

**CREDIT RISK MANAGEMENT INITIATIVES AND FINANCIAL
PERFORMANCE OF SACCOS UNDER THE UASIN GISHU
ENTERPRISE DEVELOPMENT FUND**

BY

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DECLARATION

Student's Declaration

I declare that this research project is my original work and has never been presented for a degree in any other university.

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Supervisor's Declaration

This research project has been presented for examination with my approval as the University Supervisor.

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DEDICATION

I am dedicating this work to my sister Hita Mamet, my loving children, Tevin Kigen and Talia Jemutai, my wife Carolyne Kosgei, my parents, Lawrence Tanui and Constantine Koima, lastly to the entire family for their enduring support.

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LIST OF ABBREVIATIONS AND ACRONYMS

CEDF:	County Enterprise Development Fund
SACCOs:	Savings and Credit Cooperative Societies
NPL:	Non Performing Loans
SASRA:	Sacco Society Regulatory Authority
GDP:	Gross Domestic Product
REDF	Revolving Enterprise Development Fund

ABSTRACT

While the County enterprise development fund (CEDF) have embraced credit risk management initiatives in the running of the SACCOs within Uasin-Gishu County, many of the SACCOs are still faced with the challenge of a high number of non-performing loans. The study sought to determine the effects of Credit risk management initiatives and financial performance of SACCOS in Uasin-Gishu under the County Enterprise Development Fund. The study was guided by modern portfolio and principal agent theory theoretical frameworks. Literature was reviewed according to the themes of the study from various credible secondary sources of data. The study did employ descriptive survey research design. The target population of the study was obtained from one official from the 320 active registered SACCOs and 9 members of the CEDF management board. Sample size of the study was 178 respondents obtained using Yamane sample size determination formula; census sampling technique and stratified simple random technique was used as the sampling technique to obtain the sample size from the target population. The study did use primary and secondary data for the study in which the primary data was obtained from questionnaires, interview schedule and data capture forms. The collected data was coded; processed using both inferential and descriptive statistics with the aid of statistical package for social sciences (SPSS) and findings were presented in statement form and in frequency distribution tables. Study findings showed that: credit policy, interest rate management, financial review and debt collection and recovery have significant relationship with financial performance of SACCOs.

CHAPTER ONE: INTRODUCTION

1.1 Background

Financial institutions often advance credit to borrowers in form of loans for which the borrowers are expected to pay back with some interest. This exchange however presents conflicting circumstances particularly with the lack of harmony between attainment of maximum profit by the borrower and minimizing of risk for the lending bank. As described by Bluhm, Overbeck and Wagner (2010), credit entails providing resources in form of a loan by one party to another where the latter does not make an immediate reimbursement, thus generating a debt. According to them credit risk is the potential that the borrower is likely to fail meeting their obligations on the terms of agreement (Bluhm, Overbeck & Wagner, 2010). Credit risk management therefore aims at maximizing the lender's returns within acceptable risk conditions of credit. It forms an integral part of any sound financial institution given that lending is a risky venture which requires prudent steps to be taken to ensure that loans given to borrowers are repaid on time in order for any lending institution to have a quality loan book.

To this effect Shah (2007) advocates for adoption of credit initiatives which include controls put in place to objectively offer reasonable comfort in relation to the dependability of financial lending. Some of these initiatives include; credit policy, undertaking regular operational checks aimed at maintaining healthy loan portfolios and having efficient recovery mechanism supported by legal framework. According to Fadum (2013) a successful implementation of these initiatives, will always have a high chance of improved financial performance. The theories forming the bedrock of this study are; the Modern portfolio Theory (Markowitz, 1952) where portfolio diversification is

considered a game changer to a number of successful SACCOs. In minimizing the risks associated with lending to individuals, SACCOs can embrace the element of diversification through identifying high-risk and low-risk loan applicants. This will provide a balance between the social role of loan provision by these SACCOs and their financial viability. The Principle-Agent Theory developed by (Reekie & Crook, 1995) on the other hand presents County Enterprise Development Fund (CEDF) Managers as the Agents of Uasin-Gishu County Government (The principal) who lend to SACCOs within the County. The agent therefore takes up roles on behalf of the principal with an aim of maximizing the benefits of the principal. A successful agent–principal relationship however will require that an environment is created where the agent’s initiatives align with those of the principal (Gauld, 2016).

While Credit Risk Management initiatives have been widely practised in established financial institutions such as Commercial Banks and Insurance Companies, it is hardly employed by SACCOs, and this has had tremendous effect on their financial performance. With heightened competition and advancement of credit to low income earners whose rate of defaulting is high, SACCOs experience a heightened credit risk level which if no effort is put in adopting effective and comprehensive credit risk initiatives to minimize credit risk, the financial performance of such institutions still remain a concern.

1.1.1 Credit Risk Management Initiatives

The framework for managing risks associated with advancement of loans to borrowers is known as credit risk management (AIRMIC, Alarm & IRM, 2010). The approach to

managing such risks in any financial institution enables the institution to factorize the potential consequence of presented risks in the lending process through effective initiatives. Implementation of a comprehensive plan or initiatives will benefit the SACCOs in terms of loan performance. There are various types of risks associated with lending, this includes, liquidity risk (failure of an entity to meet short term obligations), political risk (political uncertainties), credit risks (failure of a borrower to repay back the loans). The above risks among others if they are not properly managed from the onset, may lead to collapse of lending institutions. This study focused on credit risk practises initiated by the County Enterprise Development fund in order to safe guard loans granted to registered SACCOs within the County from turning in to bad debt, which ultimately may lead to the collapse of the Revolving Fund. Exclusion of low income earners or poor households is largely a major challenge that hinders the economic advancement of our country (Omwoyo, 2016). Worse still, extending financial credit to poor households is essentially risky because in most cases they lack collateral to act as security to safeguard the loans. Most of them therefore, seek financial support through informal lenders commonly referred to as “shylocks” who take advantage of their desperation. Some Online platforms such as TALA, BRANCH do charge client interest of 10% per month, translating to 120% per annum, which is quite expensive. The formation of the County Enterprise Development Fund (CEDF) is therefore to help this poor category of people in society to meet their daily necessities through low interest loan acquisition (Cabo *et al.*, 2006).

1.1.2 Financial Performance

According to Borba (2005) Financial performance of an entity is best explained "in terms of maximizing the owners' wealth" (p. 39). The reflection of an institution's outcome showing the overall financial health of the institution over a specified period of time, usually a year is known as its financial performance (Naz, Naqvi & Ijazz, 2016). The financial performance of firm therefore demonstrates how well the firm is utilizing its resources geared towards maximization of shareholders' wealth and profitability. Important to note is that the performance of an organization can be measured either in financial terms or based on its non-financial properties. The financial performance being the paramount consideration of this study is usually the measure of the profits and equity of an enterprise as it concerns the cost efficiency of a firm to achieve its financial goals (Achoun & Tengoh, 2008). In essence, the extent to which an organization's financial health helps in generating more sales, business worth and improving profitability for the shareholders by managing the current and non-current assets, equity, financing, revenues as well as expenses.

While financial performance is measured in terms of profitability and return on assets, this particular study measured the performance based on increase in loan repayments and loans uptake. In advancing loans to borrowers, lending institutions are usually expected to evaluate the loan request putting into consideration a number of factors among them the ability of the borrower to pay back the loan based on either past earnings, income projections or both (Copisarow, 2000). While increased loan repayments are attributed to a better financial performance of a lending institution, loan repayment defaults

demonstrate a borrower's failure to repay the principal amount and agreed upon interest within a specified period of time when the debt is due (Woradithee, 2011).

A high loan uptake on the other hand is an indication of a good financial performance of the institutions while low levels or reduced loan uptake display a poor financial performance (CBK, 2016). According to the Bank supervision annual report by central bank of Kenya, there was an increase in gross loans by 5.6 percent between the year 2015 and 2016 which was attributed to increased demand for credit facilities in various sectors of the economy.

The two metrics, loan uptake and loan repayment was therefore used in this study to measure the financial performance of the SACCOs as they defined both good and bad financial performance of the lending SACCOs.

1.1.3 Credit Risk Management Initiatives and Financial performance of SACCOs

The risk that a financial institution will incur losses due to a deterioration of a borrower's financial position to repay is defined as a credit risk (Bluhm, Overbeck & Wagner, 2010). There may be high risks that borrowers may fail to pay back advanced credits thus financial institutions should manage the risks associated with loans by employing effective credit risk management initiatives. Implementation of these initiatives as a way of mitigating the possible losses associated with financial lending still remain a challenge for many financial institutions (Oviatt & McDougall, 2005) hence heavily impacting on their financial performance. Optimization of a risk-reward trade-off is an objective that every financial institution should meet so as to be in operation. The Credit risk management initiatives established by CEDF whose sole objective is to give loans to

SACCOs within Uasin-Gishu County has a major influence on their performance and therefore this particular study will establish whether these credit risk management initiatives have either a constructive or undesirable effect on the performance of SACCOs.

