

## THE EFFECT OF CREDIT RISK MANAGEMENT ON PROFITABILITY OF SACCOS IN RWANDA

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<https://doi.org/10.37602/IJSSMR.2025.8411>

### ABSTRACT

Loan management as methods and strategies adopted by a firm to ensure that they maintain an optimal level of credit and its effective management and with references to financial statements of SACCO in Kayonza District, there was a decline in profitability. The effect of credit risk management on profitability of saccos in Rwanda. The population of the study comprises of 36 employees SACCOS in Kayonza District. The sample size was 36 employees obtained using purposive sampling technique. Questionnaire and documentary review were used as sampling technique of data collection. Descriptive and inferential statistics such as multiple linear regressions were used to analyse data. The findings revealed that revealed the client appraisal is not to be significantly related to profitability of SACCOS. The findings revealed that loan risk management was significantly and positively related to profitability of SACCOS in Kayonza District. The findings revealed that loan recovery management was significantly and positively relate to profitability of SACCOS. However, there a decline in profitability where where the average of NPM in both three SACCOS of Kayonza District was 7.2% in 2020, 27.1% in 2021 while in 2022 was 15.4%. The average of ROA in both three SACCOS of Kayonza District was 0.88% in 2020, 5% in 2021 and in 2022 was 2.5%. The average of ROE in both three SACCOS of Kayonza District was 4.1% in 2020, 13.1% in 2021 was and in 2022 was 9.8%. The study concluded that that use of loan risk management and loan recovery management led to significant increase in profitability of SACCOS and their researcher recommended that lowering non-performing loans to total loan would significantly lead to increase in profitability and client appraisal should be emphasised when considering the character of the customers seeking credit facilities and aspects of collateral should considered while appraising clients.

**Keywords:** SACCO, loan, client appraisal, loan risk and loan recovery and profitability

### 1.0 INTRODUCTION

Loan management is one of the most important activities in any company and cannot be overlooked by any economic enterprise engaged in credit irrespective of its business nature. It is the process to ensure that customers pay for the products delivered or the services rendered (Kamau, 2018).

Kakuru (2018) describes loan management as methods and strategies adopted by a firm to ensure that they maintain an optimal level of credit and its effective management. It is an aspect of financial management involving credit analysis, credit rating, credit classification and credit reporting. It is a prerequisite for any entity dealing with credit transactions since it is impossible

to have a zero credit or default risk. In Asian countries like Bangladesh, loan management in SACCOs in Bangladesh facilitates efficient management and administration of the SACCO loan portfolio in order to ensure equitable distribution of funds and to encourage liquidity planning. In order to achieve prudence and accepted best practice, credit management should always be guided by clearly spelt out policies and procedures, strategic plan, by laws, the co-operative act, the SACCO regulatory act and rules and regulations (Mwangi, 2018).

Savings and credit co-operative has three operational aspects namely; the savings, the credit and channeling external funds to members. The management committee of the SACCO is responsible for formulation, reviewing and amending the loan management. The supervisory committee is responsible for ensuring that the loan management is adequately carried out and that it achieves the goals it was created. The committee determines if the management is being complied with by periodically reviewing a sample of loans granted and denied (Maiti, 2018).

In African countries like Tanzania, NPL in SACCOs usually occur because of inappropriate practices in credits risk management (Magali and Qiong 2014). Moreover, other factors such as weather, poor leadership and corporate governance might influence the quality of loan portfolio in the rural SACCOS (Magali and Lang'ati, 2014). In order to have lower number of NPL, SACCOS need strategies for managing the risk of both individual loan and loan portfolio. Magali (2017) revealed that poor credits risk management practices influence the credits default risks for rural SACCOS in Tanzania.

Poor portfolio management also influences negatively the profitability of banks, SACCOs or MFIs). Thus, in order to increase their profitability, the rural SACCOs require effective loan portfolio management strategies. Other factors which influence effective loan portfolio management include management strategies, MFIs or banks' staff competencies, choice of lending methodology and management information system (Kamau, 2018).

In Rwanda, financial institutions face more risks. Failure to manage risks effectively in the respective banks leads to bank failures. In recognition of the high risks involved in banking, the Central Bank of Rwanda published credit risk management guidelines for the purpose of providing guidance to all financial institutions on the minimum requirements for a credit management frame work and strategy. It has classified the risks facing financial institutions into nine classes namely: strategic risk, credit risk, liquidity risk, interest rate risk, price risk, foreign exchange rate risk, operational risk, reputation risk and regulatory risk (BNR, 2019).

Loan collection procedures and client appraisal are put in place to ensure that the loans together with the interests as per the loan schedule are collected back timely from the borrowers for the better management and control of the loan portfolio (Paul & Musiega, 2020).

For the better profitability of the SACCOs, a clear strategy concerning the collection of the loans needs to be sought out and implemented by the concerned loan operation team as this would guarantee the quality of the loan (Makupe, 2016). When the loan recovery management is not well followed and implemented, the chance of borrower's compliance towards payment becomes low hence there is a need to put procedures of collection to improve the loan repayment rate (Paul & Musiega, 2020).

Most studies have been carried out on loan recovery management through consideration of other variables like credit terms relating them to the financial performance of financial institution among which SACCO are inclusive (Luoga, 2013), inadequate attention has been directed towards loan collection procedures which has rendered the borrowers reluctant in paying back the loan at the stipulated agreed time hence compromising the financial performance with little or no profits at all (Mamet, 2018). Besides the competitive strength of a financial institution lies the power to control the risk of loan management therefore SACCOs need to revise and strengthen their loan risk management strategies to stand a better position towards profitability to enhance profitability. Hence, this study seeks to assess the contribution of loan management on profitability of saving and credits cooperative in Rwanda with reference to SACCOs of Rwanda

