

**EFFECT OF CREDIT RISK MANAGEMENT FRAMEWORK ON FINANCIAL
PERFORMANCE OF DEPOSIT TAKING SAVINGS AND CREDIT
COOPERATIVES IN KENYA**

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MASTER OF SCIENCE IN COMMERCE (FINANCE)

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REQUIREMENT FOR THE AWARD OF MASTER OF SCIENCE (FINANCE) IN
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UNIVERSITY.**

OCTOBER, 2019

DECLARATION

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

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ABSTRACT

The type of business undertaken by SACCOs is so delicate due to the fact that 85 percent of their liabilities are deposits derived from the contribution of the member. Through deposit mobilization, members are able to acquire advances from the SACCO, which for the majority of SACCOs is the primary income-generating activity. This method of credit creation makes the SACCOs vulnerable which may lead to financial distress including insolvency. The Framework for credit risk management enables SACCOs to reduce their credit risk exposure by allowing them to compete in the marketplace with other reputable commercial entities such as banks. Therefore, it's important to investigate the roles played by credit risk management framework in improving stakeholder value and financial position of SACCOs. The purpose of this study is to evaluate how the financial performance of SACCOs taking deposits in Kenya is affected by credit risk management. This research concentrated on parameters affecting the performance of SACCOs such as credit risk assessment, credit risk monitoring, and recovery processes. This research was guided by the following theories; theory of agency, stakeholder's theory and the resource-based theory. The study targeted SACCO credit managers in the 166 registered deposit-taking SACCOs in Kenya. The study used a descriptive research design. Census was used where all units were engaged in collecting data. The research used primary collected using questionnaires. Field data were categorized and structured in accordance with study goals and analyzed using the Social Science Statistical Package (SPSS version 2.1). To show the association between the factors, the regression model was used. The research findings revealed a positive relationship linking credit risk appraisal, credit risk monitoring and credit recovery which were the independent variables to financial performance of deposit-taking SACCOs in Kenya. The study determined that 73.8% of SACCOs' financial performance was explained by credit risk management parameters. From the findings and conclusion, the researcher recommends that deposit-taking SACCOs should enhance credit management frameworks such as credit risk monitoring and credit risk appraisal to enhance financial performance. In addition, different types of financial institutions such as microfinance and banks can be used for further research to ascertain whether the current results will change. Other areas that can be investigated are other types of risks such as market risk, interest risk, and liquidity risk and there influence on financial performance.

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LIST OF ABBREVIATIONS AND ACRONYMS

DTS	Deposit-Taking SACCOs
EPS	Earnings per Share
ERM	Enterprise Risk Management
ROA	Return on Asset
ROE	Return on Equity
ROI	Return on Investment
SACCOS	Savings and Credit Cooperatives
SASRA	SACCOs Societies Regulatory Authority
WOCCU	World Council of Credit Unions
SD	Standard Deviation

DEFINITION OF OPERATIONAL TERMS

Performance A business concept representing the successful execution of a given task measured against preset known standards of accuracy, completeness, cost, and speed.

SACCO This is a democratic, unique member-driven, self-help co-operative whose ownership and management lie on members brought together by a common bond or interest.

Financial performance It is the rate at which entities management can generate profit by utilizing assets efficiently while conducting its business.

Deposits –This refers to the sum of money paid on terms under which it shall be repaid, with or without interest or premium and either on-demand or a term or in circumstances agreed by or on behalf of the person making the society to receive it at the risk of the society receiving it.

Dividend Payout In relation to a co-operative society, it refers to the members' share of surplus profit of the society which is divided amongst its members in proportion to a member's shareholding of the total share capital of the society.

Credit risk It's defined as the potential that a SACCO borrower or counterparty will fail to meet its obligations in accordance with agreed terms.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

A savings and credit cooperative society (SACCO) is a cooperative of members, with unique orientation. It is controlled, owned and managed by common bonded members (Kwaku, 2015). Within Kenya, there are two sub-sectors in the SACCO industry. The first sector is deposit-taking (DT-SACCOs), and the other is non-deposit-taking SACCOs (non-DT-SACCOs). The DT-SACCOs are those that accept members' contributions and also give services comparable to those offered by banking organizations that can be withdrawn from savings accounts. The non-DT-SACCO section, on the other side, is the segment that mobilizes savings (deposits) from its participants; and contributions are solely used as security for loan facilities issued to members by the DTS (Essendi, 2013).

Members cannot use their funds, but they are refundable upon withdrawal from the SACCO affiliation (less any liabilities provided by the member). It is essential to note that a distinctive phenomenon for the Kenyan Credit Union association is the distinction between DTS and non-DTS. This may be so considering the stages of evolution and growth that SACCOs were going through in Kenya. Nevertheless, all credit organizations are considered to be deposit-taking (DT) financial societies in the international arena of commercial unions or credit union organizations. Within Kenya, SACCOs taking deposits are accredited and controlled by the governing authority of SACCO society (SASRA, 2017).

The creation of SASRA, part of the financial industry reform agenda of the Government of Kenya, aimed at guarding the welfare of SACCO members, fostering

government confidence in the SACCO division, and stimulating economic development of Kenya through national saving mobilization. SASRA is required to regulate, license and monitor SACCO Societies taking deposits in Kenya (SASRA, 2018). Recently, SACCOs have grown into enterprises with loan books of millions of shillings, ranging from rural financial institutions to urban institutions. They have played an important part in boosting life through financial inclusion in society. Their presence is not evident but is based on the strong financial possibilities for growth such as a well-versed youth and flexible law, which facilitates easy members' entry into society. The 2030 Vision in Kenya acknowledges that SACCO enterprises as a main player in increasing economic potential for investment and private growth of savings (Ng'ombe and Mikwamba, 2004).

Similar to the banking industry, SACCOs, flourish on members and investor's trust and confidence in order to deliver accessible financial services to the people of Kenya. Regardless of the financial and economic status of Kenya, SACCOs have facilitated both household and business development through the mobilization of savings as well as lending to low and middle income (Mutua, 2016). Every nation worldwide has adopted its own methodology to promote the saving standard. In 1995 the International Collaborative Alliance (ICA), a worldwide corporate movement, was established. ICA works according to the SACCO's seven fundamental values of democratic administration, open membership, autonomy and independence, membership education, member financial engagement and collaboration with other cooperatives. Today, SACCOs are one of the biggest financial institutions in the globe that solve the financial difficulties of every single individual (ICA, 2015).

In Africa, the first cooperative society was founded by the British colonized countries. Tanzania, Ghana, Kenya, Nigeria, and Uganda were among the early participants. In the early 1960s, SACCOs were taken up by the majority of non-English nations with the primary

stream in the 1970s (Mwakajumilo, 2011), a collaborative movement leading to the establishment of the African Confederation of Co-operative Credit Savings Societies (ACCOSSCA). This Continental association of SACCOs was formed in 1965, by 28 nations in Africa with the aim of encouraging SACCO values and social welfare (Ng'ombe and Mikwamba, 2004).

1.1.1 Credit risk management framework

The risk is based on a situation involving exposures to damage, danger, or loss, as stated by Allan, Parks, Taghert, St Pierre,& Thor (2005). The management of credit threat refers to the potential that the debtor may not fulfill his/her commitment in terms of the agreed terms and conditions in relation to lending, settlement, hedging, commercial transactions, and other economic events. The framework of managing risk is an effective coordinated method of addressing uncertainty by identifying, evaluating and developing risk approaches to manage and reinforce risk by using funds accessible to executives.

For the stability of any banking organization, a well-developed loan management structure is essential (Kagoyire, 2016). For the lasting survival of all commercial institutions, effective management of credit risk is vital (Kwaku, 2015). Effective credit risk management, as stated by Kimoi, Ayuma & Kirui (2016), includes credit management schemes designed to identify, evaluate and monitor all credit processes of the firm. The provision of loan facilities is the key role of all cooperative savings and loan companies. The credit management role helps to manage the SACCO loan portfolio efficiently, with the objective of ensuring fair resource distribution and encouraging liquidity planning.

Credit management should always be based on clear policies and processes, the strategic plan, the administrative legislation, the SACCO legislative act, the cooperative act, and laws, in essence, to attain carefulness and accepted best practices. In principle, savings

and credit unions have three operational elements: savings, loans, and maximization of shareholder's wealth (Mutua, 2016).

The SACCO management committee must formulate, review, amend and implement the credit policy. The supervisory committee ensures satisfactory execution of the credit policy to achieve the established objectives. In checking a section of loans given and rejected, the committee determines whether procedures are being adhered to. The policy is meant to meet the following significant objectives: establishing a fair loan scheme, establishing effective lending administration processes, helping to properly recover the funds and ultimately guiding the employees and members of the board on credit practices (Essendi, 2013).

Furthermore, the aim of the management of credit risk structure is to capitalize on yields for SACCO through a reduction in exposures to credit risk to an acceptable rate. Nelson and Schwedt (2006) observed that an efficient framework for loan risk supervision is a crucial element of extensive risk management and vital to any financial institution's long-term achievement. They observed that all commercial entities should also take into account The connection between loan risk and other kinds of risk, such as money risk, swap risk, and price risk. For SACCOs, the nature of its business, which relies heavily on credit formation, makes the management of credit risk a bigger concern. The primary source of revenue for SACCOs is creating credit. This gives rise to the risk that members may be unable to honor their obligation either willingly or unwillingly, this puts the SACCOs operation at risk (Kwaku, 2015).

A high credit risk, on the other side, has a high likelihood of bankruptcy, threatening member funds. One of the major issues for authorities and public regulators is credit risk, among the risks facing SACCOs (Boateng, 2008). Loan management practices implemented

by various loan unions depend on the entity's requirements. They comprise the formulation of policy on credit, loan assessment, credit monitoring policies and rehabilitation (Kwaku, 2015). The foundation of this research is these parameters.

Mutua (2016) investigated the effects on financial results in the Kitui County of the credit risk management of savings and loan enterprises. He observed that loan surveillance was therefore very high and financially sound. He also found that SACCOs have efficient credit procedures regulating loan issues and collection, since most of these organizations conduct the credit inquiry and monitor the projects that their borrowers have in an attempt to ensure that they are well investing and are able to generate returns from their investments.

Opondo (2015) states that in commercial organizations, while management of risk procedures can be developed inside the entity, they are sometimes compelled to employ external agencies or specific individuals to handle credit risk. This significantly increases the organization's extra costs that have a negative bearing on the economic results of SACCOs taking deposits in Kenya and beyond. Bayyoud and Sayyad (2015) conducted a survey to find the connection between investment and business banks' credit risk administration and profitability in Palestine. The research did not show any link between loan risk administration on the success of Palestinian business and investment institutions.