1.1.4 SACCOs Within Uasin-Gishu County

Savings and Credit Cooperative Societies (SACCOs) play essential role in the advancement of society and economy as a whole and

and have really contributed to the growth of Kenya's Gross Domestic Product (GDP). A SACCO is defined by the UN-HABITAT (2010) as an institution whose sole purpose is pooling savings for its members to provide them with credit facilities in future. In 2012, the United Nations made this recognition by endorsing the cooperatives as a measure to subdue the deficiencies in the regulated financial institutions (Perilleux, 2013). The establishment of cooperative societies was therefore considered a strategy to correct a gap in the market.

According to the report from the ministry of cooperatives in Uasin-Gishu County, the County Commissioner of cooperatives maintained that there were a total of 625 registered SACCOs in the county; this was also read out by the Governor in 2018 during the year's Ushirika Day Celebrations marked within the county grounds. Of the total 625 registered SACCOs, 320 SACCOs were recognized as being active. The SACCOs comprised; Savings and Credit Cooperative Societies (aimed at providing financial support to its members through member savings from which loans are granted to them at affordable rates with a minimum number of 30 members), farmers cooperative societies (mainly

farmer based aimed at marketing their farm produce while enjoying the economies of scale), housing cooperative societies (which are concerned with real estate enterprises either for commercial purposes or for members' residential needs and consists of minimum of 100 members); consumer cooperatives societies (mainly dealing with buying and selling products which are produced by other Companies e.g. owning a supermarket or an Agrovet shop), Farmer Based SACCOs (mainly comprising farmers producing similar produce like milk or cereals coming together to sell their produce as a group or buying farm inputs) members) (Gatuguta, Kimotho & Kiptoo, 2014).

The County government of Uasin-Gishu drew an ACT of the County Assembly that sought to establish a Revolving Enterprise Development Fund (REDF) strictly for the Co-operative sector within Uasin-Gishu County (RoK - Kenya Gazzette, 2014).The Fund was aimed at providing low-interest loans to cooperative institutions seeking to promote the economic welfare of the people of Uasin-Gishu County and for other related purposes.

SACCOs have a role in ensuring that the funds provided by the CEDF are properly safeguarded and effectively used for the purpose to which they were intended. It is however important to acknowledge that doing business sometimes imposes unnecessary risks to any enterprise and taking up such risks is the order of the day in society today (Carrasco, 2004).

According to Munker (2002), formation SACCOs are not instrumental to the provision of direct financial help to the low income earners and the marginalized, but more of value addition focus to enabling groups of people who help themselves through joining cooperatives and borrowing to boost their enterprises.

It is against this backdrop that most funds extended by the County Enterprise Development Fund on behalf of the county Government to the SACCOs had not been well repaid despite the risk management initiatives employed by the managers of the fund. Therefore, the study sought to determine the effect of these initiatives on the financial performance of SACCOs under the County Enterprise Development Fund.

1.2 Research Problem

Despite good credit risk management initiatives implemented by the CEDF, a huge portfolio of loans given to SACCOS were Non-performing and hence lead to poor financial performance of SACCOS, the industry standards on the minimum acceptable levels of a portfolio to be declared as non performing is usually at or below 5% of the entire loan book, this is according to the Central Bank of Kenya (2008) prudential guidelines on lending. The scenario at the CEDF was way above this minimum acceptable standard.

The fact that the establishment of SACCOs is geared towards assisting the marginal poor and small entrepreneurs, through access to low interest financial borrowing, they had failed in meeting this objective satisfactorily as a result of redundancy of loans (Akide, 2005). In contrast to the established financial institutions like commercial banks, SACCOs do not demand collateral from their members to enable them access credit facilities. Instead, they only require guarantee of other SACCO members to access financial credit (Kurui & Kalio, 2014). This had exposed SACCOs to hefty risks such as default payment, leaving the SACCOs with no choice but to pursue the guarantor members in recovering the monies lend out. This in turn affected the performance of

SACCOs which lead to the failure of these Revolving funds to practice their core mandate with the fear of the vicious cycle.

There are several global studies that have been done revolving around the topic. In a study conducted by Chakabva and Thurner (2015), microfinances are significant entities to the economy in the provision of financial facilities to the low income earners. The two emphasized that it is however a risky venture to lend to the low income individuals. In their article, they therefore assessed employment of some risk management initiatives for those who provide finance to SME's in Cape Metropolitan Area. Due to inadequate collateral to access credit facilities from microfinances, they established a close link between microfinance enterprises and borrowers. Their study found out that even though there could be written credit risk policies in place, the observations on risk initiatives are dependent on if the person making approvals is the owner or employee of an enterprise. They therefore recommended that enterprises should develop credit policies that are acceptable and workable with all parties involved in a credit transaction (Chakabva & Thurner, 2015).The study was done in Metropolitan Area and no single study had been done in Eldoret, Uasin Gishu County, where this study was mainly focused.

Local studies have also been done on the topic. A study conducted by Njunge (2014) with an aim to establish the effect of credit policies adopted by SACCOs on their performance in Kiambu District showed that there were stringent credit policy used by SACCOs which resulted to delayed service delivery and limitations on the amount of loans given. A weak credit policy would not help the situation either, as a result, most of SACCOs collapsed over poor management of credit risks which led to high degree of non-performing portfolios. This study therefore tried to answer the question, was there an

effect of the Credit risk management initiatives on financial performance of SACCOs under the County Enterprise Development Fund?

1.3 Research objective

The study sought to determine the effect(s) of credit risk management initiatives on financial performance of SACCOs within Uasin-Gishu County.

1.3.1. Research hypothesis

HO:₁ There is no significant relationship between credit risk management initiatives and financial performance of SACCOs

1.4 Value of the Study

This study will offer real benefits to the policy makers in and outside government to help them formulate good policies relating to access of discounted credit facilities given to SACCOs. This is in relation to county enterprise development fund; the government should deem it necessary to develop policies to address the various challenges hampering its operations.

The study will also benefit the CEDF's management in providing independent and unbiased credit determination. In this, the study will furnish the managers and board of Directors across the other 46 counties whom they have established such Revolving Funds with invaluable information on effective credit risk management initiatives.

Scholars and academicians will benefit from this study as it opens up new areas for research. The study therefore adds to the body knowledge on risk initiatives and SACCO performance

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The section discusses the theoretical framework covering the theories that will guide the study. More so, it reviews literature related to the initiatives of credit risk management as operationalized by the study in relation to financial performance of SACCOs. The empirical studies reviewed entails works from other scholars which may necessarily not be specific to the SACCO performance and this will help in identifying the gap in literature. The chapter also presents the conceptual framework upon which this study will be modeled pointing out the relationships between the dependent and independent variables.

2.2 Theoretical Review

In this section, the researcher discusses some of the theories upon which this study will be driven. The theories discussed in this section are; the Principal-Agent theory and Modern portfolio theory both of which were reviewed in relation to the credit risk management initiatives and financial performance.

2.2.1 Modern Portfolio Theory

This Theory was proposed by Harry Markowitz (1952) by stating that investors are able to diversify their risks by investing in a portfolio of assets as opposed to ‘placing all eggs in one pool’. The Selection that is optimal guarantees good returns. Institutions continue to efficiently adopt modern portfolio theory and SACCOS are not left behind with their hitherto culture of savings without investments, SACCOs are nowadays diversifying their investment in a pool of various portfolios like borrowing funds from the CEDF and

investing in viable projects which in the long run will help repay the small interest on borrowed funds and help them grow exponentially as opposed to relying strictly on member funds. The modern portfolio theory is therefore a concern that an investor balances between returns' maximization and risk minimization which is indeed simple to apply. This theory relates to the current study such that SACCOs are considered risk averse and that provided two portfolios with similar expected return, they will choose the one with less risk. SACCOs will therefore only give high risk loans only if the expected returns are high. On the other hand, if the lending institutions want higher returns they should accept more risk hence the need for risk management initiatives. While this theory does not substitute the part of an informed investor, it can offer a powerful tool to match a keenly managed portfolio.

2.2.2 The principal-Agent Theory

This theory as initiated by Reekie and Crook (1995) advocates for the principal-agent rights and responsibilities in undertaking their daily operations. According to Reekie and his colleagues, in the principal-agent theory, one of the parties referred to as the principal, usually delegates the other particularly known as the agent some of the responsibilities that entail making decisions so as to transact businesses on behalf of the principal and in their own best interest. The principal entrusts the agent with the responsibility since the effort of the agent have a significant effect of the former's welfare. This theory assumes that both organizations and consumers are focused to the objective functions of profit and utility maximization. It also assumes availability of perfect and free information to all contracting parties (Wolf, 1999). The importance of this theory in the study is a case

where the County Government acting as the Principal, entrusts the (CEDF) who acts as an agent with an obligation of making sure that the money lend to SACCOS are fully repaid back.

