiencing a wide range of issues on credit management because they mostly have targeted low-income earners. The key theoretical frameworks and conclusions from earlier relevant studies on credit management and loan performance are briefly discussed in this chapter. The review shows that DT SACCO must have a strong and effective credit risk management policy in place to ensure consistent customer payments. Studies have shown that large bank losses result from complete defaults because customers are unable to meet their obligations.

According to local studies, the main challenges facing Kenya in terms of microfinance governance and sustainability are efficiency and effectiveness. Some microfinance institutions are more tolerant with their customers and extend credit, resulting in a rise in NPL. However, this research has not identified an appropriate methodology for implementing the proposed policies and effective credit management related to SACCO's loan performance. They also failed to highlight DT SACCO's credit management in other organizations, such as Meru County.

Table 2.1 entails a summary of previous studies done on credit risk management and loan performance aimed at adding value to existing gaps.

**Table 2.1: Literature Summary**

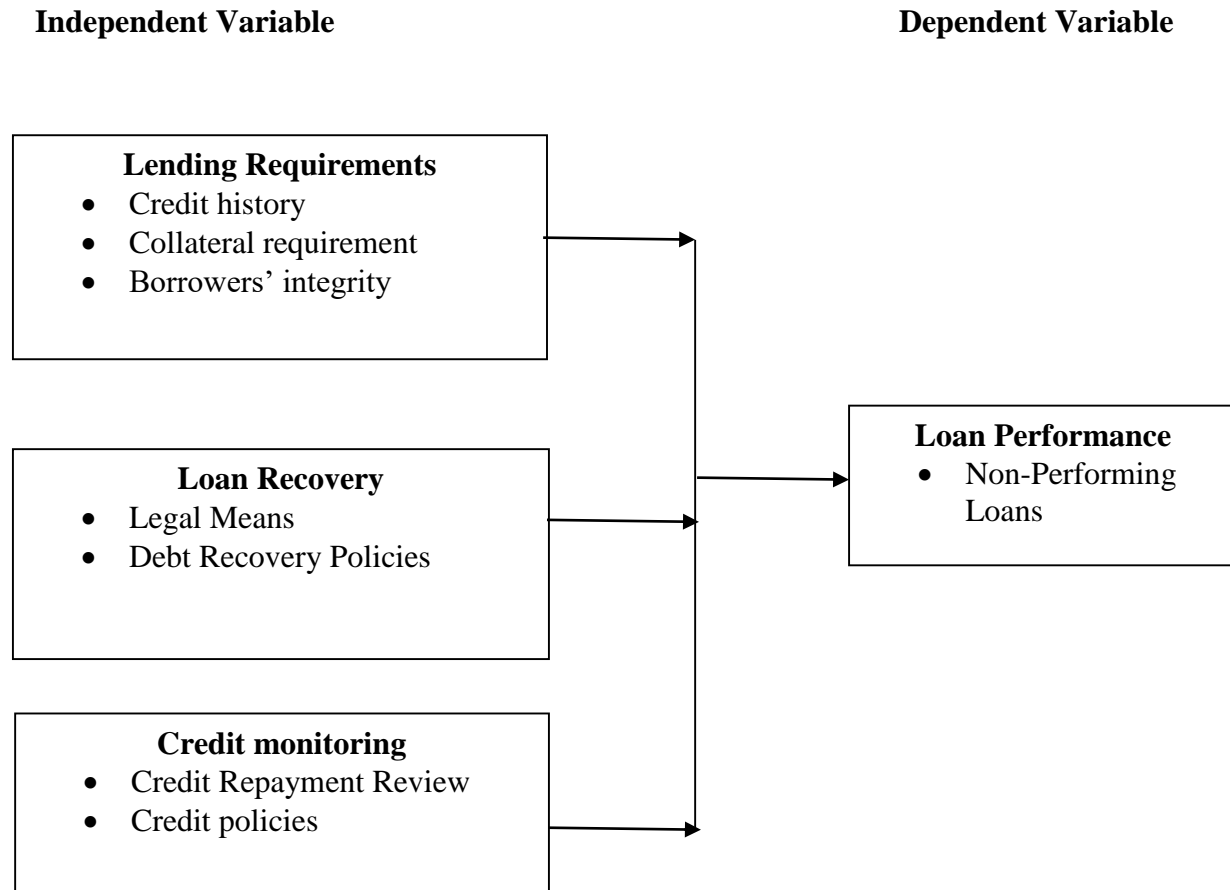
<b>Author/s</b>	<b>Title</b>	<b>Results</b>	<b>Gaps</b>	<b>This research focus</b>
Ahmed and Malik (2015)	Influence of credit risk management on the lending of Pakistani microfinance banks	Loan performance is influenced by the credit term, customer appraisal, collection procedure, and credit risk management.	<b>Contextual gap: The study was done in Pakistan</b>	The current study was conducted in Kenya
Njenga (2014)	Credit risk management's impact on loan performance at Kenya's deposit-taking microfinance institutions	According to the research, poor loan performance is caused by credit officers' leniency, lack of information sharing, and excessive reliance on their clients.	Conceptual gap: The study did not particularly focus on lending requirements as a credit risk management practice.	The current study concentrated on loan performance and its impact on lending requirements.
Soke Fun Ho and Yusoff (2016)	Credit risk management practices of a few Malaysian credit institutions.	The data show that the primary cause of loss for loan institutions and banks is due to customers' failure to fulfill their commitments in connection with lending, trading, settlement, and other loan operations.	Contextual gap: The study was done in Malaysia	Local analysis was used in the study
Maiti S.N (2015)	Impact of credit rules on Nairobi County's deposit-taking SACCOs' financial performance.	The link between the credit criterion and ROA is large, strong, and favorably skewed.	Conceptual Gap: The study concentrated on credit policies and general performance	The focus of the current study was loan performance and credit risk management.
Gizaw, Kebede and Selvaraj, (Gizaw, 2015)	<b>The influence of credit risk on commercial bank profitability in Ethiopia.</b>	Loan loss provisions, non-performing loans, capital sufficiency, and credit risk metrics all have an impact on Ethiopia's commercial banks' profitability.	Conceptual gap: study focused on profitability as the dependent variable. <b>Contextual gap: the study was done in Ethiopia</b>	The focus of the current study was loan performance. In the study, local analysis was employed.
Kipsang (2020)	The impact of debt collection	A positive and significant association	Discrepancy in methodology since	The current study used causal resea

	techniques on Fintech companies' loan performance in Kenya	was also discovered between bad credit listings, fines, loan limit reduction, and loan performance, according to the research.	the study employed a descriptive survey approach rather than a causal research design.	(Yusoff, 2016)rch design
Pyle (2017)	Credit risk management on meeting the regulatory requirements for risk measurement and capital	Credit managers, according to the report, require credible risk measures in order to allocate resources to activities that have the best risk/reward ratios.	Conceptual gap: study focused on profitability as the dependent variable <b>Contextual Gap: the study did not focus on DT SACCOs</b>	This study targeted loan performance.  This study focused on DT SACCOs
Nagarajan (2014)	Microfinance institutions in Mozambique use credit risk management strategies.	Through efficient stakeholder coordination, loan institutions needed to limit risk-related losses via meticulous portfolio and cash-flow management, developing a strong institutional infrastructure with trained human resources, and instilling client discipline.	The study was conducted in Mozambique with a focus on microfinance organizations.	Local analysis was used in the study and concentrates on deposit taking SACCOs
Tucker and Miles (2014)	<b>Financial performance of microfinance institutions</b>	In MFIs, the loan portfolio is the most valuable asset because its quality affects future earnings, as well as the capacity to expand outreach and retain existing clients.	The study context was financial performance of MFI	The current study was local and focuses on credit risk and loan performance of SACCOs
Chege (2010)	<b>The relationship between credit risk management practices and Microfinance Institutions' performance in Kenya</b>	The performance of MFIs is improved by MFI diversification, MFI lending policy procedures, and human-based expert systems' payment capability. Diversification among MFIs increases shareholder value and savings.	Methodological Gap: The study only utilized descriptive method	The study used causal research design

Source: Researcher (2022)

## 2.5 Conceptual Framework

The independent and dependent variables are integrated by this. In accordance with Mugenda & Mugenda (2003), a dependent variable is one that is influenced by the independent variables, whereas an independent variable is a characteristic of a phenomenon that influences or affects others. The conceptual framework of credit risk management and loan performance is shown Figure 2.1



**Figure 2.1: Conceptual Framework**

**Source: Researcher (2022)**

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter outlines the research methodologies, including the target audience, data collection strategy, and data analysis.

#### **3.2 Research Design**

Research design serves as a comprehensive framework for the systematic gathering, measurement, and analysis of data, as well as a strategic roadmap for acquiring solutions to research inquiries (Haydam & Steenkamp, 2020). As per the studies conducted by Tumiran, (2024). research design refers to the organisation of conditions for gathering and analysing data in a way that seeks to balance the relevance to the research objective with efficiency in the process. Bryman and Bell (2017) assert that the research design is a systematic and structured approach for gathering and analysing data, which determines the nature of the research. Research design refers to a systematic plan that outlines how a research study will be conducted (Waithaka, 2013). A descriptive research aims to offer information about the who, what, when, where, and sometimes how of a certain subject or phenomenon (Englander, 2012). The researcher employed a descriptive research design, allowing for the collection of detailed data on the target population. This approach facilitated the acquisition of relevant and specific information. The design employed was appropriate as it addressed the correlation between the variables and the formation of generalisations that possess collective validity.

#### **3.3 Target Population**

There are 175 Deposit-Taking SACCOs, according to the Annual Report on the Performance and Operations of SACCO Societies in Kenya (2020). As of 2020, there are 169 SACCOs in Meru County, 11 of which are regulated by SASRA (Annual Report of the Meru County Cooperative Directorate, 2020). The study's target group through purposive sampling consisted of 11 DT-

SACCOs with headquarters in Meru County and had SASRA licenses. A segment of the general population was the target audience for the study, and the researcher had to locate the most relevant and reliable information on how deposit-taking SACCOs manage their credit risk and how well they perform on their loans. According to SASRA Annual Report 2020, SACCOs have been traditionally clustered into original common-bonds from which they traditionally drew their membership namely; Teachers-based, Farmers-based and Community-based DT SACCOs. The eleven (11) DT-SACCOs in Meru County belong to three clusters. The study population in all of the three clusters in each Sacco was forty-four (44) managers as tabulated 3.1.

**Table 3.1: Target Population**

<b>S/no.</b>	<b>Common Board Clusters</b>	<b>Target No. of SACCOs</b>	<b>Target Respondents per SACCO</b>	<b>Target Population</b>
1.	Farmers-Based DT-SACCOs	5	4	20
2.	Community Based DT-SACCOs	5	4	20
3.	Teacher Based DT-SACCOs	1	4	4
	Total	11		44

**Source: Researcher, (2022)**

### **3.4 Sampling Technique and Sample Size**

Mugenda and Mugenda (2009) noted that given the small target population, researchers can arrive at a census methodology that takes into account the entire population. Therefore, this study adopted a census study; no sampling was performed for this test. Cooper and Schindler (2011) argue that census surveys yield better results than any sample survey when the study population is neither too large nor relatively small, provided that the survey study employs efficient and trained staff. In Meru County, a sample of 11 SACCOs was selected from the whole population. This sample fairly represents the entire population because it includes Farmer-based, Teacher-Based, and Community-Based SACCOs. This was regarded as being sizable enough to give a broad overview of the entire

population and act as a solid foundation for drawing accurate and trustworthy results. The target participants included four (4) managers from each SACCO who were directly involved into the management and performance. They included credit managers, finance managers, general risk managers and operations managers. The total sample size was forty-four (44) as shown below.

