

# The contribution of loan management on the financial performance of umurenge savings and credits cooperatives in rwanda

<sup>a</sup>Alphonse Nsengiyumva and <sup>a</sup>Jean Bosco Harelimana

<sup>a</sup>Jean Bosco Harelimana, Institut d'Enseignement Supérieur de Ruhengeri, Musanze, Rwanda,

## Corresponding author.

Correspondence: Jean Bosco Harelimana

E-mail: jbosco.harelimana@gmail.com

## Article info

Received 21<sup>st</sup> January 2020

Received in revised form

1<sup>st</sup> March 2020

Accepted 5<sup>th</sup> March 2020

## Keywords

Savings and credit cooperatives, loan management procedures and micro finance financial performance.

## Abstract

The study analyzed the contribution of loan management on the financial performance of Umurenge Savings and Credit Cooperatives in Rwanda. The study adopted the use of descriptive survey using both qualitative and quantitative methods for a total sample size of 78 clients who have received more than two times the loan. Purposive and simple random sampling was used for this purpose. Primary and secondary data were collected and then analyzed. The study found that loan management determinants used such as membership enrolment, client appraisal, credit risk control and collection policy impact on financial performance respectively at 23,9%; 24,1% ; 39,2 % ; 28,4%. Loan management practices have a high influence on the SACCO's financial performance during the five years. The correlation results imply that suitable loan management in a saving and credit institution has a positive impact on financial sustainability and profitability and on financial efficiency and productivity as they move in the same direction ( $R=0.980$ ).

## 1. Introduction

The Savings and Credit Cooperatives (SACCOs) are financial institutions in the line of cooperatives Societies that aims to meet common needs of the members through savings mobilization, loans and financial advisory services (Auka & Mwangi, 2011) [17]. They enhance economic growth and development by availing funds to members so as to engage in viable business ventures. SACCOs offer most similar products with other financial institutions such as commercial banks. In this sense, they are suitable for low income households who find it difficult to access credit from banks. Delivering financial services to the members is the key function of Savings and Credit Cooperatives. These include financial products and advisory services. To adequately do this, they ought to perform effectively. Financial performance is subjective measure of how well a Sacco can undertake its activities using the available resources and generate optimal revenues. This indicates the organization financial health and sustainability.

Desirable performance in Savings and Credit Cooperatives indicates that they are efficient and effective in their resource utilization. This also involves management of transaction costs. They have to measure their performance to determine whether they have desirable outcome for survival. Planning for future helps organizations to cope with uncertainties and unexpected changes in economic and technological groups. Therefore, they have established financial strategies to guide that purpose.

In Rwanda, the ultimate objective long term development plan is to transform the country into a middle-income country and an economic trade, communication and financial hub by the year 2020. Towards the achievement of this, the GoR has recently adopted an Economic Development and Poverty Reduction Strategy (EDPRS), with Financial Sector Development as one of its key components. According to BNR report (2018), SACCOs are created in line with UMURENGE SACCO program started in the year 2009 by the government initiative to promote financial inclusion. FinScope 2008 results indicated that only 21% of bankable population was able to access and use formal financial services. After introduction of UMURENGE SACCOs and other initiatives, the formal access to financial services doubled to 42% in 2012 and reached 68% in 2016.

Umurenge SACCO's non-performing loans increased to 12.5 percent in 2015-2016 from 8.2 percent in the year 2014-2015 (BNR, 2016). SACCOs in Rwanda are tied and regulated by National bank of Rwanda, Rwanda Cooperative agency and Association of Microfinance in Rwanda. In December 2008, the government of Rwanda recommended the creation of at least one SACCO at the level of each administrative sector (Umurenge). Accordingly, a task force was established to propose a strategy to implement this directive. The task force proposed a strategy in line with the national microfinance policy implementation strategy and the national savings mobilization strategy.

The concept of Umurenge SACCO in Kigali City was initiated on the understanding that banks and other financial institutions are more concentrated on rich people and do not serve the poor. As such, establishing Umurenge SACCO at every administrative sector would bridge this gap. Umurenge SACCO in Kigali City is a financial institution under the cooperative form. According to the National Bank of Rwanda (2016), the minimum required non-performing loans ratio is 5 percent and the report presented on 22<sup>nd</sup> December, 2016 in Kigali called for tough measures to tackle the problem of bad debts showed that bad loans had gone up, with 13 per cent and others represented a ratio above 20 per cent of nonperforming loans in Kigali City whereas in other districts the non-performing loans stood at 12.5 percent (BNR, 2016). Despite all the measures and controls including Seminars, Trainings, and Supervision and employing qualified workers to tackle the problem of non- performing loan, still non-performing loan is very high exceeding the benchmark of 5% set by National Bank of Rwanda. This drew the researcher's intention to carry out research on credit management practices and loan recovery in KUNGAHARA SACCO as one of financial institution cooperative operating in Kigali City.

Loan repayment performance is an important concept for all the lending institutions. It is a measure of whether loans are settled up in full according to the loan contract or not. The higher loan repayment performance leads to the higher probability of the collecting interest revenues and lower loan losses in a lending institution (Okurut and Kinyondo, 2009) [9].

On the other hand, the poor loan repayments have a harmful impact on institutions capital, earning as well as in realizing its objectives and may even lead to a financial institution collapse. For instance, failure to manage loan repayment performance results in losses and high delinquency management costs (Ledgerwood, 2000) [12]. The higher expenses are for closer monitoring, more frequent portfolio and legal fees for pursuing seriously delinquent loans. Such costs adversely affect the generated income, and, in general, the operations of the lending institution, thus, the institution becomes financially unperformed and so unsustainable.

Savings and Credit Cooperative (SACCOs) contribute immensely to the growth and development of economies. They promote savings culture among people that is crucial for planning in terms of investments and expenditures. SACCOs plays a big part in financial accessibility thus enabling members to engage in viable businesses that generate income to improve living standards. Despite the potential and contribution of SACCOs in Rwanda, they have not delivered financial services to members as expected due to undesirable performance. Most of them engage in financial malpractices such as giving huge loans without proper appraisal or the same. Lack of competent management leads to adoption of mediocre financial decisions that never prove performance. Supervision of SACCOs has not catered for the needs of members in terms of consumer protection. This means that it has not been done as it should be. Moreover, some SACCOs fail to meet loan requirements as sought by members due to insufficient funds at their disposal leading to stagnant or decrease of membership. Undercapitalization makes some unstable and to some extent unsustainable in terms of operations .

Past studies have not solved the problem of undesirable performance of SACCOs to the satisfaction of members. In such cases, there is an interest to carry out a research on loan management practices and the financial performance of microfinance institution in saving and credit cooperatives in Kigali City.

This study is important in that it provides relevant information on loan management practices in occurrence, membership enrollment, client appraisal, credit risk controls, and collection policy in regard to financial performance of an institution. These constructs have been analyzed well based on their effect on financial performance of SACCOs in Rwanda and recommends how undesirable performance can be rectified.

## 2. Objectives

The main objective of this study is to analyze the loan management strategies and evaluate their contribution on the financial performance in Savings and Credits Cooperatives in Rwanda; specifically the objectives are the following:

- 1) To assess the indicators of loan management strategies in KUNGAHARA SACCO.
- 2) To analyze the level of financial performance in KUNGAHARA SACCO.
- 3) To determine the relationship between loan management strategies and the financial performance in KUNGAHARA SACCO.

## 3. Literature Review

*Loans Management* is the process by which risks that are inherent in the loan process are managed and controlled. The assessment focuses on what management does to identify issues before they become problems. According to Burt Edwards [3], the Loans Management component offers functions for mapping the complete loan process for loans given and loans taken, from entering data on a potential contract right through to contract disbursement and the data transfer to Financial Accounting. It incorporates complex collateral management functions, support for decision- making and a range of options for tailoring the contracts (Pandey, I. M., 2008) [19].

There are many determinants of loan management but the researcher considered only the mainly four following: membership enrollment, client appraisal, Credit risk control and Collection policy.

*On membership enrolment*, a study by Kivuvo and Olweny (2014) [10] noted that capacity to generate revenue influences the performance of a SACCO. This capacity is largely determined by the number of members that belongs to a SACCO. When other factors are constant, the higher the number, the higher the amount of revenue. Therefore, membership size of SACCOs determines its financial performance. Poor financial service delivery leads to decline in membership.

Thomas (2000) emphasizes that education of members enhances the borrowers' ability to repay. The better educated borrowers are deemed to have more stable and higher income employment and thus a lower default rate. Borrowers with high level of education are more likely to repay their loan since they occupy higher positions and with high income levels.

Borrower financial education can go a long way towards reducing default rates. Prior to disbursement, institutions should educate and train the client and guarantor about the implications of obtaining a loan, how the product works, the benefits of paying on time and the payment schedule, while also providing information about the closest and easiest way for this particular client to make loan payments.

A study to assess the challenges and opportunities facing SACCOs in the current devolved system of government of Kenya, A case study of Mombasa County. The study pointed out

education as one of the major challenges facing SACCOs in Mombasa County. He found out that education is an important ingredient that helps the members to invest the loans they acquire into viable business ventures. Membership size determines the level of organization revenue and performance.

The researcher considers the following key Credit management variables: *client appraisal, credit risk controls and collection policy*.