2.3 Determinants of Financial Performance

The financial performance of SACCOs is significant to not only its members but also for investors, as well as scholars in understanding its determinants. According to Gamba and Komo (2005), the financial performance of cooperative societies in Africa and particularly in Kenya is influenced by a number of factors among them inadequate human resource, governance, limited products and services, weak regulations and supervision, low marketing and innovation as well as the general image of the firms. Their study also pointed out other areas as lack of adequate planning, lack of awareness among SACCO members, organizational structure issues among others. While poor information technology, low capitalization, high taxation and interest rates, inadequate financial standards, and low saving culture among the SACCO members remain significant determinants of SACCOs' financial performance, this study focused on four major factors. Thus the study defined the four factors influencing financial performance as credit policy, interest rate management, financial review (Audit) and debt recovery strategies. The four determinants are as discussed in the next section of empirical studies.

2.4 Empirical Studies

Various developments in the field of credit risk management and firm performance have been made by different scholars but these studies remain scanty and unsatisfactory. In this section, the researcher reviewed several studies that had been done by different scholars on the research topic.

2.4.1 Credit Policy and Financial Performance

Any financial lending firm should have a credit policy in place approved by the board. A credit policy is a written guideline explaining the conditions, under which a credit risk is identified, measured, evaluated, monitored, reported, controlled and mitigated both from an individual's perspective and portfolio management (Pandey, 2001). According to Pandey, an effective credit policy has a significant influence on the performance of financial institutions through improved information sharing. Communication among the stakeholders is a crucial factor to enhance interaction among the financial institutions in this case the County enterprise development fund and the borrowing SACCOs. The two need to have defined standards of operation on credit applications and approvals. This has pointed out by Pandey (2001) will eventually help to maintain a good relationship in terms of growth the of the Fund as well as the expansion of SACCOs

The credit policy will help in determining the customers to whom the credit facilities can be extended and clearly define which companies based on prevailing circumstances the financial institutions should avoid (Christen & Rosenberg, 2000). According to Christen and Rosenberg, credit policy enables the evaluation of a borrower's position subject to their cash flow trends, capability of businesses ventures focused on the expected returns and the capital position of the customer. Good procedural policies will promote the ability of the SACCOs to take up funds which are given as loans to their registered members. Credit policies that are tight however, makes an institution lose customers especially due to increased loss risks through bad debts, hence lack of a clear credit policy increases bad debts and non-performing loans.

2.4.2. Interest rate management and Financial Performance

For effective and profitable investments, interest rates play a crucial function, as attractive an rate means increased loan uptake while high interest rates forces borrowers to seek other financial options. In a study carried out by Fuentes and Maquieira (2003) focusing on the legal framework on developing credit market and management non serviced loans, it was established that interest rates largely affected non performing loans more than the business cycle. The study had adopted use of yearly time series data for the year (1960-1997). A conclusion was made that information sharing and deep financial market liberalization had a positive relationship with development of credit market.

A study conducted by Ngugi (2001) examined Kenya's interest rates and established a growingly wide interest-rate spreads. This was spread out because of lack of control of interest rate like what is currently witnessed on capping .This was "characterized by high levels of hidden costs and constricted monetary policy" realized by increase in reserves and cash ratios as well as a decline in non-performing assets. According to Ngugi, 'highly non-performing loans are a reflection of the poor economic environment and strained borrowing' attributed to lack of additional source of credit. As banks therefore increase the interest rate on loans, individuals are driven to seek other sources of borrowing, preferably from SACCOs and other cheap means.

2.4.3 Financial Review and Financial Performance

Review of finances entailed the audit process which formed the basic part of correspondence between management and borrowers and enables smooth operations of financial institutions streamlining transaction procedures undertaken by a firm.

Bennett and Kerr (2010) in their study carried out in Netherlands, offers that auditors ought to develop strategy for handling audits towards achievement of organizational goals. A cohesive coordination of activities such as the planning process, the implementation process, monitoring and evaluation (Bennett & Kerr, 2010) is therefore paramount. Financial institutions including the SACCOs are keen on the quality of auditing without consideration to the financial performance of institutions.

In a study carried out by Cohen and Sayang (2010), on the feasibility of auditing, they considered nature of the work, internal auditor's proficiency and private verses open auditors, confirmed that to complete an a financial review, the management's support is crucial. They also mentioned other factors as capability of the person conducting the financial reviews and authoritative freedom which makes the reviews adequate. Financial institutions that include SACCOS and Revolving enterprise development funds that have an effective audit plan experience less or zero errors in their financial statements and requires less time to check accounts statements. In essence, audit planning helps the overall SACCO organization with an opportunity to arrange and organize their books of accounts neatly and to be in order for ease of the person conducting the financial reviews with an easier time while undertaking his work. It Means, financial review planning helps to point out key risk in audits within the SACCO and the procedures the SACCOs in-house financial events, another role for the person conducting the financial reviews, in this case the Cooperatives Auditor is to provide overall control and get the entire testing done before and after the end of financial year, this will be in readiness of the external auditor. Although, preparing the audit plan for SACCOS has been the most cumbersome job more so when there is absolutely lack of strategic plan for the SACCO being

implemented previously to guide their growth path and avoid the management from being tempted to venture into non-core business activities. It is in public domain that the famous Moi University SACCO is being placed under receivership because of investing huge portion of their capital to putting up the tallest Plaza in Eldoret town against the wishes of nearly half the members as well as Auditors.

The Ethiopia National Bank (2010) indicates that financial reviews should be conducted by autonomous financial experts of a given institution on frequent basis to give a healthy check on the status of credit facilities, that it should have been given in harmony with the laid down credit policies and procedures; timely feedback on potential threats should be presented to Board of Directors and top management; potential weaknesses acknowledged and immediately conveyed to the highest levels of authority; top management level are also notified of concessions to stipulated policies and procedures', Generally, financial reviews are done to the SACCOs before they are considered for loans by the Enterprise Fund, this plays a crucial role in mitigating loan defaults.

2.4.4 Debt Recovery and collection in Relation to Financial Performance

Strategies for collection of debts or debt recovery may be specific to individual institutions but are often influenced by common aspects such as the lack of affective penalty measures for defaulters delayed payments. Nyanumba (2010) notes that most often, debt collection issues may arise due to lack of staff within the financial institutions or may be as a result of the organizational structure. Some institutions therefore end up outsourcing staff so as to use debt collection agencies, who, in most cases are experienced in handling corporate, or high income borrowers as opposed to low income

earners represented by majority of customers in the SACCOs. Mori (2006) points out that using external agents for debt collection or debt recovery may not portray the same ethical standards as would have been with the lending firms themselves hence loss of confidentiality by the customers.

Debt collection processes may prove cumbersome and sometimes often turn out negative. The process can be also expensive especially in terms of the product expenditure and loss of good will (Tandelilin, Kaaro, & Supriyatna, 2007). Efforts for debt collection may involve following up and forcing guarantors to pay, attaching mandatory savings to the loan accounts, attachment of collateral assets and courts litigation, and to safeguard the loans taken. Regulated SACCOs can also include telephone calls, demand letters and face to face interaction with SACCO or fund officials to enforce legal procedures. The County Enterprise Fund can incorporate capacity building initiatives to sensitize members on the importance of repaying their loans well, this are achieved through benchmarking and pairing performing SACCOS with those that are not performing.

According to Zimmer (2003) the debt collection policy is usually put in place to enhance prompt payments and regular debt collections. The procedure for debt collection therefore is necessary for customers who fail to repay the loans in advance. In such case of failure to pay the loans, debt recovery strategies are adopted to accelerate the collection process so as to avoid bad debts. In the same vein, Dawkin (2010) also cited that timely payments are aimed at increasing turnover rates and keeping in check, bad debts. As a result, debt recovery efforts are driven towards acceleration of loan recoveries from slow payers and reduce chances of bad debt losses while increasing profitability of the SACCOs.

2.4.5 Credit Risk Management Initiatives and Financial Performance of SACCOs

Many studies have been done relating to factors influencing financial performance of financial institution and one of them is Credit risk. Effective risk management has benefits to all types of organizations (Ranong & Phuenggam, 2009). The same authors argue that both private and public entities, large or small organizations have chances of improving their performance when they adopt appropriate risk management tools. Risk mitigating strategies save the company the cost of dealing with risks after they have occurred. It should be noted that the main aim of management of risk is to minimize the extent of negative damage in the event of risks materializing. It is thus, of crucial importance to define the risk exposures of SACCOs, identify mitigating procedures and keep monitoring the process to ensure it is working as intended. It is true to say that SACCOs are indeed faced with major risks owing to the fact they operate in a volatile financial environment.