**Table 3.2: Sample Size**

Population	Target Population	Percentage of Target Population	Sample Size
Credit managers	11	100%	11
Finance managers	11	100%	11
General risk managers	11	100%	11
Operations managers	11	100%	11
Total	44		44

**Source: Researcher (2022)**

### **3.5 Data Collection Instruments**

Data collection is the process of acquiring information in order to confirm or refute certain truths (Kothari, 2007). This study aims to gather information from both primary and secondary sources. Primary data are ones that were initially acquired particularly to address the subject being studied. Data collection involved using a questionnaire. A questionnaire, according to Kothari (2007), is the best instrument since it can gather a lot of data in a short amount of time. Through anonymity and uniformity, this protects the source confidentially of the information. For the reasons mentioned above, the questionnaire was selected as a suitable research tool. The survey's closed-ended questions were carefully prepared to enable respondents to give accurate answers. Secondary sources of information was used in this study, including books, SACCO financial reports, and business periodicals.

### **3.6 Data Collection Procedures**

The researcher personally distributed and collected the surveys from the respondents. The completed questionnaires were then collected once the responders had filled them out. Every participant was given an identical set of questions in a completely uniform manner. The questionnaire clearly stated in the beginning the research's purpose by elucidating the academic objective and assuring the respondents that there would be no adverse consequences when participating in the research. The collection of primary data mostly relied on primary sources. The primary data was utilised because of its proximity to the truth and its simplicity of control over faults (Zimmer, 2020).

### **3.7 Reliability and Validity of Research Instrument**

#### **3.7.1 Validity**

According to Long & Wang (2022), all evaluations of validity are subjective assessments derived from the researcher's judgments. The research design was intended to improve the internal, construct, and external validity. In order to analyse the validity of the research instruments, the questionnaires were developed and sent to the supervisor for cross-checking and to evaluate the reliability of the content. The questionnaires underwent a pre-testing process through a pilot study conducted one week before to the start of the main study in order to ensure that the findings would be clear and unambiguous. Five respondents were interviewed during the pilot study.

#### **3.7.2 Reliability**

The ability of a research tool to deliver consistent outcomes and information across various investigations is known as reliability (Mugenda & Mugenda, 2003). The goal of a reliability analysis is to see how well a measuring approach delivers consistent results when repeated under the same conditions (Toke et al., 2012). To determine Cronbach's alpha, SPSS was utilized. According to Cronbach's alpha coefficient (Cronbach, 1959), a result greater than 0.7 indicates that the measurement technique is reliable.

Wierma (1995) stated that all assessments of validity are subjective opinions based on judgments of the researcher. The research design aimed at enhancing internal, construct and external validity. To test the validity of the research instruments, the questionnaires were prepared and submitted to the supervisor for cross checking and also assess the reliance of content. The questionnaires were pre-tested through a pilot study which were done a week earlier before the commencement of the actual study to free the findings from ambiguity.

### **3.8 Empirical Model**

As reiterated by Kothari (2007), data analysis is part of examining what is collected in a study or experiment and drawing conclusions. Data was checked for correctness, completeness, and consistency then presented in tabular form and evaluated using SPSS software version 24. Descriptive statistics and multiple regression analysis were utilized. To show the research results, graphs, pie charts, and frequency tables were used. Content analysis was carried out to examine qualitative data. Regression model was used to show how the variables were related to one another.

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \epsilon$$

Where;

Y is loan performance

X1 is lending requirement,

X2 is Debt recovery process,

X3 is Credit monitoring,

$\beta_0$  is Constant,

$\beta_1 - \beta_4$  = Regression Coefficients and

$\epsilon$  = Error terms.

The relative importance (sensitivity) of each independent variable (credit risk management) that influences SACCO's loan performance, as measured by loan portfolio growth, was determined using multiple linear regression models and t-statistics.

### **3.9 Data Analysis and Presentation**

Descriptive statistics were used to analyze the quantitative data obtained. The data collected were edited and coded for accuracy and completeness. Data was analyzed using descriptive analysis, ANOVA (mean, frequencies, standard deviation) and multiple regression analysis output will be presented i.e. tables, graphs and charts. Burns and Grove (2007) describe the purpose of descriptive statistics as providing the opinion of respondents regarding the phenomenon studies. Descriptive research provides an accurate account of characteristic of a particular individual, event or group in real life studies.

### **3.10 Diagnostic Tests**

Normality, multicollinearity, and heteroscedasticity are some of the diagnostic tests that were tested in this study.

#### **3.10.1 Normality Test**

The normality test uses numerical statistical methods or graphical analysis to depict the normal distribution of data (Brooke, 2008). Excess is a measure of the distribution's peak, whereas bias explains the mean asymmetry. Normality was tested using Histogram. The bell-shaped curve indicates normal distribution.

#### **3.10.2 Multicollinearity Test**

Multicollinearity is a test for the existence of a correlation in a situation where certain factors are assumed to have an effect on others under the influence of other variables, particularly independent variables, according to Cortina (1993). The premise behind multicollinearity is that the independent variables are closely connected, as indicated by a non-zero correlation. As a result, when the

correlation is minimal, efficiency does not alter considerably. As a result, this research is critical in determining if the detected collinear factors have a causal relationship. In this work, the variance inflation factor was utilized to assess multicollinearity. According to Field (2009), multicollinearity exists when VIF values are greater than 10, and vice versa.

### **3.10.3 Heteroscedasticity Test**

Heteroscedasticity is a major worry in regression analysis. It causes discontinuous values and erroneous statistical tests. Eduardo (2015) contends that when the residuals are regularly distributed, the regression estimate is strong. Scatter plots were used to test heteroscedasticity. There is no heteroskedasticity in the data when scatter points are generally at the same distance from the line of fit. This entails locating operations that highlight the values of a variable under investigation by identifying specific concrete observations that are believed to empirically capture an already-existing notion.

### **3.11 Ethical Considerations**

Kenyatta University graduate School granted a letter of authorization to facilitate the research. NACOSTI employed this letter to bestow authorization for research. Moreover, each bank was requested to grant authorization for data collection. Participants were invited to take part in the study, although obtaining informed consent was required. Anonymity was ensured by utilising specialised codes to identify certain banks and responses. Encoded and encrypted data was entered into a computer that requires a password for access. The data was only available to the researcher and her supervisor. The study's findings were exclusively employed for instructional purposes.

## CHAPTER FOUR

### RESEARCH FINDINGS AND DISCUSSIONS

#### 4.1 Introduction

The main goal of the study was to determine how credit risk management affects the effectiveness of loans. A summary of the outcomes of the analysis of the data is provided in the chapter. Descriptive and inferential statistics were two techniques used in data analysis. A graph and a chart were used to display the response rate. The summaries of the research findings provided by the researcher were presented using descriptive statistics, such as means, medians, modes, standards deviations, and correlations. The study's findings and the literature review were related.

#### 4.2 Response Rate

The study used primary data from the questionnaires issued to the 44 credit managers, finance managers, general risk managers and operations managers of the deposit taking SACCOs in Meru County, Kenya. Out of the 44 questionnaires that were issued 39 were correctly filled out and returned on time, which equals 88.64% response rate.

**Table 4.1: The Response Rate**

<b>Responses</b>	<b>n</b>	<b>%</b>
Response	39	88.64%
Non response	5	11.36%
<b>Total</b>	<b>44</b>	<b>100%</b>

**Source: Researcher (2022)**

Kothari (2011) states that a response rate of 50% is considered appropriate, a rate of 60% is considered good, and a rate over 70% is considered outstanding. The analysis demands a high response rate. Therefore, an overall response rate of 88.64% is excellent for the study.

### 4.3 Reliability Test

To evaluate the survey constructs, the study carried out a questionnaire reliability analysis. The primary indicator of the validity of the study method was the Cronbach's Alpha Coefficient. The Cronbach Alpha Coefficient Index has a range of 0.0 to 1.0. The Cronbach's Alpha coefficient index, according to Sekaran and Bougie (2013), is fixed at 0.7, and any score of 0.7 or above is regarded as appropriate for the dependability of the research instrument used to collect study data.

**Table 4.2: Reliability and Validity Statistics**

<b>Constructs</b>	<b>Cronbach's Alpha</b>	<b>Number of items</b>
Lending requirement	0.867	5
Loan recovery	0.879	5
Credit monitoring	0.709	5
Loan performance	0.715	5

**Source: Researcher (2022)**

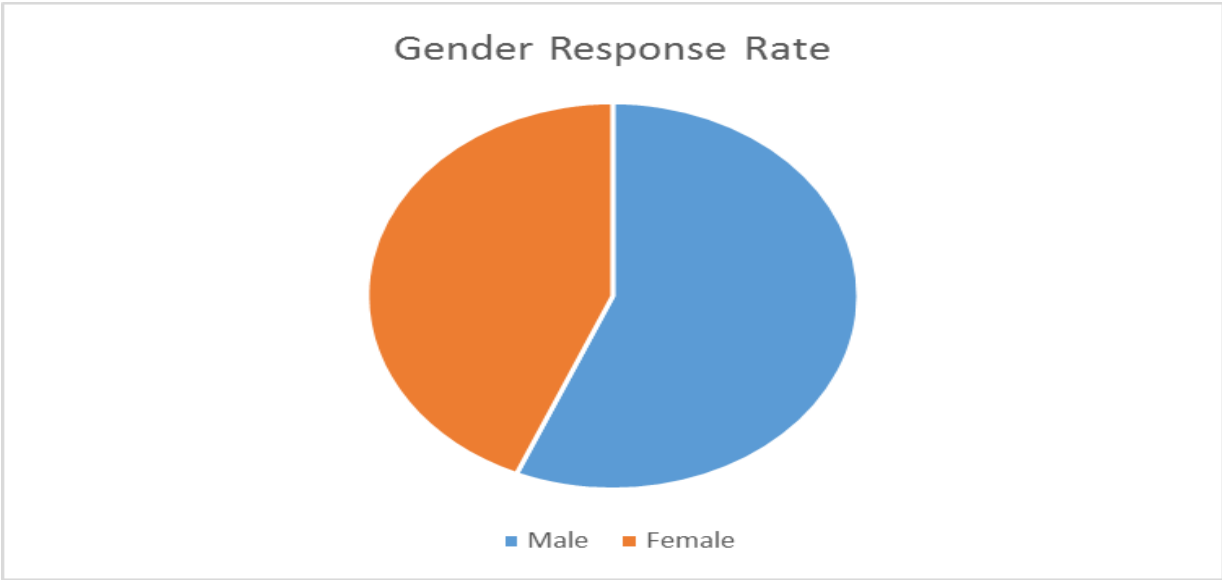
The variables; lending requirement, loan recovery, credit monitoring and loan performance returned highly reliable results ranging from 0.715 to 0.879. These results therefore indicate that the questionnaire as a research instrument was highly dependable.

### 4.4 Demographic Information

These comprises gender, education level, work duration, department, duration worked in the department.

#### 4.4.1 Gender Response Rate

Figure 4.1 presents the results on respondents' gender.