1.1.2 Financial performance

The level at which organization organizations can profit from the efficient use of resources while carrying out a company is measured by financial performance (Selçuk, 2015). The capacity of a company to make effective use of its funds to attain its objectives is according to Warsame (2016). The economic performance of the organization is determined by Kagoyire and Shukla (2016), who are able to function effectively, be lucrative, grow and

stay a problem. All companies strive to use accessible resources effectively, particularly in financial terms, to accomplish high efficiency.

The economic performance is, therefore, a consequence of a variety of institutions ' operations (Fujo and Ali, 2016). Further, Odhiambo (2017) observed a lack of adequate investment choices, absence of investment possibilities, postponed cash streams from employees, and doubtful administration of loan risks which have little or no profit to the membership's assets under regulations as one of the key issues hindering excellent economic performance in SACCOs. In 2016, various scientists used distinct ratios to evaluate efficiency according to Mwaura. These ratios include; the prevalent profitability measures are the yield on full assets (ROA), income per unit of ownership (EPS), and default rate. Further assessment demonstrates that the items in a revenue declaration are articulated as a trades proportion; while the Aggregate Assets Return demonstrates an entity's capability to produce revenue with its assets. Capital return (ROE) shows leadership effectiveness in the use of shareholder funds (Gardeklint, 2009).

In view of criminal loans or default rates, the financial performance also can be seen. Any credit in which the complete payment wasn't obtained by the loan agreement is described as a criminal loan. SACCOs must classify credits and provide poor debts for the purposes of the management of criminal loans where loans have to be described as defaulted, executed, supervised, substandard, questionable, or unlawful debts. Each month and not beyond 15th in the following month, SACCOs are due to file capital adequacy returns with SASRA.

The inability to do so would lead to economic and subsequent administrative penalties including investment suspension, lending, estate buys and SACCO deposits. For the leadership of delinquency on efficient loan portfolios, the following categories are divided

into five, including performance, unpaid until 30days, unpaid for underpaid up to 180days, unpaid for doubts up to 360days and unpaid for loss for more than 360days as stated by (SASRA, 2017). In lieu of loans longer than 180 days, they are considered irretrievable. The default rate is the proportion of the total credit portfolio to be irrecoverable. This study measures economic performance with regard to asset yields, default rates and dividends per share.

1.1.3 Deposit-taking SACCOs in Kenya.

Lumbwa Co-operative society within Kenya become the first cooperation society set up by European farmers in 1908 to help farmers to achieve economies of scale (CSU Kenya, 2009). The state has acknowledged cooperative societies as an instrument for financial development and empowerment in the country following independence. Since then the Kenya Government has taken a step in which the SACCO social movement in the country has grown and expanded rapidly (Gardeklint, 2009).

The first SACCO particular regulation was approved in November 2008 by the Kenyan Parliament. The legislation lays down updated SACCO safety and health and service delivery frameworks, enabling them to compete efficiently with national banks. The legislation offers It enables SACCOs to satisfy the suggested regulatory standards through the implementation of fresh accounts charts, installation of updated information systems, standardization of policies and processes, appropriate provision, management of issues, correct management of credit, and the development of suitable goods and services (Mohammed, 2013).

The SACCO subsector's advancement and development from smaller prosperity organizations to enormous multiple branch financing systems, according to SASRA's Supervisory Report 2017, demonstrate enough the importance of SACCO companies in

delivering decent economic services for all Kenyans. FOSA's pseudo-banking facilities were a response to the exceptional difficulty that banks had in the early 1990s to manage a bank account, thereby leading to the enormous shutdown of bank branches in rural Kenya (Gisemba 2010).

With the reversal of this SACCO revolution, the FOSA gave thousands of low-income people, almost removed from the banking system, a rehabilitated hope. SACCO sector is resilient and highly appreciated for millions of Kenyans in funding their gradually increasing requirements twenty years ago and despite a broad and sophisticated banking industry (Saunders & Cornett, 2002). As stated by Ileve (2008) SACCOs have endeavored to maintain their seven importance on the market and are therefore inclined to invest in data and technology and offer contemporary services like ATMs and personalized credit services.

SACCO firms have been identified as key players in increasing access to finance for savings in corporate and individual development investment in Kenya's National Development Plan and Vision 2030 (Mohammed, 2013). SACCOs are growing from 3,145,565 to 3,456,975 according to SASRA (2017), representing a 9.9 percent increase between 2015 and 2016. Out of 342,848 million investments, total assets rose from 393,136 million to 14.7 percent development. Net loans grew from 251.080 million to 282.733 million an increase of 12.6% in the sector.

Total deposits increased from 237.440 million to 272.749 million by 14.9 percent. The capital funds grew from 50,856 million to 67,555 million, development of 32.8%. A total of 177 SACCOs have been licensed to function in Kenya for 2016. However, for the fiscal year culminating 2016, two (2) DTs were deregistered, so 175 SACCOs were in service. In addition, for a further half-year of non-complying with prescribed laws and regulations to

protect the interests of member states, thirteen (13) DTS have received limited licenses (SASRA, 2017).

1.2 Statement of Problem

The type of the business of SACCOs is so delicate due to the fact that 85 percent of their obligations are deposits derived from the contribution of the member. SACCOs uses those deposits to create loans for its members, which actually generates most of its revenue. The SACCOs are highly vulnerable to defaults which may lead to bankruptcy and economic distress (Saunders & Cornett 2005). The default rate of SACCOs in Kenya remains comparatively high despite the growth and utilization of extremely advanced instruments and models for measuring financial institutions' exposure to credit risk. For instance, SACCO's default rate grew from 5.2% in 2016 in Kenya to 6.1% in 2017 as stated by (SASRA, 2018).

As per the SACCO Fiscal Report on Supervision (2017), loans at risk of default loans grew from 5.12% in 2015 toward 5.23% for 2016, out of these loans there was a rise from \$13.21bn in 2015 to \$15.57bn in 2016 in non-performing lending. This provides important data on the significance of loan management in SACCOs. SACCOs should create an effective credit risk management structure to increase their operational efficiency and performance (Gisemba, 2010).

Different studies on the management of credit risk and financial performance appear not to unanimously agree as to whether the two factors are positively or negatively related. Globally, Ntiamoah, Oteng, Opoku, & Siaw (2014) examined loan management procedures in the Greater Accra area of Ghana. The research discovered that the management of credit risk had a beneficial effect on monetary results. Locally, Mutua (2016) investigated risk management effects on the financial results of savings and credit co-operative communities in the Kitui district. However, this research did not reveal how the two parameters were linked.

Maiti (2015) however, found that loan risk administration had no influence on SASRA's deposit-taking SACCOs financial results as all loans were completely guaranteed.

Despite various studies being carried out on risk management on SACCOs, there is no clear verdict on the outcome. Some have indicated that there is no impact on financial results. Default rates continue to rise despite the existence of a risk management framework. It is, therefore, the objective of this study to establish if the credit risk management framework employed by SACCOs has a positive, negative or no impact on the financial performance of SACCOs in Kenya, as well as to whether the two links have a shared base.

1.3 Objectives of the Study

The overall objective is to establish the effect of credit risk management framework on the financial performance of deposit-taking SACCOs in Kenya.

Specific objectives include;

- i. To evaluate the effect of a credit appraisal on SACCO's financial performance in Kenya.
- ii. To determine the effect of loan risk monitoring on SACCO's financial performance in Kenya.
- iii. To examine the effects of loan recovery procedures on SACCO's financial performance in Kenya

1.4 Research Questions

- i. How is the financial performance of SACCOs in Kenya affected by the loan appraisal?
- ii. How does the monitoring of credit risk affect SACCO's financial performance in Kenya?

- iii. Is the financial performance of SACCO taking deposits in Kenya influenced by loan recovery policies?

1.5 Justification of the Study

For SACCO executives the results of the research will be crucial since they will provide them with a greater understanding of the loan risk management structure and its impact on the economic results of the SACCO. This will increase efficiency and efficiency in the management of credit risk in deposit-taking SACCOs.

The research will assist policymakers to develop efficient strategies on credit risk management for DTS in Kenya. The research will also help to develop strategies for other associated industries, particularly MFIs and banks. Finally, this study will improve the present knowledge of loan risk management and the economic results of DTS in Kenya. This will contribute to the loan risk management practice of a platform for further scholarships as well as a future benchmark.

1.6 Scope of the study

The research focused on the impact of managing credit risk on DTS financial outcomes. This research covered all 166 SACCO taking deposits with the target respondents being the credit managers. The research took six months ranging from April to October 2019. The technique of census was applied and information assemblage involved the usage of questionnaires. The DTS Manager responsible for SACCO leadership was the target respondent.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The existing literature was discussed and the theories that guide the research were examined. The foundation of the research was the theory of credit risk, the theory of agency and the theory of resources based view. Studies related to how to deposit takings SACCOs are affected by credit risk assessment; loan risk tracking and retrieval procedures will also be discussed.

2.2. Theoretical Framework.

2.2.1 Credit Risk Theory

In 1974 Melton introduced the theory of credit risk which states that the circumstances resulting in the occurrence of risk originate from asset changes in a firm. The model created relies on the particular specific variable of the issuer. Losses in a corporate asset may be due to defaults or due to uncontrolled occurrences or variables of the industry. The failure to repay any corporate debt can be described from the earliest to the final phases of the corporate debt (Long Staff and Schwartz 1995).

Early (before 1974) literature shows that ancient actuarial credit risk techniques were being used to assess risks whose principal problem lied in the total reliance on historical information. To date, the analysis of credit risk has three quantitative methods: structural approach, minimized form evaluation, and partial data (Crosbie, 2003).

The credit risk theory was started by Melton in 1974 and is said to be based on diffusion with constant parameters as a result of the growth of the company's assets. These models are often called the structural model and are based on factors associated with a

particular issuer. An evolution of this category consists of a collection of models in which the loss is exogenously particular subject to defaults. The default could occur over a corporate bond lifetime and not only over maturity in these models (Long Staff and Schwartz, 1995).

This theory is relevant to this study since it acknowledges the element that repayment risk can happen depending on the operational models or variables that the firm adopts throughout the debt lifespan. The theory will guide the current study in determining how these specific parameters or measures put in place during the debt cycle affect the financial performance especially for deposit-taking SACCOs in Kenya.

2.2.2 Agency Theory

The theory of an agency is a notion that explains why the conduct or decision varies when shown by group members. In particular, it defines the connection between the parties known as the principal who works for another person known as the officer. It describes their behavioral or decision-making differences, noting that the two sides often have distinct objectives and may have distinct risk attitudes regardless of their respective objectives. This idea came from Berle and Coit's work, who already talked about agent and principle problems in 1932 (Murtishaw and Sathaye 2006). Berle and Means studied the ideas and applications of agencies for big corporations ' growth. They realized that the interests of the executives and directors of a certain company vary from the interests of the firm's proprietor and made using the ideas of agency besides principal to clarify the causes of the conflict (Murtishaw and Sathaye, 2006).