*Client appraisal* is according to Abedi [1], the first step in limiting credit risk which involves screening clients to ensure that they have the willingness and ability to repay a loan. Microfinance Institutions use the 5Cs model of credit to evaluate a customer as a potential borrower.

The 5Cs help MFIs to increase loan performance, as they get to know their customers better. These 5Cs are: character capacity, collateral, capital and condition.

**Character** - refers to the trustworthiness and integrity of the business owners. It's an indication of the applicants' willingness to repay and ability to run the enterprise. **Capacity** assesses whether the cash flow of the business (or household) can service loan repayments.

**Capital** - Assets and liabilities of the business and/or household. **Collateral** - Access to an asset that the applicant is willing to cede in case of non-payment, or a guarantee by a respected person to repay a loan in default. **Conditions**- A business plan that considers the level of competition and the market for the product or service, and the legal and economic environment.

The 5Cs need to be included in the credit scoring model. The credit scoring model is a classification procedure in which data collected from application forms for new or extended credit line are used to assign credit applicants to „good“ or „bad“ credit risk classes (Constantinescu et al., 2010). It is important to note that capital (equity contributions) and collateral (the security required by lenders) are major stumbling blocks for entrepreneurs trying to access capital. This is especially true for young entrepreneurs or entrepreneurs with no money to invest as equity; or with no assets they can offer as security for a loan (Inkumbi, 2009) [7].

Key Credit risk controls include *loan product design, credit committees, delinquency management and collection procedures* (Churchill and Coster, [4]). The World Bank recommends the management of financial institution to set up credit policy that could not negatively affect profitability.

For Sindani SACCOs can mitigate a significant portion of default risk by *designing loan products* that meet client needs. Loan product features include the loan size, interest rate and fees, repayment schedule, collateral requirements and any other special terms. Loan products should be designed to address the specific purpose for which the loan is intended.

According to Churchill and Coster [4], the *credit committee* has the responsibility not only for approving loans, but also for monitoring their progress and, should borrowers have repayment problems, getting involved in delinquency management. Establishing a committee of persons to make decisions regarding loans is an essential control in reducing credit (and fraud) risk. If an individual has the power to decide who will receive loans, which loans will be written off or rescheduled, and the conditions of the loans, this power can easily be abused and covered up. While loan officers can serve on the credit committee, at least one other individual with greater authority should also be involved.

According to Churchill and Coster [4] SACCOs can minimize *delinquency management* by using the following delinquency management methods Institutional Culture: A critical delinquency management method involves cultivating an institutional culture that embraces zero tolerance of arrears and immediate follow up on all late payments. SACCOs can also remind clients who have had recent delinquency problems that their repayment day is approaching.

*if collection procedures* are carefully formulated, administered from top and well understood at all

levels of the institution, proper credit standards and elimination of excess risk can be achieved. There are various procedures that an organization should put in place to ensure that credit management is done effectively; one of these procedures is a collection procedure which is needed because all customers do not pay the firms bills in time.

**The Savings and Credit Cooperatives (SACCOs)** are financial institutions in the line of cooperatives Societies that aims to meet common needs of the members through savings mobilization, loans and financial advisory services (Auka & Mwangi, 2011) [17].

**Financial performance** is a measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm's overall financial health over a given period of time and it is one of major indicator of organizational performance. Financial performance can be defined as the accomplishment of a given task that is measured using predetermined standards of accuracy, completeness, efficiency and effectiveness.

There are many studies carried out on impact of Loan Management on financial performance of SACCOs. In this part, the study presents some of studies related to the topic.

A study to determine the relationship between credit management and financial performance of SACCOs carried out in Kenya that there was a positive relationship between credit risk management and financial performance of SACCOS in Kenya.

Onsase, Okioga, Okwena and Ondieki (2013) [18] assessed the effects of performance management practices on provision of financial services by savings and credit cooperative societies. The study findings that efficiency and effectiveness influenced performance via appropriate performance management practices. Moti, Masinde, Mugenda, and Sindani, [15, 16] in their study on Effectiveness of Credit Management System on Loan Performance: Empirical Evidence from Micro Finance Sector in Kenya found out that credit risk controls adopted by microfinance institutions have an effect on loan performance.

Kariuki [8] in his study on Effective Collection Policy stated that there are various policies that an organization should put in place to ensure that credit management is done effectively, one of these policies is a collection policy which is needed because all customers do not pay the firms bills in time. Some customers are slow payers while some are non-payers. The collection effort should, therefore aim at accelerating collections from slow payers and reducing bad debt losses.

The credit risk management and loan performance of micro finance banks of Pakistan indicated that credit collection procedure is a systematic way required to recover the past owing from clients within the legal framework. Different financial institutions have different collection policies and processes which have to be lawful (Latifee, 2006) [11]. For better performance of credits or loan a well structure collection policy is needed and if the financial institutions do not implement it would lead to loan delinquency (Boldizzoni, [2]).

Maiti (2015) [14] carried out a study to answer the question what is the effect of credit policy on financial performance of SASRA regulated SACCOs in Nairobi. The study adopted correlation research design and revealed that regulated SACCOs had adopted credit standards as a credit policy and credit term policy loan ratio in determination of how much a client would borrow. The study concluded that credit terms policy significantly increased ROA of regulated SACCOs hence decreasing loan to assets ratio significantly leading to increase in financial performance.

A survey on selected SACCOS carried out to establish the relationship between membership and financial performance of SACCOS in Kenya. The results showed that membership had a significant relationship with financial performance.

The study on Effectiveness of Credit Management System on Loan Performance: Empirical Evidence from Micro Finance Sector in Kenya found out that Credit terms formulated by the microfinance institutions do affect loan performance; the involvement of credit officers and customers in formulating

credit terms affects loan performance.

#### 4. Methodology

This section summarized dimensions of the research, tools and techniques and methods used to achieve the research objectives.

**Data collection:** Data were collected, as primary data, using observation, interview and questionnaire techniques and secondary data. A *Self-administered questionnaire* was designed for 78 members in collection of primary data and the technique of documentation for secondary data was used. Consequently, the sample in this study has been chosen purposively based on *who have received more than once loan from KUNGAHARA SACCO NYAKABANDA* with using Alain Bouchard's formula with confidence interval of 95% and a permissible margin error of 10%. The total population is categorized into two: The first category (Staff) of population size equals 6 and the second (clients) equals 862 with the sample size 6 and 72 respectively. The total sample size is 78.

**Data analysis:** To assess the impact of loan management on financial performance of Savings and Credit Cooperatives, the researcher considered both quantitative and qualitative data which were coded, summarized and presenting using SPSS and excels software. Apart from descriptive statistics of Mean, Frequency and percentages on the characteristics of the respondent, regression analysis was used to measure and predict the relationship between the predictor variables and the dependent variable. The general form of the model was as follows:

$$Y = a + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e$$

Where, Y= financial performance,

X<sub>1</sub> = Membership enrolment, X<sub>2</sub>= client appraisal, X<sub>3</sub>=Credit risk control, X<sub>4</sub>=Collection procedures, a is constant and  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  and  $\beta_4$  are coefficients to estimate, and e is the error term.

Since the study intends to assess whether Loan Management practices have any relationship with the financial performance of KUNGAHARA SACCO- NYAKABANDA which is the dependent variable, the most commonly used relational statistic is correlation (r) and it is a measure of the strength of a relationship between two variables, but not causality. Beside this equation, the correlation coefficient was calculated using the SPSS. The statistical method helped in computing the correlation between loan management practices (X) and financial performance (Y) of KUNGAHARA SACCO-NYAKABANDA.

#### 5. Results, Discussion and Findings

Data on assertion of loan management indicators was gathered on the following themes: membership enrollment, client appraisal, Credit risk control and Collection policy on the financial performance of SACCOs.

To analyze the level of financial performance (second objective) based on loan management indicators, data from KUNGAHARA SACCO-NYAKABANDA financial management was collected using Fact sheet. All those data was used finally to assess if there is any relationship between loan management and financial performance (last objective).

##### **Assessment of Loan management indicators in KUNGAHARA SACCO-NYAKABANDA**

The study intended to assess the Impact of Loan Management practices on financial performance of Savings and Credit Cooperatives in Rwanda by determining the Loan management determinants and its relationship to the financial performance indicators of KUNGAHARA SACCO-NYAKABANDA during the period of study.

- *Gender respondents*

The researcher wanted to establish how savings and investments in SACCOs can be influenced by an individual gender status.

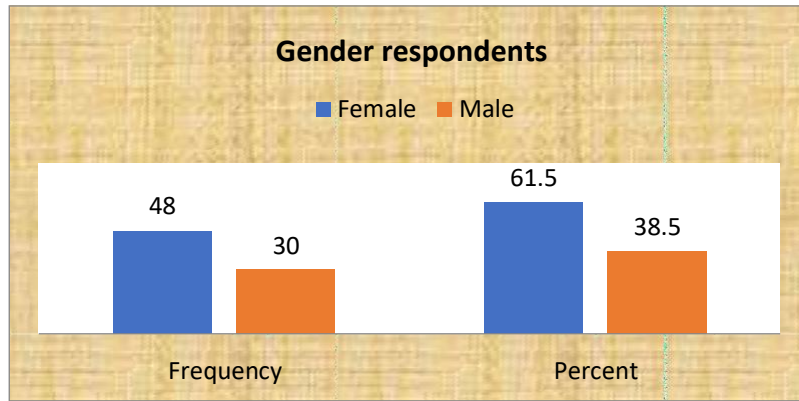


Figure 1: Gender respondents

The findings in this study with *gender* showed that out of the 78 respondents (100%) of respondents who participated in the study 30 (38.5%) were males while 48 (61.5%) were females. This implies that the majority of SACCO members are females. It is noted that gender in addition to age is one of the most used socio- demographical variables to differentiate the predictive power between men and women.