## 1.1 Problem statement

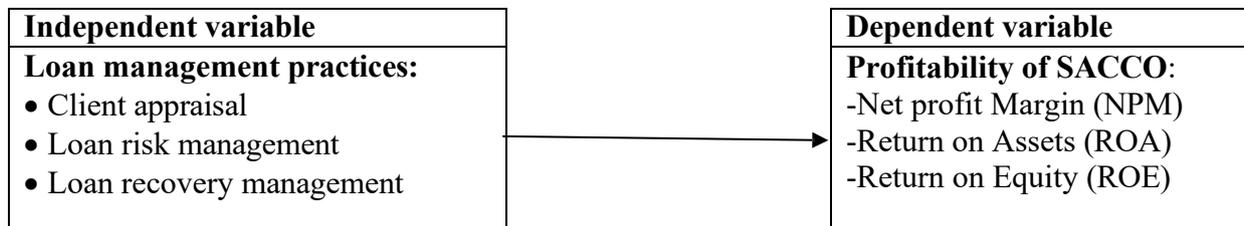
Savings and Credit Cooperatives in Rwanda play an important part in resource mobilization and provision of credit at affordable rates. This is attributed to the fact that people come together under one common goal of mobilizing their financial resources and have a framework that allows lending to members for different use, including investment in different projects. However, when it comes to financial performance, most of the Savings and Credit Cooperatives have been recording poor financial performance because of non-performing loans. With reference to financial statements of SACCOs in Kayonza District (2018-2021), especially in Kungahara Kabare SACCO, Icyogere SACCO and sacco Dukire Murama, there was a decline in profitability caused by different factors. This variation of profitability of BPR may be caused by different factors. According to BNR annual report (2020-2021), the non-performing Loan (NPL) stood at 6.6% in the microfinance sector whereas the compliance prudential requirements for Banks and MFIs benchmark are at 5% (NBR, 2021). Looking at the results of Non-Performing Loans (NPLs) of SACCO in 2020-2021 were 17.1% and 17.2% respectively and it is clear that SACCO management has not been able to control and mitigate loan management. This issue is negative influence of SACCO loan management on profitability. In December 2021 and 2022, a total of 9,880,249FRWs and 17,262,246vFrws respectively are yet to be recovered especially in SACCO Dukire. This stems out to be the existing problem in SACCO and the picture will not be far from the same in the writing off cumulative loan to total tune of SACCOs. Consequently, poor loan management has negative effect on an institutional capital earnings, and ability to achieve its goals and they may even cause financial institutions to fail. Studies have indicated that poor loan management influences negatively the profitability and operation efficiency of banks (George et al., 2019). Similar studies in Ghana by Aballey (2019) confirmed that huge bad loans portfolio for African Development Bank (ADB) in

Ghana was largely caused by ineffective loan monitoring and poor credit selection. This study therefore, seeks to find out the effect of loan management practices on profitability of SACCOs in Keyonza District.

## 1.2 Conceptual framework

According to Smyth (2015) a conceptual framework is an analytical tool with several variations and contexts. It is used to make conceptual distinctions and organize ideas. Strong conceptual frameworks capture something real and do this in a way that is easy to remember and apply.

The study came up as shown in the figure bellow by measuring the effects of independent variable which is loan management on dependent variable which is profitability of SACCOs of Rwanda.



Source: Researcher design, 2025

Figure 1.1: Conceptual framework

### 1.3 Theoretical framework Information Theory

Derban, Binner and Mullineux (2005) proposed a possible solution by suggesting that numbers bearing the total of the values in comparison with a threshold can be allocated to the characteristics of borrowers if they are assessed through qualitative models. This method reduces the costs of processing, minimizes the biased judgments and probable prejudices. The ranking methods become very useful if they track changes in the anticipated level of loan loss. Bridge (1998) established that computable models ease the numerical establishment of essential factors which are useful in the explanation of default risk, the assessment of the comparative level of significance of such factors, the improvement of the valuing of default risk, sorting out bad loan borrowers and the calculation of any provisions that are required to counter loan losses that are anticipated in the future. Therefore, this theory will help to gauge the contribution of information gathering to the profitability of SACCOs.

### 1.4 Agency Theory

The theory explained why, when undertaken by members of a group, behavior or decisions varied. It described specifically the relationship between individual parties called the principal that delegates work to another called the agent. It explained their differences in behavior or decisions by noting that the two parties often had different goals and, independent of their respective goals, had different attitudes toward risk. The concept originated from the work of Berle and Means who were discussing the issues of the agent and principle as early as 1932. To explain the origins of those conflicts Murtishaw and Sathaye (2006) explain they utilized the notions of agency and principal, and they saw how the interests of the directors and managers of a given firm differ from those of the owner of the firm. Therefore, the theory will be applied to gauge its contribution to the administration of loan management and subsequent output to profitability of SACCOs.

### 1.5 Loan risk management

The importance of monitoring risks is to make sure that they can be managed after identification. The SACCOs play an increasingly important role in local financial economies where competition for customers and resources with Micro Finance Institutions and other

commercial banks is high therefore, they require effective and efficient risk control and monitoring systems.

The risk management feedback loop will involve the management and senior staff in the risk identification and must assess, process, as well as to create sound operational policies, procedures and systems. Implementation and designing of policies, procedures and systems will integrate line staff into the internal control processes, thus providing feedback on the Sacco's ability to manage risk without causing operational difficulties. The committee and the manager should receive and evaluate the results on an ongoing basis. Most risk management guidelines in SACCOs will be contained in the management manuals eg the credit manual (Gisemba, 2018).

## 1.6 Loan recovery management

Loan recovery is the process of pursuing loans which have not been repaid and managing to recover them by convincing the loan to make attempts to repay their outstanding loans. Normally, this role of recovering loans is not an easy task as clients will go out of their way to prove inaccessible to the lender (bank). The banking industry in most cases has a loan recovery unit which is in charge of following loans before they become delinquent and make attempts to recover the loans (Rose, 2018)

Loan recovery is a very important component of banking as it plays a key role in ensuring that the main objective of the bank (to issue loans) results into the desired outcome of making a margin out of the loans advanced. It is evident that the presence of loan recovery puts pressure to the loan to pay up lest they get the dreaded calls from the banking staff through the loan recovery unit. Loan recovery unit is involved in the day today role of ensuring that the loans issued to the bank's customers are repaid as per the schedule of contract signed by the customer and bank. The task of loan recovery entails compiling a list of overdue loans and proactively managing the loans by calling up customers who are defaulting. This unit is equally charged with the role of liaising with lawyers to draft demand letters to the loan defaulters and sending the same to the customers who are defaulting. There are various loan monitoring and recovery strategies that have been adopted by many commercial banks

Many of the agonies and frustrations of slow and distresses loans can be avoided by good loan supervision. Supervision helps keeping a good loan good. It may be visiting the borrowers' premises to investigate the general state of affairs and maintenance of plant and equipment. Inadequate maintenance is often an early sign of financial distress. Also to be observed is the state of employee morale and the physical stock of materials and finished goods. The general business and advice is considered. If a bank is sanitizing to business development it can revise its own Loan and loan polices as well as advising its customers. A gain keeping track of deposits and balances gives clue to the affairs of the borrowers (Ahlberg & Andersson, 2018).

## 1.7 Profitability of SACCOs

Maheshwari (2019) indicate that a firm's profitability is its capability to make profit from all its business lines. This is an indication of how efficient the administration can generate incomes using the capitals accessible in the market. Profitability can be expressed either accounting profits or economic profits and it is the main goal of a business venture.

Profitability ratios are arguably the most widely used ratios in investment analysis. These ratios include return on asset, return on equity, gross profit margin, operating and net profit margins. These ratios measure the firm's ability to earn an adequate return. When analyzing a company's margins, it is always prudent to compare them against those of the industry and its close competitors (Mahira, 2018). In this study, the most profitability ratio used to measure the level of profitability is: Net Profit Margin, return on assets and Return on Equity.