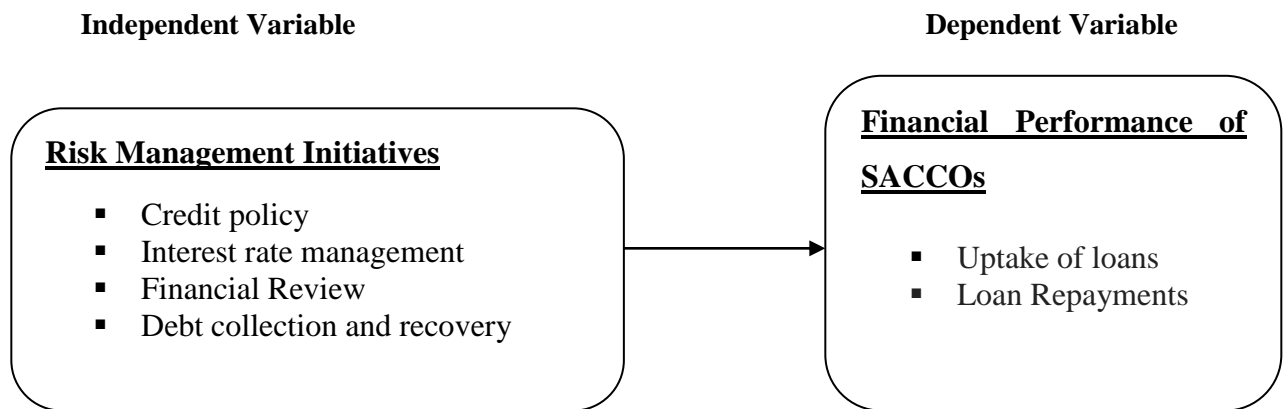
The management of risks should be an integral part of strategies employed by SACCOs in the county. According to Fadum (2013) where there is a successful implementation of Enterprise Risk Management Initiatives (ERMI), there is a chance of improved financial performance due to minimized loss exposures. Njiru and Mengich (2015) found out that risk analysis had substantial effect on financial development of SACCOs in Nakuru County. Mwirigi (2006) identified that the initiatives was regarded highly by the management of SACCOs in order to “mitigate on the performance of loans”. Wasike (2012) indicated that ‘the growth of SACCOs since the 1970s was remarkable’.

According to Kivuvo and Olweny (2014), the SACCO sector plays a crucial role in a country’s socio-economic endeavours, with great contribution to the Nation’s GDP. The

general management is always faced with the challenge of increasing returns consequently, increasing risks. Bankruptcy is a major challenge to SACCOs, hence a form of financial deficiency that an institution cannot operate well. There is a heightened regulatory environment in Kenya emphasizing on minimum the core capital for SACCOs and developed financial institutions; others include the reporting standards such as International Financial Reporting Standards (IFRS 9). SASRSA, the regulatory arm of Government equivalent to Central Bank of Kenya on licensed Commercial Banks regulates registered deposit taking SACCOs and plays a crucial role in guiding SACCOs interested in growing their portfolio to accommodate receiving deposits from the general public (Kivuvo & Olweny, 2014). The Ministry of cooperatives also plays a big role.

2.5 Conceptual Framework

Figure 1.1: Model



Source: (Author, 2018)

2.6 Summary of the Literature Review

Lagat, Mugo and Otuya (2013), found out that credit risk management was a crucial aspect in SACCOs lending procedures. Their study identified that risk management helped in sustaining the SACCOs' profitability and stability. In as much as their research has been done on SACCOs and risk management, the concern was not on relating Credit Risk Management (CRM) and performance of SACCOs in Uasin-Gishu, Kenya which this study is focused on. This study will seek to establish the influence of credit risk management as a holistic approach, on the performance of the SACCOs with a direct bearing on survival of County Revolving Funds.

The study by Ranong and Phuenggam (2009) examined the critical success factors for effective risk management processes in financial institutions. Their argument is that institutions better their performance if they make use of appropriate tools for risk management. Their study was however conducted in Thailand which is a developed country contrary to Kenya which is underdeveloped. It is thus appropriate to define the risk exposures of SACCOs in developing economies, and identify mitigating procedures, a case sought by this research.

2.7 Study Gap

In the previous section, a summary of the reviewed literature is provided and based on this, it is clear that the current study is worth conducting to establish the effect of credit risk management initiatives on the financial performance of SACCOs in Uasin Gishu County. In Ranong and Phuenggam's (2009) study focus was on critical success factors for effective risk management processes not considering that despite the succession of financial institutions through effective risk management procedures, firms may still fail

under other circumstances hence this study looks at both success and failure in performance of the firms. In a research undertaken by Lagat, Mugo and Otuya (2013), they identify the concept of credit risk management as a whole without a mention of some of the risk management initiatives; this study therefore fills that gap by pointing out some of the initiatives that enhance SACCO performance.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

Chapter Three presents the methodology that was used in conducting this study. The chapter hence discussed the research design used, the target population for the study, sample size pointing out the techniques used in determining the sample size. Further the chapter explains the instruments used to collect data and finally the various methods that was used to analyze data.

3.2 Research Design

According to Kothari (2009) the definition of a research design is explained to mean the structure under which a research is carried out and clearly shows the established methods and procedures used in collecting and analyzing measures of the variables detailed in the research problem. In addition, a research design comprises a blue print for data collection, measurement and analysis (Donald & Pamela, 2011). The study used descriptive survey research design which is concerned with collecting quantitative data to establish the what, who, when where and how of a phenomenon (Donald & Pamela, 2011). The study design was of importance because it enabled adequate coverage of large amount of data from the target population which included all the active registered SACCOs in Uasin-Gishu County.

3.3 Target Population

The target population in any research refers to the persons, companies, and entity with the hope to investigate (Black, 2008). The researcher in this study targeted one official from the 320 registered and active SACCOs in Uasin-Gishu County and it comprised the following; 22 Savings and Credit Co-operative Societies, 47 Housing Co-operatives

Societies, 53 Consumer Co-operatives Societies and 198 Farmers based Co-operative Societies. Additionally, a total of 9 members drawn from the board of management of the County Enterprise Development Fund (CEDF) were also targeted and they comprised of the Director (acting as the Chief Executive Officer (CEO) and Secretary to the Board), legal manager, Management Information System (MIS) personnel, credit manager, administrator and four independent committee members drawn from various commercial banks with lending background. Meaning the entire target population of the study were 329 (320+9) respondents.

3.4 Sample Size and Sampling Techniques

A sample size as advanced by Oso and Onen (2008) is a representative number of items to be considered for investigation so as to gain dependable data or information. The study employed the use of non-probability and probability sampling techniques. The study also employed a census technique where a total of 9 respondents from the CEDF were purposively selected because they are well versed with the information both of the fund as well as that of the SACCOs while stratified simple random sampling technique was used to select sample size from the 320 active SACCOs. The study applied Yamane (1967) sample size determination formulae to obtain the sample size of the study. This is because the method is suitable in determining the sample size for proportions and stratified population. The study sample size based on 95% significance level is computed as follows;-

$$n = \frac{N}{1+Ne^2}$$

Where n =the sample size

N = the size of population

e =the error of 5 percent (level of precision)

$N=320$, and $e =0.05$ therefore, sample size $n=177.78$ when rounded to the nearest digit, it give a sample size of 178 which was obtained from the target population using stratified simple random technique proportionately as shown on the table 3.1.

Table 3.1 Sampling Framework

Strata	Target Pop	Sample Pop
Savings and credit Cooperative Societies	22	12
Housing Cooperatives	47	26
Consumer Cooperatives	53	30
Farmer Based cooperatives	198	110
Total	320	178

(Source: Author, 2018)

3.5 Data Collection

This research used both the primary and secondary data to attain the correct information that informed the study. Primary data was collected using self administered questionnaires to the SACCO officials and the interview schedule was used for CEDF board of management, secondary data on the other hand was obtained through review of literature and CEDF databases. Kothari (2009) recommends that the use of questionnaire for business and economic survey is dependable since it is usually unbiased in nature and one is able to capture large data.

3.6 Data Analysis

Data was collected, processed and analyzed using inferential statistics aided with the use of (SPSS) version20 software. Inferential statistics employed multiple regression models to test relationships between dependent and independent variables. Descriptive statistics was used to indicate measures of central tendencies like mean. It was also used to indicate measures of dispersion such as standard deviation. Frequency distribution tables inform of mean and standard deviation were used to show comparison of the collected data. The qualitative data from the interview guide collected from the 9 members of the board was first organized, arranged and analyzed using content analysis and was presented in statement form.

3.6.1 Multiple Regression Model

In this study, regression analysis was used to test significant effect of independent variables on the measures of how SACCOs performed. The assumptions in the regression model were tested for Variations. Linearity showed a mathematical function which was graphically exemplified as a straight line to show Performance of SACCOs.

The regression model for this study took the form:

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

Where:

Y = Performance of SACCOs

a = (Alpha) is the constant measuring sensitivity of X to unit change of Y

β_i = coefficient for X_i ($i=1, 2, 3, 4$)

X_1 = Credit policy

X_2 = Interest rate management

X_3	=	Financial review
X_4	=	Debt collection and recovery
ε	=	Estimated Error term

3.6.2 Assumptions of Multiple linear regressions

Multiple linear regression analysis made some assumptions which include: assumptions of linearity, multivariate normality, no collinearity (the variables should not be highly correlated) lastly, is the test of independence of errors.

3.7 Operationalization of the Study Variables

The present study measures risk management initiatives in terms of the initiatives put in place by the Uasin-Gishu County Enterprise Development Fund (CEDF) that include; credit policy, interest rates Management, financial review and finally debt recovery and collection strategies. The initiatives form an integral part of the enterprise's overall risk management strategy.