In the context of risk-sharing research popular in the 1960s and 1970s, Jensen and Meckling shaped the work of Berle and Means to build agency theory as a formal concept. Jensen and Meckling created a think-tank arguing that companies are structured to minimize agents ' expenses in order to be able to follow the leaders ' direction and interests. The theory fundamentally recognizes that there are various motivations in various parties engaged in a

specified scenario with the same objective and that these motivations may be expressed on a separate basis. The report says that the conflict between sides is always partly aimed, that efficiency is inseparable from effectiveness and that data between the principal and the officer is always somewhat asymmetrical (Gegeh, 2016).

This theory prescribes staff as having to be held responsible for their work and obligations as a framework of good governance. In this scenario, SACCO management is responsible on behalf of its members to formulate and implement credit risk strategies. In order to generate wealth, the manager should be encouraged, monitored and overseen by defining the officer as possibly fraudulent (Marek 2013). Leading agents are instruments based on financial and non-pecuniary products that cause incentive problems in conditions of uncertainty and information asymmetry (Ileve 2008).

If the agent is notified in full of the agent's actions, the agent opportunism can be readily curbed. The agent is therefore obliged to behave for the officer's benefit. The Agency model describes the key issues in hierarchical relationships of executives and employees with respect to policy execution and decision making. It also involves issues arising from conflicting opinions between DTS members of the agents and the principal with distinct behaviors, preferences, and yields. This theory leads the research to see if decisions are made in the interests of employees (Gegeh, 2016).

2.2.3 Resource-Based Theory

The resource-based view begins with the presumption that the required outcome of management strategy at an organization is a long term competitive advantage (SCA). The SCA allows SACCOs to gain economic income, or to achieve greater yields than average. This focuses on how SACCOs attain a competitive benefit. This theory claims that certain main resources, for instance, resources with features such as worth, duplication obstacles, and significance, are available to respond to this issue. If SACCOs efficiently deploy these funds

on their market for products, a sustainable competitive advantage may be acquired. The RBV, therefore, stresses the strategic option which needs SACCO management to define and use important return funds (Machuki & Aosa, 2011).

SACCOs must efficiently deploy precious, single and hard to copy tangible and invisible assets in order to reach that possibly favorable atmosphere. In order to develop long term competitive benefits and in turn, to attain superior economic efficiency by SACCOs, SACCOs use the physical resources, human assets and organizational resources of this firm from the resources point of perspective.

This research shows the need for SACCOs to handle loan risk efficiently through accessible resources to position themselves more than their rivals for enhanced market yields, which resulted in enhanced economic results. This theory is important to this research. Because the SACCO sector is extremely competitive, it will only be possible to differentiate themselves by the assets that SACCO has with an efficient credit risk management structure.

2.3 Empirical Review

2.3.1 Credit appraisal and financial performance

Credit evaluation is designed to guarantee that credit is granted to borrowers based on merit and their ability to repay them within the specified time period. Not only are lenders lending because they say that they are prepared and prepared to provide greater interest rates, but they are confident that loans are only lending to those who are able to pay back. The concept was to make credit possible based on the ability of people to reimburse according to current achievements in the word credit assessment, SACCOs should take care to assess the target customer or client to determine if the client has the necessary credit worth and likely money flows from the project without forgetting the related danger (Gegeh, 2016).

Includes but does not limit the parameters used to assess creditworthiness among them; the capacity and willingness to repay. Technical, market share and management are important fields in which financial institutions conduct evaluations (Boldizzoni, 2008). In order to decrease the probability of credit defaults, SACCOs must employ proper and sufficient methods. A credit risk assessment process study on the economic performance of SACCOs, Bosek (2016) has been conducted in Bomet County, Kenya. The aim of this research was to examine how economic performance is linked to credit risk assessment procedures.

Owusu (2008) discovered that the evaluation of loan apps does not properly evaluate the credit risks inherent in the adoption of a loan choice. He also noted that both banks have no fundamental loan management records drafted, such as the loan distribution method, credit portfolio mix, pricing basis, m In his suggestions, he indicated that in order to guarantee appropriate financing the loan quantity should be closely evaluated for defined projects. The scenario offers the economic resources needed to support projects, thereby preventing the transfer of funds to other, economically unsustainable reasons.

Ogboi and Unuafe (2013) investigated how banks ' economic performances within Nigeria are affected by credit and equity adequacy danger. The objective of this study was to determine the impact of enormous funds on the economic results of credit risk management carried out by commercial banks. This study was performed with an assessment of regression. Six out of 21 banks that were in existence since 2009 were part of the sample population. The research disclosed that the components of profitability are an extensive loan management process and appropriate capital. Unlike this research which will concentrate on SACCOs, this research concentrated only on commercial banks. Furthermore, in Nigeria, the legislative framework differs from Kenya.

Ntiamoah (2014) investigated how lending management procedures in the Greater Accra of Ghana relate to economic results with certain chosen microfinance. Data were gathered by a population of 400 microfinance firms in Ghana using administered questionnaires. The research showed that the assessment of credit had a significant impact on economic results. SACCOS' effectiveness was affected in Ethiopia in terms of the loan, revenue, and expenditures. Tesfamariam and Liu (2013) analyzed the factors affecting rural efficiency SACCOS in Ethiopia. They also observed the non-observance of credit assessment methods. These resulted in a rise in default rates that also threatened SACCO development and the future.

Nyawera (2013) researched the impact of loan policy on microfinance institutions' economic performance. It was enacted a descriptive design. For the six microfinance organizations in Kenya, the researchers used a census strategy. The central bank of Kenya and each of the organizations acquired secondary data. The results showed that credit policy affects the economic performance of a deposit-taking microfinance organization in a very beneficial and important connection.

In a review of risk management procedures and the economic results of SACCOs, Gisemba (2010) discovered that before a credit to customers is awarded to the customer, SACCOs have embraced different approaches to screening and analysis. This involves capacity building, circumstances, collateral use, borrower screening, and risk analysis to try to decrease and handle loan hazards. He found that in order for SACCOs to efficiently handle credit hazards, credit defaulters, money loss must be minimized and the organization's return on investments improved.

The issue of the impact of the credit policy on the economic results of the SACCOs governed by the SASRA was answered by Maiti (2015), in Nairobi. The study embraced a design for correspondence studies. All 40,000 SACCOs listed under the Societies Act within

Nairobi, Kenya, comprised the population of the study. The research showed that controlled SACCOs have adopted credit requirements to determine the amount a customer is borrowing as per credit strategy and credit term loan policy ratio. The research found that the ROA of controlled SACCOs increased considerably in lending policies.

Gaitho (2010) has found out that a majority of SACCOs used the credit risk administration procedures as the basis of objective credit risk assessment in Nairobi to mitigate risk. She discovered that most of the SACCOs rely highly on portfolio managers' discretion and capacity for efficient credit risk administration procedures, as opposed to a loan and credit risk decision-making scheme.

Essendi Research (2013) has identified effective credit features as a guideline for the management and governance of SACCO's lending portfolio to ensure the distribution and maintenance of the funds fairly. The conclusions conclude that loan policies are drawn up by staff and managers with little involvement. New policies are developed on the basis of current policies, overhead costs and creditor trends when formulating loan policies are taken into account. However, this study did not measure how important credit risk was in terms of the loan portfolio, using a descriptive research design, aimed at 106 SACCO licensed companies, and a sample size of 35 SACCOs.

Griffin (2009) studied risk management methods for 28 Islamic banks by examining Senior Islamic bankers' understanding of danger. The outcome has shown that Islamic banks in standard banks with distinct risk concentrations are typically subjected to the same type of danger. Olomola, in 2002, discovered that borrower features, credit features, and credit features are considerably influenced in terms of repayment results. Repayment issues can be credit and default issues. However, regardless of the form in which the borrowers themselves cannot be liable for any problem, it is essential to assess the degree to which both the

borrower and the lender conform to the loan agreement as well as the nature and duties of both sides as revealed in the credit program design rather than the borrowers ' responsibility alone.

The power of loan risk leadership on the economic results of savings and loan cooperation communities in Kenya was investigated in Kipngetich (2015). The sample in Bomet County was 18 SACCOs. Secondary data have been used from the SACCOs' financial statements. Every predictor variable had a favorable economic results connection. The gap in these studies is that it is hard to generalize the study goals since research has taken place in a single region.

Nyambere (2013) conducted a survey that identified the impact on economic results of Savings as well as Credit Co-operative Societies within Kenya from credit risk management. In the study, the researcher embraced a cross-sectional assessment design. The complete amount of deposit-taking SACCOs supervised by SASRA was 215 and therefore all executives of loan risk management worked for this research. The research utilized primary as well as secondary data.

The SACCO financial performance measured through Equity Return (ROE) was the assessment by Pearson and the multiple models for regression analyzes, using CAMEL to provide capital adequacy, asset quality, efficiency management, income and liquidity as a dependent variable. The result showed a positive link with all the independents tested at 0.179, 0.063, 0.240, 0.003 and 0.160 to the economic results of capital adequacy, quality of Asset, management, and profit liquidity.

2.3.2 Credit risk monitoring and financial performance

In order for SACCO to track risk efficiently, prospective risk parameters that are material must be identified and measured. This involves risk surveillance with IT systems,

which deliver up-to-date credit path from the application point, payment and then recuperation. This makes it easier to decide quickly and act if the likelihood of credit loss or rapid management behavior is present (Gallagher, 2008).

Optimum risk management involves the examination and reporting of loan structures in order to promote efficient identification, evaluation, and control. Credit surveillance ensures that financial institutions uncover errors early on and that suitable steps are taken to handle the error. (Al-Tamimi, 2007). Managerial surveillance alone cannot be sufficient for a successful risk monitoring scheme. Controls are developed at multiple levels. Management will, therefore, choose a particular team to monitor and monitor the danger internally. The internal audit team is this team. The supervisory board shall be responsible for the audit team. If the inner audit finds a defect, the SACCO Supervisory Board will notify the Joint Management Board of that defect (Al-Tamimi, AlMazroei, 2007).

Wachira (2015) surveyed the influence of corporate management on Kenya's economic performance of savings and credit cooperative partnerships and found that the performance of the SACCO was influenced by monetary oversight by the Board. The research also suggested that participants with a strong knowledge of loan leadership should make up the SACCO's board of Directors. On the other side, Langat et al. (2013) have carried out a survey on variables affecting the efficiency of Bomet County Savings and Credit Cooperatives. The research observed that the economic performance of SACCOs was driven by credit surveillance.