- *Distribution of respondents by age*

The researcher sought to establish the age distribution of respondents so that it can be ascertained how age disparity affects the membership of SACCOs and appointments in SACCO management and what effect this can have on the loan management.

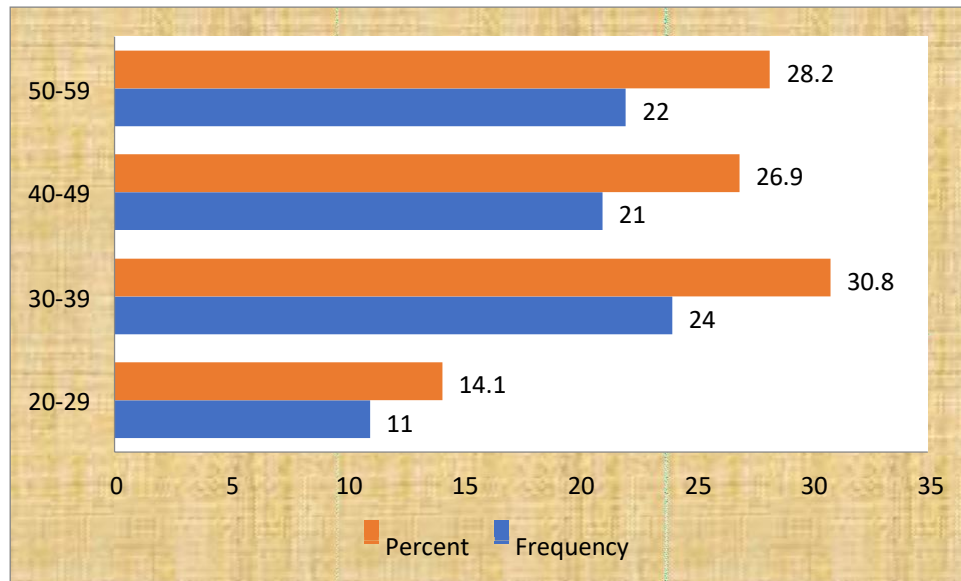


Figure 2: The age of respondents

In this study, *the age of respondents* shows that out of the 78 respondents who participated in this study, 11 (14.1%) fell in the age bracket of 20-29 years, 24 (30.8%) fell in the age bracket of 30-39 years, 21 (26.9%) fell in the age bracket of 40-49 years, while 22 (28.2%) were in the range bracket of 50-59 years respectively.

This imply that the majority of SACCO members are in the age bracket of between 30 and 39 years probably because this is the age of young adults who seek money from financial institutions to establish their home and educate their children. The smallest percentage of respondents was in the age brackets of 20-29 (14.1%) implying that these are unemployed youth who have not acquired enough resources to

invest in SACCOs. Inkumbi [7] noted that capital (equity contributions) and collateral (the security required by lenders) are major stumbling blocks for entrepreneurs trying to access capital and this is especially true for young entrepreneurs or entrepreneurs with no money to invest as equity; or with no assets they can offer as security for a loan.

- *Distribution of respondents by marital status*

The researcher sought to establish the marital status of respondents with the aim of establishing how it affects the saving and investing culture

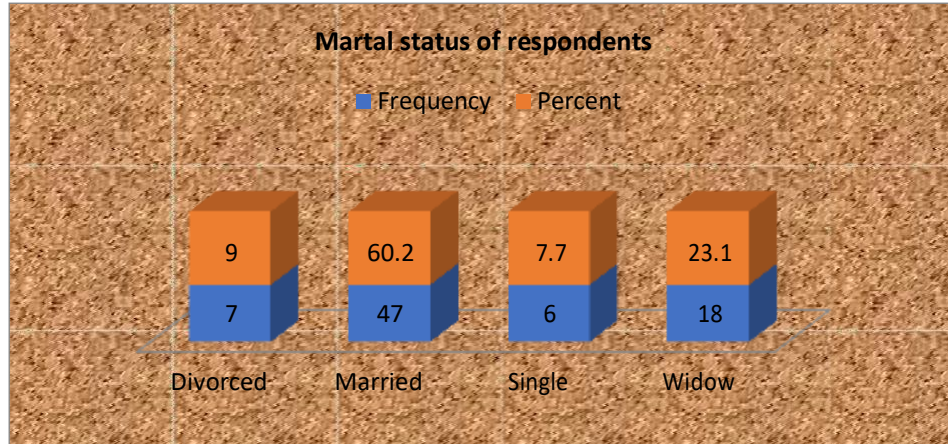


Figure 3: Marital status of respondents

The findings of the results show that out of 78 respondents 100%, 6 (7.7%) were single and this constitute the smallest percentage. This implies that married people have more financial demands compared to single because they need to educate their children and establish their families.

This finding is affirming that marital status affects the borrower’s level of responsibility, reliability, or maturity. The probability of default is higher for married than single borrowers. They discover that the marital status is typically related to number of dependents which in turn reflects financial pressure on the borrower and borrower’s ability to repay a loan.

- *Distribution of respondents by education level*

The researcher wanted to show the educational level of respondents with the aim of establishing how it affects the saving and investing culture.

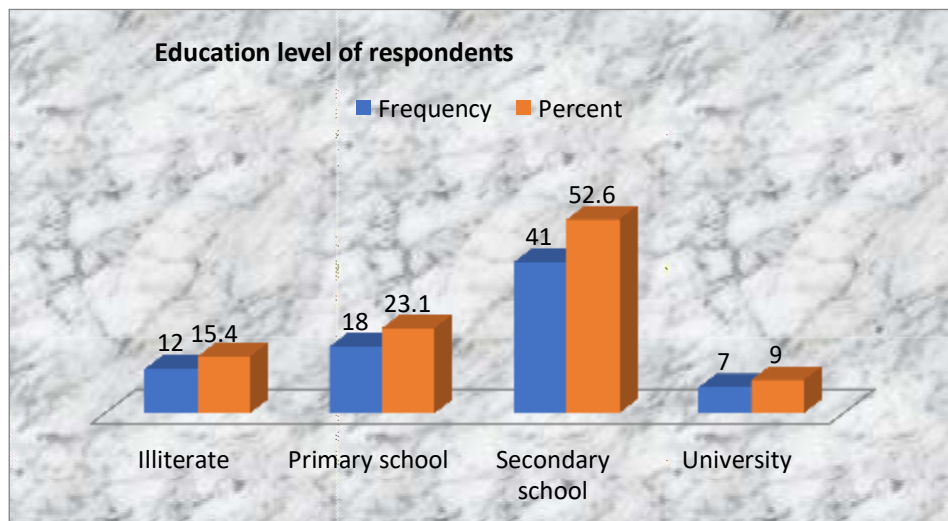


Figure 4: Gender respondents

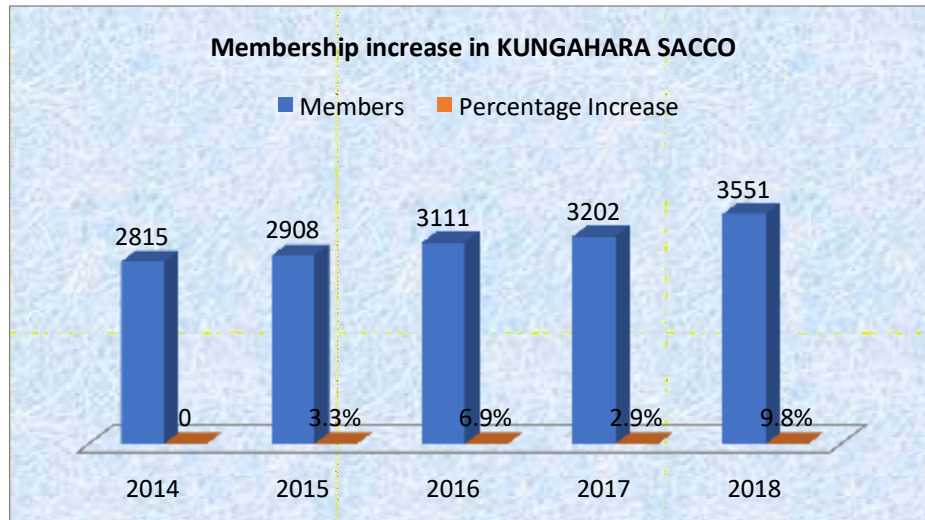


From the figure 4, illiterate respondents represent 15.4%, primary school 23.1%, secondary school 52.6% while university level represents 9%. Secondary education level is the active member of KUNGAHARA SACCO-NYAKABANDA.