## 2.0 EMPIRICAL REVIEW

### 2.1 Loan analysis and profitability of financial institutions

Kamau (2019) analyzes the effect of credit management practices on the performance of SACCOs in the hospitality industry in Nairobi. Descriptive research design was used with a target population of 67 active SACCOs in the hospitality industry based in Nairobi. A sample size of 10 SACCOs was selected using systematic random sampling technique. The questionnaire was formulated with both open ended and close ended questions based on the objectives of the study. Both the questionnaire and the data collection sheet were administered to the SACCO members through drop and pick method. The entry and analysis of data was done using SPSS (Statistical Package for Social Science version) program. The data has been presented in form of tabulations, charts, graphs and percentages. The findings of the study show that SACCOs have heavily relied on particular credit risk techniques which are not adequate to mitigate against loan losses in a dynamic and competitive lending environment. Secondly adequate credit risk monitoring and control mechanisms are lacking in majority of SACCOs which results in late detection and determination of non-performing and defaulted loans. Thirdly, governance structures that would ensure that the laid down credit risk policies are strictly adhered to, is lacking in majority of SACCOs.

Nduwayo (2015) in his paper explores the effect of loan management on the financial performance of commercial bank with reference to Bank of Kigali (BK). Loan management play a more role in the banking institution to maintain the financial performance. Bank are expected to be socially responsible, support local communities and ensure adequate supply of credit to all legitimate businesses and consumers to price that loan reasonable in line with market determined rates without jeopardizing the viability of the institution. The objective of this study was to find out how far loan management affects financial performance of a banking institution. Data collection techniques adopted were questionnaires and documentation, where qualitative and quantitative data about loan management and financial performance of BK were gathered and analyzed. The study findings revealed that there is an effect or a close relationship between loan management and financial performance of Bank of Kigali, where it was noted that well management of loan was the main source of the positive financial performance achieved by BK. Finally, this study ends up with some recommendations where the Bank of Kigali should improve the training of employees of credit department to enhance the suitable effective performance of loan management. The study based on credit management and performance of commercial Banks. The present study will be based on SACCOs in Rwanda.

Bizimungu et al (2022) examined the effect of loan management on the financial performance of commercial banks in Rwanda. Banking sectors play a key role within the development of an economy. The development role the steadiness of banking sector determines the step for

development of economy. Hence the steadiness of the banking sector may be a key for the event of an economy. Descriptive case study design is used since it allows to the researcher to find information about the present status of a phenomenon to describe “what exist” with respect to variables or conditions in a situation (Yin, 2003). The study considered 20 respondents as sample size. A coefficient correlation measures the strength and direction of a linear association between two. A correlation coefficient measures the strength and direction of a linear association between two variables. It ranges from -1 to 1. The closer the absolute value is to 1, the stronger the relationship. BK should reduce all those processes of getting loans and help their clients who request loans to get them in a few days, this will help the bank to provide many loans and get profit from it. The study based on loan management and performance of commercial Banks. The present study will be based on SACCOs in Rwanda.

## 2.2 Research gap

From empirical reviews stated above, findings from those studies show that loan management have contributed to the financial performance of financial institutions including profitability. However, there is a research gap in content where previous researchers focused on other variables than client appraisal, loan risk management and loan recovery management and most of them focused on financial performance of SACCO. The study covered it by using client appraisal, loan risk management and loan recovery management variables and their effect on profitability of SACCOs by employing both descriptive and inferential statistics to determine the relationship between loan management and profitability (NPM, ROA and ROE) of SACCOs in Rwanda.

## 3.0 RESEARCH METHODOLOGY

### 3.1 Research design

The study used descriptive research design using descriptive statistics and inferential statistics. By descriptive statistics, the study describes quantitatively loan management practices used by SACCOs in terms of loan analysis, loan risk management and loan recovery management and profitability by computing ratios such as NPM, ROA and ROE. The study used inferential statistics through correlation analysis and multiple linear regressions to determine the effect of loan management on profitability of SACCOs of Rwanda.

### 3.2 Population of the study

According to Majid (2018), population refers to a large group from which a sample is drawn. By referring to SACCO Dukire, Kungahara SACCO and Icyogere SACCO in Kayonza District (2023), the number of employees consists of 45 employees of SACCOs

### 3.3 Population size

| Categories | SACCO Dukire | Kungahara SACCO | Icyogere SACCO |
|------------|--------------|-----------------|----------------|
| Manager    | 1            | 1               | 1              |

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|                                  |    |    |    |
|----------------------------------|----|----|----|
| <b>Auditor</b>                   | 1  | 1  | 1  |
| <b>Accountant</b>                | 3  | 3  | 3  |
| <b>Loan officer and recovery</b> | 4  | 2  | 4  |
| <b>Customer care</b>             | 1  | 1  | 1  |
| <b>Teller</b>                    | 2  | 2  | 2  |
| <b>Auditing committee</b>        | 3  | 3  | 3  |
| <b>Total</b>                     | 15 | 15 | 15 |

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**Source:** SACCO Dukire, Kungahara SACCO and Icyogere SACCO, 2025

Population is a group of people or objects from which the sample for statistical measurement is taken (Mugenda, 2018).

### 3.4 Sample size

According to Taherdoost (2016), sampling is the process by picking a subset from a larger population sample is a set of individuals selected from a population. In this study the sample size is 36 employees of SACCOs in Kayonza District

### 3.5 Sample size

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| <b>Categories</b>         | <b>Population size</b> | <b>Sample size</b> |
|---------------------------|------------------------|--------------------|
| Manager                   | 3                      | 3                  |
| Auditor                   | 3                      | 3                  |
| Accountant                | 9                      | 9                  |
| Loan officer and recovery | 12                     | 12                 |
| Auditing committee        | 9                      | 9                  |
| <b>Total</b>              | <b>36</b>              | <b>36</b>          |

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**Source:** Primary data, 2025

### 3.6 Sampling technique

Sampling technique is the procedure a researcher uses to gather people, places or things to study (Taherdoost, 2016). The study used purposive sampling in selecting employees of

SACCOs who have further information regarding loan management and profitability of SACCOs.

### 3.7 Data collection techniques

This study used a combination of self-administered questionnaires as a means of primary data collection and documentation to collect secondary data.

### 3.8 Questionnaire

The researcher in this study decides to use closed ended questions which are well structured and written in a simple language so it makes simple to collect the detailed information also it is free from bias because the answers obtained are in respondents' words, respondents have enough time to give well answers. The questionnaire comprises of closed ended questions. The closed-ended questions were constructed on a five-point scale and were measured using the scale as follows: 1= Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5= Strongly Disagree addressed to the employees for the purpose of ensuring the role of loan management on profitability of SACCO. In this study the researcher distributed 36 questionnaires to employees of SACCOs in Kayonza District

### 3.9 Reliability

Reliability of data refers to the extent to which one can rely on the source of the data and the data itself. Questionnaires were pre-distributed to see if the respondents understood the data to ensure if the questions are precise and clear. The answers are submitted to a reliability analysis (with SPSS) for computation of the Cronbach's Alpha. According to Leung (2021) Alpha values for each variable under study should not be less than 0.7 for the statements in the instruments to be deemed reliable. The answers were submitted to a reliability analysis (with SPSS) for computation of the Cronbach's Alpha. It was done by comparing the value of the Coefficient Cronbach's Alpha with the value 0.7. If the Coefficient Cronbach's Alpha > 0.7, it means that the measurement result is reliable. The pilot study was done at Imboni SACCO Kigabiro SACCO.