Makori (2015) carried out an impact survey on the profitability of SACCO deposits in Nairobi County on loan risk management procedures. The descriptive technique of studies was used; 80 participants were the target population. The findings of the regression reveal a positive influence on the profitability of DTS in Nairobi on the loan management procedures;

loan assessment, credit monitoring, and debt collection. The research was done in one county, so it is not possible to generalize the outcomes for all SACCOs. The research also examined profitability as one of the performance factors.

Wambugu (2009) in connection with loan management practices for SACCOs providing front office services discovered that risk understanding is a significant phase in the management of credit risk and ought to be efficiently used to define the present credit hazards the organization faces and recognize the probability of such losses. In conclusion, the creation of a revision scheme with clear and readily understood precise and relevant risk data is essential to risk surveillance.

A clear method of tracking new credit and current loans plays an essential part in the management of loan hazards between collaborative communities (Gakure, Ngugi, Ndwiga, & Waithaka, 2012). Mwisho (2001) endorsed this statement. He felt that borrower surveillance is significant as present and possible exposures both alter over time and activities in the basic factors. The study also shows that financial institutions have various techniques for tracking credit: the frequent communication of lenders and the establishment of a framework in which the bank can be perceived as a solution for problems and a trustworthy advisor.

The research also argues that, if acknowledged to be in difficulty and striving to cope with the scenario, the bank may create the culture of borrower support; track the company flows by means of the bank's account; periodic review of accounts from the borrower as well as a site visit; update loan documents from the borrowers; and periodic review of borrowers' accounts. To support this, Moti (2012) acknowledged credit duration as a significant factor in enhancing the repayment of loans, security guarantees, and pacts.

Research by Nair and Kloeppinger-Todd (2007) showed that SACCO loans are not strictly regulated or regulated in Kenya and Sri Lanka as the weakness of the legislative

setting. On the other side, Brazil supplied a well-defined case for regulation and effective loans and for the monitoring of activities by SACCO. This study proposed that in rural developing nations, SACCOs offer economic services and make Profits if the prudential regulation and credit monitoring are better functioning. The research demonstrates that supervision is one of the measures to be taken once a loan has been given after the original phases.

2.3.3 Credit recovery practices and financial performance

This involves tracking unpaid credits and attempting to persuade the loaner to settle his / her credit commitment. The function of credit recovery is generally not a simple job as some customers will try all means possible to make themselves unavailable to the institution. Most banking organizations have a credit recovery section that monitors non-performing credit by trying to save the credit before it becomes irredeemable.

Measures that can be put in place to boost credit recovery include a brief text (SMS), email, or an easy phone call to remind customers that they have due debts. The emergence of the Credit Reference Bureau (CRB) has also deprived serialized defaulters access to loans in various banks, thereby decreasing default chances. SACCOs use guarantors to recover non-performing loans as their last resort (Migwi, 2013)

Gisemba (2010) investigated the connection between the procedures of management of risk and economic results of SACCOs and discovered that the SACCOs embraced diverse methodologies to risk assessment and analysis before giving credit to the members to moderate loan losses. This involves capacity-building, circumstances, collateral use, borrower assessment and risk assessment used in an effort to decrease and manage credit risk. He found that in order to efficiently handle credit risks, SACCOs must minimize credit

defaulters, money loss, and guarantee better performance by the organization in growing asset returns.

Nara (2012) performed studies on risk management by SACCOs and discovered that there were no quantitative and systematic processes in Nepal to identify monitor and control complete credit risk due to the absence of efficient risk management systems. There were situations when SACCO's went into large losses as a result of the absence of active risk management policies and an active audit committee.

He further observed that the external audit input was marginal, and as a consequence of ineffective management of risk procedures, there were times when SACCO's culminated in extreme delinquency predicaments. This study, however, has not quantified how the performance of SACCO has been influenced by risk management. Furthermore, the research did not pinpoint the techniques embraced by the committee of audit and SACCO's team of internal auditors to recognize and assess the danger of lending (Nara, 2012).

Wanjira (2010) performed a survey on the connection between loan management procedures and banks' financial results in Kenya. The research concentrated on how non-performing loan management procedures relate to the economic performance of commercial banks by using both main and secondary data, to gather the information. Secondary data were acquired from Kenya's 46 commercial bank's audited financial statements. The research disclosed that their financial performance is determined by the sort of non-performing loan management procedures taken by commercial banks. The research found that the bank's financial performance was effectively affected by non-performing loans.

A loan recovery agency is an instrument used by a company to recover proceeds that are unsettled, according to Huseyin (2011). The financial institution hires a debt collector to collect the money on their behalf and receive a payment for the services rendered. Sometimes

the agent may decide to purchase everything at discount together with the debt based on the agent's finest suites and where the agent earns more premiums. It is known that the agents employed are aggressive and use constant techniques to recover what is due in their practices. Upon failing to repay, the credit officer may proceed to sue the participants or list the member with a credit bureau. The element of credit leadership is the default evaluation that measures the probability of credit default.

It ought to be observed that using credit agency facilities to recover loans is a very important factor in SACCO's economic sustainability and development where it has been hard to recover loans (Ronald, 2012). Some organizations are more interested in giving out credit than in carrying out due diligence which is crucial for preventing or minimizing cases of defaults in loan repayment. Setting up a solid recovery approach can also have a major impact on reducing instances of loans that are not performing.

As stated by Van (2015), the research of cooperative failures in the province of Limpopo stated that bad leadership, rigorous credit collectors, conflict between employees (primarily owing to bad service delivery) and absence of resources raised significant contributing factors to Non-performing loans due to weak internal structures, capital inadequacies, inadequate aid schemes such as internal monitoring and loan evaluation.

Hannah (2012) observed that often an owner or director makes choices about issuing loans based on inner politics as opposed to sound economic policies. The respondents thought that cooperative managers may occasionally be inspired to create choices that profit the person at the SACCOs cost. This might assist to clarify why corporate-related problems of governance are exaggerated in cooperatives (Holstrom, 2013). The lender offers a relatively tiny number of debtors with whom they usually are associated via links or other markets or links in the policy or other connections from which they are highly profitable in the collection

of loans, the majority of rural credit is provided by casual credit. Walsh's (2010) study noted that the SACCO members' default in loan payment is a consequence of other loan commitments, salary change, employer withdrawal due to financial issues or discipline, unwillingness to pay back, and an absence of profit to the units financed.

The creditor's image must provide timely repayments of credits and the late payment of credits implying a repayment of debtors. Potential borrowers have been screened and the only loan repayment is applied. Steams (2012) investigated the selection of borrowers and the quantity of lending to any successful borrower. Creditors receiving loans cannot repay them without difficulty in default. In any case, the default is due to bad credit and not bad loan repayment borrowers. The borrower pays a bad loan with many problems.

2.4 Summary of literature Review

Ogboi and Unuafe (2013) investigated how banks' economic performances within Nigeria are affected by credit and equity adequacy danger. The research disclosed that the components of profitability are an extensive loan management process and appropriate capital. Ntiamoah et al. (2014) investigated how lending management procedures in the Greater Accra of Ghana relate to economic results with certain chosen microfinance. The research showed that the assessment of credit had a significant impact on economic results. Griffin (2009) studied risk management methods for 28 Islamic banks. The outcome has shown that Islamic banks in standard banks with distinct risk concentrations are typically subjected to the same type of danger.

Nyambere (2013) conducted a survey that identified the impact on economic results of Savings as well as Credit Co-operative Societies within Kenya from credit risk management. Wachira (2015) surveyed the influence of corporate management on Kenya's economic performance of savings and credit cooperative partnerships and found that the

performance of the SACCO was influenced by monetary oversight by the Board. Langat et al. (2013) have carried out a survey on variables affecting the efficiency of Bomet County Savings and Credit Co-operatives. The research observed that the economic performance of SACCOs was driven by credit surveillance.

Gisemba (2010) investigated the connection between the procedures of management of risk and economic results of SACCOs and discovered that the SACCOs embraced diverse methodologies to risk assessment and analysis before giving credit to the members to moderate loan losses. Nara (2012) performed studies on risk management by SACCOs and discovered that there were no quantitative and systematic processes in Nepal to identify, monitor and control complete credit risk due to the absence of efficient risk management systems. Wanjira (2010) performed a survey on the connection between loan management procedures and banks' financial results in Kenya. The research found that the bank's financial performance was effectively affected by non-performing loans.

2.5 Research Gaps

Author	Form of Study	Methodology	Findings	Knowledge/Research Gap
Nara (2012)	Risk Management in Savings and Credit Cooperatives, found in Nepalese	Descriptive research design	Nepalese SACCOs had no systematic and quantitative methods to identify, monitor and control aggregate credit risk due to lack of comprehensive risk management system.	The study did not highlight the credit risk framework that Nepalese Sacco's used to control credit risk.
Kalui & Kiawa (2015)	Effects of credit risk management procedures on financial performance among microfinance institutions (MFIs) in Kenya.	Descriptive and inferential statistics	Management of the Microfinance institutions is enhancing their credit risk management by ensuring there are measures to limit risk and improve efficient services.	This study focused on MFIs, unlike this study which will focus on SACCOs.
Ogboi and Unuafe (2013)	Credit risk management impacts on financial performances of Nigerian banks.	Regression analysis	Well defined credit management procedures and adequate capital are ingredients for profitability.	This study focused on commercial banks only unlike this study which focuses on Sacco's

Soke	Malaysia	financial	Cross-sectional	A bad portfolio leads to	Didn't explain how credit
Fun Ho	institution	strategies	of survey	liquidity as well as credit	risk strategies influenced
and	managing credit risk		research	risk.	the performance of
Yusoff			design		financial institutions.
(2009)					
Essendi	Impacts of credit risk on		descriptive	The study found out that	The study focused on the
(2012)	loans portfolio		research	efficient credit functions	loan portfolio, unlike this
			design	guide administration and	study which will focus
				management of Sacco	on financial performance.
				loan portfolio aimed at	
				ensuring funds are	
				equally distributed and	
				liquidity maintained	

2.4 Conceptual Framework

This demonstrates the connection between the autonomous and dependent research factors.