This finding is corroborated by the research conducted in Kenya whereby the study pointed out education is an important ingredient that helps the members to invest the loans they acquire into viable business ventures.

- *Membership increase in KUNGAHARA SACCO-NYAKABANDA*

The researcher sought to see if there was increase of members in KUNGAHARA SACCO- NYAKABANDA during the period under study.



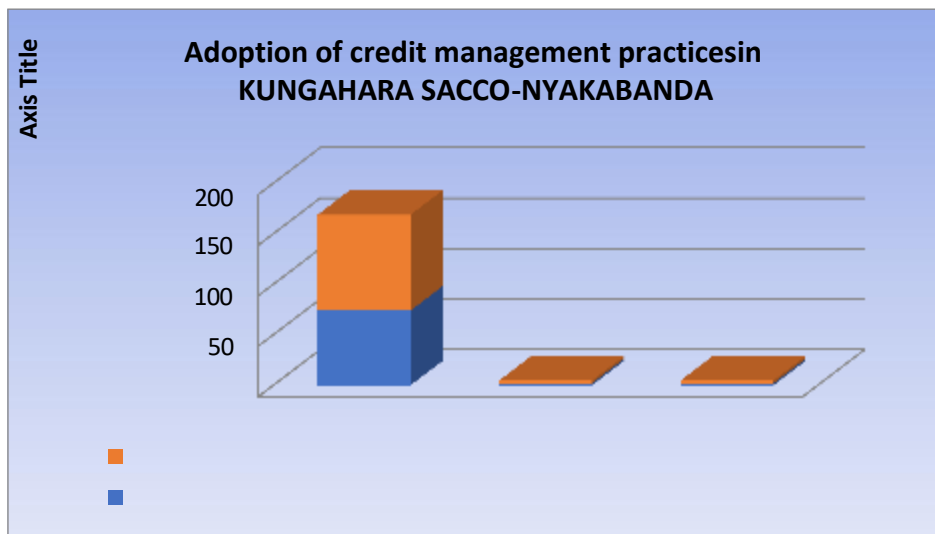
**Figure 5:** Membership increase in Kungahara SACCO

According to this finding, members in KUNGAHARA SACCO-NYAKABANDA are increasing year to year. This finding is supported by organizational theory, according to which big organizations are better positioned to achieve effective financial performance than the small ones. As such, firms aim to expand much as they can. Moreover, size of the firm determines its ability to acquire economies of scale that helps in costs reductions (Hosmer, 1995) [6]. This finding is also supported by a survey carried out by Onyango (2012) in Kenyan SACCOs which results showed that membership had a significant relationship with financial performance.

- *Adoption of credit management practice in KUNGAHARA SACCO-NYAKABANDA*

To assess if the organization has adopted loan management practices to decrease loan default see the figure bellow.

|            | Yes  | No  | Do not know |
|------------|------|-----|-------------|
| Percentage | 94.8 | 2.6 | 2.6         |
| Frequency  | 74   | 2   | 2           |



**Figure 6:** Adoption of loan management practices in Kungahara SACCO

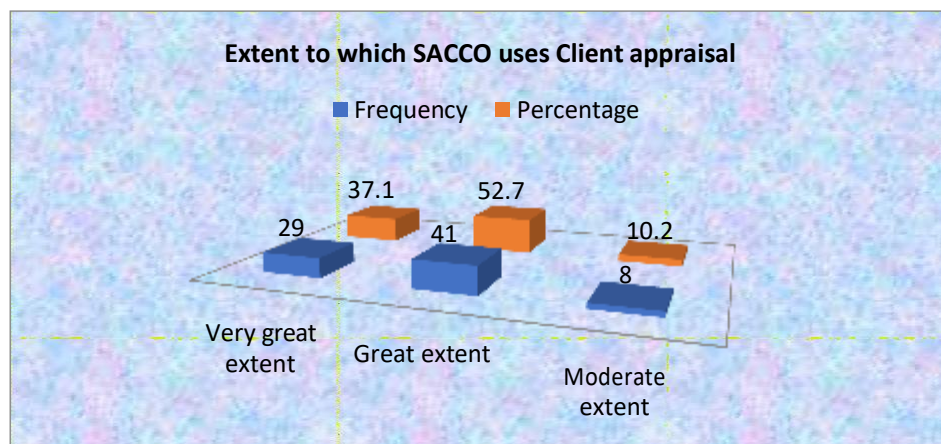
From above figure, majority of respondent 94.8% affirmed that the SACCO has adopted credit management practices while 2.6% do not know and 2.6% have said no. This finding is in line with the

World Bank which recommends the management of financial institution to set up credit policy that could not negatively affect profitability.

This finding is corroborating with the finding of Maiti (14) analyzing the effect of credit policy on financial performance of SACCOs in Nairobi. The study concluded that credit terms policy significantly increased ROA. Kargi (2011) cited in Nancy (2013) found when evaluating the impact of credit risk on the profitability of Nigerian banks, that credit risk management has a significant impact on the profitability.

*- Client appraisal*

The researcher sought to determine the extent to which SACCO used client appraisal in loan management.



**Figure 7:** Client appraisal in loan management in Kungahara SACCO

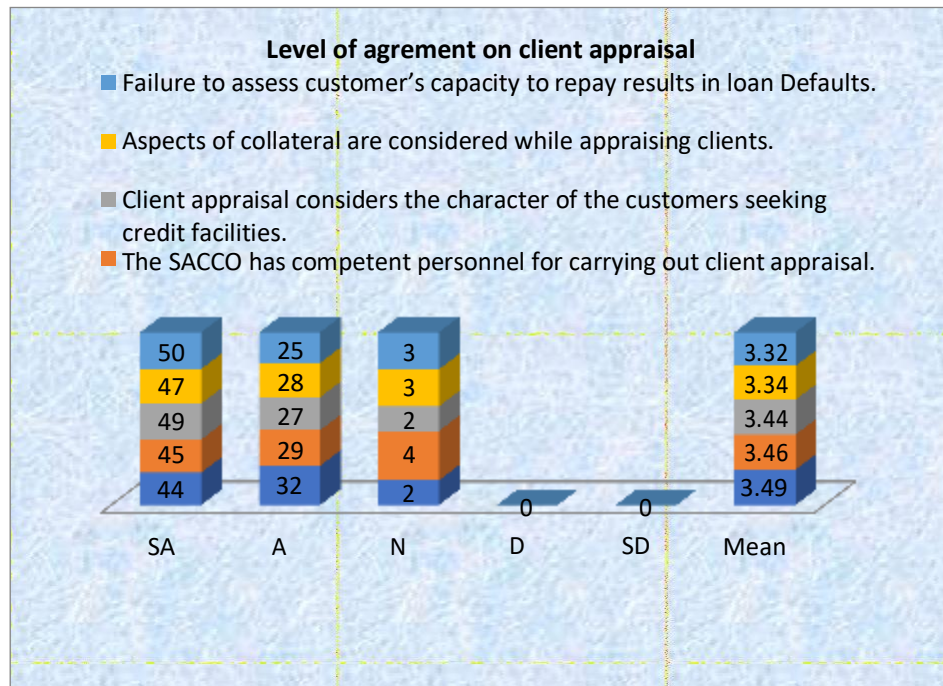
From the findings, 52.7 % of the respondents indicated SACCO uses client appraisal to a great extent, 37.1 % of the respondents indicated to a very great extent whereas 10.2% of the respondents indicated to a moderate extent; this implies that SACCO used credit risk control in Credit Management to a great extent. According to Abedi [1] Microfinance Institutions use the 5Cs model of credit to evaluate a customer as a potential borrower.

*- Level of agreement on client appraisal in KUNGAHARA SACCO-NYAKABANDA*

The study sought to establish the level at which respondents agreed or disagreed with the below statement relating to credit risk control in SACCO. The results are presented in figure 8.

SA: Agree with no doubt, A: Agree with some doubt, N: Neutral

D: Disagree with some doubt, SD: Strongly disagree with no doubt



**Figure 8:** Level of agreement on client appraisal

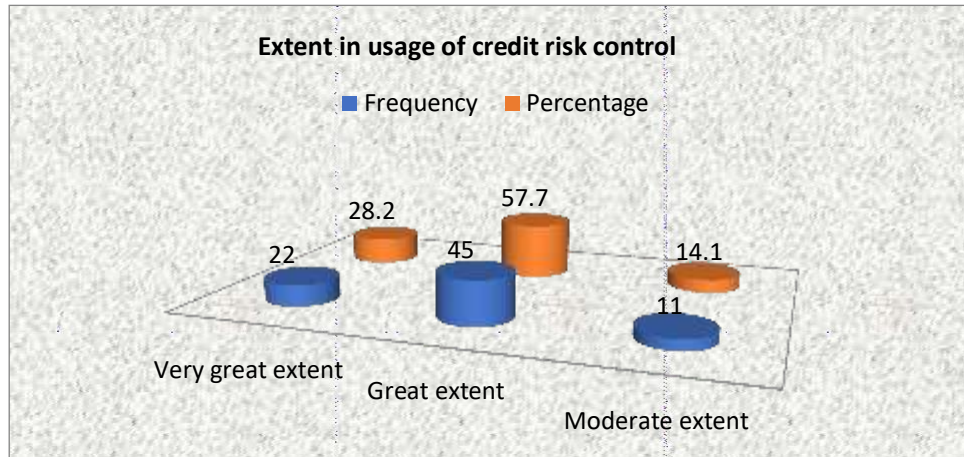
Source: Primary data, August 2019

According to the above table, majority of respondents agreed that Client appraisal is a viable strategy for credit management as shown by a mean of 3.49, Aspects of collateral are considered while appraising clients as shown by a mean of 3.46. Failure to assess customer's capacity to repay results in loan defaults as shown by a mean of 3.44, Client appraisal considers the character of the customers seeking credit facilities as shown by a mean of 3.34 and that the SACCO has competent personnel for carrying out client appraisal as shown by a mean of 3.32. According to the findings on the level of agreement on client appraisal it was found that many respondents agreed that client appraisal is used (average mean=3.41). This means very good.