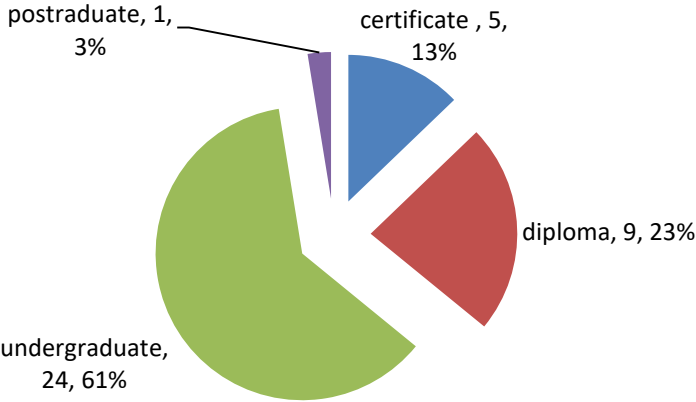


**Figure 4.1: Gender Response Rate**

Source: Researcher (2022)

According to the findings, there were 39 respondents, 22 were men while 17 were women. The DT SACCOs, however adhered to the 1/3 gender requirement. This suggested that men made up the majority of DT-SACCO managers in Meru County.

**4.4.2 Education Level**

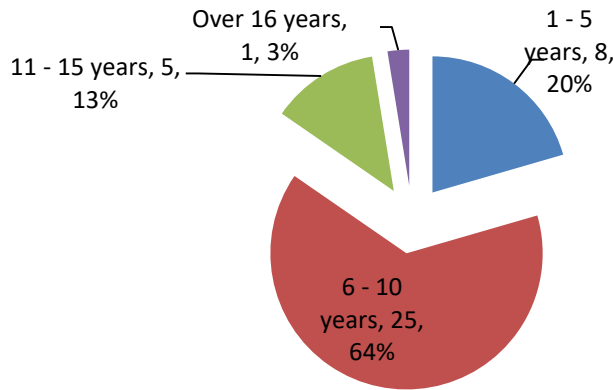


**Figure 4.2: Education**

Source: Researcher (2022)

Findings indicate that 24(61%) of respondents were undergraduates, 9(23%) had a diploma, 5(13%) had a certificate while 1(3%) had a PhD. This suggested that the majority of DT SACCO managers were well-educated and hence had the ability to enhance the DT SACCOs' lending performance.

#### 4.4.3 Work Duration in the Institution



**Figure 4.3: Duration Worked in the Institution**

**Source: Researcher (2022)**

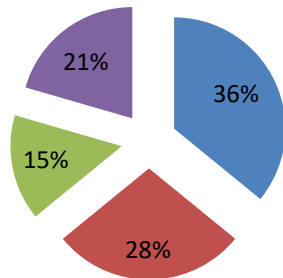
Figure 4.3 revealed that most participants aged 25 (64%) had been employed for six to ten years, eight (20%) for one to five, five (13%) for eleven to fifteen, and one (3%) for more than sixteen. This suggested that because the majority of DT SACCO managers had worked for a considerable amount of time, they knew enough details about the organization to be able to respond to queries in an appropriate manner.

#### 4.4.4 Position in the SACCO

Figure 4.4 shows results on respondents' position in the organization.

## Position in the SACCO

■ Credit managers      ■ Finance managers  
■ General risk managers   ■ Operations managers



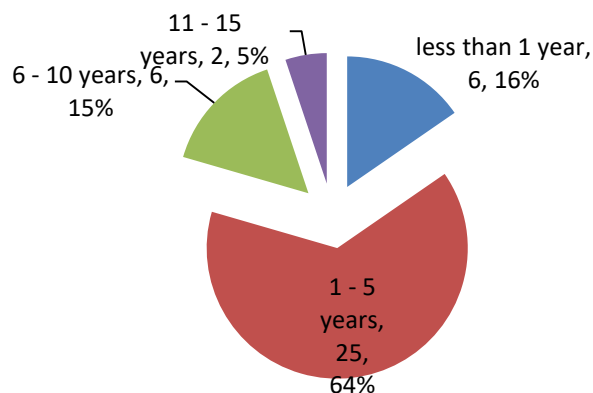
**Figure 4.4: Position in the SACCO**

**Source: Researcher (2022)**

The results showed that 17 of the participants were credit managers, 11 were finance officers, 6 were general risk managers while 8 were operation managers. This implied that most respondents were credit managers thus reliability of information provided.

### 4.4.5 Work Duration in the Current Position

The questionnaire had a section for the respondents to indicate the period they had served in their current position. Results are shown in Figure 4.5



## **Figure 4.5: Duration in the Current Position**

**Source: Researcher (2022)**

Findings showed that (64%) of participants had worked in the department for one to five years, six (16%) had worked for less than a year, six (15%) for six to ten years, and two (5%) for eleven to fifteen years.

This suggested that most of the DT SACCO managers who were interviewed had served in the current position for a considerable amount of time and therefore had enough knowledge about the SACCO.

### **4.5 Descriptive Analysis**

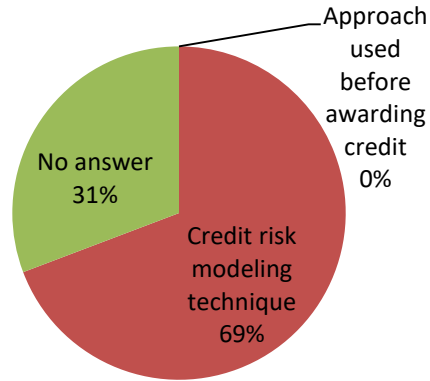
The study analyzed the extent of lending requirements, debt recovery and credit monitoring on loan performance of deposit taking SACCOs in Kenya using descriptive statistics. The findings were presented in the following sections;

#### **4.5.1 Lending Requirements**

This was to find out whether due diligence was carried out before issuing credit to the members. This was in terms of credit analysis, assessment and client's capability to pay.

##### **4.5.1.1 Approach used in Credit Risk Analysis**

The respondents were asked to describe the method that their institution uses to assess credit risk before granting credit to a customer.



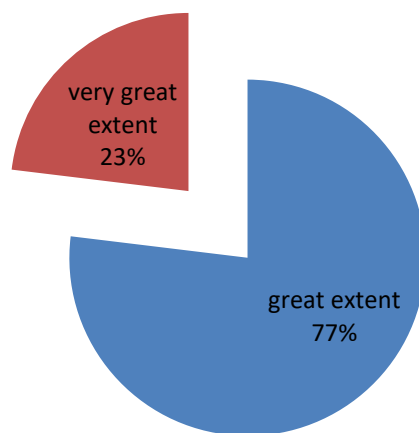
**Figure 4.6: Approach Used Before Awarding Credit**

**Source: Researcher (2022)**

Most respondents 27(69%) said their organization employed a credit risk modeling technique while 12(31%) did not answer the question. The respondents further explained they majorly use this method since it helped to create strategies that maximize return and minimize risk.

#### 4.5.1.2 Credit Analysis and Assessment

The respondents were questioned about the extent their institution took credit analysis and assessment into account before granting credit. The outcome of the analysis is shown in Figure 4.8.



**Figure 4.7: Extent of Credit Analysis and Assessment**

**Source: Researcher (2022)**

Majority 30 (77%) of participants indicated very great extent while 9 (23%) indicated great extent. This response indicated that due diligence was done before issuing members with credit to the members hence minimal default rate.

#### 4.5.1.3 Evaluating Clients on Loan to be awarded

Respondents were asked the extent they considered evaluating their clients on the loan to be awarded and the Table 4.3 indicates the outcome of the analysis.

**Table 4.3: Lending Requirements**

Statement	No Extent All	Small Extent	Moderate Extent	Great Extent	Very Great Extent	M	Std.Dev
Clients' ability to generate sufficient cash flows to honor his or her obligations	2 (5.10%)	6 (15.30%)	3 (7.60%)	11 (28.20%)	17 (43.50%)	3.97	1.20
Collateral provided by clients to ensure that loans are properly secured	3 (7.60%)	5 (12.80%)	4 (10.2%)	8 (20.50%)	19 (48.7%)	3.92	1.36
Clients' financial net worth and cash flows	2 (5.10%)	3 (7.70%)	2 (5.10%)	15 (38.40%)	17 (43.60%)	4.16	1.03
Integrity of the borrower and belief in his ability to repay	3 (7.60%)	3 (7.60%)	3 (7.60%)	10 (25.60%)	20 (51.30%)	4.11	1.25
Obtaining the borrower's credit history from other banking organizations	5 (12.8%)	4 (10.20%)	2 (5.10%)	14 (35.90%)	14 (35.90%)	3.74	1.41

**Source: Researcher (2022)**

Analysis of findings showed most of the participants who were 17(43.50%) indicated that their institution considered clients' ability to generate sufficient cash flows to honor his or her obligations to a great extent before giving out the loan (mean=3.97, std.dev=1.20). This shows that the cash flow capability of the customer is an important factor in an individual's ability to repay the loan. Additional

results show that the majority of respondents 19 (48.7%) reported that their institution considers the customer's collateral base to ensure that loans are properly secured before granting loans (mean = 3.92, std.dev = 1.36). This means that having customers with good collateral is a key factor in getting the loan repaid. In addition, the results showed that the majority of respondents, namely 17 (43.6%), indicated that their institutions gave high consideration to the net financial wealth and cash flows of customers before providing loans (mean = 4.16, std . dev = 1.06). This suggested that financial net worthy of a client enhanced loan repayment.

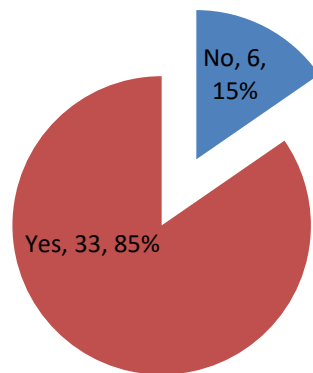
The findings also reveal that the majority of respondents (20/51.3%) said their SACCO gives serious consideration to the borrower's moral character and faith in their ability to repay before extending the loan (mean = 4.11, standard deviation = 1.25).

This concludes that borrowers with good integrity can be held responsible for repaying their loans. In addition, the results showed that the majority of respondents 14(35.9%) reported that their institutions mostly obtained borrowers' credit checks from other financial institutions before providing loans (mean = 3.74, std.dev = 1.41). This infers that credit history of a borrower of other institutions helped the SACCOs help to determine if the client will be able to repay the loan.

#### **4.5.1.4 Credit Manual**

The participants were further asked to determine if firm has a credit manual that guides on requirements needed before issuing credit to the client. Results were shown in Figure 4.8.

## Credit Manual



**Figure 4.8: Credit Manual**

**Source: Researcher (2022)**

The findings revealed that 33 (85%) said their SACCO has a credit manual that guides the requirements needed before credit is given to customers, while only 6 (15%) respondents do not have credit. This implied that most SACCOs had credit manual that guides on requirements needed before issuing credit to the client.