The dependent variable on the other hand entails the uptake of loans and repayment of loans which is consolidated into the flow of funds within the SACCO. While a high inflow and outflow of funds would mean improved performance, a low cash inflow and outflow is attributed to low or poor financial performance of the SACCOs.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

4.0 Introduction

Data was analyzed objectively to determine the effect of credit risk management initiative on performance of SACCOs under Uasin-Gishu Enterprise development fund. Descriptive and inferential statistics were used to analyze the data.

4.1 Questionnaire Response Rate

A total of 178 questionnaires were issued to the respondents, and total of 170 were fully filled and returned for analysis. This represented a 95.51% questionnaire response rate. According to Kothari (2010) when the rate is 75%, then it is appropriate to continue with the study. A total of 9 respondents were subjected to an interview schedule. This was carried out on the Board members of the County Enterprise Development fund (CEDF). Table 4.1 shows questionnaire response rate as well as the interview schedules rate.

Table 4.1 Questionnaire and Interview schedule response rate

Questionnaire Issued	Questionnaire returned	Questionnaire response rate
178	170	95.5%

(Source author, 2018)

4.2 Background Information

The study sought to find out personal and work related information which includes: gender, age bracket, rank in the SACCO, years SACCO in operations, work experience, level of education and form of risk mitigation strategies used in the SACCO. Table 4.2 presents background information of the respondents.

Table 4.2 Background information

Categories		Frequency	%	Valid %	Cumulative %
Gender	Male	122	71.8	71.8	71.8
	Female	48	28.2	28.2	100.0
	Total	170	100.0	100.0	
Age bracket	18- 25	2	1.1	1.1	1.1
	26-30	9	5.3	5.3	6.4
	31-55	18	10.6	10.6	17.0
	36-40	60	35.3	35.3	52.3
	41-45	76	44.7	44.7	97.0
	46& above	5	2.9	3.0	100.0
	Total	170	100.0	100.0	
Rank in SACCO	Manager	143	84.1	84.1	84.1
	Supervisor	27	15.9	15.9	100.0
	Total	170	100.0	100.0	
Years SACCO has been in operation	Less than 1 year	5	2.9	2.9	2.9
	1-5 years	39	22.9	22.9	25.8
	6-10 years	105	61.8	61.8	87.6
	Over 10	21	12.4	12.4	100.0
	Total	170	100.0	100.0	
Years worked in SACCO	0-3	125	73.5	73.5	73.5
	4-6	29	17.1	17.1	90.6
	7-10	9	5.3	5.3	95.9
	Over 10	7	4.1	4.1	100.0
	Total	170	100.0	100.0	
Level of education	Postgraduate	3	1.8	1.8	1.8
	Graduate degree	5	2.9	2.9	4.7

	College certificate	30	17.6	17.6	22.3
	Secondary school	132	77.6	77.7	100.0
	Total	170	100.0	100.0	
Form of risk mitigation strategies used in the SACCO	Guarantor	84	49.4	49.4	49.4
	Collateral security	2	1.2	1.2	50.6
	Shareholding	84	50.6	49.4	100.0
	Total	170	100.0	100.0	

4.2.1 Gender

The respondents were asked to state their gender. This was important in identifying how gender is skewed in social services. The findings were presented in table 4.2 as follows: The male were 122(71.8%) while the female were 48(28.26%) of the respondents. This implies that the majority of respondents were male with a big difference compared to female and hence there is no good gender parity during sampling process.

4.2.2 Age bracket

Respondents were requested to indicate their age bracket. This was important in linking the age category to credit risk management initiatives and financial performance. Findings for the question were presented in table 4.2. Finding from table 4.2 showed that 2 (1.1%) were aged between 18-25 years, 9 (5.3%) between 26-30 years, 18 (10.6%) were between 31-35 years, and 60 (35.3%) were aged between 36-40. Some 41-45 were 76 (44.7%) while 5 (2.9%) were above 46 years of age. The findings showed that majority of respondents 65% were aged above 36 years of age. This could be interpreted to mean that the respondents have vast knowledge due to their age bracket.

4.2.3 Rank in SACCO

Respondents were informed to state their rank in the SACCO. The study revealed that managers were 143(84.1%) while supervisors were 27(15.9%). This shows that majority of the respondents are in managerial position thereby indicating that they are well versed with credit risk management initiatives and financial performance of their entities.

4.2.4 Years SACCO has been in operation

The respondents were asked to state how long the SACCO has been in operation. SACCOs which have operated for less than 1 year were 5(2.9%) while those that have been in operation for between 1-5 years were 39(22.9%). Those that have been in operation for between 6-10 years were 105(61.8%) while those that have been operating for over 10 were 21(12.4%). The study revealed that majority of SACCOs have been operating for over 6 years. This shows that they are well versed with the happenings concerning credit risks management.

4.2.5 Years worked in SACCO

Respondents were asked to state the number of years that they have worked in the organization. The study found out that majority of respondents have worked in the organization for between 0-3 were 125(73.5%) while 4-6 were 29(17.1%). Some respondents had worked in the organization for 7-10 were 9(5.3%) while 7(4.1%) had worked in the organization for over 10 years.

4.2.6 Level of education

Respondents who had postgraduate education were 3(1.8%), with graduate degree were 5(2.9%), and with college certificate were 30 (17.6%) while those with secondary school were 132 (77.6%). This shows that majority of respondents were form four leavers.

4.2.7 Form of risk mitigation strategies used in the SACCO

Respondents were asked to state the mitigation risks that the organization uses. The study revealed that guarantor 84(49.4%) while collateral security are 2(1.2%). Majority of the SACCOs use shareholding 84(50.6%). This shows that they are playing safe when it comes to risk management because it is easier to realize shares as opposed to title deed and other forms of securities which takes time to dispose of/ liquidate.

4.3 Credit Policy And Performance of SACCOs

Table 4.3: Credit policy and performance of SACCOs

Statement	N	Mean	Std. Deviation	Variance
Loan tenure affect the uptake of SACCO loan	170	4.0000	.79057	.625
Amount of loan given affects SACCO loan repayments	170	3.0412	.61097	.373
Management experience of the SACCO officials affect management of non-performing loans	170	4.6701	.74612	.557

There has been a steady increase in the Return on Assets for the SACCOs as a result of regulated credit policy	170	1.0412	.53847	.290
The nature of the business affect the rate of loan repayment	170	4.323	.7949	.632

(Source: Author, 2018)

Findings from table 4.3 showed that loan tenure affect the uptake of SACCO loan as represented with a mean of 4.0000 and SD .79057. The respondents were of the opinion that amount of loan given affects SACCO loan repayments as supported with mean of 3.0412 and SD of .61097. Majority of the respondents with mean of 4.6701 and SD of .74612 believed that management experience of the SACCO officials affect management of non-performing loans mean of 4.6701 and SD of .74612. This shows that experience in handling loans reduces the level of bad loans. There has not been a steady increase in the Return on Assets for the SACCOs as a result of regulated credit policy. This is supported with a mean of 1.0412 and SD of .53847 as shown in table 4.3. The study further found out that the nature of the business affect the rate of loan repayment (mean of 4.323 and SD of .7949). The findings of the study on credit policy are in tandem with findings of Pandey (2001) and Christen and Rosenberg (2000) credit policy influences performance

of the institutions but stringent credit policies makes SACCOs loose customers respectively.

Majority of the respondents interviewed were of the opinion that credit policy of the SACCOs influences the loans uptake. They further stated that management experience and loan tenure affects increase repayment rate.

4.4 Effects of interest rate management on performance

Table 4.4 Interest rates management on performance of SACCOs

Descriptive Statistics

Category	N	Mean	Std. Deviation	Variance
The favorable interest rates affect uptake of SACCO loans	170	4.2062	.90067	.811
Interest Risk Rate management policies are often reviewed to assess effectiveness	170	3.1588	.72050	.519
The SACCO keeps its members updated on the interest rates used on borrowers.	170	3.2763	.78073	.610
The SACCO penalties affect loan repayments	170	4.3918	.70055	.491
The 90 days moratorium (grace period before first installment payment) affect uptake of loan	170	4.3711	.95000	.902

(Source: Author, 2018)

The findings in table 4.4 showed that majority of the respondents were of the opinion that favorable interest rates affect uptake of SACCO loans (mean of 4.2062 and SD of

.90067). The study further revealed that averagely, Interest Risk Rate management policies are often reviewed to assess effectiveness (mean of 3.1588 SD of .72050) and that the SACCO keeps its members updated on the interest rates used on borrowers (mean of 3.2763 and SD of .78073). This is aided by the results of the study carried out by Fuenther and Maquieira (2003) that interest rates affect the level of non-performing loans in SACCOs.