According to Abedi [1] Microfinance Institutions use the 5Cs model of credit to evaluate a customer as a potential borrower. This finding is in relation of what found Magali (2013) [13] when studying the impacts of credits risk management on profitability of rural SACCOs in Tanzania. He recommended that SACCOs should screen borrowers before issuing loans by using the credit policy and carrying out a feasibility study on the client and they should also issue loans only to qualified borrowers.

- *Credit Risk Controls*

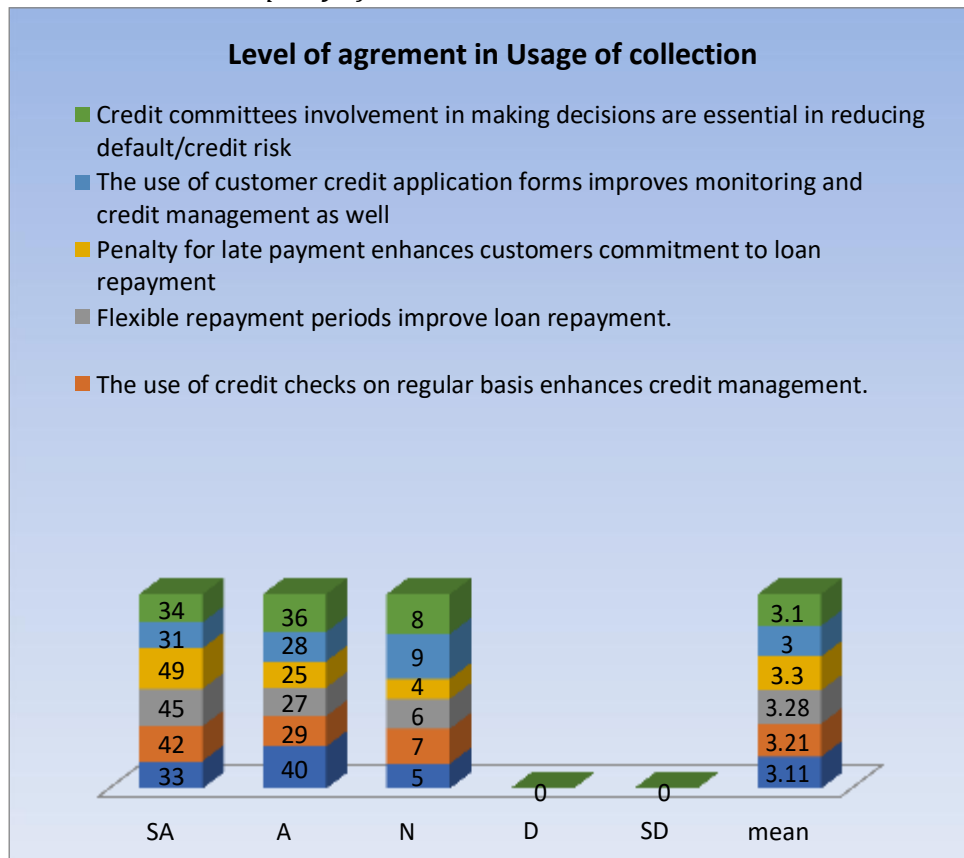
The study sought to determine the extent to which SACCO used credit risk control in Loans Management.



**Figure 9:** Extent in usage of credit risk control

From the findings 57.7 % of the respondents indicated to a great extent, 28.2 % of the respondents indicated to a very great extent whereas 14.1% of the respondents indicated to a moderate extent; this implies that SACCO used credit risk control in Credit Management to a great extent. This finding is corroborated by the research conducted by Moti, Masinde, Mugenda, and Sindani [15, 16] on Effectiveness of Credit Management System on Loan Performance Kenyan Micro Finance Sector that credit risk controls adopted by microfinance institutions have an effect on loan performance.

- *Level of agreement on collection policy of SACCO*



**Figure 10:** level of agreement in usage of credit risk control

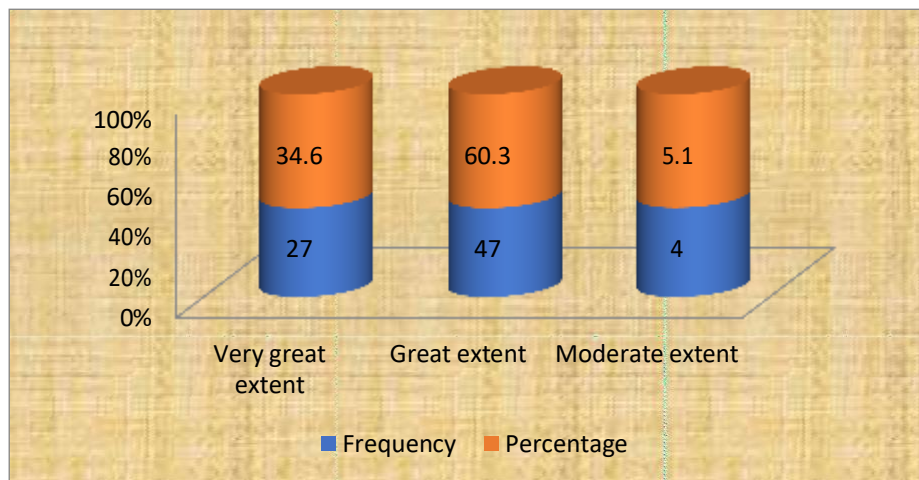
Source: Primary data, August 2019

From the findings, the study established that majority of the respondents strongly agreed that Credit committees involvement in making decisions regarding loans are essential in reducing default/credit risk as shown by a mean 3.11 other agreed that, the use of credit checking on regular basis enhances credit management, Penalty for late payment enhances customers commitment to loan repayment as shown by a mean 3.21 in each case, The use of customer credit application forms improves monitoring and credit management as well, as shown by a mean 3.28, Flexible repayment periods improve loan repayment as shown by a mean 3.30, and that the use of credit checks on regular basis enhances credit management as shown by a mean 3.10.

These results corroborated and while studying the Effectiveness of Credit Management System on Loan Performance in Kenyan SACCOs. He found out that the involvement of credit officers and customers in formulating credit terms affects loan performance.

- *Collection Policy*

The study sought to determine the extent to which SACCO use collection policy in Credit Management.



**Figure 11:** Extent in usage of credit risk control

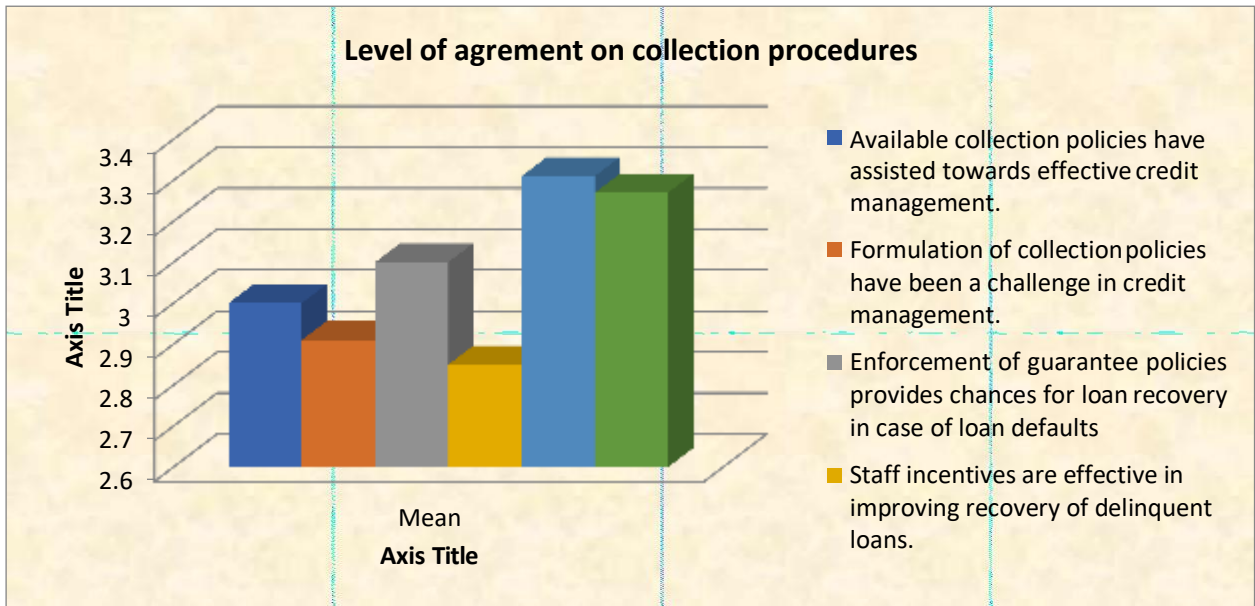
From the findings 60.3% of the respondents indicated to a great extent, 34.6% of the respondents indicated to a very great extent whereas 5.1% of the respondents indicated to a moderate extent, this implies that SACCOs use collection policy in Credit Management to a great extent.