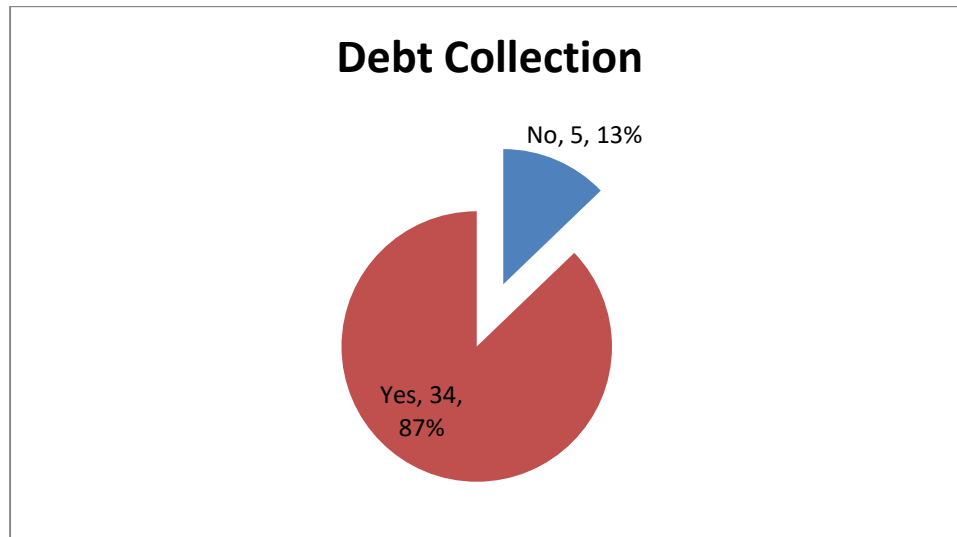
Additionally, respondents were asked to describe how they adhered to the manual. The participants stated that they make sure the customer meets the requirements set out in the manual before granting a loan. The respondents further explained that giving credit manual to client enabled the clients to understand the terms of the SACCO as well as it helped clients to develop trust with the firm.

### **4.5.2 Loan Recovery Process**

This was to assess the processes and procedures employed by SACCOs when the loan facility defaults and the analysis was done by assessing whether SACCOs had debt recovery department, loan default timing, debt recovery methods, access to Credit Reference Bureaus and an assessment using 5 point likert scale on debt recovery policies.

#### 4.5.2.1 Debt Recovery Department

The participants were asked to state whether their institution had a debt collection/recovery department and the results were shown in Figure 4.9



**Figure 4.9: Debt Collection Department**

**Source: Researcher (2022)**

According to the results, 34 (87%) of respondents claimed to have a collection department, while 5 (13%) did not have a collection department. This implied that most SACCOs in Meru County had a debt recovery department. The respondents further explained that a debt collection department helped them to make proper planning of the lending and loan collection process.

The participants were asked to name the duty carried out by the department of debt collection. The respondents indicated that the debt collection departments helped in ensuring the loans are offered according to the lending requirements. The department also helps to ensure that all the loans given out are fully recovered.

#### 4.5.2.2 Loan Default Timing

The respondents were further questioned on the timing of their institution's determination of a client's default and Table 4.4 indicate the outcome of the analysis.

**Table 4.4: Debt Default Timing**

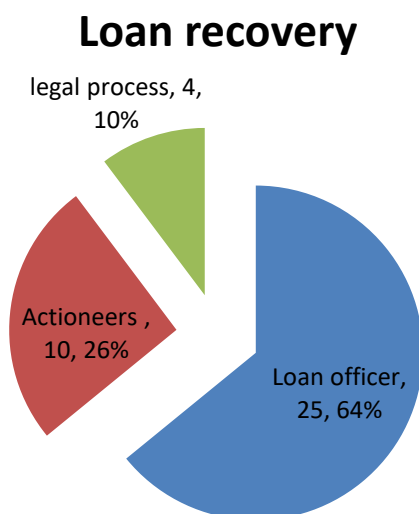
	<b>Frequency</b>	<b>Percent</b>
One month late	5	12.8%
More than 12 months payment	11	28.2%
Use of supervision on one to one basis (Individual Based Analyses)	23	59.0%
<b>Total</b>	<b>39</b>	<b>100</b>

Source; Researcher (2022)

The participants 23(59.0%) indicated that institution decides whether the client had defaulted loan/credit repayment using supervision on one to one basis. The results further revealed that 11(28.2%) indicated that institution decides whether the client had defaulted loan/credit repayment after more than 12 months payment. In addition, 5(12.8%) indicated that institution decides whether the client had defaulted loan/credit repayment after one month late. Through use of supervision on one to one basis ensured minimal default as clients are analyzed on individual basis.

#### **4.5.2.3 Debt Recovery Methods**

The participants were further requested to state the debt recovery methods that their organization adopt when recovering loans and the analysis of the results were shown in Figure 4.10



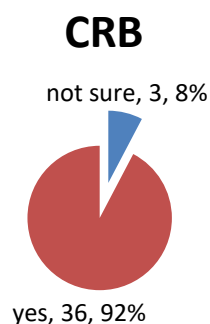
#### **Figure 4.10: Loan recovery**

**Source; Researcher (2022)**

Majority of the respondents, 25, or 64%, said they utilized loan officers to recover their loans, followed by 10 (26%) and actioneers, and only 4 (10%) said they had used the court system. This implied that most DT SACCOs used loan officers to recover their loans in Meru County. This was because they understood the members' background, source of income and other factors that might have hindered loan repayments.

#### **4.5.2.4 Credit Reference Bureau**

The participants were further asked to state whether their firm use Credit Reference Bureau system to regulate client with bad credit history and figure 4.11 indicates the outcome of the analysis.



#### **Figure 4.11: Credit Reference Bureau**

**Source: Researcher (2022)**

The participants, 36(92%) revealed that they used Credit Reference Bureau system to regulate client with bad credit history while 3(8%) indicated that they were not sure whether their SACCO used Credit Reference Bureau system to regulate client with bad credit history. This implied that most SACCOs used Credit Reference Bureau system to regulate client with bad credit history.

The respondents were to explain further how they followed the guidelines if they used CRB system to list the defaulters. They responded that guidelines were issued by the CRB companies like notifying the defaulters before listing them.

#### 4.5.2.5 Debt Recovery Policies

Descriptive results on debt recovery policies are provided in Table 4.5.

**Table 4.5: Debt Collection**

Statement	No Extent All	Small Extent	Moderate Extent	Great Extent	Very Great Extent	Mean	Std.Dev
Effective fines for late and defaulted payments are disclosed to the client	2 (5.30%)	4 (10.50%)	1 (2.60%)	9 (21.10%)	23 (60.50%)	4.21	1.23
Auctioning of defaulting clients' properties	3 (7.90%)	4 (10.50%)	4 (10.50%)	10 (23.70%)	18 (47.40%)	3.92	1.32
A strict policy is implemented. more effective than a tolerant strategy in debt recovery	3 (5.30%)	5 (13.20%)	3 (7.90%)	7 (15.80%)	22 (57.90%)	4.08	1.30
The institution uses legal means in loan collection	3 (5.30%)	5 (13.20%)	3 (7.90%)	14 (34.20%)	15 (39.50%)	3.89	1.23
Available debt recovery policies have assisted towards effective credit management	4 (10.5%)	4 (10.50%)	2 (5.30%)	10 (26.30%)	19 (47.40%)	3.89	1.39

**Source: Researcher (2022)**

Majority of respondents (81.6%) indicated that their institutions have effective sanctions for non-payment and that customers are generally aware of late payments (mean: 4.21; standard deviation: 1.23). This implied that most SACCOs make their clients aware of the penalties in case of loan default. The participants, 28 (71.1%) said that their institutions mostly carried out real estate sales to clients who were in default (mean = 3.92, std.dev = 1.32). This means that in the event of a payment default, most of the customers result in the sale of the property to the customer. Additional results show that the majority of respondents 29 (73.7%) said that their institution implemented strict and mostly more effective policies than implementing a permissive debt recovery strategy (mean = 4.08, std.dev = 1.30). This implies that a strict policy helps the SACCOs to recover their loan easily.

The participants 29 (73.7%) said their institution used extensive legal means to collect loans (mean = 3.89, std.dev = 1.23). This suggests that using the legal process to collect loans improves loan performance. Further, 29 (73.7%), indicated that their institution implemented available debt

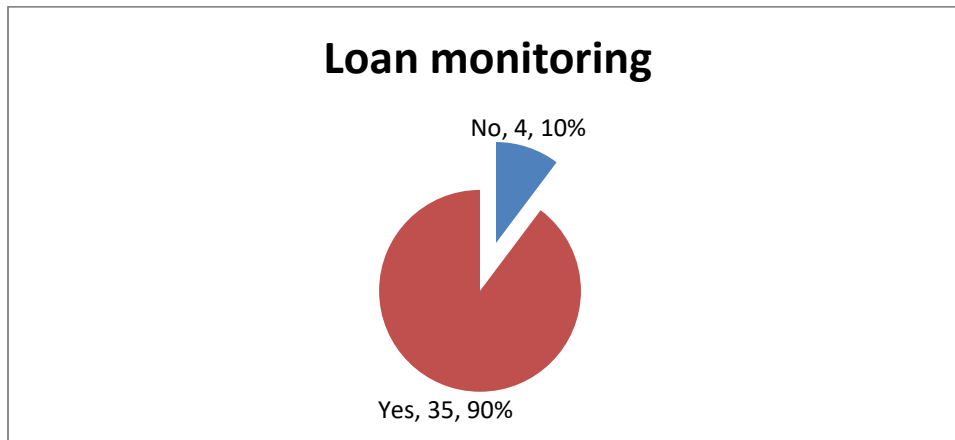
collection policies that strongly support effective credit management (mean = 3.89, std.dev = 1.39). This implies that most SACCOs have set up good policies that will enhance loan performance.

### 4.5.3 Credit Monitoring

The managers were to respond on loan monitoring practices applied in their SACCOs to minimize default rates through loan monitoring practices, default rates and 5 point likert scale analysis on the aspects of credit monitoring. The analysis were as follows;

#### 4.5.3.1 Loan Monitoring Practice

The participants were asked to state whether their institution considers loan monitoring as best of practice and the results of the findings were analyzed in figure 4.12.



**Figure 4.12: Loan Monitoring**

**Source: Researcher (2022)**

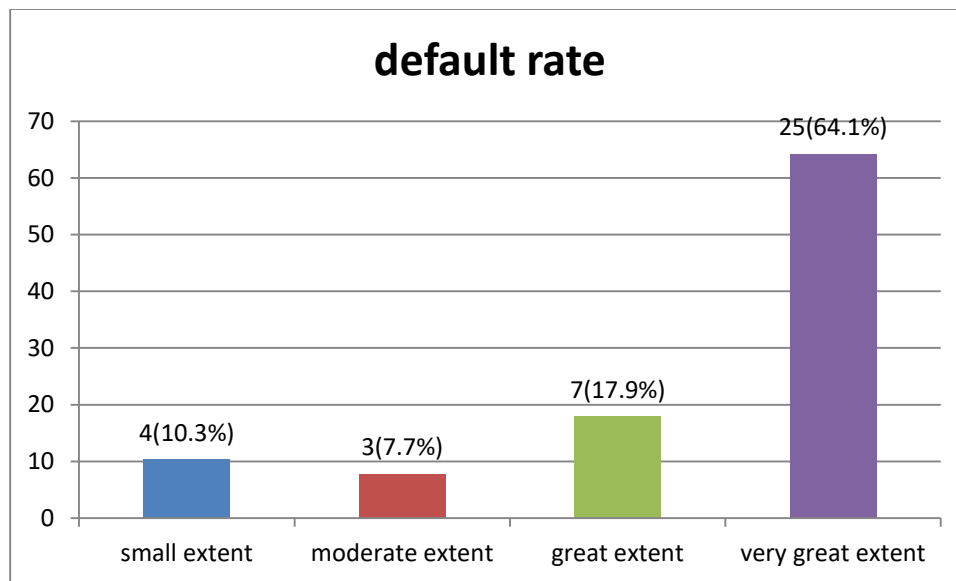
The participants, 35(90%) indicated that they consider loan monitoring as best of practice while 4(10%) do not consider loan monitoring as best of practice. This implied that most SACCOs in considered loan monitoring as a very good practices that can enhance their performance.