On the other hand the findings showed that majority of the respondents believed that SACCO penalties affect loan repayments (mean of 4.3918 and SD of .70055) and that 90 days moratorium (grace period before first installment payment) affect uptake of loan as evidenced with a mean of 4.3711 and SD of .95000. The findings contradict the findings of the study carried out by Christen and Rosenberg (2000) that tight credit policies and stringent policies do not reduce the loan defaults. This shows that where there is stringent penalties on loan defaults, the members are forced to pay up in time. The findings are further supported by Njiru and Mengich (2015) that when customers are allowed grace period to repay their loans, the rate of defaulting are minimal. .90 days grace period enables the loan applicant to adequately reorganize themselves before starting loan repayment.

Respondents interviewed believed that favourable interest rates, SACCOs penalty regulations and offer of 90 days moratorium affects performance of loans in SACCOs.

4.5 Financial Review (audit)And performance of SACCOs

Table 4.5 Financial review and performance of SACCOs

Statements	N	Mean	Std. Deviation	Variance
The SACCO keeps their financial records ready at any given time facilitate financial review (audits)	170	1.8763	.66548	.443
The Sacco has a written accounting and financial reporting policy for conducting financial reviews	170	2.3608	.56246	.316
The Sacco usually implements financial review findings from previous financial reports.	170	1.4433	.86565	.749
Financial reviews (audits) conducted annually affects loan uptake	170	4.2165	.80657	.651
Financial statements are always obtained to assess the creditworthiness of borrowers before loans	170	4.472	.5902	.335

(Source: Author, 2018)

Findings in table 4.5 revealed that SACCO don't keep their financial records ready at any given time facilitate financial review (audits) as supported with a mean of 1.8763 and SD of .66548 neither do they have a written accounting and financial reporting policy for

conducting financial reviews (mean of 2.3608 and SD of .56246). The study further found out that he Sacco doesn't usually implement financial review findings from previous financial reports (mean of 1.4433 and SD of .86565).

The findings of this study is supported by the findings of Gamba and Kombo (2005) that human resource, governance and weak regulations are some of the main factors that affect financial reviews. Findings further showed that financial reviews (audits) conducted annually affects loan uptake (mean of 4.2165 and SD of .80657.) and that financial statements are always obtained to assess the creditworthiness of borrowers before loans (mean of 4.472 and SD of .5902). This shows that SACCOs don't just give out loans without looking at whether the loan applicant is able to repay the applied amount. This contradicts the findings of the study done by Njiru and Mengich that SACCOs depend heavily on the shares of the customer as the basis for giving loans but doesn't look for many other important factors.

Respondents interviewed were of the opinion that most SACCOs don't keep good records that are readily available for reviews neither do they review findings of previous reports to enhance credit risk management.

4.6 Debt Recovery Strategies And performance of SACCOs

Table 4.6 Debt recovery strategies on performance of SACCOs

Statement	N	Std.		
		Mean	Deviation	Variance
The Sacco regularly monitors approved versus actual loans to minimize over-lending and bad debts	170	2.2577	1.07314	1.152
Proper risk monitoring helps the SACCO to discover mistakes and correct early in the stage of lending.	170	2.0825	.98605	.972
The SACCO has appropriate controls and responses on credit defaulters in place	170	2.0619	.93335	.871
The SACCO often makes follow ups on the borrowers to check if the money has been put in the rightful purpose it was intended for.	170	4.9897	1.02566	1.052
There are daily, weekly and monthly credit reports generated to monitor loans within the SACCO	170	2.0206	.98931	.979

(Source: Author, 2018)

The findings as shown in table 4.6 states that Sacco don't regularly monitors approved versus actual loans to minimize over-lending and bad debts (mean of 2.2577 and SD of 1.07314) neither does proper risk monitoring helps the SACCO to discover mistakes and correct early in the stage of lending (mean of 2.0825 and SD of .98605. This means that most of unpaid loans are due to absence of a good policy on monitoring of loans. Most respondents were of the opinion that SACCO doesn't have appropriate controls and responses on credit defaulters in place (mean of 2.0619 and SD of .93335).

Interestingly, a bigger percentage of the respondents were of an opinion that SACCO often makes follow ups on the borrowers to check if the money has been put in the rightful purpose it was intended for (mean of 4.9897 and SD of 1.02566.This shows that SACCO is mostly concerned with the use of the loan and not checking on the customer about their repayment plans. Respondents were asked whether there are daily, weekly and monthly credit reports generated to monitor loans within the SACCO. It was revealed that such a thing does exist as shown in table 4.6 with a mean of 2.0206 and SD of .98931. The findings are supported by a study by Tandelilin, Kaaro and Supriyatna (2007) that recovery collection process is very critical but it can be messy and sometimes expensive.

A bigger percentage of the respondents were of an opinion that most SACCOs are more interested on ensuring that the funds taken are put to the use that it was intended for. They were of the view that there is lack of proper monitoring mechanism in the SACCOs, a thing that they believe affects financial performance of the institutions.

4.7 Financial Performance of performance of SACCOs

Table 4.7 Financial performance of SACCOs

Statement	N	Mean	Std.	
			Deviation	Variance
The SACCO has grown significantly in terms of revenues and profitability over the last one year	170	4.7526	.91322	.834
There has been an increase in the number of members taking up loans from the SACCO.	170	4.6134	.71990	.518
Loan repayment among the SACCO members is prompt and timely	170	2.5866	.59295	.352
The risk management initiatives has led to reduction of non-performing loans	170	4.6887	1.08933	1.187
The risk management initiative has led to increased reduction of loan defaults	170	4.5567	.70665	.499

(Source: Author, 2018)

The study findings showed that the SACCO has grown significantly in terms of revenues and profitability over the last one year (mean of 4.7526 and SD of .91322) and that the number of members taking up loans from the SACCO has increased (mean of 4.6134 and SD of .71990). Loan repayment among the SACCO members is not prompt and timely (mean of 2.5866 SD of .59295). The risk initiatives has led to a decline of non-performing loans as supported in the findings with a mean of mean of 4.6887 SD of 1.08933

4.8. Inferential statistics

It entailed the use of regression model, Anova and hypothesis testing to report on the findings.

4.8.1. Analysis of multiple regression model

Analysis of the study regression model will require certain assumptions to be carried out. The assumptions tests include: test for normality, assumptions of linearity, and test of assumptions of independence of errors. Once the variables meet these tests analysis of regression model can be computed and interpreted.

4.8.1.1. Tests for normality

The tests for normality of the regression model can be done using measures of skewness and kurtosis. That is to test if the population of scores has a normal distribution. If the

values fall between -2.0 to 2.0 then the model is accepted. Table 4.8 shows tests of normality.

Table 4.8 Tests of normality

Variables	N	Minimum	Maximum	Kurtosis			
				Skewness			
		Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Credit policy	170	-2.0	2.0	1.386	.197	0.740	.391
Interest rates	170	-2.0	2.0	1.434	.197	0.058	.391
Financial review	170	-2.0	2.0	1.895	.197	1.613	.391
Debt collection & recovery	170	-2.0	2.0	1.895	.197	1.613	.391
Valid N (list wise)	170						

(Source: Author, 2018)

From the table 4.8 it shows that both values of the variables fall between the ranges of -2.0 to 2.0 in both tests of kurtosis and skewness. The regression model fits the test of normality.

4.8.2.1. Tests of linearity and homoscedasticity

The test of linearity involves checking if the scores of each variable should have a normal distribution. Pearson's Product Moment Correlation coefficients were used to examine the assumption of Linearity. A positive value shows linearity of the values. The tests of

homoscedasticity involves test of variability in scores for one variable is roughly the same at all values of the other variable. Statistic for equality of variances was used to test for the assumption of homoscedasticity. Table 4.9 and 4.10 shows test of linearity and homoscedasticity respectively.

Table 4.9 Test of linearity

		Credit policy	Interest management	rate Financial review	Debt management	rate
Credit policy	Pearson Correlation	1	.660**	.065	0.065	
	Sig. (1-tailed)		.000	.214	.214	
	N	170	170	170	170	
Interest management	Pearson rateCorrelation	.660**	1	.086	0.042	
	Sig. (1-tailed)	.000		.146	0.304	
	N	170	170	170	170	
Financial review	Pearson Correlation	.065	.086	1	.802	
	Sig. (1-tailed)	.214	.146			
	N	170	170	170	170	
Debt collection & recovery	Pearson &Correlation	.065	.042	.802**	1	
	Sig. (1-tailed)	.214	.304	.000		
	N	170	170	170		170

**.

Correlation

is significant

at the 0.01

level (1-

tailed).

The values with asterix (*) show that the variables have a positive value which means the variables have linearity.

Table 4.10 Test of Homoscedasticity

Variables	Levene Statistic	df1	df2	Sig.
Credit policy	0.072	3	220	.362
Interest rate management	.120	3	217	.948
Financial review	.083	3	219	.969
Debt collection & recovery	.658	3	216	.979

(Source: Author, 2018)

Table 4.10 shows that testing at the 0.05 level of significance; none of the Levene statistics was significant. The assumption of homogeneity of variances was not violated.

4.8.2.3. Assumptions of independence of errors

It is used to test the regression model whether production of independence errors were correlated. Errors are deemed uncorrelated if the Durbin-Watson statistics was to be within the interval of 1.50 to 2.50. Table 4.11 shows the Durbin-Watson model.