This finding is corroborated by the research conducted by Ahmed and Malik (2015) investigating the credit risk management and loan performance of micro finance banks of Pakistan.

The research found that credit collection procedure is a systematic way required to recover the past owing from clients within the legal framework. According to Latifee [11], different financial institutions have different collection policies and processes which have to be lawful. According to Boldizzoni [2], for better performance of loan a well structure collection policy is needed and if the financial institutions do not implement it would lead to loan delinquency.

- *Level of agreement on collection procedures*

The researcher needed to measure the level at which the respondents agreed on the usage of collection procedures in KUNGAHARA SACCO-NYAKABANDA. This was shown by the figure bellow.



**Figure 12:** Level of agreement on collection procedures

The study sought to establish the level at which respondents agreed or disagreed with the above statements relating to collection procedures of SACCOs.

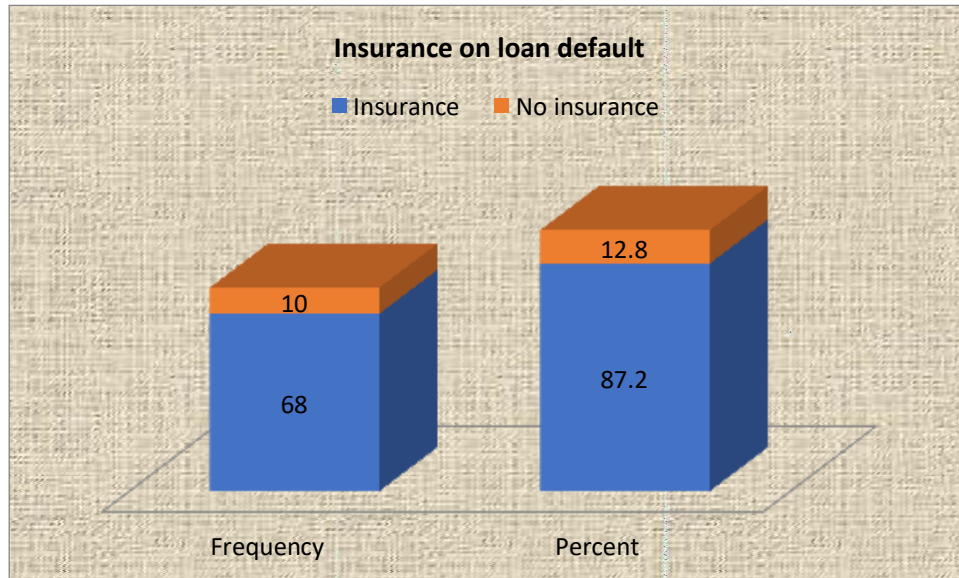
From the findings majority of the respondents strongly agreed that formulation of collection procedures have been a challenge in credit management as shown by a mean of 2.91 others agreed that enforcement of guarantee procedures provided chances for loan recovery in case of loan defaults as shown by a mean of 3.10, staff incentives are effective in improving recovery of delinquent loans as shown by a mean of 2.85, a stringent policy is more effective in debt recovery than a lenient policy as shown by a mean of 3.27. The respondent agreed in general that collection procedures reduces credit risk at a mean of 3.07 which is good.

Kariuki [8] in his study on Effective Collection Procedures stated that there are various policies that an organization should put in place to ensure that credit management is done effectively; one of these policies is a collection policy.

Finding is also pointed out that if collection procedures are carefully formulated, administered from top and well understood at all levels of the institution, proper credit standards and elimination of excess risk can be achieved.

- *Insurance cover on defaulters*

The study aimed at finding out whether any insurance cover was taken against default.



**Figure 13: Insurance on loan default**

Source: Primary data, September 2019

Out of the 78 respondents, 68(87.2%) said the SACCO insured loans against defaulters.

The finding is corroborated by the credit risk theory asserting that, uncertainties which result from unrecorded default can be caused by events that are beyond the control of the management. Therefore the SACCOs need to hedge themselves from such a risk by transferring the risk to third parties such as insurance companies therefore preventing any unforeseen happenings.

### **Financial analysis in KUNGAHARA SACCO-NYAKABANDA**

After the analysis of the determinants of loan management in KUNGAHARA SACCO-NYAKABANDA, the second objective of this research intended to analyze the impact loan management on the financial performance of Savings and credit in Rwanda by analyzing the KUNGAHARA SACCO-NYAKABANDA financial variation to previous years.

Ratios and indicators help managers evaluate the performance of their organization in several different aspects of its activity and are customarily expressed as an annualized number or percentage. They can be calculated for any period; however, managers are encouraged to calculate ratios monthly or quarterly (SEEP, 2005).

#### *- Variation of main parts of financial statement of KUNGAHARA SACCO-NYAKABANDA 2014-2018*

The findings revealed that KUNGAHARA SACCO-NYAKABANDA's total assets are positively varying to 20.9% in 2015, 19.1% in 2016, 95% in 2017 and 1.8% in 2018. The net equity was -39.2% in 2015, 61.4% in 2017, 50.4% in 2017 and 3.7% in 2018. SACCOs in Rwanda started being taxed during 2018 which explains the low increase of assets and equity during this year.

#### *- Loan portfolio or portfolio quality ratios analysis*

The findings reveal that KUNGAHARA SACCO-NYAKABANDA's portfolio at risk, measured in terms of non-performing loans (30 days), passed from 5.1% in 2014 to 44.3% in 2015, from 44.3% in 2015 to 15.1% in 2016, from 15.1% in 2016 to 8.9% in 2017 and from 8.9% in 2017 to 33.8% in 2018. During the period of study only in 2014 the PAR-30 was 5.1% near BNR accepted threshold (5%) and greater than this threshold for other four years. This is in line with the BNR report (2016) according to which in Kigali City

the non performing loan in SACCOs is above 20%. KUNGAHARA SACCO-NYAKABANDA must conjugate more effort in loan recovery to reach the under accepted BNR trend. However, to have a good picture of loan portfolio, PaR must be analyzed in conjunction with portfolio at risk and write-offs, since all three are interdependent. This is in conformity with Jansson (2003) who stated the portfolio at risk can have different risk profiles, even if the overall number is the same.

A PaR30 of 5% can be highly risky if it contains a large proportion of loans that are seriously overdue, or it can be relatively safe if loans are sure to be repaid. As for write-offs, they reduce portfolio at risk at the stroke of a pen.

KUNGAHARA SACCO-NYAKABANDA coverage ratio were staying the same 34% in 2014 and 34% in 2015, decreased from 34% in 2015 to 31% in 2016, jumped up from 31% in 2016 to 100% in 2017 and decreased again from 100% in 2017 to 33% in 2018. This is to mean that in 2014, only 34% of the portfolio at risk was covered by 2014 loan loss reserves, only 34% of the portfolio at risk was covered by 2015 loan loss reserves, 100% of the portfolio at risk was covered by 2017 loan loss reserves, only 33% of the portfolio at risk was covered by 2016 loan loss reserves and only 33% of the portfolio at risk was covered by 2018 loan loss reserves. The trend varies between 31% and 100% of the portfolio at risk with remarkable efforts in 2014, 2015 and 2017. This is not a positive index for KUNGAHARA SACCO-NYAKABANDA because its indicator on how is prepared for a worst-case scenario is very lower. This is in agree with empirical studies of CGAP (2004) that argued that, for micro-finance institutions, loan loss reserves usually range between 80% and 120% of portfolio at risk.

From the portfolio quality ratios analyzed, it is revealed that strong strategies have to be taken here to increase the risk coverage ratio.

- *Financial efficiency and productivity ratios analysis*

According to the study of Onsase, Okioga, Okwena and Ondieki [18] on the effect of performance management practices on provision of financial services by savings and credit cooperative societies, findings revealed that efficiency and effectiveness influenced performance via appropriate performance management practices.

Operational expense ratio as an indicator of efficiency of KUNGAHARA SACCO-NYAKABANDA. This ratio highlights personnel and administrative expenses relative to the loan portfolio over the period of study (2014-2018).

Portfolio yield (the rate of operating expenses on the average gross loan Portfolio) was 26.8% in 2015, 30.7% in 2016, 41.1% in 2017 and 23.5% in 2018.

This implies that on 100 Rwf of loan portfolio for the year 2015, KUNGAHARA SACCO-NYAKABANDA made operating expenses of 26.8Rwf while the same amount invested for the same purpose in 2016 made likewise 30.7 Rwf of operating expenses. On 100 Rwf of loan portfolio in 2017, KUNGAHARA SACCO-NYAKABANDA spent 41.1 Rwf while on 100 Rwf of loan portfolio in 2018; KUNGAHARA SACCO-NYAKABANDA disbursed 23.5 Rwf of operating expenses Then, it is revealed that in KUNGAHARA SACCO-NYAKABANDA was increased its efficiency as it grew its loan portfolio orderly in 2015, 2016, 2017 and 2018. The value of operational expense was positive over the period of study. This indicates that KUNGAHARA SACCO-NYAKABANDA spent relatively well its operating expense, since it realized operating expense ratios less than the BNR accepted threshold of 50%.