In addition, respondents were asked to indicate why credit monitoring is the best practice for credit risk management. Respondents indicated that credit monitoring plays an important role in

maintaining the quality of loan portfolios and protecting risk assets from declines, thereby keeping non-performing loans (NPLs) at acceptable levels.

#### 4.5.3.2 Default Rate

The participants were also asked to describe how much the default rate served as a barometer for the institution's non-monitoring credit policy. The findings were presented in Figure 4.13.



**Figure 4.13: Default Rate**

**Source: Researcher (2022)**

Participants, 25(64.1%) reported that a default rate was a prerequisite measure of non-monitoring credit policies in the institution to a very great extent, 7(17.9%) indicated that a default rate was a prerequisite measure of non-monitoring credit policies in the institution to a great extent, 4(10.3%) reported that a default rate was a prerequisite measure of non-monitoring credit policies in the institution to a small extent, while 3(7.7%) indicated that a default rate was a prerequisite measure of non-monitoring credit policies in the institution to a moderate extent. This implied that most SACCOs used default rate as a credit policy measure hence need for frequent monitoring of debts.

### 4.5.3.3 Aspects of Credit Monitoring

The participants were further requested to state the extent they considered the following assertion on credit monitoring. Findings are displayed in Table 4.6.

**Table 4.6: Credit Monitoring**

Statement	No Extent All	Small Extent	Moderate Extent	Great Extent	Very Great Extent	Mean	Std.Dev
Thoroughly checking applicants credit worthiness.	2 (5.10%)	8 (20.5%)	3 (7.70%)	9 (23.1%)	17 (43.6%)	3.79	1.34
Continually monitoring of the status of loans by credit risk committee.	1 (2.60%)	7 (17.9%)	1 (2.60%)	12 (30.8%)	18 (46.2%)	4.00	1.21
Issuing standardized loan application forms in the process.	3 (7.70%)	10 (25.6%)	0.00%	10 (25.6%)	16 (41.00)	3.67	1.44
Adhering to internal guidelines procedures.	1 (2.60%)	8 (20.5%)	3 (7.70%)	14 (35.9%)	13 (33.30)	3.77	1.2
Thorough check is done to ensure loans are paid within stipulated time	1 (5.10%)	1 (5.10%)	1 (5.10%)	10 (25.6%)	23 (59.0%)	4.28	1.12

**Source: Researcher (2022)**

Most respondents 17(43.6%) revealed that they carried out extensive credit checks on applicants (mean = 3.79, std.dev = 1.34). This means that most of the DT SACCO checked the creditworthiness of the loan applicant before granting the loan. The results further show that the majority of respondents, namely 18(46.2%), indicate that credit status is highly monitored on an ongoing basis by the credit risk committee (mean = 4.00, std.dev = 1.21). That is, monitoring loan status improves loan performance. Additional results show that 16 (41%) of participants indicated that the process mostly involved issuing standard loan application forms (mean = 3.67, std.dev = 1.44). This implied that a standardized loan application form improved the client trust which enhanced performance.

The results also showed that 14 (35.9%) reported a high level of compliance with internal policy procedures (mean = 3.77, std.dev = 1.20). This means that compliance with credit policy guidelines improves loan performance. The results further show that 23 (59.6%) of participants indicated that a

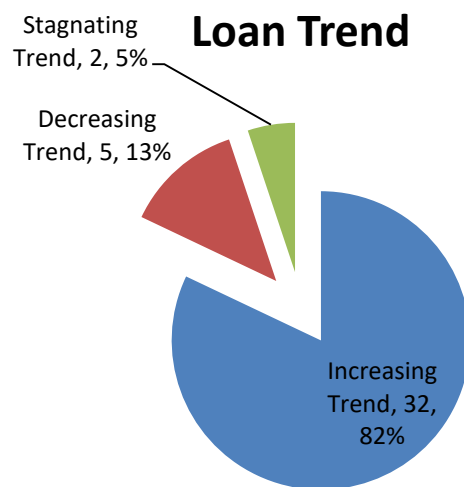
thorough check was carried out to ensure that the loan was repaid within the specified timeframe (mean = 4.28, standard deviation = 1.12). This implied that doing thorough checks on the clients before administering the loans enhanced loan performance.

#### 4.5.4 Loan Performance

The respondents were also required to indicate their loan performance trend, credit risk management practices in place and loan performance indicators. The results were analyzed as shown.

##### 4.5.4.1 Loan Performance Trend

The respondents were further asked to indicate their loan performance trend in the organization from year 2016-2020 and the findings were shown in Figure 4.15.



**Figure 4.14: Loan Trend**

**Source: Researcher (2022)**

The results showed that majority of the respondents who were 32(82%) indicated that their loan performance trend was increasing in their organization from year 2016-2020, 5(13%) indicated that their loan performance trend was decreasing in their organization from year 2016-2020 while 2(5%) indicated that their loan performance trend was stagnating in their organization from year 2016-2020.

This suggested that the majority of DT SACCOs had a significant growth over the previous five years.

#### 4.5.4.2 Credit Risk Management Practices

The participants were further asked to explain the credit risk management practices that contributed to the increasing, decreasing, or the stagnating trend of loan performance. The respondents indicated that majorly loan recovery process lead to increasing trend of loan performance in the deposit taking SACCOs. However, loan monitoring did not contribute much towards loan performance.

#### 4.5.4.3 Loan Performance Indicators

Table 4.7 shows results on loan performance indicators.

**Table 4.7: Loan Performance Indicators**

Statement	No Extent All	Small Extent	Moderate Extent	Great Extent	Very Great Extent	Mean	Std.Dev
Increase in the amount of loan disbursed	3 (7.70%)	5 (12.80%)	2 (5.10%)	6 (15.40%)	23 (59.50%)	4.11	1.35
Decrease in level of non-performing loans	2 (5.10%)	4 (10.30%)	1 (2.60%)	7 (17.90%)	25 (64.10%)	4.24	1.24
Repayment of loans within scheduled time	3 (7.70%)	2 (5.10%)	2 (5.10%)	18 (46.20%)	14 (35.90%)	3.97	1.17
Increase in loan products	3 (7.70%)	6 (15.40%)	2 (5.10%)	14 (35.90%)	14 (35.90%)	3.82	1.29
Increase in profitability of the institution	4 (10.30%)	5 (12.80%)	1 (2.60%)	11 (28.20%)	19 (48.70%)	3.95	1.39

**Source: Researcher (2022)**

The findings revealed 23(59.5%) of participants indicated increase in the amount of loans disbursed (mean = 4.11, std.dev = 1.35). This means that most of the SACCOs had increased loan disbursement. Further, 25 (64.2%) indicated that the proportion of non-performing loans fell sharply (mean = 4.24, std.dev = 1.24). This indicates that SACCOs access their loan performance through reduction in the rate of non-performing loan. In addition, 18 (46.2%) indicated loan repayment within scheduled time

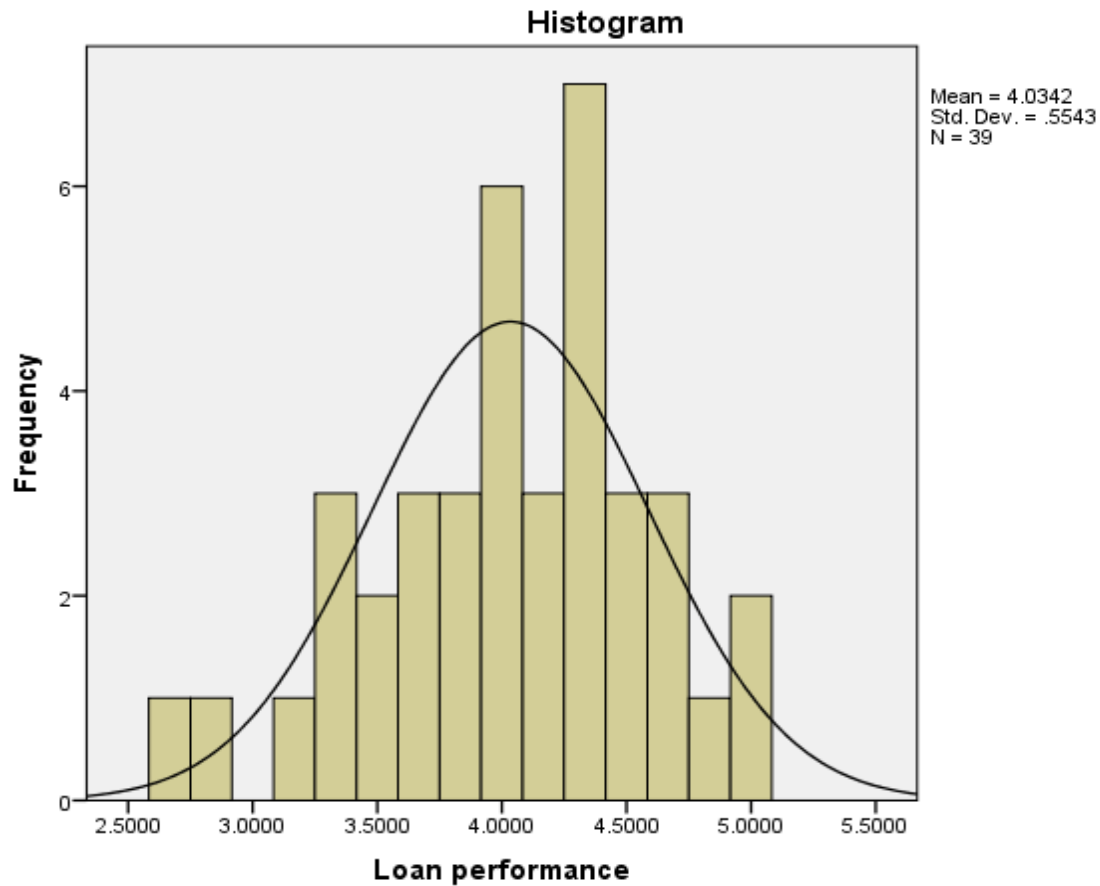
(mean = 3.97, std.dev = 1.17). This implied that most SACCOs were able to offer loans to the right people who are able to repay the loans in the scheduled time. Additional results showed that the majority of respondents 14 (35.9%) showed a significant increase in credit products (mean = 3.82, std.dev = 1.29). This suggests that most SACCOs were innovative and developed new products. In addition, most of the respondents 19(48.7%) indicated that the profitability of the institution has increased rapidly (mean = 3.95, std.dev = 1.39). This implies that most SACCOs increase in profitability was a measure of loan performance reduced collection costs.

#### **4.6 Diagnostic Tests**

Diagnostic tests including normality, multicollinearity and heteroskedasticity were conducted on the data.

##### **4.6.1 Normality Test**

The result revealed that the data was normally dispersed as shown by the bell-shaped curve in Figure 4.15.