### 3.10 Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| 0.742            | 23         |

**Source:** Primary data, 2025

The findings indicated that all variables had a coefficient of 0.742. All constructs depicted that the value of Cronbach's Alpha are above the suggested value of 0.7 thus the study was reliable.

### 3.11 Data Analysis

Data processing was done in accordance with general and specific objectives of the research study. It involves the transformation of the observation gathered from the fields into the system of categories and the transformation of these categories into codes to quantitative analysis and tabulation. This process was used with the help of SPSS version 23.0. Data were analyzed by using both descriptive statistics such as frequencies, percentages, mean and standard deviation and inferential statistics such as correlation and multiple linear regression analysis was used to analyze the data.

**Descriptive statistics:** Descriptive statistics such as mean, frequency and standard deviation will be used to describe the effective cash management (client appraisal, loan risk management and loan recovery management) and also describe the level of profitability of SACCOs.

**Pearson Correlation test:** The Pearson correlation coefficient is a very useful way to measure the statistical relationship that exists between loan management (loan analysis, loan risk management and loan recovery management) and profitability of SACCOs.

**Multiple regression models:** Multiple regressions analysis was used in order to assess the effects of multiple predictor variables (rather than a single predictor variable) on the dependent measure. A multiple regression model was also used to test the significance of the effect of the independent variables on the dependent variable. Multiple regression analysis was used to establish the role played by each predictor such as (loan analysis, loan risk management and loan recovery management) to profitability of SACCOs in Kayonza District.

### 3.12 Model specification

The following econometric model was used as follow:

The equation ( $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$ )

Where  $\beta_0$  = constant

$\{\beta_1, \beta_2 \text{ and } \beta_3\}$  = coefficients of independent variables and  $\mu$  = error term  $Y$  = Profitability of SACCOs in Kayonza District

$X_1$  = Loan analysis

$X_2$  = Loan risk management  $X_3$  = Loan recovery management

The regression model runs to test whether the model is significant or not. The statistical

significance was verified by the Coefficient ( $\beta$ ), t-statistic and Prob. In additional, statistically significant relationship between the dependent variable which is profitability of SACCO SACCOs in Kayonza District and independent variables which loan management practices: loan analysis, loan risk management and loan recovery management from the model is accepted at 5% significance level.

## 4.0 DATA ANALYSIS AND INTERPRETATION OF FINDINGS

**4.1 Introduction**

The study used descriptive statistics such as frequency, percent, mean and standard deviation as method of data analysis to achieve the research of first objective which is to assess the loan management used by SACCOs. The respondents were asked whether they agreed or disagreed with the statement regarding to the components of loan management as state in conceptual framework such as loan analysis, loan risk management and loan recovery management.

**4.2 Client appraisal used by SACCOs in Kayonza District**

The study assessed the loan analysis used by SACCOs. The respondents were asked whether agreed or disagreed with the statements regarding client appraisal. The findings were presented in Table below:

**4.3 Client appraisal used by SACCOs in Kayonza District**

|   | <u>SD</u> |     | <u>D</u> |      | <u>N</u> |     | <u>A</u> |      | <u>SA</u> |      | Mean        | St. dev     |
|---|-----------|-----|----------|------|----------|-----|----------|------|-----------|------|-------------|-------------|
|   | fi        | %   | Fi       | %    | fi       | %   | Fi       | %    | fi        | %    |             |             |
| SACCO reviews of credit history of the member or borrower                           | 3         | 8.3 | 0        | 0.0  | 0        | 0.0 | 3        | 8.3  | 30        | 83.3 | 4.58        | 1.13        |
| SACCO has competent personnel for carrying out client appraisal                     | 1         | 2.8 | 4        | 11.1 | 0        | 0.0 | 9        | 25.0 | 22        | 61.1 | 4.31        | 1.12        |
| Client appraisal considers the character of the customers seeking credit facilities | 1         | 2.8 | 5        | 13.9 | 1        | 2.8 | 6        | 16.7 | 23        | 63.9 | 4.25        | 1.20        |
| Aspects of collateral are considered while appraising clients                       | 0         | 0.0 | 2        | 5.6  | 1        | 2.8 | 2        | 5.6  | 31        | 86.1 | 4.72        | .78         |
| Failure to assess customers capacity to repay results in loan defaults              | 0         | 0.0 | 4        | 11.1 | 1        | 2.8 | 14       | 38.9 | 17        | 47.2 | 4.22        | .96         |
| <b>Overall mean</b>   |           |     |          |      |          |     |          |      |           |      | <b>4.41</b> | <b>1.03</b> |

**Source: Primary data, 2025**

About loan appraisal, the findings in Table above revealed that that 8.3% of respondents strongly disagreed and 8.3% of respondents agreed whereas the majority 83.3% of respondents strongly agreed that SACCO reviews of credit history of the member or borrower with very high mean of 4.58 and standard deviation of 1.13. The results show that 2.8% of respondents strongly disagreed, 11.1% of respondents disagreed whereas 25% of respondents agreed and the majority 61.1% of respondents strongly agreed that SACCO has competent personnel for carrying out client appraisal with very high mean of 4.31 and standard deviation of 1.12.

The results show 2.8% of respondents strongly disagreed, 13.9% of respondents disagreed and 2.8% of respondents were neutral whereas 16.7% of respondents agreed and the majority 63.9% of respondents strongly agreed that client appraisal considers the character of the customers seeking credit facilities with very high mean of 4.25 and standard deviation of 1.20. The results show that 5.6% of respondents disagreed and 2.8% of respondents were neutral whereas 5.6% of respondents agreed and the majority 86.1% of respondents strongly agreed that aspects of collateral are considered while appraising clients with very high mean of 4.72 and standard deviation of 0.78

The results show that 11.1% of respondents disagreed and 2.8% of respondents were neutral whereas 38.9% of respondents agreed and the majority 47.2% of respondents strongly agreed that failure to assess customers capacity to repay results in loan defaults with very high mean of 4.22 and standard deviation of 0.96.

The general analysis on client appraisal in SACCOs was at very high extent with very high mean=4.41 and standard deviation of 1.03 which implies that there is strong evidence of existing fact that SACCOs has effective client appraisal at very high extent and heterogeneity responses. This implies that SACCOs can improve the examination of loan applications and guarantee that they are evaluated and rated on their merits.

