# THE RELATIONSHIP BETWEEN CREDIT RISK MANAGEMENT PRACTICES AND FINANCIAL PERFORMANCE OF SACCOs IN KENYA

PRESENTED BY

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## DECLARATION

This research project is my original work and has not been presented for award of any degree in any University.

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This project has been submitted for examination with my approval as University of Nairobi supervisor.

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## DEDICATION

This research study is dedicated to my Mum, wife Edina, children, brothers and sisters for their moral support throughout the entire MBA program and especially during this research project.

## ACKNOWLEDGEMENT

The completion of this project was not easy. It was not created by the author alone, but relied on the cooperative assistance of many unseen hands. First and foremost I owe special thanks to God all glory for guiding me and for allowing His favour to constantly shine upon me.

I sincerely acknowledge my supervisor Dr. J. Aduda, Lecturer University of Nairobi, Chairman Department of Accounting and Finance, School of Business for his invaluable guidance, wisdom and support, Doctor, thank you for patience and always being available whenever I needed to consult with you. Without your guidance and sharp mind, this research project would not have been easy to complete.

I would also like to acknowledge the encouragement from all my colleagues and my MBA classmates, friends and relatives whose remarkable devotion and dedication throughout the project work was incredible. May God bless the work of their hands!

Last but not least, I am deeply indebted to many others whom I consulted in the course of preparing this project. Data analyst and research instruments experts and all others whom I consulted made salient contribution to this study. I cannot forget to mention the respondents who provided information for this study. Without your genuine, honest and timely contributions, this study would not have seen the light of the day

My deepest appreciation goes to my wife Edna and my children Adah, Stency , Edel and Joshua for their unwavering understanding and support and particularly through your prayers. May God bless you abundantly. My profound gratitude also goes to all the other people, not mentioned here, who in one way or the other assisted me in completing this research project .God bless you all.

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## ABBREVIATIONS

| | |
|---|---|
| APT | Arbitrage Pricing Theory |
| CAPM | Capital Assets Pricing Model |
| FI | Financial Institution |
| FOSA | Front Office Services Activities |
| FSA | Financial Services Authority |
| ROA | Return on Assets |
| SACCO | Saving Credit Co-operative Society |
| UAE | United Arab Emirates |
| UK | United Kingdom |
| USA | United States of America |
| WOCCU | World Organization Council Credit Union |

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## ABSTRACT

Risk management practices can help Credit unions reduce their exposure to credit risks and enhance their ability to compete with other well established financial institutions like commercial banks in the market. It is importance to a study on effects of credit risk management practices to be established due to the role of enhancing shareholder value and improve its financial performance. This study sought to establish the relationship between credit risk main objectives of the study was to establish the relationship between credit risk management practices and financial performance of SACCOs in Kenya.

The sample size of the study was 41 SACCOs. Questionnaires were used to obtain important information about the population. After receiving questions from the respondents, the responses were edited, classified, coded and tabulated to analyze quantitative data using Statistical Package for Social Science (SPSS version 17). Tables and charts were used for further representation for easy understanding and analyzes. The collected data was thoroughly examined and checked for completeness and comprehensibility. The data was then be summarized, coded and tabulated. Inferential statistic was used to establish the relationship between credit risk management practices and the financial performance of SACCOs

From the findings the study concludes that SACCOs adopted credit risk management practices to counter credit risks they are exposed to. The study also concluded that SACCO adopt various approaches in screening and analyzing risk before awarding credit to clients to minimize on loan loss. This included establishing capacity/competition and conditions and use of collateral/security and character of borrower were used in screening and risk analysis in attempt to reduce manages credit risks.The study further concludes that there was a positive relationship between credit risk management practices and the financial performance of SACCOs.

# CHAPTER ONE

# INTRODUCTION

## 1.1 Background

Credit risk is the most obvious risk that a credit union faces based on the nature of its activity. In terms of potential losses, it is typically the largest type of risk. The default of a small number of members may result in a very large loss for the union (Bessis 2003) .Credit risk is the risk that a borrower defaults and does not honor his or her obligation to service debt. It can occur when the member is unable to pay or cannot pay on time. There can be many reasons for default, in most cases the obligor is in a financially stressed situation and may be facing a bankruptcy procedure. He can also refuse to comply with the debt service obligation, for example in the case of a fraud or a legal dispute.

Credit risk arises from non performance by a borrower by either inability or unwillingness to perform in the pre-committed contracted manner. This affects the lender holding the loan contract as well as other lenders to the creditor (Caoutte, Altman and Narayanan 1998). Therefore the financial condition of the borrower as well as the current value of any underlying collateral is of considerable interest to its credit union. The deviation of portfolio performance from it expected value result to real credit risks that face the financial institutions ((Gestel and Baesen 2009). Credit risk is hard to eliminate but it can be diversified because a portion of the default risk may result from the systematic risk. In addition, the idiosyncratic nature of some portion of these losses remains a problem for creditors in spite of the beneficial effect of diversification on total uncertainty. This is particularly true for banks that lend in local markets and the ones that take highly illiquid assets. In such cases, credit risk is not easily transferred and accurate estimates of loss are difficult to obtain. (IFSB, 2005)

Credit risk is the potential change in net asset value due to changes in the perceived ability of counterparties to meet their contractual obligations. It occurs when a borrower

does not pay back the loan. The definition makes it clear that credit risk arises much earlier than the final failure to pay becomes visible. According to Mwirigi (2006) most financial institutions as early as one month late repayment, a loanee was considered as a defaulter and thus collections efforts were intensified and this explains why micro finance institutions commend low default rates. Those who didn't pay on time, their property was sold to recover the money, followed by write off of the balance and others would consider writing off the balance and allow defaulters to repay the principal only.