Independent Variables

Dependent Variables

Credit Risk Management

Financial Performance

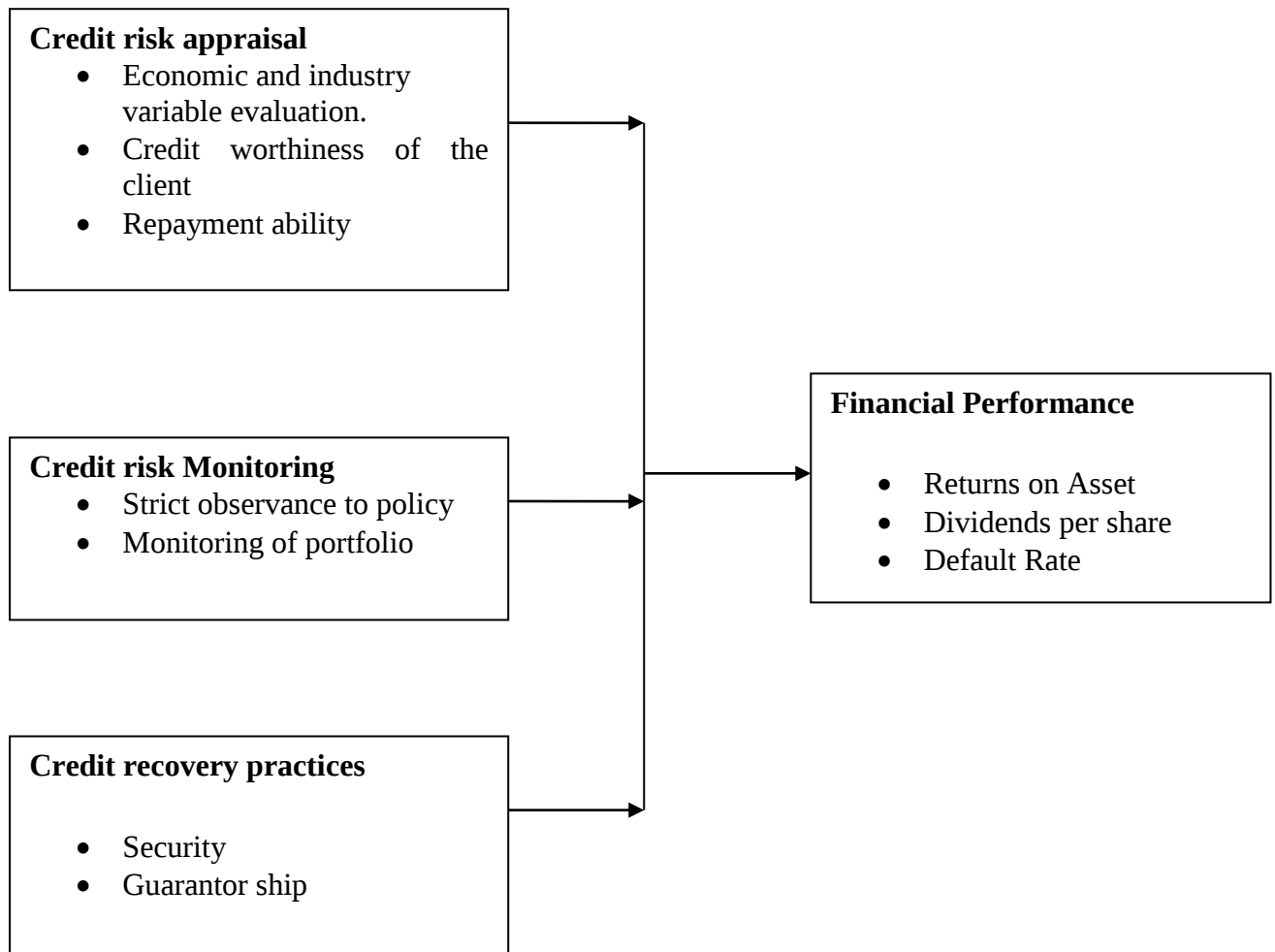


Figure 2.1 Conceptual Framework

Source: Researcher, (2019)

Credit risk appraisal entails focus on economic sector risk, credit administration as well as the risk appetite consideration while designing credit risk framework. Credit risk appraisal entails analysis of risk exposure. Credit monitoring considers policy adherence, Sacco's information system able to track and monitor loans as well as the ability to provide

timely feedback on loan performance. Credit recovery practices were used to investigate the recovery mechanism used by SACCO in collecting defaulted loans as well as measures put in place to ensure loans are recovered such as security and guarantors. The effect of these variables on financial performance was then investigated.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction

This chapter discusses the approaches used to achieve the defined objective of the research. The research project began with research design, population description, sample size, data collection, and the analytical model.

3.1 Research Design

This relates to an overview of a researcher's actual measures for accessing the relationship between dependent parameters and autonomous factors (Kothari, 2008). A descriptive research design was used to carry out the study. This research design is essential since the scholar anticipates gathering through description an extensive range of data that was crucial in defining variables. Descriptive research design, as stated by Bryman and Bell (2013), enables researchers to get data describing prevailing phenomena by examining data on individual views. Furthermore, this technique is more precise and accurate as it shows happenings in a well-organized way (Orodho, 2013).

3.2 Target population

Population is described by Mugenda and Mugenda (2003) as a component, individual or object with identifiable common features. In other words, the study objective and the statistical inferences of scientists are linked to a population (Gall, 2006). In Kenya, there are 166 deposit-taking SACCOs as per SASRA 2018 publication.

For this study, a census approach was used to collect information. This means that all 166 DTS SACCOs were considered. This is because the target population is small and manageable, thus census is suitable. The respondents were the credit managers within each

SACCO. Census technique helped in eliminating bias which arises from sampling and also in enhancing the response rate. The accuracy of the study was to be enhanced since the technique involved all the units in the study.

3.4 Validity of Research Instrument

Golafshani (2003) noted that the validity of the survey concerns the measurements it aims to evaluate or the real outcomes of this research. In order to confirm that the aims were well defined in order to operationalize the study expectations, the researchers carried out facial validity and value tests of the instrument.

3.5 Reliability of Research Instrument

Reliability refers to whether or not the same result will be obtained using a given research instrument. This helps determine the quality of the measurement procedures used in data collection. The information was be verified against other sources including the regulator SASRA and released economic results records of the SACCOs in order to guarantee the reliability of the data.

3.6 Data Collection procedures

Using the questionnaire, primary data was gathered by drop and subsequently pick methodology. Research questionnaires were circulated in head office premises of all one hundred and sixty-six (166) SACCOs taking deposits. After two days, the questionnaires were picked for analysis. This ensured that there was sufficient time to allow respondents to fill the questionnaire.

Because of its broad coverage, the questionnaire is a suitable instrument for information collection in this research (Kothari, 2004). The respondents consisted of senior and middle-level executives who are directly engaged in the day-to-day operation of SACCO

taking deposits and are familiar with the study subject matter. SASRA publications and journals were used to obtain secondary data.

3.7 Data Analysis

Field statistics were systematically tabularized, coded and structured to assist in evaluation using the Social Sciences Statistical Package (SPSS) version 21. Quantitative statistics were evaluated with the aid of descriptive statistics and presented using percentages as well as frequency counts. The study took into consideration Central tendency measurements.

In order to prove the connection between study variables, the researcher conducted a linear regression analysis as well as Pearson correlation assessment. In addition to descriptive analysis, the researcher made use of tables to demonstrate the outcomes of the research. ANOVA was also used by the researchers to evaluate hypotheses and to validate the study's hypotheses using the correlation coefficient. To define the result of managing credit risk on the financial outcomes of SACCOs taking deposits in Kenya, the following regression equation was utilized:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \hat{e}$$

Where;

α = constant

Y= Financial Performance

X_1 = Credit Appraisal

X_2 = Credit risk Monitoring

X_3 = Credit recovery practices

$\beta_1, \beta_2, \beta_3$ =co-efficient of the model

$\hat{\epsilon}$ = Error term

The parameters were being measured using Likert scale.

3.8 Diagnostic Tests

Various diagnostic studies, such as multicollinearity testing, normality tests, observation independence testing, and variance homogeneity testing, were used to assess the power and nature of the relationship between dependent and autonomous parameters of the linear regression model. For the serial correlation or autocorrelation assessment, the Durbin Watson statistics were used while inflation was used for multi-linearity testing. The normal distribution of the information was checked with skewness and kurtosis. In order to test variance homogeneity, a residual plot was also be used.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the results and interpretations of the study, which is guided by the research objectives. Data analysis was performed using statistical, descriptive, and regression analysis. Descriptive analysis was used to address the profile of respondents and regression analysis was used to determine the impact of the research objectives on the financial performance of deposit-taking SACCOs in Kenya. Finally, the ANOVA test was used to compare the relationship between the objectives (independent variables) and financial performance (dependent variables).

4.2. Response rate

One hundred and sixty-six (166) questionnaires were distributed to the various head offices of deposit-taking cooperative societies. Out of the one hundred and sixty-six (166) questionnaires distributed, one hundred and twenty-seven (127) questionnaires were duly filled out. The aggregate response rate was at 76.5 percent, which is a sufficient amount as per Mugenda and Mugenda (2003). Mugenda & Mugenda (2003) argue that a fifty percent reaction rate is adequate for generalization and 60 percent is good, while 70 percent is an outstanding response rate. This outstanding response rate is attributed to the technique used to collect information in the sense that all SACCOs were briefed about the questionnaire.

Table 4.1: Response Rate

Response	Frequency	Percentage
Fully answered Questionnaires	127	76.5%
Unanswered Questionnaires	29	23.5%
Total	166	100.00

4.3 Demographic Information

Demographic features refer to gender, work experience and level of education. Demographic features are objective features that help in assessing the power of the reaction provided on a specific problem by the respondents.

4.3.1. Gender

The study sought to determine the effect of credit risk management framework on the financial performance of deposit-taking SACCOs in Kenya. Participants were asked to specify their gender. The findings are as shown in the following table:

Gender	Frequency	Valid Percent
Female	51	40.2%
Male	76	59.8%
Total	127	100.0%

Table 4.2: Gender distribution

It is clear from the table that the majority of participants are male at 59.8 percent, while the female gender constitutes 40.2 percent. This is an indication that there are more males engaged in the management of deposit-taking SACCOs than females in Kenya. However, the discrepancy is not big.

4.3.2 Education

The research assessed the respondent's level of formal education. This was to determine whether the level of education of participants had an impact on the management of credit risk among deposit taking SACCOs in Kenya. Participants were asked to specify their level of education and the outcomes were shown in the table below.

Table 4.3: Education distribution

Education	Frequency	Percent
Secondary school	11	8.7%
Diploma	27	21.3%
Bachelors	71	55.9%
Masters	13	10.2%
PhD	5	3.9%
Total	127	100.0%

The level of education has also been evaluated in the questionnaire. As shown in the table above, the degree level was dominant at 55.9 percent, followed by a diploma at 21.3 percent and master and Ph.D. level at 10.2 and 3.9 percent respectively. The result implies that the participants have an understanding of the issues and know how to fill out the questionnaire with efficient responses.