KUNGAHARA SACCO-NYAKABANDA is efficient but at a non-satisfied degree, because the ratio is too high as well as, for this indicator, the lower the ratio, the more efficient the SACCO is. These findings are in range with CGAP (2009) that stated that operating expense ratio is the most commonly used efficiency indicator which enables managers to compare quickly administrative and personnel expenses to the SACCO's yield on the gross loan portfolio. Monitoring this trend is an easy way to observe if the SACCO is increasing its efficiency as it grows its loan portfolio.

- *Financial profitability and sustainability ratio analysis*



Measuring profitability is the most important measure of the success of the business (Mishkin, 2002). The operational self-sufficiency is an indicator of sustainability of KUNGAHARA SACCO-NYAKABANDA over the period of study (2014-2018). From findings, the rate of operating revenues on the average operating costs was 72% in 2014, 65.2% in 2015, 103.6% in 2016, 99.4% in 2017 and 110.8% in 2018. This implies that in 2016 and 2018 KUNGAHARA SACCO-NYAKABANDA was, regardless its capital base composition, sufficient to cover its cost of operations with its revenue from operations as well as its operational self-sufficient ratios were above 100%, the breakeven point. However, in 2014, 2015, 2017, KUNGAHARA SACCO-NYAKABANDA was insufficient because its operational self-sufficient ratios were below 100% which indicates that it did not generate profits. KUNGAHARA SACCO-NYAKABANDA has to increase its operating revenues and decrease its operating costs in order to improve its ability of operational self-sufficiency. Otherwise, its financial sustainability is low. These results are in conformism with empirical studies of CGAP (2004) that stated that operational self-sufficiency measures how well an MFI can cover its costs through operating revenues.

Return on assets (ROA) as an indicator of profitability of KUNGAHARA SACCO-NYAKABANDA over the period of study (2014-2018). From findings, the rate of return on the average assets was -126% in 2015, 14% in 2016, 12.7% in 2017 and 2.9% in 2018. This implies that 100 Rwf invested by KUNGAHARA SACCO-NYAKABANDA in assets for the year 2015 generated -126 Rwf while the same amount invested for the same purpose in 2016 generated also 14 Rwf as net profit after tax. The 100 Rwf invested in total assets generated 12.7 Rwf as net profit after tax in 2017 and 100 Rwf invested in assets in 2018 generated 2.9 Rwf as net profit after tax.

The value of ROA over the period of study was positive except in 2015. This indicates that KUNGAHARA SACCO-NYAKABANDA considered in itself, used well its assets to generate returns in 2016, 2017, and 2018. In these years, KUNGAHARA SACCO-NYAKABANDA had a positive ROA, then was profitable and also sustainable, because it was covering all its costs and was able to capitalize itself for growth. In 2015, KUNGAHARA SACCO-NYAKABANDA was neither profitable nor sustainable because it realized a negative ROA of -1%. This negative ROA was improving in 2016 of 1.4%, which means that KUNGAHARA SACCO-NYAKABANDA is not yet profitable but is moving towards it.

Considering the BNR benchmark, ROA of 5% are considered desirable from the industry perspective. Then, the results predict that KUNGAHARA SACCO-NYAKABANDA had an ROA below the industry average in the year of 2015, 2016 and 2018. But from the industry perspective, ROA of 5% are considered desirable. Then, considering this BNR benchmark, the results predicts that KUNGAHARA SACCO-NYAKABANDA had an ROA above the industry average in only 2017. The findings indicate also that in the others years of 2015, 2016 and 2018, KUNGAHARA SACCO-NYAKABANDA was not competitive compared to other bank in the same sector of activity considering that the ROAs were below 5% over the period of study. These results show a big task to KUNGAHARA SACCO-NYAKABANDA to generate a return that would meet national microfinance standards or the standards necessary for banks to think it is a good credit risk.

Finally the Return on Equity (ROE) is an indicator of profitability of KUNGAHARA SACCO-NYAKABANDA over the period of study (2014-2018).

The rate of return on the average equity was -43.8% in 2015, 5.7% in 2016, 55.7% in 2017, and 13.9% in 2018 (No data was available for 2014).

This implies that 100Rwf invested by shareholders in Equity capital generated -43Rwf in 2015, 5.7Rwf in 2016, 55.7Rwf in 2017, and 13.9 Rfw in 2018 as net profit which returns on shareholders' equity. Moreover if a SACCO has a positive ROE it is profitable and it is also sustainable, because it is covering all its costs and is able to capitalize itself for growth. From these findings, the value of ROE over the period of study was positive except in 2015. This indicates that KUNGAHARA SACCO-NYAKABANDA was able to

generate a profit in 2016, 2017 and 2018. In 2015, KUNGAHARA SACCO-NYAKABANDA was neither profitable nor sustainable because it realized a negative ROE of -43.8%.

Although, the deep analysis lead us to conclude that the ROE ratio shows that KUNGAHARA SACCO-NYAKABANDA was only two times not profitable and sustainable, the extent of its profitability and sustainability is enough sufficient and at a high level in 2017 and 2018 because the desirable ROE in banking sector is stated between 12-15%. For KUNGAHARA SACCO-NYAKABANDA, this range of the value of ROE was performed during in two last years of our study (2014 and 2018) and was profitable base on industry benchmark. These results are in conformity with empirical studies of CGAP (2004) who stated ROA and ROE as two most used financial tools to measure how well the MFI uses its assets to generate returns and how well it uses its equity to generate returns for the period.

To conclude, the study states that the results show that loan management impact positively on financial performance indicators of 5 last years (2014-2018).

### 5.3 Loan management and financial performance in KUNGAHARA SACCO-NYAKABANDA

After analyzing the loan management determinants in KUNGAHARA SACCO-NYAKABANDA and its indicators of financial performance, the study intended to measure the relationship between the determinants of loan management and financial performance indicators of KUNGAHARA SACCO-NYAKABANDA.

Research objective 3 sought to establish if there is a significant relationship between the extent of loans management and the degree of performance of KUNGAHARA SACCO. It was hypothesized that the two variables are not significantly correlated. To test the hypothesis, the model summary, analysis of variance (ANOVA) and the regression model were presented.

The model summary was used to test  $H_0$ . Summary of R-value of those variables are presented in table 1. To test this hypothesis,  $r$  must be comprised between two variables: -1 and +1 (Franklin, [5]).

**Table 1: Model summary**

| MODEL SUMMARY <sup>B</sup> |                   |         |          |                        |                   |         |     |     |           |             |
|----------------------------|-------------------|---------|----------|------------------------|-------------------|---------|-----|-----|-----------|-------------|
| Model                      | R                 | R Squar | Adjusted | Std. Error of Estimate | Change Statistics |         |     |     |           | Decision on |
|                            |                   |         |          |                        | R Square Ch       | F Chang | df1 | df2 | Sig. F Ch |             |
| 1                          | .990 <sup>a</sup> | .980    | .921     | .2467                  | .980              | 2.213   | 3   | 1   | .178      | Rejected    |

Source: Primary data, September 2019

Results provide both the coefficient of determination ( $R^2$ ) and the coefficient of correlation (R). The coefficient of determination ( $R^2=0.98$ ) explained the explanatory power of the model and indicates that 98% of variation in the financial sustainability and profitability of KUNGAHARA SACCO-NYAKABANDA is being explained by the variation in the explanatory variable such as Membership increase, client appraisal, credit risk controls and collection policies indicators. The results show that Membership increase, client appraisal, credit risk controls and collection policies indicators positively predict the variation on financial performance of KUNGAHARA SACCO-NYAKABANDA as adjusted R Square equal to 0.921 which means 92.1% the independent variable (Loan Management) predict the variation of dependent variable (financial performance of KUNGAHARA SACCO-NYAKABANDA expressed by financial sustainability and profitability in the model). However, the R of 99% indicates that there are other important variables that affect the financial sustainability and profitability of the KUNGAHARA SACCO-NYAKABANDA which are not captured by the model formulated in the study that account for about 24.67% variation not explained by the model.

The coefficient of correlation ( $R=0.99$ ) is greater than 0.5. This indicates that there is a positive and high relationship between Loan management procedures utilization and financial sustainability and profitability of KUNGAHARA SACCO-NYAKABANDA.

**Table 2: Analysis of variance**

| ANOVA <sup>a</sup> |            |                |    |             |   |      |
|--------------------|------------|----------------|----|-------------|---|------|
| Model              |            | Sum of Squares | df | Mean Square | F | Sig. |
| 1                  | Regression | 0.896          | 4  | .224        | 2 | .0   |
|                    | Residual   | 5.184          | 48 | .108        |   |      |
|                    | Total      | 6.08           | 52 |             |   |      |

*Source: Primary data, September 2019*

According to David W.S. (2007), when explaining ANOVA, in all the information presented in the ANOVA table, the major interest of the researcher is most likely focused on the value located in the "Sig." column, because this is the exact significance level of the ANOVA.