Table 4.11 Durbin-Watson model

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.231 ^a	.053	.028	.9003	1.611

a. Predictors: (Constant), credit policy, interest rate management, financial review, debt collection and recovery.

b. Dependent Variable: financial performance

From the table 4.11 the Durbin- Watson is within the range which means the errors are uncorrelated allowing the study to continue.

4.8.2. Multiple Regression model analysis

After testing for the fitness of regression assumptions the analysis of the regression model was done to check whether independent variables (credit policy, interest rate management, financial review, debt collection and recovery) predict financial performance. The findings of regression model are summarized in table 4.12

Table 4.12 regression model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.969 ^a	.939	.937**	.11198

a. Predictors: (Constant): credit policy, interest rate management, financial review, debt collection and recovery.

Findings from the regression model show an Adjusted R square value =0.937 which is closer to a value of 1. In regression analysis a value close to R= 1 shows a strong relation between the variables. R squared explains how well the model predicts the observation. Adjusted R squared is the one that takes into account the standard error of estimates. The independent variable predicts financial performance.

Further statistics using ANOVA showing F test was presented as follows.

Table 4.13 ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.671	4	.168	7.543**	.001 ^b
	Residual	3.223	145	.022		
	Total	3.893	149			

a. Dependent Variable: financial performance

b. Predictors: (Constant), credit policy, interest rate management, financial review, and debt collection recovery.

The table on ANOVA show F value=7.543 which is above the significant value of 0.001 which means the dependent variable is depended on the predictors. The ANOVA model is statistically significant with F value > 0.001.

4.8.3. Inferential statistics on Hypothesis testing

Hypotheses postulated that there was no significant relationship between risk management initiatives and financial performance. Consequently, multiple regression analysis was used to test these hypotheses. Results are presented in Table 4.13

Table 4.14 Coefficients on hypotheses

			Standardized	T	Sig.
	B	Std. Error	Beta		
(Constant)	4.129*	.237*		17.440	.000
1 Credit policy	.019	.023	.818*	.132	.010
Interest rate management	.016	.024	.636*	.665	.007
Financial review	.190	.045	.808*	4.167	.000
Debt collection & recovery	.010	.019	.775*	.538	.029

** Table significance value $\alpha=0.05$ **

A standardized beta coefficient compares the strength of the effect of each individual independent variable to the dependent variable. The higher the value of beta coefficient,

the higher the effect on the dependent variable, and if the beta coefficient is significant, examine the sign of the beta. All the independent variables showed a higher standardized coefficient beta which shows a higher effect on the dependent variable. If the regression beta is positive, the interpretation is that for every one unit increase in predictor variable, the dependent variable will increase by standardized beta coefficient value.

The regression model based on the standardized beta coefficient value will be as follows:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

$$Y = 4.129 + 0.818X_1 + 0.636X_2 + 0.808X_4 + 0.775X_5$$

H0₁ There is no significant relationship between credit policy and financial performance of SACCOS.

The first hypothesis stated that there was no significant relationship between credit policy and financial performance of SACCO. The results indicated that the sig. value $0.01 < 0.05$. The researcher therefore rejected the null hypothesis that 'there is no significant relationship between credit policy and financial performance of SACCO,' and accepted the alternative that there is significant relationship between credit policy and financial performance of SACCO.

H0₂ There is no significant relationship between interest rate management and financial performance of SACCOs.

The second hypothesis stated that there was no significant relationship between interest rate management and financial performance of SACCOs. The results indicated that the sig. value $0.01 < 0.05$. The researcher therefore rejected the null hypothesis that 'there is no significant relationship between interest rate management and financial performance

of SACCO,' and accepted the alternative that there is significant relationship between interest rate management and financial performance of SACCOs.

H0₃ There is no significant relationship between interest rate management and financial performance of SACCO.

The third hypothesis stated that there was no significant relationship between financial review and financial performance of SACCOs. The results indicated that the sig. value $.001 < 0.05$. The researcher therefore rejected the null hypothesis that 'there is no significant relationship between financial review and financial performance of SACCOs,' and accepted the alternative that there is significant relationship between financial review and financial performance of SACCOs.

H0₄ There is no significant relationship between debt collection and recovery and financial performance of SACCOs.

The fourth hypothesis stated that there was no significant relationship between debt collection and recovery and financial performance of SACCOs. The results indicated that the sig. value $.001 < 0.05$. The researcher therefore rejected the null hypothesis that 'there is no significant relationship between debt collection and recovery and financial performance of SACCOs,' and accepted the alternative that there is significant relationship between debt collection and recovery and financial performance of SACCOs.

4.9. Summary of County Enterprise Development Fund loans

The information in table 4.14 shows data capture of loan status in terms of loan disbursement, loan repayment and loan repayment from period 2014-2018

Table 4.15 Loan status

Loan criteria	2014	2015	2016	2017	2018
Loan disbursement	120 M	250M	435M	302M	564M
Loan repayment	79M	162M	213M	175M	332M
Loan default	50M	107.5M	195.7M	141.9M	273.6M

Table 4.14 shows that loan disbursement to SACCOs during years 2014 to 2018 had increased by 78.5%, while loan repayment was 65% in year 2014, 64% in 2015, 49% in 2016, 57% in 2017, and 58% in 2018. The average loan repayment stands at 58.6% for the five years period. The loan default in 2014 was 42%, 43% in 2015, 45% in 2016, 47% in 2017, and 49% in 2018. The findings showed an increase in percentage of loan defaulters over the five years period.

CHAPTER FIVE: SUMMARY OF RESULTS, CONCLUSION AND RECOMMENDATIONS

5.1 Overview

This chapter had the following sections; summary of results, conclusions and recommendations. These parts were informed by the, objectives, and the findings of the study.

5.2 Summary of Findings

The study showed that majority of the respondents was male with minority being female. The findings showed that majority of respondents 65% were aged above 36 years of age. This could be interpreted to mean that the respondents have vast knowledge due to their age bracket. The study revealed that majority of SACCOs has been operating for over 6 years. Most SACCOs use members' shares as security.

Majority of the respondents were of the opinion that credit policy of the SACCOs influences the loans uptake. They further stated that management experience and loan tenure affects increase repayment rate. There has not been a steady increase in the Return on Assets for the SACCOs as a result of regulated credit policy as supported with a mean of 1.0412. The study also found out that the nature of the business affect the rate of loan repayment (mean of 4.323). The study did establish that there is significant relationship between credit policy and risk management initiatives.

The findings showed that majority of the respondents were of the opinion that favorable interest rates affect uptake of SACCO loans (mean of 4.2062 and that averagely, Interest Risk Rate management policies are often reviewed to assess effectiveness (mean of

3.1588) and that the SACCO keeps its members updated on the interest rates used on borrowers (mean of 3.2763). On the other hand the findings showed that majority of the respondents believed that SACCO penalties affect loan repayments (mean of 4.3918) and that 90 days moratorium (grace period before first installment payment) affect uptake of loan as evidenced (mean 4.3711). This shows that where there are stringent penalties on loan defaults, the members are forced to pay up in time. 90 days grace period enables the loan applicant to adequately reorganize themselves before starting loan repayment. The study did find that there is significant relationship between interest rate management and financial performance of SACCOs.

Findings revealed that SACCO don't keep their financial records ready at any given time facilitate financial review (audits) as supported with a mean of 1.8763 neither do they have a written accounting and financial reporting policy for conducting financial reviews (mean of 2.3608). The study further found out that he Sacco doesn't usually implement financial review findings from previous financial reports (mean 1.4433. Findings further showed that financial reviews (audits) conducted annually affects loan uptake (mean of 4.2165) and that financial statements are always obtained to assess the creditworthiness of borrowers before loans (mean of 4.472). This shows that SACCOs don't just give out loans without looking at whether the loan applicant is able to repay the applied amount. The study did establish that there is significant relationship between data collection and recovery and financial performance of SACCOs.

The study findings showed that the SACCO has grown significantly in terms of revenues and profitability over the last one year (mean of 4.7526) and that there has been an increase in the number of members taking up loans from the SACCO (mean 4.6134)..

Loan repayment among the SACCO members is not prompt and timely (mean 2.5866). The risk management initiatives has led to reduction of non-performing loans and risk management initiative has led to increased reduction of loan defaults as supported in the findings with a mean of mean of 4.6887 and a mean of 4.5567 respectively. The study found that there is significant relationship between risk management initiatives and financial performance of SACCO.

5.3 Conclusion

Based on the findings the study concluded that credit policy of the SACCOs influences the loans uptake. In addition management experience and loan tenure affects increase repayment rate. Return on Assets for the SACCOs as a result of regulated credit policy. The study concluded nature of the business affect the rate of loan repayment. The study did conclude that there is significant relationship between credit policy and risk management initiatives.