4.3.3 Experience

The study sought to determine the length of time the officers had served in the SACCO. For the officers, this helped to determine their level of expertise in the management of the SACCO; it also helped to determine the power of the data provided.

Table 4.4: Experience distribution

Experience	Frequency	Percent
0-2 Years	21	16.54%
3-5 Years	10	7.87%
6-10 Years	46	36.22%
11-20 Years	31	24.4%
Above 20 Years	19	14.96%
Total	127	100.0%

From the results above, the researcher noted that 16.54% of the respondents had been working in the SACCO for 0-2 Years while 7.87% of the respondents had been working in the SACCO for 3-5 Years. It is also evident that 36.22% have been working or served in the SACCO for 6-10 Years while 24.4% have been working in the SACCO for 11-20 Years. Similarly, 14.96% had been working in the SACCO for more than 21 years. More importantly, most of the participants had sufficient experience, expertise, and abilities in the management of deposit-taking SACCOs in Kenya. The findings also show that competence and skill improve with the rise in the number of years of employment.

4.4 Descriptive Statistics

This division represents the descriptive analysis of the outcome of credit risk management on the financial performance of deposit-taking SACCOS in Kenya. The role of credit risk management framework and financial performance was investigated using a Likert scale. The range was from 'strongly disagree' (1), to 'strongly agree' (5). The scores of little involvement had been taken to represent a variable that had a mean of less than 2.5 on the continuous Likert scale. The scores of moderate involvement have been represented as a variable with a mean of 2.5-3.4, while the mean score of 3.5-5 on the continuous Likert scale

represents great or very great involvement. A standard deviation of > 0.9 implies a significant difference in the effect of the variables among respondents.

4.4.1 Credit risk appraisals and financial performance

The researcher endeavored to establish the influence of Credit risk appraisals on the financial performance of deposit-taking SACCOs in Kenya. The SACCOs were asked to give their responses on a Likert scale where 1 indicated Strongly Disagree, 2 indicated Disagree, 3 indicated Neutral, 4 indicated Agree, and 5 indicated Strongly Agree. The study noted that a large number of SACCOs agreed that SACCOs analyses the creditworthiness of members before awarding credit indicated by a mean of 4.1969 and SD of 1.03156. The researcher noted that most SACCOs agreed that Credit risk appraisal addresses all potential risks of lending as indicated by a mean of 4.1496 and SD of 0.52066.

Additionally, the SACCOs agreed that Credit risk appraisal has helped in reducing default rates as indicated by a mean of 3.6535 and SD of 1.01870. Most SACCOs agreed that Proper credit appraisal has reduced SACCO's risk exposure as shown by mean of 4.0079 and SD of 1.01180. In addition, most SACCOs agreed that SACCO's objectives are incorporated in the credit policy. This was supported by a mean of 4.0000 and SD of 1.07644. Further, most of the SACCOs agreed that SASRA regulations are duly followed during credit appraisal. This was supported by the calculated mean of 3.9134 and SD of 0.75618. The researcher also noted that Credit policy defines parameters to be considered during credit appraisal as indicated by mean of 3.8898 and SD of 1.07644.

Table 4.5: Credit risk appraisal

Credit risk appraisals and financial performance	Mean	Std. Deviation
SACCO analyses the creditworthiness of members before awarding credit	4.1969	1.03156

Credit risk appraisal addresses all potential risk of lending	4.1496	0.52066
Credit risk appraisal has helped in reducing default rates	3.6535	1.01870
Proper credit appraisal has reduced SACCO's risk exposure	4.0079	1.01180
SASRA regulation are duly followed during credit appraisal	3.9134	0.75618
SACCO's objectives are incorporated in the credit policy	4.0000	1.07644
Credit policy defines parameters to be considered during credit appraisal	3.8898	1.24230

The study findings concur with Magali (2013) who noted that credit risk appraisal has helped boost financial performance by reducing the default rate, credit risk appraisal has been able to address risks that come with lending money.

4.4.2 Credit risk monitoring and financial performance

This study also endeavored to find out how credit risk monitoring affected the financial performance of cooperatives taking deposits. The majority of the SACCOs agreed that Credit risk monitoring is supported by SACCO's information system as shown by a mean of 4.1339 and SD of 0.95421. Further, SACCOs agreed that the credit risk monitoring process is fully tested for reliability regularly as indicated by a mean of 3.7795 and SD of 1.00722.

In addition, most SACCOs agreed that there is a procedural guideline for credit risk monitoring as shown by a mean of 4.0000 and SD of 1.20185. Deposit-taking SACCOs also agreed that credit risk monitoring has helped reduce loan defaults shown by a calculated mean of 3.9213 and SD of 0.93100. However, most SACCOs were not sure as to whether the internal audit team actively monitors loans as shown by the calculated mean of 3.1024 and SD of 1.43557.

Table 4.6: Credit risk monitoring

Credit risk monitoring and financial performance	Mean	Std. Deviation
Credit risk monitoring is supported by SACCO's information system	4.1339	0.95421
The credit risk monitoring process is fully tested for reliability regularly	3.7795	1.00722
There is a procedural guideline for credit risk monitoring	4.0000	1.20185
Credit risk monitoring has helped reduce loan defaults	3.9213	0.93100
The SACCO has active internal audit team which monitors loans	3.1024	1.43557

Essendi (2013) noted that effective credit risk management entails not only monitoring but a continuous review of the credit structures to ensure risk is well identified and assessed as well as ensuring proper controls are put in place. Credit monitoring should assist in identifying mistakes at a manageable level and taking corrective actions.

4.4.3 Credit recovery practices and financial performance

The study also sought to explain how recovery practices influenced the financial performance of DTS. The researcher noted that the majority of SACCOs agreed that they use letters of credit, emails, SMS to remind borrowers of their outstanding obligations as shown by a calculated mean of 3.9528 and SD of 0.68843. Further, most SACCOs were not decided on whether they used debt recovery agencies to collect defaulted loans as indicated by a mean of 2.9667 and SD of 0.80392. In addition, most SACCOs strongly agreed that effective recovery is essential for profit maximization as indicated by a mean of 4.5000 and an SD of 0.50855. Most SACCOs disagreed that Legal actions have been successfully used to recover defaulted loans as indicated by a calculated mean of 1.8268 and SD of 0.99279. SACCOs also agreed that Collateral such as fixed asset has been used to recover defaulted loans as shown by a mean of 1.8333 and SD of 1.01992.

In addition, SACCOs were not decisive on whether members who default loans are listed under the Credit Reference Bureau (CRB) as indicated by a mean of 2.9667 and SD of 0.80392. Lastly, the majority of SACCOs agreed that Guarantors are used as a last resort to recover defaulted loans as indicated by a mean of 4.4333 and SD of 0.50401.

Table 4.7: Credit recovery practices

Credit recovery practices and financial performance	Mean	Std. Deviation
Letter of credit, emails, SMS are used to remind borrowers of their outstanding obligations.	3.9528	0.68843
SACCO has engaged a recovery agency to collect defaulted loans.	2.9667	0.80392
Members who default loans are listed under the Credit Reference Bureau (CRB)	3.0394	1.55023
Collateral such as fixed asset has been used to recover defaulted loans.	1.8333	1.01992
Effective recovery is essential for profit maximization.	4.5	0.50855
Guarantors are used as last resort to recover defaulted loans.	4.4333	0.50401
Legal actions have been successfully used to recover defaulted loans.	1.8268	0.99279

According to Maina (2011) on credit risk management, despite the adoption of rigid norms on credit risk management by financial institutions, credit recovery has continued to be a major barrier to most of the financial institutions and its management has had a significant impact on the financial performance of these financial institutions.

4.4.4 Financial performance

Financial performance was measured using return on the asset, dividend per share payment and the default rate as indicated in the last five years. However, the return on assets was found to be insignificant and was excluded from the research.

4.5. Inferential statistics

Correlation results were generated using inferential analysis, the model of fitness and analysis of regression coefficient and variance.

4.5.1 Correlation analysis

The degree of correlation between variables under research (dependent and autonomous) was evaluated using the Pearson correlation. The coefficient of correlation ranges from -1 to +1. Negative data shows a negative correlation, while positive data imply a positive correlation. Coefficient < 0.3 shows a weak correlation, $0.3 \leq 0.5$ indicates a mild correlation, while > 0.5 shows a powerful correlation.

From the table below, the results of correlation analysis revealed that credit risk appraisal and financial performance are positively and significantly related ($r=0.605$). It also indicates that credit risk monitoring and financial performance are positively and significantly related ($r=0.7$). Lastly, it indicates that credit recovery and financial performance are positively and insignificantly related ($r=0.364$). This implies that an increase in any unit of the variables leads to an increase in financial performance.

Table 4.8: Correlations

		Correlations			
		Financial Performance	Credit risk appraisal	Credit risk monitoring	Credit recovery practice
Financial Performance	Pearson	1	.605**	.700**	.364**
	Correlation Sig. (2-tailed)		.000	.000	.000
Credit risk appraisal	Pearson	.605**	1	.664**	.639**
	Correlation Sig. (2-tailed)	.000		.000	.000
Credit risk monitoring	Pearson	.700**	.664**	1	.639**
	Correlation Sig. (2-tailed)	.000	.000		.000
Credit recovery practice	Pearson	.364**	.639**	.639**	1
	Correlation Sig. (2-tailed)	.000	.000	.000	

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

The table above indicates a positive correlation among all the parameters with credit risk monitoring being the strongest (Pearson correlation coefficient of 0.700) influencer of financial performance. Additionally, Credit risk appraisal and credit recovery practice have a Pearson correlation coefficient of 0.605 and 0.364 respectively. The correlation matrix points out a strong relationship between the variables (Credit risk appraisal, credit risk monitoring, and loan recovery practices) with the financial performance of deposit-taking SACCOs.

4.5.2 Regression analysis

The findings in Table 4.9 constitute the summary model used to explain the research phenomenon in regression. The coefficient of determination describes the extent to which changes in the dependent variable can be explained by variations in the independent variable.

The three independent variables studied (credit risk appraisal, credit risk monitoring, and credit recovery). To determine the association between the variables, Pearson correlation and multiple regression models were used to analyze the data and took the following form;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \hat{e}$$

Where;

α = constant

Y= Financial Performance

X₁= Credit risk Monitoring

X₂= Credit risk Appraisal

X₃= Credit recovery practices

$\beta_1, \beta_2, \beta_3$ =co-efficient of the model

$\hat{e}$ = Error term

Table 4.9: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. error of the Estimate
1	.859a	.738	.732	.36873
a. Predictors: (Constant), Credit recovery practices, Credit risk appraisal, credit risk monitoring				

This shows that 73.8% of the financial performance was explained by credit risk appraisal, credit risk Monitoring and credit Recovery Practices as shown by R² indicating that there were other variables which were not considered accounting for 36.8% of financial

performance of SACCO's within Kenya indicating that the parameters under research are critical to the financial performance of SACCO's and needs to be considered in attempt to enhance financial performance.