#### 4.4 Loan risk management used by SACCOs in Kayonza District

The study assessed Loan risk management used by SACCOs. The respondents were asked whether they agreed or disagreed with the statements regarding loan risk management. The findings were presented in Table below:

#### 4.5 Loan risk management used by SACCOs in Kayonza District

|  | <u>SD</u> |     | <u>D</u> |      | <u>N</u> |     | <u>A</u> |      | <u>SA</u> |      | Mean | St. dev |
|--|-----------|-----|----------|------|----------|-----|----------|------|-----------|------|------|---------|
|  | fi        | %   | Fi       | %    | fi       | %   | Fi       | %    | fi        | %    |      |         |
| The duration of loan repayment is considered for all customers           | 1         | 2.8 | 5        | 13.9 | 2        | 5.6 | 5        | 13.9 | 23        | 63.9 | 4.22 | 1.22    |
| Imposing credit size limits is a viable strategy in credit management    | 0         | 0.0 | 8        | 22.2 | 0        | 0.0 | 8        | 22.2 | 20        | 55.6 | 4.11 | 1.21    |
| Flexible repayment periods improve loan repayment.                       | 1         | 2.8 | 0        | 0.0  | 0        | 0.0 | 9        | 25.0 | 26        | 72.2 | 4.64 | .76     |
| Penalty for late payment enhances customers commitment to loan repayment | 0         | 0.0 | 2        | 5.6  | 1        | 2.8 | 1        | 2.8  | 32        | 88.9 | 4.75 | .77     |

|  |   |     |   |     |   |     |   |      |    |      |      |      |
|--|---|-----|---|-----|---|-----|---|------|----|------|------|------|
| The use of customer credit application forms improves monitoring and loan management as well | 0 | 0.0 | 1 | 2.8 | 0 | 0.0 | 4 | 11.1 | 31 | 86.1 | 4.81 | .58  |
| Overall mean   |   |     |   |     |   |     |   |      |    |      | 4.50 | 0.90 |

**Source:** Primary data, 2025

About loan risk management, the findings in Table 4.3 revealed that 2.8% of respondents strongly disagreed, 13.9% of respondents disagreed while 5.6% of respondents were neutral whereas 13.9% of respondents agreed and the majority 63.9% of respondents strongly agreed that the duration of loan repayment is considered for all customers with high mean of 4.22 and standard deviation of 1.22. The findings revealed that 22.2% of respondents disagreed and 22.2% of respondents agreed whereas the majority 55.6% of respondents strongly agreed that imposing credit size limits is a viable strategy in credit management with very high mean of 4.11 and standard deviation of 1.21.

The findings revealed that 2.8% of respondents strongly agreed and 25% of respondents agreed whereas the majority 72.2% of respondents strongly agreed that flexible repayment periods improve loan repayment with very high mean of 4.64 and standard deviation of 0.76. The findings revealed that 5.6% of respondents strongly disagreed and 2.8% of respondents were neutral whereas 2.8% of respondents agreed and the majority 88.9% of respondents strongly agreed that penalty for late payment enhances customers commitment to loan repayment with very high mean score 4.75 and standard deviation of 0.77. The findings revealed that 2.8% of respondents disagreed whereas 11.1% of respondents agreed and the majority 86.1% of respondents strongly agreed that the use of customer credit application forms improves monitoring and loan management as well with very high mean score 4.81 and standard deviation of 0.58.

The overall views of employees on loan risk management used by SACCOs was at very high extent with very high mean score of 4.50 and standard deviation of 0.90 which implies that there is strong evidence of existing fact that loan risk management used by SACCOs at very high extent and heterogeneity responses. The findings imply that reviewing the policies regarding the loan repayment is also very important as it puts into consideration the economic concerns of the borrowers to ensure flexibility in operation for the good towards loan repayment.

#### 4.6 Loan recovery management used by SACCOs in Kayonza District

The study assessed loan recovery management used by SACCOs. The respondents were asked whether agreed or disagreed with the statements regarding loan recovery management. The findings were presented in Table below:

#### 4.7 Loan recovery management used by SACCOs in Kayonza District

|  | <u>SD</u> |     | <u>D</u> |     | <u>N</u> |      | <u>A</u> |      | <u>SA</u> |      | Mean        | St. dev     |
|--|-----------|-----|----------|-----|----------|------|----------|------|-----------|------|-------------|-------------|
|  | fi        | %   | Fi       | %   | fi       | %    | Fi       | %    | fi        | %    |             |             |
| The Policies on loan collection are clear to every customer  | 0         | 0.0 | 3        | 8.3 | 8        | 22.2 | 2        | 5.6  | 23        | 63.9 | 4.25        | 1.08        |
| Payment of credit in time in SACCO is determined by the reminders to customers.                        | 1         | 2.8 | 0        | 0.0 | 0        | 0.0  | 6        | 16.7 | 29        | 80.6 | 4.72        | .74         |
| Recovery of credits is influenced by interest rates charged on clients                                 | 1         | 2.8 | 1        | 2.8 | 0        | 0.0  | 6        | 16.7 | 28        | 77.8 | 4.64        | .87         |
| SACCOs have developed a system which recovers loans from guarantors incase of overdue dates of payment | 1         | 2.8 | 1        | 2.8 | 0        | 0.0  | 11       | 30.6 | 23        | 63.9 | 4.50        | .88         |
| Repayment dates and deadlines are clear and known to the borrower                                      | 0         | 0.0 | 3        | 8.3 | 3        | 8.3  | 1        | 2.8  | 29        | 80.6 | 4.56        | .97         |
| <b>Overall mean</b>  |           |     |          |     |          |      |          |      |           |      | <b>4.53</b> | <b>0.90</b> |

Source: Primary data, 2025

About loan recovery management, the findings in table 4.9 revealed that 8.3% of respondents disagreed while 22.2% of respondents were neutral whereas 5.6% of respondents agreed and the majority 63.9% of respondents strongly agreed that the Policies on loan collection are clear to every customer with very high mean of 4.25 and standard deviation of 1.08.

The findings revealed that 2.8% of respondents strongly disagreed whereas 16.7% of respondents agreed and the majority 80.6% of respondents strongly agreed that payment of credit in time in SACCO is determined by the reminders to customers with very high mean of 4.72 and standard deviation of 0.74. The findings revealed that 2.8% of respondents strongly disagreed, 2.8% of respondents disagreed and whereas 16.7% of respondents agreed and the majority 77.8% of respondents strongly agreed that recovery of credits is influenced by interest rates charged on clients with very high mean of 4.64 and standard deviation of 0.87.

The findings revealed that 2.8% of respondents strongly disagreed and 2.8% of respondents disagreed whereas 30.6% of respondents agreed and the majority 63.9% of respondents strongly agreed that SACCOs have developed a system which recovers loans from guarantors incase of overdue dates of payment with very high mean of 4.50 and standard deviation of 0.88. The findings revealed that 8.3% of respondents disagreed while 8.3% of respondents were neutral whereas 2.8% of respondents agreed and the majority 80.6% of respondents strongly agreed that repayment dates and deadlines are clear and known to the borrower with very high mean of 4.56 and standard deviation of 0.97.