Based on the findings the study found that favorable interest rates affect uptake of SACCO loans. Interest Risk Rate management policies are often reviewed to assess effectiveness and that the SACCO keeps its members updated on the interest rates used on borrowers. On the other hand the study concluded that SACCO penalties affect loan repayments and that 90 days moratorium (grace period before first installment payment) affect uptake of loan. This shows that where there are stringent penalties on loan defaults, the members are forced to pay up in time that means 90 days grace period enables the loan applicant to adequately reorganize themselves before starting loan repayment. The study concludes that there is significant relationship between interest rate management and financial performance of SACCOs.

The study concludes that financial records ready at any given time facilitate financial review (audits). Further the study noted that financial reporting policy for conducting financial reviews should be instituted. The findings showed that financial reviews (audits) conducted annually affects loan uptake and that financial statements are always obtained to assess the creditworthiness of borrowers before loans. This shows that SACCOs don't just give out loans without looking at whether the loan applicant is able to repay the applied amount. The study lastly concluded that there is significant relationship between data collection and recovery and financial performance of SACCOs.

The study empirically proved that SACCO have grown significantly in terms of revenues and profitability over the last one year and that there has been an increase in the number of members taking up loans from the SACCO. The study then concludes that loan repayment among the SACCO members is not prompt and timely. The risk management initiatives have led to reduction of non-performing loans and risk management initiative has led to increased reduction of loan defaults. The study concludes that there is significant relationship between risk management initiatives and financial performance of SACCO.

5.4 Recommendations

The study will benefit the CEDF's management in policy formulation and management of CEDF loan. The CEDF management should increase the frequency of financial reviews in order to increase loan uptake. CEDF officials to consider increasing loan tenure in their policy formulation in order to enhance loan uptake.

Further recommendations are made to the SACCOs officials they need to work on risk monitoring as they help in improving mechanisms to detect loan defaults. Because

management experience affect non-performing loans, officials of SACCOs should elect experienced members in their management, keep the record intact to improve efficiency of financial reviews/audits, always implement findings from the previous audits, and continue making follow ups on the intended use of the loan borrowings to avoid defaults.

The study in addition is recommending to managers and board of Directors across the other 46 counties in Kenya who are managing any form of revolving fund to employ risk management initiatives to enhance financial performance of their funds.

The study further recommends to scholars and academicians to use findings from this study for further research on new knowledge touching areas of risk initiatives and SACCO performance.

5.5 Further Research Recommendations

The study recommends that future studies should be conducted on other SACCOs which are not under the context of CEDF.

Future studies should be conducted to find out why farmer based SACCOs had more non-performing facilities compared to other forms of SACCOs.

Further studies should be conducted to establish the moderating factors such as politics, corporate governance, leadership skills, and social factors on financial performance of SACCOs.

Further research studies should be conducted targeting a wider number of respondents in a wider scope of geographical coverage.

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APPENDICES

Appendix I: Questionnaire Guide for SACCO Representatives

I am a student pursuing research as an academic prerequisite in partial fulfillment for the award of Master in Business Administration at University Of Nairobi. This questionnaire is envisioned to facilitate research on **Credit Risk Management Initiatives and Financial Performance of SACCOs under Uasin Gishu Enterprise Development Fund**. The information you provide for this research will be purely for academic purposes and the recommendations made will be of great importance to SACCOs and County Enterprise Development fund units. The provided information will be treated with utmost confidentiality.

PART A: BACKGROUND INFORMATION

(Please tick appropriately or fill additional information in the space provided).

1. Please indicate your gender.

Male

Female

2. Age bracket (Tick as Appropriate)

18-25years 26-30 31-35

36-40 41-45 46 and above

3. What is your highest level of education?

Primary & below Secondary School College certificate

Undergraduate degree Post graduate

4. How long has the Sacco been in operation?

Less than 1 year [] 1 to 5 years [] 6 to 10 years []
Over 10 years []

5. How long have you worked for the Sacco?

0-3 years [] 4-6 years [] 7-10 years []
Over 10 years []

6. Please indicate your rank in the Sacco

Director [] Manager [] Supervisor []
Any Other [] _____

7. What form of risk mitigation strategies do you use?

Guarantor [] Collateral Security [] Insurance []
Shareholding []

8. The following sections have statements regarding credit risk management initiatives and financial performance of SACCOs. Kindly respond with what matches your opinion by ticking (✓) for each statement on a scale of: 5 =strongly agree, 4=agree, 3=Neutral, 2=disagree, 1= strongly disagree.

SECTION B: EFFECT OF CREDIT POLICY ON PERFORMANCE OF SACCOS

No	STATEMENTS	5	4	3	2	1
	Loan tenure affect the uptake of SACCO loan					
	Amount of loan given affects SACCO loan repayments					
	Management experience of the SACCO officials affect management of non-performing loans					
	There has been a steady increase in the Return on Assets for the SACCOs as a result of regulated credit policy					
	The nature of the business affect the rate of loan repayment					

SECTION C: EFFECTS OF INTEREST RATE MANAGEMENT ON PERFORMANCE OF SACCOS

5 =strongly agree, 4=agree, 3=Neutral, 2=disagree, 1= strongly disagree.

No	STATEMENTS	5	4	3	2	1
	The favorable interest rates affect uptake of SACCO loans					
	Interest Risk Rate management policies are often reviewed to assess effectiveness					
	The SACCO keeps its members updated on the interest rates used on borrowers.					
	The SACCO penalties affect loan repayments					
	The 90 days moratorium (grace period before first installment payment) affect uptake of loan					

SECTION D: EFFECT OF FINANCIAL REVIEW (AUDIT) ON THE PERFORMANCE OF SACCOS IN UASIN-GISHU COUNTY

Does the Sacco have a Financial Manager/Accountant responsible for accounting and financial reporting?

Yes () No ()

5 =strongly agree, 4=agree, 3=Neutral, 2=disagree, 1= strongly disagree.

No	STATEMENTS	5	4	3	2	1
	The SACCO keeps their financial records ready at any given time facilitate financial review (audits)					
	The Sacco has a written accounting and financial reporting policy for conducting financial reviews					
	The Sacco usually implements financial review findings from previous financial reports.					
	Financial reviews (audits) conducted annually affects loan uptake					
	Financial statements are always obtained to assess the creditworthiness of borrowers before issuing loans					

SECTION E: EFFECT OF DEBT RECOVERY STRATEGIES ON THE PERFORMANCE OF SACCOS IN UASIN-GISHU COUNTY

5 =strongly agree, 4=agree, 3=Neutral, 2=disagree, 1= strongly disagree.

No	STATEMENTS	5	4	3	2	1
	The Sacco regularly monitors approved versus actual loans to minimize over-lending and bad debts					
	Proper risk monitoring helps the SACCO to discover mistakes and correct early in the stage of lending.					
	The SACCO has appropriate controls and responses on credit defaulters in place					
	The SACCO often makes follow ups on the borrowers to check if the money has been put in the rightful purpose it was intended for.					
	There are daily, weekly and monthly credit reports generated to monitor loans within the SACCO					

SECTION F: FINANCIAL PERFORMANCE OF SACCOs

5 =strongly agree, 4=agree, 3=Neutral, 2=disagree, 1= strongly disagree.

No	STATEMENTS	5	4	3	2	1
	The SACCO has grown significantly in terms of revenues and profitability over the last one year					
	There has been an increase in the number of members taking up loans from the SACCO.					
	Loan repayment among the SACCO members is prompt and timely					
	The risk management initiatives has led to reduction of non-performing loans					
	The risk management initiatives has led to increased reduction of loan defaults					

Thank you for participating; your response is highly appreciated.

Appendix II: Interview Guide for Board of Management of the County Enterprise Development Fund

I am a student at University of Nairobi undertaking research as an academic requirement in partial fulfillment for the award of Master of Business Administration. This interview is intended to facilitate my research on: **CREDIT RISK MANAGEMENT INITIATIVES AND FINANCIAL PERFORMANCE OF SACCOS UNDER THE UASIN GISHU ENTERPRISE DEVELOPMENT FUND**. The information you provide will strictly be for academic purposes and the recommendations made will be of great importance. 333

1. What system do you apply for SACCOs to repay their loan?
Check off system [] Cash installment [] Both []
2. What is the maximum period given to SACCOs to repay the funds allocated to them?

3. What has been the average rate of interest charged on credit to SACCOs within the county?

4. What is the contribution of the interest rate offered by the CEDF on the loan repayments.-----
5. Do you think your credit policy is too stringent to hinder uptake of loans? -----

6. How has the Financial Review/Audit? Helped in reduction of non-performing loans---

Appendix III: Data Capture Form

Type of Cooperative	Years	Loan Uptake (Kshs)	Loan Repayment (Kshs)	Loan Default (Kshs)
Savings and credit Cooperative Societies	2014			
	2015			
	2016			
	2017			
	2018			
Housing Cooperatives	2014			
	2015			
	2016			
	2017			
	2018			
Consumer Cooperatives	2014			
	2015			
	2016			
	2017			
	2018			
Farmer Based Cooperatives	2014			
	2015			
	2016			
	2017			
	2018			

Appendix IV: Organogram showing relationship between the Uasin Gishu CEDF and SACCOS