Table 5.0: ANOVA

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	47.165	3	15.722	115.633	.003b
	Residual	16.723	123	.136		
	Total	63.888	126			
a. Dependent Variable: Financial performance						
b. Predictors: (Constant), Credit recovery practices, Credit risk appraisal, credit risk monitoring						

ANOVA was applied to predict the significance of the regression model where $p < 0.001$ was used for f-significance. This indicates that the model has a confidence level of 95%. The ANOVA findings indicate the existence of correlation linking credit risk practices with financial performance since the p-value of 0.003 is less than 0.05.

Table 4.9: COEFFICIENTS

Coefficients ^a				
Model	Unstandardized	Standardized	t	Sig.
	Coefficients	Coefficients		

	B	Std. Error	Beta		
(Constant)	.136	.238		.573	.568
1 Credit risk monitoring	.676	.079	.565	8.574	.035
credit risk Appraisal	.575	.071	.540	8.095	.018
Credit recovery practices	.295	.079	.240	3.741	.011

a. Dependent Variable: Financial performance

To establish the association between the four variables and financial performance, the research carried out a multiple regression analysis. SPSS code generated above using the equation ($Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$) becomes:

$$Y = 0.136 + 0.676X_1 + 0.575X_2 + 0.295 X_3 + \epsilon$$

From the equation above, holding all factors constant (Credit Scoring, Credit risk Monitoring, and Credit Recovery Practices) at zero was 0.136. The finding further indicates that at ceteris paribus a rise in credit risk monitoring by one unit results in 0.676 rises in financial performance making it the highest influencer.

A unit increment in credit risk appraisal results to 0.575 increases in financial performance and a unit increase in credit recovery practices results in a 0.295 rise in financial performance. At a significance level of 5%, the following was obtained, Credit risk appraisal 0.575, Credit risk Monitoring 0.676 and Credit recovery Practices 0.295 hence credit risk monitoring is the most significant influencer while recovery practices are the least influencer.

4.6 Diagnostic Test Results

The researcher conducted a number of diagnostic tests to ensure that the regression model did not violate the assumptions of the classical linear regression model. This section presents the results of the diagnostic tests.

4.6.1 Multicollinearity Test Results

Table 4.111 provides the results of the multicollinearity tests.

Variable	X_1	X_2	X_3	Financial performance
X_1	1			
X_2	0.7993	1		
X_3	0.6179	0.4576	1	
Financial performance	0.2917	0.1767	0.5237	1

Source: Study Data (2019)

The results presented in Table 4.2 indicate that the correlation coefficients for all the variables were less than 0.8. This indicates that the study data does not suffer from severe multicollinearity.

4.6.2 Heteroskedasticity Test Results

The study tested the panel data for heteroscedasticity using the Likelihood Ratio (LR). The results of the test are presented in Table 4.12

Table 4.11: Results of Heteroskedasticity Test

$H_0: \sigma(i)^2 = \sigma^2$ for all i
$\chi^2(8) = 211.0648$
$\text{Prob} > \chi^2 = 0.0000$

Source: Study Data (2019)

The computed chi-square was 211.0648 and the p-value was 0.000. These results indicated that the null hypothesis is rejected. From the results, it can be concluded that the study data is heteroskedastic.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the findings, discussions, conclusions, and recommendations. It also suggests areas for further study.

5.2. Summary of the findings

The study had the following objectives; to establish the effect of credit risk management on the financial performance of deposit-taking SACCOs in Kenya. The specific objectives were to determine the effect of credit risk appraisal, credit risk monitoring and credit recovery on the financial performance of deposit-taking SACCOs.

5.2.1 Demographic information

The study found that most of the respondents had an experience of between 5-10 years, indicating that the majority of them are mature and with considerable experience to understand, the effects of credit risk management on the financial performance of deposit-taking SACCOs. In terms of gender, it is evident that most deposit-taking SACCOs are managed by men even though there is no great discrepancy with the number of women. In addition, most of the staff are graduates with either a bachelor's degree or a diploma. However, Most of the SACCOs are managed by degree holders as their highest level of education. Observably, education level and experience played a key role in understanding credit risk management among these SACCOs. Indeed, those with bachelor's degrees and have worked in a department for more than five years, had a better understanding of the roles played by credit risk management, and objectively rated the relationship with financial performance.

The key objectives of this research were to predict the influence of credit risk management framework (credit risk appraisal, credit risk monitoring, and recovery practices) on the financial performance of SACCOs in Kenya. Targeted SACCOs were required to give their responses from a Likert scale, where 1 indicated Strongly Disagree, 2 indicated Disagree, 3 indicated Neutral, 4 indicated Agree, and 5 indicated Strongly Agree. The responses were as follows:

5.2.2 Credit risk appraisals and financial performance

This study noted that a large number of SACCOs agreed that they analyze the creditworthiness of a prospective borrower before awarding credit. The researcher also noted that most SACCOs were in agreement credit risk appraisal addresses all potential risks of lending. Additionally, the SACCOs agreed that that credit risk appraisal has helped in reducing default rates. Further, Most SACCOs agreed that proper credit appraisal has reduced SACCO's risk exposure. In addition, most SACCOs agreed that SACCO's objectives are incorporated in the credit policy and that the credit policy defines parameters to be considered during credit appraisal.

5.2.3 Credit risk monitoring and financial performance

This study also endeavored to find out how credit monitoring affected the financial performance of deposit-taking cooperatives. The majority of the SACCOs agreed that credit risk monitoring is supported by SACCO's information system. Further, most SACCOs agreed that the credit risk monitoring process is fully tested for reliability regularly and that there is a procedural guideline for credit risk monitoring. Most SACCOs also agreed that credit risk monitoring has helped reduce loan defaults. However, most SACCOs were not sure as to whether the internal audit team actively monitors loans.

5.2.4 Credit recovery and financial performance

The study also sought to explain how loan recovery practices impacted the financial performance of DTS. The study noted that most of the SACCOs agreed that they use demand letters, emails, SMS are used to remind borrowers of their outstanding obligations. Further, most SACCOs strongly agreed that effective recovery is essential for profit maximization. In addition, most SACCOs agreed that guarantors are used as last resort to recover defaulted loans. The responses also indicated that SACCOs disagreed that collateral such as fixed assets had been used to recover defaulted loans. In addition, the SACCOs were not decided on whether members who default loans are listed under the Credit Reference Bureau (CRB) while most SACCOs disagreed that legal actions have been successfully used to recover defaulted loans.

5.3 Conclusions

The broad objective of the study was to evaluate the effects of credit risk management framework on the financial performance of deposit-taking SACCOs in Kenya. The study indicated that a credit risk management framework significantly influenced the financial performance of deposit-taking SACCOs in Kenya when the one factor of credit risk management was considered. On the other hand, when these variables were applied, it is evident that credit monitoring significantly influenced the financial performance of deposit-taking SACCOs in Kenya. It was evident that if the credit risk management framework was sound then, the financial performance would be satisfactory. On the other hand, if the credit risk management is poor, the financial performance will be below.

The research further concludes that credit appraisal is key in enhancing the financial performance of SACCOs. Analysis of the creditworthiness of the potential borrower plays a vital role in determining whether the advanced credit was being recovered. The study concludes that SACCOs address all potential risk associated with lending at the appraisal

stage. The study also concludes that SASRA regulations and objectives of the SACCO are well-considered during the appraisal stage. These practices minimize loan losses and ensure that the profitability of these SACCO is guaranteed. The study also concluded that SACCOs keep constant communication with members with non-performing loans by using constant reminders such as emails, SMS and calls. The study also concludes that some SACCOs list loan defaulters with Credit Reference Bureau (CRB) while others do not. The study further concludes that SACCOs use guarantors as the last option to recover defaulted loans however few SACCOs admitted to using recovery agencies to enhance loan recover.

The research also concludes that credit risk management framework contributes significantly to improvement in the results of the SACCOs and the SACCO management is fully engaged in the execution and enforcement of credit risk management framework. Finally, in order to detect delayed loans as soon as possible, the research concludes that SACCOs have a tailored information system-based reporting scheme that provides timely feedback on loan performance.

5.4Recommendations

In line with the findings and conclusions of the study, the study recommends that SACCOs should establish appropriate credit appraisal methods to offer guidance in the issuance of credit. Proper customer creditworthiness systems should be put in place on the basis of their capacity to repay their credit and customer loyalty. SACCOs should establish sound credit risk appraisal practices that are central to the mitigation of credit risk. This includes an in-depth assessment of the business project for whatever the aim of the undertaking is. Government, through its regulators SASRA, should develop sound credit policies that control credit procedures in the SACCO fraternity. SACCO management should create and continue to review loan appraisal policies in line with the overall state of the economy and government policies.

In addition, SACCOs should introduce operational and efficient credit monitoring systems to enhance economic efficiency. There is a need for SACCO to have good credit monitoring policies, good credit monitoring procedures, and loan default surveillance in accordance with SACCO's legislation. SACCO should also invest in modern information systems that are capable of offering a timely update on loan performance.

The study further recommends that SACCO management should ensure proper loan recovery practices are put in place and reviewed periodically to ensure timely response to a changing economic environment. The Government and other stakeholders should also guarantee that a favorable internal operating environment exists for SACCOs in Kenya. Finally, with respect to the barriers to credit risk management by the Kenyan SACCOs, management should overcome the lack of understanding among the implementing staff/managers by offering the required understanding through training and education advancement on risk management among their staff.

5.5 Limitations of the study

Some of the limitations encountered in carrying out the research were that some respondents were not comfortable sharing out information vital to the study due to fear of victimization or exposure of personal information. This is evidenced by the SACCOs who didn't return their questionnaires. However, they were informed that their information will be kept confidential and their names were not recorded to maintain privacy. Furthermore, the data received is self-reported which makes it a bit difficult to independently verify the data. Such data might have a bit of bias depending on the respondent.

5.6 Recommendations for Future Research

The researcher suggests that further studies should be carried out on other financial institutions such as microfinance, banks and other credit institutions to determine similarities and differences in study findings. Further study should also be carried out on other types of

risk, such as liquidity risk and market risk effects on the financial performance of deposit-taking cooperative in Kenya.