**Figure 4.15: Normality Test**

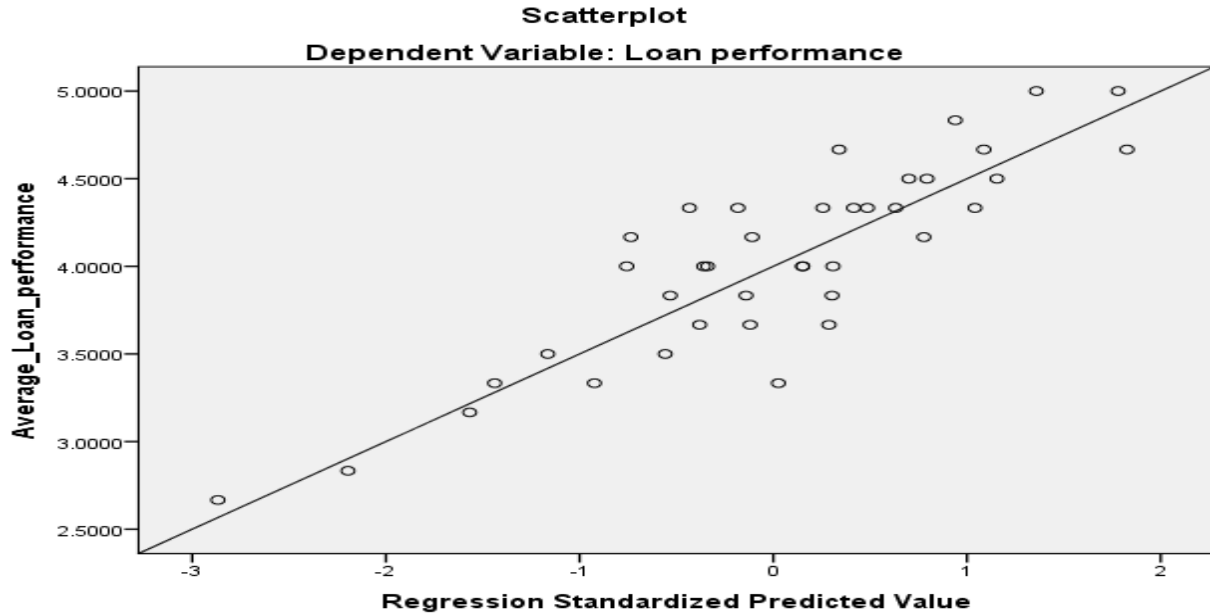
**Source; Researcher (2023)**

#### **4.6.2 Multicollinearity Test**

The results revealed that VIF values range between 1.259 and 1.854 and thus no multicollinearity problem.

#### **4.6.3 Heteroskedasticity Test**

The points were roughly the same distance from the line according to the data above. As a result, there is no heteroskedasticity in the data. This shows that the regression model used to compare loan performance and credit risk management in DT-SACCOs was appropriate for the data.



**Figure 4.16: Heteroskedasticity Test**

Source; Researcher (2022)

#### 4.7 Inferential Statistics

The correlation and regression analysis findings are presented in this section.

##### 4.7.1 Correlation Analysis

Table 4.9 shows the correlation results.

**Table 4.9: Correlation Results**

	Loan performance	Lending requirement	Loan recovery process	credit monitoring
Loan performance	1			
Lending requirement	.781** 0.000	1		
Loan recovery process	.768** 0.000	.675** 0	1	
Credit monitoring	.589** 0.000	.433** 0.007	.432** 0.007	1

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

### **Source; Researcher (2022)**

Results in Table 4.9 demonstrated a positive and substantial correlation between lending requirement and loan performance ( $r=0.781$ ,  $p=0.000$ ). This suggests that lending requirements and loan performance are positively correlated. The results supported Njenga's (2014) assertion that there was a strong and positive association between credit risk management and loan performance.

Results also showed that loan recovery process had a favorable and substantial association with loan performance ( $r=0.768$ ,  $p=0.000$ ). This indicates that loan recovery process positively correlate with loan performance. The study's findings are consistent with those made by Maiti (2015), who found a strong and statistically significant positive correlation between the loan recovery procedure's parameters and return on investment.

Results also showed that credit monitoring had a favorable and substantial association with loan performance ( $r=0.589$ ,  $p=0.000$ ). This reveals that credit monitoring positively correlate with loan performance. These findings agreed with Pyle (2017) who indicated that credit monitoring enhanced loan performance.

#### **4.7.2 Regression Analysis**

Findings revealed that the R was 0.873. This shows that credit risk management and loan performance have a substantial link. Furthermore, the R-square value was 0.763%. This indicates that 76.3% of the variability observed in the dependent variable, loan performance, can be attributed to independent variables.

#### **4.7.3 Model Summary**

The study sought to determine the model's goodness of fit statistics. Table 4.10 presents model fitness results.

**Table 4.10: Model Fitness Results**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.873a	0.763	0.742	0.2855

Source; Researcher (2022)

The three predictor variables account for 74.2% of the variation in the loan performance of deposit taking SACCOs, according to the adjusted R-square (R<sup>2</sup>) (0.742) coefficient of determination.

#### 4.7.4 ANOVA

The ANOVA was calculated to assess whether credit risk management served as a predictor of loan performance and the results were presented in Table 4.11.

**Table 4.11: ANOVA**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	8.904	3	2.968	36.414	.000b
Residual	2.771	34	0.082		
Total	11.675	37			

Source; Researcher (2022)

#### 4.7.5 Regression Coefficients

Credit risk management was a significant predictor of loan performance, as evidenced by a F statistic of 36.414 and a reported p value of 0.000, which was less than the typical probability of 0.05 significant level. This demonstrates that, at a 95% level of confidence, credit risk management has a statistically negative effect on loan performance.

**Table 4.12: Coefficients**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.178	0.421		-0.424	0.674
Lending requirement	0.389	0.107	0.419	3.619	0.001
Loan recovery process	0.420	0.128	0.38	3.283	0.002
Credit monitoring	0.244	0.095	0.243	2.565	0.015

Source; Researcher (2022)

The results are fitted in the multiple regression;

$$Y = -0.178 + 0.389 X_1 + 0.420 X_2 + 0.244 X_3 + \varepsilon$$

Where:

Y = Loan performance

X<sub>1</sub> = Lending requirement

X<sub>2</sub> = Loan recovery process

X<sub>3</sub> = Credit monitoring

ε-error term

Lending requirements and loan performance were positively and strongly correlated, according to regression of coefficients (r=0.389, p=0.001). This means that an increase in the lending requirement of one unit would translate into an increase in loan performance of 0.389 units. The results corroborated Chege's (2010) assertion that MFI lending policies boost investment and that human-based expert systems' solvency can lower default rates by improving an MFI's presentation.

Additionally, it was discovered that the process of loan recovery and loans performance were strongly and favorably connected with one another (p=0.002, r=0.420). This means that an improvement of one unit in the loan recovery process would translate into an improvement of 0.420 units in loan performance. The study's findings are consistent with those made by Maiti (2015), who found a strong and statistically significant positive correlation between the loan recovery procedure's parameters and return on investment.

Results also showed a strong and significant relationship between credit monitoring and loan performance (r=0.244, p=0.015). This implied that an increase in credit monitoring of one unit would

translate into an improvement in loan performance of 0.244 units. The research's conclusions corroborated those of Nagarajan (2014), who claimed that credit monitoring improved loan performance.

#### **4.8 Study Hypotheses**

**H<sub>01</sub>: Lending requirements have no significant effect on loan performance of deposit taking SACCOs in Kenya.**

The findings of the regression coefficients showed that the p value was 0.001 less than 0.05. Lending requirements are substantially connected with the loan performance as a result of this; the null hypothesis was not accepted. The findings agree with Njenga (2014) which found that lack of credit sharing information, leniency, and too much trust on the customers by credit officers affected loan performance. The study further agrees with the study by Soke Fun Ho and Yusoff (2016) on investigation the credit risk management practices of a number of Malaysian financial institutions. The study advised careful investigation of the loan granted and careful assessment of the customer's capacity to fulfill the loan obligation.

**H<sub>02</sub>: Loan recovery has no significant effect on loan performance of deposit taking SACCOs in Kenya.**

According to the regression coefficient data, the probability was 0.002 less than 0.05. Loan recovery has a substantial effect on the loans performance as a result of the null hypothesis' failure. The findings concur with Kipsang (2020), who found that loan performance and bad credit listings, fines, and loan limit reductions have a positive and significant correlation. The results further agrees with study by Ahmed and Malik (2015) on influence of credit risk management on lending performance of Pakistan Micro finance banks which concluded that loan performance was influenced by the credit term, customer appraisal, collection procedure, and credit risk management.

**H<sub>03</sub>: Credit monitoring has no significant effect loan performance of deposit taking SACCOs in Kenya.**

The findings of the regression coefficient showed that the p value was 0.015 less than 0.05. As a consequence, the null hypothesis was disproved, showing that credit monitoring significantly influences deposit-taking SACCOs in Kenya's lending performance. The findings support a study by Pyle (2017) that found procedures are necessary to keep an eye on positions and encourage acceptable risk-taking by organizations and people. The results are consistent with a research by Nagarajan (2014) that examined credit risk management strategies for Mozambican microfinance institutions and discovered that risk management is a dynamic process that functions best when it is developed gradually and tested in a high-risk scenario. According to the study's findings, credit institutions should properly manage their portfolios and cash flows to reduce risk loss, provide customers with a strong institutional foundation and skilled human resources, and encourage client discipline through efficient stakeholder coordination.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

The findings summary was presented in this chapter. It also includes the study results, recommendations and suggestions for additional research.

#### **5.2 Summary of Findings**

The study objectives, which included lending requirements, loan recovery process as well as credit monitoring on deposit-taking SACCOs loan performance in Kenya guided the synthesis of research findings.

##### **5.2.1 Lending Requirements and Loan Performance**

The first objective was to determine the effect of lending requirements on loan performance of SACCO's deposit taking loans in Kenya. Descriptive findings indicated that majority of respondents considered the ability of customers to generate sufficient cash flow to meet their obligations before repaying the loan. According to findings, the majority of respondents said their institution takes the customer's collateral base into account to make sure the loan is properly secured before it is disbursed. The study's findings also demonstrate that most respondents said their organizations take their clients' net financial wealth and cash flow into account before making loans. The findings also indicate that most respondents stated that their companies evaluate a borrower's moral character and trust in their capacity to repay before extending credit. The study's results also show that most participants claimed their company verifies a borrower's credit with a different financial institution before approving a loan. The regression analysis's results showed a significant and favorable correlation between the lending requirement and loan performance.

### **5.2.2 Loan Recovery Process and Loan Performance**

The second objective was to ascertain the impact of the loan recovery process on the lending performance of deposit-taking SACCOs in Kenya. According to descriptive data, the majority of respondents claimed that customers were generally aware of the actual penalties for late payments. The findings also reveal that the majority of respondents claimed their institutions sold a lot of property at auction to troubled customers. This indicates that the majority of customers result in the sale of the property to the customer in the case of a payment default. According to additional findings, the majority of respondents said that adopting a hard debt collection approach was far more successful than adopting a soft one. The findings also reveal that most respondents said their institution employed a variety of lawful methods to collect loans. The majority of respondents, according to additional findings, said that the current debt collection policy greatly helps efficient credit management. The regression analysis's findings showed a strong and positive correlation between loan performance and the loan recovery process.

### **5.2.2 Credit Monitoring and Loan Performance**

The third objective was to establish the effect of credit monitoring on the loan performance of deposit taking SACCOs, Kenya. According to descriptive findings, the majority of respondents claimed to have thoroughly investigated applicants' creditworthiness. According to the findings, the majority of respondents believed that the credit risk committee mostly continuously assesses the credit standing. Additional research revealed that the majority of respondents believed the process mostly involved distributing standard loan application forms. The findings also demonstrate that the majority of respondents claimed to follow internal regulations. This implies that adhering to the rules of the credit policy enhances loan performance. Further research reveals that most respondents said careful due diligence was done to guarantee that most loans were returned within the allotted time limit. A significant and positive association between credit monitoring and loan performance was shown by the regression analysis.

### **5.3 Conclusions**

The study concluded lending requirement and loan performance were positively and significantly related. The study also concluded that clients with ability to generate sufficient cash flow enhance loan performance. In addition, most SACCOs used clients' collateral base for ensuring that the loans are well secured. The study also concluded clients' financial net worth and cash flows was a great determinant of loan performance. The investigation came to the additional conclusion that before giving the loan, the majority of SACCOs requested the borrower's credit history record from other financial institutions.