The general analysis on loan recovery management used by SACCOs was at high extent with high mean=4.53 and standard deviation of 0.90 which implies that the fact appears more that SACCOs has loan recovery management at high extents and heterogeneity responses. This implies that SACCOs are strict on loan collection from debt holders as means to minimize loan delinquency related issues in their operations. This is an indication that SACCOs in Kayonza District have developed a system of recovering loans from guarantors in case the borrowers fail to meet their obligations on the agreed duration. . This analysis designates that SACCOs have taken a significant step of punishing the borrowers who fail to meet their financial obligations as a means to minimize loan default.

**4.8 Level of profitability of SACCOs in Kayonza District**

The study assessed the level of profitability of SACCOs. The respondents were asked whether agreed or disagreed with the statements regarding the level of profitability of SACCOs. The findings were presented in Table 4.5 below:

**4.9 Views on the level of profitability of SACCOs in Kayonza District**

|   | <u>SD</u> |     | <u>D</u> |      | <u>N</u> |      | <u>A</u> |      | <u>SA</u> |      | Mean        | St. dev     |
|---|-----------|-----|----------|------|----------|------|----------|------|-----------|------|-------------|-------------|
|   | fi        | %   | Fi       | %    | fi       | %    | Fi       | %    | fi        | %    |             |             |
| The profits of SACCO have been increased over the last three years              | 1         | 2.8 | 4        | 11.1 | 5        | 13.9 | 2        | 5.6  | 24        | 66.7 | 4.22        | 1.22        |
| SACCO 's ROA has been growing for the last 3 years                              | 0         | 0.0 | 6        | 16.7 | 5        | 13.9 | 3        | 8.3  | 22        | 61.1 | 4.14        | 1.20        |
| The volumes of loan offered to clients of SACCO increased over the last 3 years | 3         | 8.3 | 0        | 0.0  | 0        | 0.0  | 1        | 2.8  | 32        | 88.9 | 4.64        | 1.13        |
| SACCO 's return on investment has been growing over the 3 years                 | 3         | 8.3 | 3        | 8.3  | 0        | 0.0  | 6        | 16.7 | 24        | 66.7 | 4.25        | 1.32        |
| The rate of return on equity (ROE) of SACCOs will be efficient last 3 years     | 2         | 5.6 | 3        | 8.3  | 0        | 0.0  | 8        | 22.2 | 23        | 63.9 | 4.31        | 1.19        |
| Provision for bad loan is annually increasing in SACCOs                         | 1         | 2.8 | 0        | 0.0  | 2        | 5.6  | 10       | 27.8 | 23        | 63.9 | 4.50        | .85         |
| <b>Overall mean</b>   |           |     |          |      |          |      |          |      |           |      | <b>4.34</b> | <b>1.15</b> |

Source: Primary data, 2025

About the level of profitability of SACCOs, the findings in table 4.11 revealed that 2.8% of respondents strongly disagreed, 11.1% of respondents disagreed while 13.9% of respondents

were neutral and 5.6% of respondents agreed whereas the majority 66.7% of respondents strongly agreed that the profits of SACCO have been increased over the last four years with very high mean of 4.22 and standard deviation of 1.22.

The findings revealed that 16.7% of respondents disagreed while 13.9% of respondents were neutral whereas 8.3% of respondents agreed and the majority 61.1% of respondents strongly agreed that SACCO's ROA has been growing for the last 3 years with very high mean of 4.14 and standard deviation of 1.20.

The findings revealed that 8.3% of respondents strongly disagreed whereas 2.8% of respondents agreed and the majority 88.9% of respondents strongly agreed that the volumes of loan offered to clients of SACCO increased over the last 3 years with very high mean of 4.64 and standard deviation of 1.13.

The findings revealed that 8.3% of respondents strongly disagreed, 8.3% of respondents disagreed whereas 16.7% of respondents agreed and the majority 66.7% of respondents strongly agreed that SACCO's return on investment has been growing over the 3 years with very high mean of 4.25 and standard deviation of 1.32

The findings revealed that 5.6% of respondents strongly disagreed and 8.3% of respondents disagreed whereas 22.2% of respondents agreed and the majority 63.9% of respondents strongly agreed that the rate of return on equity (ROE) of SACCOs will be efficient last 3 years with high mean of 4.31 and standard deviation of 1.19.

The findings revealed that 2.8% of respondents strongly disagreed while 5.6% of respondents were neutral and 27.8% of respondents agreed whereas the majority 63.9% of respondents strongly agreed that provision for bad loan is annually increasing in SACCOs with high mean of 4.50 and standard deviation of 0.85.

The overall view of respondents on the level of profitability of SACCOs was very high mean equal to 4.34 which implies that there is strong evidence of existing fact that profitability of SACCOs was moderate and standard deviation of 1.15 which implies that heterogeneity responses. This implies that the majority of respondents are in agreement that profitability of SACCOs has been improved at very high level. According to Chinoda (2014), the availability of expenses is influences profitability since it enhances the capacity of the bank to acquire cash, in order to fulfill present and essential needs. Therefore, for SACCO to gain public assurance, they should have sufficient liquidity to meet the demands loan holders and depositors needs. Clair (2004) established that credit quality, expense control and proper management of lending activities enhance bank's financial performance.

Relationship between loan management on profitability of SACCOs in Kayonza district  
Inferential statistics

The study used inferential statistics such as correlation analysis and multiple regression to determine the effect of loan management on profitability of SACCOs.

#### 4.10 Correlations analysis

Analysis of the correlation is generally performed to determine the relation between the variables. The primary objective of conducting correlation analysis in this research work is to establish the relationship between loan management and profitability of SACCOs. The Pearson’s coefficient of correlation ranges between +1 to -1. A zero (0) coefficient indicates that there is no association between the two variables. A coefficient value of greater than 0 indicates a positive relationship between the variables and hence an increase in the value of one variable leads to an increase in the other values of the other variable and the converse is true. The study sought to determine the correlation between the independent variables (Clients appraisal, loan risk management and loan recovery management) and the dependent variable (Profitability of SACCOs). To calculate the correlation (strength) between the study variables and their findings the survey data used the Pearson’s coefficient of correlation (r). The findings were presented in table 4.9:

**4.11 Correlations coefficients matrix**

|   |                     | X1     | X2     | X3     | Y |
|---|---------------------|--------|--------|--------|---|
| X1= Client appraisal                          | Pearson Correlation | 1      |        |        |   |
| X2= Loan risk management                      | Pearson Correlation | .529** | 1      |        |   |
| X3= Loan recovery management                  | Pearson Correlation | .281** | .654** | 1      |   |
| Y=Profitability of SACCOs in Kayonza District | Pearson Correlation | .799** | .845** | .883** | 1 |
|   | Sig. (2-tailed)     | .000   | .000   | .000   |   |

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

The results from the table 4.9 indicates that there is high positive relationship between clients appraisal and profitability of SACCOs at  $r = 0.799^{**}$ ;  $p\text{-value} = 0.000 < 0.01$ . This means that clients appraisal had a positive relationship with profitability of SACCOs.