In addition, the researcher suggests that further studies should be undertaken to investigate the effects of credit risk management on SACCO's financial performance as this study did not exhaust everything related to credit risk. The findings of this study will provide more insight into the relationship between these determinants, which could be useful in informing the risk management strategies and policies of the Kenyan SACCOs. Further research should also consider the use of both qualitative and quantitative techniques that can be used to evaluate borrowers.

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APPENDIX I-QUESTIONNAIRE

SECTION A: GENERAL INFORMATION

Kindly tick (✓) the option that best describes your Organization. Also, fill in the blanks where applicable.

Section A: Background Information

1. Respondent Profile

i. Gender

Male	☐
Female	☐

ii. Level of education

Secondary school	☐
Diploma	☐
Bachelors	☐
Masters	☐
PHD	☐

2. Level of experience

0-2 Years	☐
3-5 Years	☐
6-10 Years	☐
11-20 Years	☐
21 Years and above	☐

SECTION B: MAIN PARAMETERS OF THE STUDY

Use the scale provided below to give your evaluation, Use (√) on all sections of part B to indicate what applies to your SACCO.

Credit risk appraisals and financial performance	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
SACCO analyses the creditworthiness of members before awarding credit					
Credit risk appraisal addresses all potential risk of lending					
Credit risk appraisal has helped in reducing default rates					
Proper credit appraisal has reduced SACCO's risk exposure					
SASRA regulation are duly followed during credit appraisal					
SACCO's objectives are incorporated in the credit policy					
Credit policy defines parameters to be considered during credit appraisal					

Credit risk monitoring and financial performance	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
Credit risk monitoring is supported by SACCO's information system					
The credit risk monitoring process is fully tested for reliability regularly					
There is a procedural guideline for credit risk monitoring					
Credit risk monitoring has helped reduce loan defaults					
The SACCO has active internal audit team which monitors loans					

Credit recovery practices and financial performance	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
The demand letter, emails, SMS are used to remind borrowers of their outstanding obligations.					
SACCO has engaged a recovery agency to collect defaulted loans.					
Members who default loans are listed under the Credit Reference Bureau (CRB)					

Collateral such as fixed asset has been used to recover defaulted loans.					
Effective recovery is essential for profit maximization.					
Guarantors are used as last resort to recover defaulted loans.					
Legal actions have been successfully used to recover defaulted loans.					

SECTION C: FINANCIAL PERFORMANCE OF DEPOSIT TAKING SACCOS

What is the trend of the following in your SACCO for the last five years? Please enter the figures appropriately.

Financial performance	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
Return on the asset has been increasing in the last five years.					
The dividend per share payment has been increasing in the last five years.					
The default rate has reduced in the last five years					

APPENDIX 11: LIST OF SACCOS IN NAIROBI COUNTY

NO. NAME OF SOCIETY

1	2NK SACCO
2	AFYA SACCO
3	AGRO-CHEM SACCO
4	AINABKOI SACCO
5	ALL CHURCHES SACCO
6	AIRPORTS SACCO
7	AMICA SACCO
8	ARDHI SACCO
9	ASILI SACCO
10	AZIMA SACCO
11	BANDARI SACCO
12	BARAKA SACCO
13	BARATON UNIVERSITY SACCO
14	BIASHARA SACCO
15	BIASHARA TOSHA SACCO
16	BI-HIGH SACCO
17	BINGWA SACCO
18	BORESHA SACCO
19	CAPITAL SACCO
20	CENTENARY SACCO
21	CHAI SACCO
22	CHUNA SACCO
23	COMOCO SACCO
24	COSMOPOLITAN SACCO
25	COUNTY SACCO
26	DAIMA SACCO
27	DHABITI SACCO
28	DIMKES SACCO
29	DUMISHA SACCO
30	ECO-PILLAR SACCO
31	EGERTON SACCO
32	ELGON TEACHERS SACCO

- 33 ELIMU SACCO
- 34 ENEA SACCO
- 35 FARIDI SACCO
- 36 FARIJI SACCO
- 37 FORTUNE SACCO
- 38 FUNDILIMA SACCO
- 39 GITHUNGURI DAIRY &COMMUNITY SACCO
- 40 GOOD HOPE SACCO
- 41 GOODWAY SACCO
- 42 GUSII MWALIMU SACCO
- 43 HARAMBEE SACCO
- 44 HAZINA SACCO
- 45 IG SACCO
- 46 ILKISONKO SACCO
- 47 IMARIKA SACCO
- 48 IMARISHA SACCO
- 49 IMENTI SACCO
- 50 JACARANDA SACCO
- 51 JAMII SACCO
- 52 JOINAS SACCO
- 53 KAIMOSI SACCO
- 54 KATHERA RURAL SACCO
- 55 KENPIPE SACCO
- 56 KENVERSITY SACCO
- 57 KENYA ACHIEVAS SACCO
- 58 KENYA BANKERS SACCO
- 59 KENYA HIGHLANDS SACCO
- 60 KENYA POLICE SACCO
- 61 KIMBILIO DAIMA SACCO
- 62 KINGDOM SACCO
- 63 KIPSIGIS EDIS SACCO
- 64 KITE SACCO
- 65 KITUI TEACHERS SACCO
- 66 KMFRI SACCO

67	KOLENGE TEA SACCO
68	KORU SACCO
69	K – PILLAR SACCO
70	K – UNITY SACCO
71	KWETU SACCO
72	LAINISHA SACCO
73	LENGO SACCO
74	MAFANIKIO SACCO
75	MAGADI SACCO
76	MAGEREZA SACCO
77	MAISHA BORA SACCO
78	MENTOR SACCO
79	METROPOLITAN NATIONAL SACCO
80	MMH SACCO
81	MOMBASA PORT SACCO
82	MUDETE TEA GROWERS SACCO
83	MUKI SACCO
84	MWALIMU NATIONAL SACCO
85	MWIETHERI SACCO
86	MWINGI MWALIMU SACCO
87	MWITO SACCO
88	NACICO SACCO
89	NAFAKA SACCO
90	NANDI FARMERS SACCO
91	NATION SACCO
92	NAWIRI SACCO
93	NDEGE CHAI SACCO
94	NDOSHA SACCO
95	NG'ARISHA SACCO
96	NOBLE SACCO
97	NRS SACCO
98	NSSF SACCO
99	NUFAIKA SACCO
100	NYALA VISION SACCO

- 101 NYAMBENE ARIMI SACCO
- 102 NYAMIRA TEA FARMERS SACCO
- 103 NYATI SACCO
- 104 NEW FORTIS SACCO
- 105 OLLIN SACCO
- 106 PATNAS SACCO
- 107 PRIME TIME SACCO
- 108 PUAN SACCO
- 109 QWETU SACCO
- 110 RACHUONYO TEACHERS SACCO
- 111 SAFARICOM SACCO
- 112 SHERIA SACCO
- 113 SHIRIKA SACCO
- 114 SIMBA CHAI SACCO
- 115 SIRAJI SACCO
- 116 SKYLINE SACCO
- 117 SMART CHAMPIONS SACCO
- 118 SMART LIFE SACCO
- 119 SOLUTION SACCO
- 120 SOTICO SACCO
- 121 SOUTHERN STAR SACCO
- 122 SHOPPERS SACCO
- 123 STAKE KENYA SACCO
- 124 STIMA SACCO
- 125 SUBA TEACHERS SACCO
- 126 SUKARI SACCO
- 127 SUPA SACCO
- 128 TABASAMU SACCO
- 129 TAI SACCO
- 130 TAIFA SACCO
- 131 TAQWA SACCO
- 132 TEMBO SACCO
- 133 TENHOS SACCO
- 134 THAMANI SACCO

- 135 TRANSCOUNTIES SACCO
- 136 TRANS NATION SACCO
- 137 TIMES U SACCO
- 138 TOWER SACCO
- 139 TRANS – ELITE COUNTY SACCO
- 140 TRANSNATIONAL TIMES SACCO
- 141 UFANISI SACCO
- 142 UKRISTO NA UFANISI WA ANGLICANA SACCO
- 143 UKULIMA SACO
- 144 UNAITAS SACCO
- 145 UNI-COUNTY SACCO
- 146 UNITED NATIONS SACCO
- 147 UNISON SACCO
- 148 UNIVERSAL TRADERS SACCO
- 149 VIHIGA COUNTY FARMERS SACCO
- 150 VIKTAS SACCO
- 151 VISION POINT SACCO
- 152 VISION AFRICA SACCO
- 153 WAKENYA PAMOJA SACCO
- 154 WAKULIMA COMMERCIAL SACCO
- 155 WANA – ANGA SACCO
- 156 WANANCHI SACCO
- 157 WANANDEGE SACCO
- 158 WASHA SACCO
- 159 WAUMINI SACCO
- 160 WEVARSITY SACCO
- 161 WINAS SACCO
- 162 YETU SACCO
- 163 JITEGEMEE SACCO
- 164 NANDI HEKIMA SACCO
- 165 NANYUKI EQUATOR SACCO
- 166 UCHONGAJI SACCO

(SOURCE: SACCO SOCIETY REGULATORY AUTHORITY, 2018)

APPENDIX 1I1: RESEARCH BUDGET

	Description	Quantity	Cost Per Unit	Amount (KES)
1	Project development	Reading materials	N/A	NA
2	Labour cost for research Assistant	5 days	2,000@ day	10,000/=
4	Printing and Binding	5*2 copies	1,000/=	10,000/=
5	Miscellaneous	1	10%	5,000
	TOTAL			25,000/=

APPENDIX IV: WORK PLAN

	Research Activities	Month in 2019						
		April	May	June	July	Aug	Sep	Oct
1.	Develop a project							
2.	Fine tune project							
3.	Data collection							
4.	Data analysis							
5.	Prepare the initial draft report							
6.	Submit initial report							
7.	Research correction							
8.	Defense							
9.	Revision and Submission							
10.	Consulting the Supervisor							

APPENDIX 1IV: INTRODUCTION LETTER

EMMANUEL KYALO MULINGE

P.O BOX 22 90121

EMALI.

Date.....

SACCO NAME.....

P.O BOX....

Nairobi.

Dear Sir/Madam,

RE: ACADEMIC RESEARCH DATA COLLECTION

This is to seek permission to carry out my academic research project in your SACCO within Kenya.

I am a bonafide student from KCA University undertaking a Master's of Science degree (Finance) who is pursuing a research project entitled; "Effects of credit risk management framework on the financial performance of deposit-taking SACCOs in Kenya." A structured questionnaire has been formulated to assist in the collection of data from respondents (Management). The data collected will be treated with the utmost confidentiality and none will be shared or used for any other purpose other than for academic research without your permission.

Attached herewith is a copy of the questionnaire to be used for data collection. I am waiting for your positive feedback on the same.

Yours sincerely

EMMANUEL KYALO