From the ANOVA statistics in the table above, the processed data, which is the population parameters, had a significance level of 0.012 which shows that the data is ideal for making a conclusion on the population's parameter as the value of significance (p-value) 0.012 (1.2%) is less than 0.05 (5%). The significance value is less than 0.05 and this is an indication that the model is statistically significant.

Therefore, we reject the null hypothesis and conclude that the goodness of overall model is statistically significant, meaning that this is a good model for explaining the improvement of loan management through the variation of finance generated by KUNGAHARA SACCO-NYAKABANDA.

**Table 3: Coefficients**

| Model 1 |                      | Unstandardized coefficient |           | Standardized coefficient | t     | Sig. |
|---------|----------------------|----------------------------|-----------|--------------------------|-------|------|
|         |                      | B                          | Std Error | Beta                     |       |      |
|         | (Constant)           | .218                       | .141      |                          | 1.608 | .039 |
|         | Membership enrolment | .239                       | .165      | .229                     | 1.653 | .045 |
|         | Client appraisal     | .241                       | .136      | .205                     | 1.071 | .029 |
|         | Credit risk controls | .392                       | .271      | .027                     | 1.087 | .032 |
|         | Collection policy    | .284                       | .157      | .413                     | 1.852 | .012 |

*Source: Primary data, September 2019*

From the data in the above table the established regression equation is:

$$Y = 0.218 + 0.239X_1 + 0.241X_2 + 0.392X_3 + 0.284X_4$$

The results tabulated above indicate that all (B) values are positive which means that there is positive relationship between Loan management and financial performance determined here by the financial profitability and sustainability of SACCOs specifically in KUNGAHARA SACCO-NYAKABANDA. That means the existence of a proportion of change of financial profitability and sustainability of KUNGAHARA SACCO-NYAKABANDA that results in the change of one of the predictors specified for the model.

From the above regression equation in table 3, it is revealed that membership enrolment, holding client appraisal, credit risk control and collection policy to a constant zero, financial performance of SACCOs would be 0.218. It is shown again that the coefficient of membership enrolment indicates a positive relationship with the financial performance indicators represented by financial sustainability and profitability. Membership enrolment of 0.251 is indicating that a slight change in new input in membership enrolment will increase the financial performance by approximately 0.239.

Accordingly, the coefficient of client appraisal of 0.241 indicates a positive relationship with the KUNGAHARA SACCO-NYAKABANDA's financial profitability and sustainability. The value of  $b=0.241$  shows

that an increased but weak percentage in client appraisal of the KUNGAHARA SACCO-NYAKABANDA generates an increase in the values of the financial sustainability and profitability by 0.241 units when this loan management determinant is employed alone. The coefficient of credit risk control of 0.392 indicates a positive relationship with KUNGAHARA SACCO-NYAKABANDA's financial performance. The value of  $b=0.392$  shows that an increased percentage in credit risk control in KUNGAHARA SACCO-NYAKABANDA generates an increase in the values of the financial sustainability and profitability by 0.392 units when credit risk control is employed alone. The coefficient of collection procedures of 0.284 indicates a positive relationship with KUNGAHARA SACCO-NYAKABANDA's financial performance. The value of  $b=0.284$  shows that an increase percentage in collection procedures of KUNGAHARA SACCO-NYAKABANDA generates an increase in the values of the financial sustainability and profitability by 0.284 units when this collection procedures determinant is employed alone.

The study reports the existence of positive association and significant course and effect between loan management and financial performance of KUNGAHARA SACCO-NYAKABANDA.

The results are agreed by Maiti (14) who carried out a study to answer the question what is the effect of credit policy on financial performance of SASRA regulated SACCOs in Nairobi. The study adopted correlation research design and revealed that regulated SACCOs had adopted credit standards as a credit policy and credit term policy loan ratio in determination of how much a client would borrow. The study concluded that credit terms policy significantly increased ROA of regulated SACCOs hence decreasing loan to assets ratio significantly leading to increase in financial performance.

## **6. Conclusion and recommendations**

This study analyzed the impact of loan management on the financial performance of SACCOs with case study of KUNGAHARA SACCO-NYAKABANDA. It was carried out for the period from 2014 to 2018. The study did a descriptive survey and used both qualitative and quantitative methods to find out how Loan Management impacts on financial performance of Savings and Credit Cooperatives. It was carried out on the sample size of 78 respondents selected by purposive sampling technique and simple random sampling technique.

It used both primary and secondary data collected using questionnaires, interviews and documentary review. Its hypothesis was verified by regression analysis model using the Statistical Package for Social Sciences (SPSS 20.00).

The study reported that membership increase, client appraisal, credit risk control and collection procedures are the most four used loan management determinants in KUNGAHARA SACCO-NYAKABANDA. All determinants of dependent variable (portfolio quality or loan repayment, financial efficiency and productivity, financial profitability and sustainability are the financial performance indicators) are influenced by loan management. Loan management impacts firstly on financial sustainability and profitability, secondly on financial efficiency and productivity and thirdly and finally on portfolio quality. The study reported also on the relationship between the predictor variables loan management determinants and the dependent variable (financial performance). On this, the results confirmed a positive and moderate correlation between loan management determinants and financial performance of KUNGAHARA SACCO-NYAKABANDA represented in the regression model by financial sustainability and profitability of KUNGAHARA SACCO-NYAKABANDA. With positive coefficients, the findings of the study revealed that Loan management usage move in the same direction with the financial performance.

### ***Recommendations***

1. The researcher recommends that the management should enhance marketing to increase the number of members hence increasing the capital base of the SACCO.

2. It is also recommended that the board of management must increase the ownership level and financial literacy to have basic financial skills enabling them interpret financial statements.
  3. The study recommends that SACCOs should enhance their collection policy by adapting a more stringent policy to a lenient policy for effective debt recovery.
  4. The study also recommends that there is need for SACCOs to enhance their client appraisal techniques so as to improve their financial performance. Through client appraisal techniques, the SACCOs will be able to know credit worth clients and thus reduce their non-performing loans.
- There is also need for SACCOs to enhance their credit risk control this will help in decreasing default levels as well as their non-performing loans. This will help in improving their financial performance.

Further research should also be done on the relationship between credit management and nonperforming loans on Savings and credit cooperatives in Rwanda and on the reasons for loan default in Savings and Credit Cooperatives from the clients' perspective.

## **References**

1. S. Abedi, Corporate Financial Management, New Jersey: Prentice Hall, (2000).
2. F. Boldizzoni, Means and ends: The idea of capital in the West, 1500-1970, New York: Palgrave Macmillan (2008).
3. B. Edwards, Credit management Handbook, ICM, (2004).
4. Gilbert A. Churchill, Basic Marketing Research, 2<sup>nd</sup> edition, the Dryden Press, U.S.A (2001).
5. A. Franklin, Statistics. Landon: the art and science of Learning from data , pearson Inc(2009).
6. L. T. Hosmer, Trust: The connecting link between organizational theory and philosophical ethics. Academy of management Review, 20 (1995) 379-403.
7. M. Inkumbi, Beyond the 5Cs of Lending,(2009).
8. J. N. Kariuki, Effective Collection Policy, Nairobi: KASNEB Publisher, (2010).
9. AA. Kinyondo, N. Okurut, Determinants of loan repayment performance in microcredit institutions : Evidence from Tanzania, Asia-African J. Economic, 9 (2009) 337-345.
10. RM. Kivuvu, T. Olweny, Financial Performance Analysis of Kenya ' s SACCO Sector Using the Altman Z Score Model of Corporate Bankruptcy, Int. J. Bus Soc. Sci, 5 (2014) 34-52.
11. H. Latifee, The future of Micro-Finance: Visioning the who, what, when, where, why and how of micro-finance; expansion Over the Next 10 Years, Grameen Trust publication, (2006).
12. Ledgerwood, Microfinance handbook: An institutional and financial perspective, Washington, The World Bank, (1999).
13. JJ. Magali, The Influence of Rural Savings and Credits Cooperatives Societies (SACCOS') Variables on Loans Default Risks: The Case Study of Tanzania, Eur. J. Bus. Manag, 4 (2013) 77-91.
14. S. N. Maiti, The effect of credit policy on financial performance of Deposit Taking Savings and Credit Cooperative Societies in Nairobi County.(Unpublished Master's Thesis), University of Nairobi, Nairobi, Kenya, (2015).
15. H. O. Moti, Effectiveness of credit management system on loan performance: empirical evidence from micro finance sector in Kenya, International Journal of Business, Humanities and Technology, (2012).
16. O.M. Mugenda, and A.G. Mugenda, Research Methods, Quantitative & Qualitative Approaches, Africa Centre for Technology Studies, ACTS press, Nairobi Kenya (2003).
17. A. N. Mwangi, Responses of Savings and Credit Co-operative Societies (SACCOs) to the challenges of competition in the Kenyan Financial sector: The case of SACCOs in Eldoret, MBA research project, University of Nairobi, (2011).
18. A. N. Ondieki, C. Okioga, D. K. Okwena, A. Onsase, Assessment of effect of external financing on

19. I. M. Pandey, Financial Management. Vikas Publishing House (PVT) Ltd, New Delhi,(2008).