The results revealed that there is a very high positive relationship between loan management practices and profitability of SACCOs at  $r = 0.845^{**}$ ;  $p\text{-value} = 0.000 < 0.01$ . This means that loan risk had a positive effect on profitability of SACCOs.

The results indicated that there is high positive significant relationship between loan recovery management and profitability of SACCOs at  $r = 0.885^{**}$ ;  $p\text{-value} = 0.000 < 0.01$ . This means that loan recovery management had a positive effect on profitability of SACCOs.

**4.12 Multiple linear regression model**

With this test, it was assumed that the kind of relationship that exists between independent and dependent variables is linear. To ascertain this, and to know the extent to which the predictors affect loan management, regression test was carried out; the predictors in this case include: clients’ appraisal, loan risk management and loan recovery management) while dependent variable is profitability of SACCOs.

4.13 Model Summary

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .951 <sup>a</sup> | .905     | .896              | .09840                     |

a. Predictors: (Constant), X3= Loan recovery management, X2= Loan risk management, X1= Client appraisal

Findings established an R-squared value of .905. This means that when all the independent variables were taken together, they gave an R-squared value of 0.905 (90.5%). Thus, the independent variables (clients’ appraisal, loan risk management and loan recovery management) taken together could account for up to 90.5% of the total variation of profitability of SACCOs at 95% of confidence interval. The remaining 9.5% in the variation in profitability of SACCOs could be explained by other factors not in the model. This meant that in an ideal situation without interference from extraneous variables, the independent variables accounted for up to 90.5% of the total variance in profitability of SACCOs.

4.14 ANOVA

| Model |            | Sum of Squares | df | Mean Square | F       | Sig.              |
|-------|------------|----------------|----|-------------|---------|-------------------|
| 1     | Regression | 2.961          | 3  | .987        | 101.915 | .000 <sup>b</sup> |
|       | Residual   | .310           | 32 | .010        |         |                   |
|       | Total      | 3.271          | 35 |             |         |                   |

a. Dependent Variable: Y=Profitability of SACCOs in Kayonza District

b. Predictors: (Constant), X3= Loan recovery management, X2= Loan risk management, X1= Client appraisal

In order to examine on whether the data was good fit for regression model, the ANOVA was undertaken and the data being good fit for data was tested at 5% level of significance. Since from the Table 4.11 indicated an F-value of 101.915 is larger than the critical  $F(v1=3, v2=35)=2.87$  and also because p-value calculated =0.000 is less than Critical p-value =0.05 level of significant. Therefore, this implies that loan management such as: clients’ appraisal, loan risk management and loan recovery management), as independent variable is good predictors of profitability of SACCOs.

4.15 Regression coefficients

| Model |                      | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-------|----------------------|-----------------------------|------------|---------------------------|-------|------|
|       |                      | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant)           | 1.064                       | .228       |                           | 4.676 | .000 |
|       | X1= Client appraisal | .021                        | .087       | .024                      | .242  | .810 |

|                              |      |      |      |       |      |
|------------------------------|------|------|------|-------|------|
| X2= Loan risk management     | .375 | .066 | .459 | 5.658 | .000 |
| X3= Loan recovery management | .366 | .058 | .565 | 6.348 | .000 |

a. Dependent Variable: Y=Profitability of SACCOs in Kayonza District

$$\text{Profitability of SACCOs} = 0.1.064 + 0.021X_1 + 0.375 X_2 + 0.366X_3$$

The regression equation above has established that taking all factors into account (clients’ appraisal, loan risk management and loan recovery management) constant at zero, profitability of SACCOs will be 1.064.

The regression results revealed that clients’ appraisal has no significance positive effect on profitability of SACCOs as indicated by  $\beta_1 = 0.021$ ,  $p\text{-value} = 0.810 > 0.05$ .

The regression results revealed that loan risk management has positive effect on profitability of SACCOs as indicated by  $\beta_2 = 0.375$ ,  $p\text{-value} = 0.000 < 0.05$ . The implication is that an increase of one unit in loan risk management would lead to the profitability of SACCOs by 0.357 units. Hence, loan risk management had a statistically significant effect on profitability of SACCOs.

The regression results revealed that loan recovery management has significance positive effect on profitability of SACCOs as indicated by  $\beta_3 = 0.366$ ,  $p\text{-value} = 0.000 < 0.05$ . The implication is that an increase one unit in loan recovery management would lead to an increase in profitability of SACCOs by 0.366 units.

## 5.0 CONCLUSION AND RECOMMENDATIONS

### 5.1 Summary of major findings

The summary of major findings is presented based on the research objectives which were to analyse the effect of client’s appraisal used by SACCOs on profitability in SACCOs Kayonza District, to assess the effect of credit risk management on profitability of SACCOs in Kayonza District and to determine the effect of loan recovery management on profitability of SACCOs in Kayonza District.

### 5.2 Credit risk management on profitability of SACCOs in Kayonza District

For the second objective, the findings Based on Table 4.3, descriptive statistics revealed that loan risk management was very high mean equal to 4.57 and standard deviation equal to 0.93 which implies that there is strong evidence that loan risk management affects on profitability of SACCOs in Kayonza District. Inferential statistics revealed that loan risk management to be significantly and positively related to profitability of SACCOs as a result the null hypothesis was rejected.

### 5.3 Loan recovery management on profitability of SACCOs in Kayonza District

For the third objective, the findings from descriptive statistics revealed that loan recovery management very high mean equal to 4.26 and standard deviation equal to 1.10. The findings revealed that involving loan recovery management has an effect on affects profitability of SACCOs. The inferential statistics revealed that loan recovery management is to be significantly and positively relate to profitability of SACCOs which led to the rejection of the null hypothesis.

## 5.4 Conclusions

Based on the study findings, the study concluded that SACCOs had adopted client appraisal as an indicator of loan management, however, inferential statistics show that client appraisal was not significant effect on profitability of SACCOs in Kayonza District. Loan risk management and loan recovery management have a great effect on profitability of Dukire SACCO, Icyogere SACCO and Kungahara Kabare SACCO. Based on the findings from secondary data, there was a decline in profitability of those three SACCOs in terms of NPM, ROA and ROE. The study concluded that use of loan risk management and loan recovery management led to significant increase in profitability of SACCO Dukire indicating that lowering non performing loans to total loan would significantly lead to increase in profitability. Client appraisal should be emphasised when considering the character of the customers seeking credit facilities, aspects of collateral should be considered while appraising clients and SACCOs cautiously invest in loan policies formulated to avoid defaulting and to boost productivity, competitiveness and subsequently performance. From the findings, the study concludes that there is a significant relationship between loan management and profitability of SACCOs in Kayonza District even though there is a decline in profitability of SACCOs

## 5.5 Recommendations

Referring to the mentioned weaknesses, results of analysis and interpretation of data from the respondents, SACCOs should put more effort on the following actions in order to maintain the increasing of its profitability:

### For client appraisal,

- SACCOs should examine their credit rules on a regular basis. This would improve the examination of loan applications and guarantee that they are evaluated and rated on their merits. For SACCOs to develop sustainably, they must provide prompt loan distribution to promote loan recovery and reduce administrative expenses.
- SACCOs should make sure that all given credit is well analyzed in order to avoid the higher rate of nonperforming loan.
- SACCOs should make sure that all given collateral security are well analyzed in order to avoid the higher rate of non- performing loan.