On loan collection period the study concludes that there exists a significant relationship between loan collection period and loan delinquency in SACCOs in Meru County. Loan collection period should be stringently followed to ensure that credit defaulters are detected early and hence necessary measures taken to recover the loans. Credit risk control was also found to play a significant role on loan delinquency in SACCOs in Meru County, this brings out the need for SACCOs to enact strict measure to enable them identify potential defaulters before disbursing loans. Credit committee plays a key role in loan appraisal to members hence ensuring that there is a high possibility of loan repayments from the borrowers.

The study also concluded that loan recovery process and loan performance were positively and significantly related. The study also found that making consequences for default and late payments clear to clients increased their trust, which improved loan performance. In addition, most SACCOs considered auctioning of defaulting clients' properties. Further a strict policy is implemented more effectively than a tolerant strategy in debt recovery. Additionally, the policies for debt recovery that are currently available have greatly aided in good credit management.

The study further concluded that credit monitoring and loan performance were positively and significantly related. Checking applicants' credit worthiness thoroughly enhanced loan performance.

In addition, continually monitoring of the status of loans by credit risk committee enhances loan performance. Issuing standardized loan application forms boosted clients trust which enhanced loan performance.

#### **5.4 Recommendations**

The research recommended DT-SACCOs should have credit risk management policies, which guarantees loan repayment, accurate estimation of loan defaults and suitable mitigation measures. Moreover, SACCOs should assess customers' ability to generate sufficient cash flow, collateral base, financial net worth and cash flows and credit history record from other financial institutions. Further, it is recommended that customers should be informed of late payment penalties and the management to ensure strict implementation of credit policies.

Extending the grace period for clients from four months to one year in SACCOs is proposed as a means to mitigate loan delinquency and improve member welfare. This adjustment aims to offer borrowers additional time to invest loan funds into income-generating ventures, facilitating loan repayment through generated returns. The proposal recognizes the diverse needs of SACCO members and seeks to accommodate varying business circumstances, fostering entrepreneurship and financial inclusion. While extending the grace period may offer benefits in reducing loan delinquency and supporting member welfare, SACCOs must carefully evaluate the financial feasibility and potential impacts on liquidity to ensure the sustainability of such a policy adjustment.

To enhance loan performance, DT-SACCOs should enhance their ongoing credit risk monitoring of their loan portfolio. Hiring qualified employees and collection companies will help you do this. It is suggested that DT SACCOs should use the services of a credit reporting agency to determine the creditworthiness of borrowers to minimize credit losses. CRB helps lenders make faster and more accurate credit decisions. The management should create policies and practices to recognize,

quantify, track, and manage credit risk. They are also encouraged to have a system to monitor individual loan status and overall loan performance.

Persistent awareness should be created on the importance of prompt loan repayment to SACCO members hence ensuring that they pay their loans when due. This will assist in decreasing loan default levels

DT-SACCOs in Meru County should explore opportunities to diversify their income streams beyond traditional lending activities to enhance revenue stability and resilience. This will include offering a broader range of financial products and services, such as savings accounts, insurance products, and investment opportunities, tailored to the needs of members in the region. By diversifying revenue sources, DT-SACCOs will reduce dependency on interest income from loans and better withstand fluctuations in economic conditions that may impact loan performance.

### **5.5 Recommendation for Further Research**

The purpose of the study was to ascertain how credit risk management and loan performance of deposit-taking SACCO in Kenya. It is recommended that future studies be done focusing on non-deposit taking SACCOs in Kenya. The management of credit risk and the performance of deposit-taking SACCO loans in Tanzania and Uganda, among other East African nations, should be the subject of further study.

Additionally, the study was not 100 percent. This suggests that alternative credit risk management techniques may have an impact on SACCOs' ability to repay loans. As a result, more research could concentrate on various techniques for managing credit risk, like credit risk assessment and portfolio asset quality.

Based on the study, researchers and policy makers should do additional research on the ways in which external entities, such as the government, might enhance the functioning of SACCOs (Savings and

Credit Cooperative Organisations) in Kenya. They can get their conclusions from particular credit management strategies such as credit risk governance and credit monitoring. There are several credit risks mitigating elements that can significantly impact the performance of an organisation, with debt recovery and the involvement of other agencies being the primary ones. A comparative study can be conducted on credit management techniques across many sectors, including banking, hospitality, and manufacturing industries. The objective is to identify the most effective strategies that can be universally adopted by all industries. It is important to note that the study does not provide particular definitions.

## References

- Ahmed, S. F., & Malik, Q. A. (2015). Credit Risk Management and Loan Performance: Empirical Investigation of Micro Finance Banks of Pakistan. *International Journal of Economics and Financial Issues*, 5 (2), 575-576.
- Alfred, O. (2011). Corporate Governance and Financial Performance of SACCOs in Lango Sub Region Master's Thesis, Makerere University.
- Ammirato, P. (2024). *Cooperative Enterprises*. Taylor & Francis.
- Bessis, J. (2003). *Risk Management in Banking* (2nd edition), John Wiley & Sons, Chichester, New York.
- Binks, M. R., & Ennew, C.T. (1992). Information asymmetries and the provision of finance to small firms. *International Small Business Journal* 11, No.1 pp 35-46.
- Boldizzoni, F. (2008), *Means and ends: the idea of capital in the West, 1500-1970*. New York: PalgraveMacmillan.
- Boston Consulting Group (2001), *From Risk Taker to Risk Manager: Ten Principles for Establishing a*
- Budianto, E. W. H., & Dewi, N. D. T. (2023). Non-Performing Financing (NPF) on Islamic and Conventional Banking: Mapping Research Topics using VOSviewer Bibliometric and Library Research.
- Chorus, I., & Welker, M. (2021). *Toxic cyanobacteria in water: a guide to their public health consequences, monitoring and management* (p. 858). Taylor & Francis.
- Edwards, P., & Turnbull (1994). Finance for small and medium sized enterprises. Information and the income gearing challenge. *International Journal of marketing* vol. 12 no.6.Pg. 3-9.
- Englander, M. (2012). The interview: Data collection in descriptive phenomenological human scientific research. *Journal of phenomenological psychology*, 43(1), 13-35
- Eppy, I. (2005). Perceived Information Asymmetry, Bank lending Approaches and Bank Credit Accessibility by SMEs in Uganda (Unpublished thesis) Makerere University

- Financial Services and Credit Cooperative Society (KIFISACCOS) in Kongwa District. *Business Minds Africa*, Case series.
- Frank, B., Simon G., & Josephine, M. (2014), Risk management practices adopted by financial firms in Malta. *Managerial Finance*, 40, 587-612.
- García, F., Giménez, F., Guijarro, F. (2013), Credit risk management: a multicriteria approach to assess creditworthiness. *Mathematical and Computer Modelling*, 57.
- Gatimu, E. M., Muturi, W., & Oluoch, O. (2018). Effect of non-performing loan management practices on loan recovery performance of deposit taking Savings and Credit Cooperatives in Kenya. *Journal Of Humanities And Social Science*, 23, 1-27.
- Gatimu, E. M., Muturi, W., & Oluoch, O. (2018). Effect of non-performing loan management practices on loan recovery performance of deposit taking Savings and Credit Cooperatives in Kenya. *Journal Of Humanities And Social Science*, 23, 1-27.
- Greuning, H., & Bratanovic, S. B. (2003). Analyzing and Managing Banking Risk, A Framework for Assessing Corporate Governance and Financial Risk. 2nd edition, The World Bank, Washington, DC.
- Haydam, N. E., & Steenkamp, P. (2020). A methodological blueprint for social sciences research—the social sciences research methodology framework. *EIRP Proceedings*, 15(1)
- ICA (International Co-operative Alliance) (2005) Statement on the co-operative Identity. Available from the University of Wisconsin Center for Co-operatives at [Http://www.wisc.edu/uwcc/rin-html](http://www.wisc.edu/uwcc/rin-html) viewed may 15th, 2014 International cooperative
- Johnson, D., Rodwell, J., & Hendry, T. (2021). Analyzing the impacts of financial services regulation to make the case that buy-now-pay-later regulation is failing. *Sustainability*, 13(4), 1992.
- Karim, M. M., Bhuiyan, M. Y. A., Nath, S. K. D., & Latif, W. B. (2021). Conceptual Framework of Recruitment and Selection Process. *International Journal of Business and Social Research*, 11(02), 18-25.

- Kariuki, J. N. (2010). *Effective Collection Policy*. KASNEB Publishers, Nairobi.
- Karmelavičius, J., & Ramanauskas, T. (2019). Bank credit and money creation in a DSGE model of a small open economy. *Baltic journal of economics*, 19(2), 296-333.
- Karumuna, L., & Akyoo, A. (2011). *Rural Finance Challenges in Tanzania – The case of Kibaigwa*
- Kimeu, J. (2008). *Credit risk management techniques of unsecured banks loans of commercial banks in Kenya*, Unpublished MBA thesis, University of Nairobi.
- Kurui, S. K., & Kalio, A. (2014). Influence of Credit Risk Management Practices on Loan Performance of Microfinance Institutions in Baringo County. *International Journal of Science and Research*, 3 (10).
- Lagat, F. K., Mugo, R., & Otuya, R. (2013). Effect of Credit Risk Management Practices on Lending Portfolio Among Savings and Credit Cooperatives in Kenya. *European Journal of Business and Management*, 5(19), 93–105.
- Latifee, I.H. (2006), *Global Summit 2006*. Valladolid, Madrid: Spanish Publishers
- Long, H., & Wang, J. (2022). Dissecting reliability and validity evidence of subjective creativity assessment: A literature review. *Educational psychology review*, 34(3), 1399-1443.
- Lundqvist, S. A., & Vilhelmsson, A. (2018). Enterprise risk management and default risk: Evidence from the banking industry. *Journal of Risk and Insurance*, 85(1), 127-157.
- Magali, J. J. (2013). *The Impacts of Credits Risk Management on Profitability of Rural Savings and Credits Cooperative Societies (SACCOS): The Case Study of Tanzania*. *International Journal of Management Sciences and Business Research*, 2 (12).
- Maina, E. M., & Njeru, A. (2023). Influence of credit risk management practices on loan recovery performance of the registered digital credit providers in Kenya. *The Strategic Journal of Business & Change Management*, 10(4), 682-695.
- Ministry of Co-operative Development and Marketing (2007), *Investment Policy and guidelines for Cooperative sector*.

- Moti, H. O., Masinde, J. S., Mugenda, N. G., & Sindani, M. N. (2012). Effectiveness of Credit Management System on Loan Performance: Empirical Evidence from Micro Finance Sector in Kenya. *International Journal of Business, Humanities, and Technology*, 2(6), 2162–1381.
- Mugisa, F. (2010). SACCOstogetshs555 billion in loans, *The New Vision*.No.8,pg.744-778.
- Muriithi, P. K. (2024). *Regulatory Framework and Financial Intermediation Efficiency of Deposit Taking Savings and Credit Cooperative Societies in Kenya* (Doctoral dissertation, JKUAT-COHRED).
- Musengamana, A. (2019). *Non-performing loans and financial performance of microfinance institutions in Rwanda. case study of Umurenge SACCO (2016-2018)* (Doctoral dissertation, University of Rwanda).
- Mustafa, M., Al-Sayed, M., Awaideh, M., & Miller, C. (2011). Study on risk management in rural and
- Mutembei, C., & Gitonga, M. N. (2022). Assessment of Credit Risk Identification on Loan Repayment Performance of Saccos in Imenti South Sub-county, Meru, Kenya. *Asian Journal of Economics, Business and Accounting*, 22(23), 326-334.
- Njiru, G.M (2003). Credit Risk Management by Coffee Coops in Embu District. Unpublished MBA research project University of Nairobi.
- Ntuite, S. R. (2022). The contribution of saving and credit cooperatives (SACCOS) on the improvement of members ‘socio economic development in Rwanda: Opportunities and challenges.
- OLWENY, M. A. (2019). *Effect of credit management practices on financial performance of savings and credit co-operative societies in Kisumu county* (Doctoral dissertation, Maseno University).
- Pandey, Sanjay K., & James L. Garnett. 2006. Exploring public sector communication performance: Testing a model and drawing implications. *Public Administration Review*66 (1): 38–52
- Project.
- Ross, S.A., Westerfield, R.W., & Jordan, B.D. (2008), *Essentials of Corporate Finance*. Hill International edition. USA: McGraw-Hill Companies Inc.
- Silikhe, S. (2008). Credit risk management in Microfinance Institutions in Kenya. Unpublished MBA

- Soke Fun Ho, C., & Yusoff, N. I. (2009). A preliminary study on Credit Risk Management Strategies of Selected Financial Institutions in Malaysia. *Journal Pengurusan*.
- the Greek twin crises. *International Advance Economics Research*.
- Triodos Facet, (2011). Tanzania Microfinance Country Scan, Final report. Zeist, The Netherlands,
- TUMIRAN, M. A. (2024). RESEARCH METHODOLOGY CONFUSION AMONG NOVICE SOCIAL SCIENCES AND HUMANITIES RESEARCHERS. *Quantum Journal of Social Sciences and Humanities*, 5(1), 115-125.
- Gotz, I. (2017). World Co-Operative Monitor. *Journal of Entrepreneurial and Organizational Diversity*, 6(2), 67-74.
- Vladislava, U. S. Y. K. (2020). Concept Of Evaluation Of Creditworthiness Of Enterprises In Conditions Of Economic Cycle. *Theoretical and Practical Research in Economic Fields (TPREF)*, 11(22), 120-132.
- Vogiazas, S. D., & Nikolaidou, E. (2014). Credit risk determinants in the Bulgarian banking system and
- WAFULA, M. (2021). *Effect of Domestic Savings, Foreign Aid and Direct International Investments on Gross Capital Formation in Kenya* (Doctoral dissertation, Maseno University).
- Wambugu, S. M. (2008). A Survey of Credit Risk Management Practices by Micro-Finance Institutions in Kenya. Unpublished MBA research project, University of Nairobi.
- Washington, D.C. Sustainable Development Department, Best Practices Series May 2007.
- World Council of Credit Unions, (2005). Credit union Best Practices". Retrieved 3rd December 2014. (Online topical documents available at: [//www.woccu.org](http://www.woccu.org))
- Xu, Y., Pinedo, M., & Xue, M. (2017). Operational risk in financial services: A review and new research opportunities. *Production and Operations Management*, 26(3), 426-445.
- Zimmer, M. (2020). "But the data is already public": on the ethics of research in Facebook. In *The ethics of information technologies* (pp. 229-241). Routledge.

## APPENDICES

### Appendix I: Introduction Letter

Dear Participant,

#### **RE: DATA COLLECTION REQUEST**

I am studying for a Master's Degree in Business Administration-Finance option at the university.

Please help answer the questionnaire to the best of your ability. The information will only be used for research.

Thank in advance.

Yours Faithfully,

Jotham Gitonga Baariu

## Appendix II: Research Questionnaire

This research sought to collect data on the “**Credit Risk management and loan performance of Deposit Taking SACCOs in Kenya**”. Kindly respond to the questions with honesty.

### PART A: GENERAL INFORMATION

1. Gender:      Male       Female  {Tick Appropriately}

2. What's your highest level of education? {Tick as appropriate}

Certificate       Diploma       Undergraduate       Postgraduate

3. How long have you been in this institution?

Less than 1yr	1-5yrs	6-10yrs	11-15yrs	Over 16yrs
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Which position do you hold in the SACCO? (Tick as appropriate)

Credit officer       Finance manager   
General risk manager       Operations manager

5. How long have you worked in the current position? (Tick as appropriate)

Less than 1yr	1-5yrs	6-10yrs	11-15yrs	Over 16yrs
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**PART B: LENDING REQUIREMENTS**

6. Which approach (s) does your institution use in credit risk analysis before awarding credit to customer?  
 .....

7. To what extent does your institution consider credit analysis and assessment before issuing credit?

No extent at all [ ]      Small Extent      [ ]      Moderate extent [ ]  
 Great Extent      [ ]      Very Great Extent [ ]

8. To what extent does your institution consider the following in evaluating clients on the loan to be awarded?

<b>Client Evaluation</b>	<b>No extent at all</b>	<b>Small Extent</b>	<b>Extent Moderate</b>	<b>Great Extent</b>	<b>Very Great Extent</b>
	1	2	3	4	5
Ability of clients to create enough cash flow to meet their obligations					
Collateral provided by clients to ensure that loans are properly secured					
Clients' financial net worth and cash flows					
Integrity of the borrower and belief in his ability to repay					
Obtaining the borrower's credit history from other banks or other lending organizations					

**PART C: LOAN RECOVERY PROCESS**

9. (a) Does your institution have a debt collection/recovery department?

Yes [ ] No [ ] Not sure [ ]

(b) Which role does the department play? (If your answer in (a) above is Yes)

.....

10. When does your institution decide that the client has defaulted loan/credit repayment?

Period	Not at all	Least	Moderate	Most used
One month late				
More than 12 months payments				
Using supervision on one- to-one basis				

11. Which debt recovery methods does your organization adopt when recovering loans?

Tick where appropriate

Loan officer [ ] Auctioneers [ ] legal process [ ]

12. Does your organization use Credit Reference Bureau system to regulate members with bad credit history?

Yes [ ] No [ ] Not sure [ ]

13. To what extent does your institution apply the following relating to debt recovery process?

**PART D: CREDIT MONITORING**

14. a) Does your institution consider loan monitoring as the best practice?

Yes [ ] No [ ]

b) Please explain your answer above.

.....

To what extent does the firm consider?	No Extent All	Small Extent	Moderate Extent	Great Extent	Very Great Extent
	1	2	3	4	5
Effective penalties on default and late repayment well known to the client					
Auctioning of defaulting clients' properties					
A strict policy is implemented-More effective than a tolerant strategy in debt recovery					
The institution uses legal means in loan collection Available debt recovery policies have assisted towards effective credit management					

.....

15. To what extent is the default rate a prerequisite measure of non-monitoring credit policies in your SACCO?

No extent at all       Small Extent       Moderate extent

Great Extent       Very Great Extent

16. To what extent does the institution consider the following aspects on credit monitoring?

To what extent does the firm consider?	No Extent All	Small Extent	Moderate Extent	Great Extent	Very Great Extent
	1	2	3	4	5
Thoroughly checking applicants credit worthiness					
Continually monitoring of the status of loans by credit risk committee					
Issuing standardized loan application forms in the process					
Adhering to internal guidelines procedures					
Thorough check is done to ensure loans are paid within stipulated time					

**PART E: LOAN PERFORMANCE**

17. How has your SACCO been reporting on loan performance for the last five years from 2016-2020?

Increasing trend [ ]    Decreasing trend [ ]    Stagnating trend [ ]

18. Explain the credit risk management practices that contributed to your answer above.

.....  
 .....

19. To what extent has your SACCO's loan performance been improving in relation to the following indicators?

<b>Loan Performance Indicators</b>	<b>No Extent All</b>	<b>Small Extent</b>	<b>Moderate Extent</b>	<b>Great Extent</b>	<b>Very Great Extent</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Increase in the amount of loan disbursed					
Decrease in level of non-performing loans					
Repayment of loans within scheduled time					
Increase in loan products					
Increase in profitability of the institution					

**Thank you for the Participation**

**Appendix III: Deposit Taking SACCOs in Meru County**

<b>NO</b>	<b>NAME</b>	<b>ADDRESS</b>
1.	NYAMBENE ARIMI SACCO SOCIETY LTD	P.O. Box 493-60600, Maua
2.	DHABITI SACCO SOCIETY LTD	P.O. Box 353-60600, Maua Town
3.	MMH SACCO SOCIETY LTD	P.O. Box 469-60600, Maua
4.	SOLUTION SACCO SOCIETY LTD	P.O. Box 1694-60200, Meru
5.	CAPITAL SACCO SOCIETY LTD	P.O. Box 1479-60200, Meru
6.	YETU SACCO SOCIETY LTD	P.O. Box 511-60202, Nkubu
7.	CENTENARY SACCO SOCIETY LTD	P.O. Box 1207-60200, Meru
8.	GOLDEN PILLAR SACCO SOCIETY LIMITED- FORMERLY IMENTI SACCO	P.O. Box 3192-60200, Meru
9.	NEXUS SACCO SOCIETY LIMITED- FORMERLY KATHERA SACCO	P.O. Box 251-60202, Nkubu
10.	SMART CHAMPION SACCO SOCIETY LIMITED	P.O. Box 64-60205, Githongo town, Meru
11	TIMES- U SACCO SOCIETY LIMITED	P.O. Box 310-60202, Nkubu

**Source: SACCO Supervision Annual Report, 2020**

## Appendix IV: Approval of Research Project Proposal



KENYATTA UNIVERSITY  
GRADUATE SCHOOL

E-mail: [dean-graduate@ku.ac.ke](mailto:dean-graduate@ku.ac.ke)

Website: [www.ku.ac.ke](http://www.ku.ac.ke)

F.O. Box 43844, 00100  
NAIROBI, KENYA  
Tel. 810901 Ext. 4150

Internal Memo

FROM: Dean, Graduate School

DATE: 14<sup>th</sup> April, 2022

TO: Jotham Gitonga Haariu  
C/o Accounting and Finance Dept.

REF: D53/OL/26238/2015

**SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL**

This is to inform you that Graduate School Board at its meeting of 31<sup>st</sup> March, 2022 approved your Research Project Proposal for the M.B.A Degree Entitled, "**Credit Risk Management and Loan Performance of Deposit Taking Saving and Credit Cooperative Societies in Kenya**".

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking and progress report Forms per semester. The Forms are available at the University's Website under Graduate School webpage downloads.

Thank you.

ANNBELL MWANIKI  
FOR: DEAN, GRADUATE SCHOOL

c.c. Chairman, Accounting and Finance.

Supervisors:

1. Dr. Charity Njoka  
C/o Department of Accounting and Finance  
Kenyatta University

# Appendix V: NACOSTI Permit

  
REPUBLIC OF KENYA  
National Commission for Science, Technology and Innovation  
Ref No: 481423

  
NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY & INNOVATION  
Date of Issue: 25/May/2022

**RESEARCH LICENSE**



This is to Certify that **Mr. JOTHAM GITONGA BARDI** of **Kenya University**, has been licensed to conduct research in **Mara** on the topic: **CREDIT RISK MANAGEMENT AND LOAN PERFORMANCE OF DEPOSIT TAKING SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN KENYA** for the period ending - **25/May/2023**.

License No: **NACOSTI/22/17813**

**481423**  
Applicant Identification Number

*Walter Muriuki*  
Director General  
NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code



**NOTE:** This is a computer generated License. To verify the authenticity of this document, Scan the QR-Code using QR scanner application.