### For loan risk management

- SACCOs should also have solid lending policies to ensure loan performance when they increase loan disbursement to expand the loan book from which interest is paid.

- SACCOs should enhance their credit control this will help in decreasing default levels as well as their non-performing loans. This will help in improving their financial performance.

## For loan recovery management

- SACCOs should hire the professional employees or make further training for the employees from loan recovery departments.
- SACCOs should come up with a policy to monitor customers across all the financial institutions.
- The government in collaboration with RCA should evaluate the SACCO legislative framework to guarantee that appropriate credit policies are implemented for enhancing profitability.

## REFERENCES

- Ahlberg, H. & Andersson, L. (2018). How do banks manage the Credit assessment to small businesses and what is the effect of Basel III. An implementation of smaller and larger banks in Sweden, Jonkoping International Business School
- Alshatti, A. S. (2015). "The effect of credit risk management on financial performance of the Jordanian commercial banks." *Investment Management and Financial Innovations*, 12(1): 338-345
- Boldizzoni F. (2017). *Means and ends: The idea of capital in the West. 1500-1970*, New York: Palgrave Macmillan.
- Bobakova, Csc. (2018). *Raising The Profitability of Commercial Banks*, BIATEC, Volume XI.
- Chijoriga, M. M. (2017). *Application of Credit Scoring and Financial Distress Prediction Models to Commercial Banks Lending: The Case of Tanzania*. Ph.D Dissertation, WirtsCHAFTSnnversitat Wien (WU), Vienna
- Gatuhu.N (2018). *Credit risk management on financial performance of micro finance institution in Kenya*. Unpublished MBA project.
- Gisemba, P. N. (2018). *The Relationship between Credit Risk Management Practices and Financial Performance of SACCOs in Kenya*. Unpublished MBA Dissertation, University of Nairobi
- Gladys, K. (2018). *The effect of Credit risk management practices on the level of nonperforming credits. A case study of commercial banks lending to SMES in Kenya*, Unpublished MBA Project, University of Nairobi
- Haneef,S and Karim Yasir (2018). *Impact of Risk Management on Nonperforming Loans and Profitability of Banking Sector of Pakistan*; *International Journal Of Business And Social Harlow, England: Financial Times Prentice Hall.*

- Kamau, S. I. (2015) Effect of credit management practices on financial performance of savings and credit cooperative societies in the hospitality industry in Nairobi: MBA Research Project, University Of Nairobi
- Kagoyire, A and Dr. Shukla, J (2016). Effect of credit management on performance of commercial banks in Rwanda (a case study of equity bank Rwanda Ltd): International Journal of Business and Management Review Vol.4, No.4, pp.1-12
- Kakuru, J. (2018). The Management of loan portfolios and the performance of indigenous commercial banks in Uganda: A case study of Uganda Commercial Bank and Centenary Rural Development Bank, MBA. Thesis, Makerere University, Kampala.
- Kamau, S. I. (2015). Effect of credit management practices on financial performance of savings and credit cooperative societies in the Hospitality Industry in Nairobi [PhD Thesis]. University of Nairobi.
- Kariuki, J. (2018). Effective Collection Management. KASNEB Publishers, Nairobi
- Kealhofer, S. (2018). Quantifying credit risk 1, default prediction: Financial Analysts Journal Vol. 59 No.1 p.p. 30 - 44 .
- Kimari F.N. (2018). Effect of Credit Risk Management on Financial Performance of Deposit Taking Savings and Credit Cooperative Societies in Kenya. Unpublished Thesis, University of Nairobi
- Kosmidou, K. (2017). The determinants of banks' profit in Greece during the period of EU financial integration, Managerial Finance, 34 (3)
- Leung R. (2015) validity reliability and generalisability in quantitative research. Journal of family medicine and primary care 4(3) 324-32
- Magali, J. J., & Lang'at, J. K. (2014). Impacts of Corporate Governance on Efficiency and Sustainability of the Best Rural SACCOS in Tanzania. Global Journal of Commerce & Management Perspective, 3(2), 1-8.
- Majid (2018) Research fundamental: study design, population. URNCST Journal 2(1) 1-7
- Makupe, L. K. (2016). The effects of loan repayment on financial performance of Savings and credit cooperative societies; a case study of good Hope SACCO, Narok town. Unpublished thesis, University of Nairobi.
- Mamet, P. K. (2018). Credit risk management initiatives and financial performance of SACCOS under the Uasin Gishu Enterprise Development Fund [PhD Thesis]. University of Nairobi
- Mattius, M. (2016). Using the credit management in achieving microfinance missions, Credit Manual for lending Institutions.

- Moronya Asha Hesborn (2018). Effect of Credit Risk Management Practices on The Financial Performance of SACCOs In Kisii County. International Journal of Economics, Commerce and Management United Kingdom Vol. IV, Issue 11,
- Mulinge (2019). Effect of Credit Risk Management Framework on Financial Performance of Deposit Taking Savings and Credit Cooperatives in Kenya. Unpublished Thesis, KCA University
- Myers, C. & Brealey, R. (2018). Principles of Corporate Finance. New York: McGraw- Hill.
- Nassaji (2015). Quantitative and descriptive research, Data types verses data analysis. Language teaching research 19(2) 129-132
- Nduhukire, Rosebell (2017); The Effect of Credit management on performance in Ghana. Journal of Money, Credit and Banking, Vol. 26 No.1, pp. 72-86
- Nyanchama, G, B& Dr. Mogwambo,V, A.(2017) Effects of Loan Management Practices on the Financial Performance of Deposit Taking SACCOs in Kisii County: International Journal of Recent Research in Commerce Economics and Management (IJRRCEM) Vol. 4, Issue 1, pp: (126-139).
- Otanga Grace Kemunto<sup>1</sup> , Dr. Mule Robert Kisavi<sup>2</sup> , Dr. Momanyi Gideon (2019). Effect of Credit Risk Management on Financial Performance of Deposit Taking Savings and Credit Cooperative Societies in Western Kenya, Unpublished thesis
- Paul, S., & Musiega, M. (2020). Effect of Credit Risk Management Practices on Financial Performance of Micro-Finance Institutions in Nairobi. International Journal of Recent Research in Social Sciences and Humanities, 7(3), 22–39.
- Rajedom, R. (2018). The lending management and customer defection in finance organization. Journal of finance and marketing Vol 1 No 15 pp 11.