Moreover, credit risk is not what financial institution believes its default risk situation is. It is about the perceptions others have about the quality of SACCO loan portfolio. Depositors, venture capitalist and other creditors all look at the quality of the SACCOs loan portfolio as the primary indicator of creditworthiness. If there are doubts about the quality of the portfolio, it will be hard to mobilize or retain deposits or to qualify for a funding facility with a SACCO. This is a very important linkage between credit risk and liquidity risk which yield to market confidence (Kimeu, 2008).

Overall there are two important dimensions of credit risk. Transaction risk and portfolio risk Transaction risk refers to individual loans and essentially measures two aspects' which include the probability that the borrower will be able to repay and the quality of procedures such as borrower selection and loan administration which should maximize the likelihood of repayment. Controlling transaction credit risk is the core business of the credit movement and most unions have to adopt good credit risk assessment and loan loss mitigation techniques. Portfolio risk on the other hand refers to the possibility that an appropriate mix or collection of investments held by an institution will not earn the expected or desired rate of return. Investors attempt to reduce this risk through diversification or hedging (Fulton, 1999). Portfolio risk includes both systematic and unsystematic risk. Systematic risk has an impact on the overall market for example inflation, interest rate changes or economic conditions. Unsystematic risk such as product defects or management turnover is unique to individual securities. From the literature, it

practices are identified and the risk controlled, management can take certain steps to improve its potential for success.

Credit risk management practices is an issue of concern in SACCOs today and there is need to develop improved processes and systems to deliver better visibility into future performance of the credit unions. Improved credit risk management in SACCOs will undoubtedly require a clear understanding of the challenges they face. This will in turn assist in developing strategies to overcome the credit risk management process (Berger and Udell 1993). It is importance to a study on effects of credit risk management practices to be established due to the role of enhancing shareholder value and improve its financial performance.

There are few local studies on credit risk management which include; Kimeu (2008) who studied credit risk management techniques of unsecured bank loans of commercial banks in Kenya, Ngare (2008) who studied credit risk management practices by commercial banks, Simiyu (2008) studied techniques of credit risk management in microfinance institutions in Kenya, Mutwiri (2007) studied credit risk management practices by oil companies in Kenya, Muteru (2007) who studied credit risk management practices by Pharmaceuticals manufacturing firms in Kenya, Mwirigi (2006) who studied credit risk management techniques adopted by micro finance institutions in Kenya and Njiru (2003) who studied credit risk management by coffee co-operatives in Embu District.

Based on this evaluation, there is a gap in literature that motivates a research to be conducted on establishing the relationship between credit risk management practices and financial performance of SACCOs. This study therefore sought to establish the relationship between credit risk management practices and financial performance of SACCOs in Kenya. .

## 1.3 Objectives of the Study

To establish the relationship between credit risk management practices and financial performance of SACCOs in Kenya.

## 1.4 Importance of the Study

It is anticipated that the findings of this study will be important to;

The Credit Unions management and directors as it will provide an insight into the various approaches towards credit risk management techniques, how to effectively handle the issues of credit risk management and how to reduce exposure to the risk.

The government in the developing policy papers, policy making regarding taxation and other regulatory requirements of SACCOs in the country. The policy maker will know how well to incorporate the sector effectively to ensure it's full participation.

The academicians who will be furnished with relevant information regarding credit risk management practices. The study will contribute to the general body of knowledge and form a basis for further research.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.1 Introduction

In this chapter, past studies have been reviewed in regards to credit risk management practices. Only the issues in the objectives will be featured, critically reviewed and discussed.

## 2.2Credit Risk Management

Risk management framework is important for SACCOs and other money lending institutions in Kenya. In conjunction with the underlying frameworks, basic risk management process that is generally accepted is the practice of identifying, analyzing, measuring, and defining the desired risk level through risk control and risk transfer. Boston Consulting Group (2001) defines credit risk management as a sequence of four processes which include; identification of events into one or more broad categories such as market, credit, operational and other risks into specific sub-categories; assessment of risks using data and risk model; monitoring and reporting of the risk assessments on a timely basis and control of these risks by senior management.

Boston Consulting Group (2006), hold that risk management processes, require supervisors to be satisfied that the financial institutions have in place a comprehensive risk management process. This would include the Board and senior management to identify, evaluate, monitor and control or mitigate all material risks and to assess their overall capital adequacy in relation to their risk profile.

According to Boston Consulting Group (2006), credit risk is the oldest and important risk which credit unions are exposed to. Importance of credit risk management is increasing with time because of some reasons like economic crises and stagnation, company bankruptcies, infraction of rules in company accounting and audits, growth of off-balance

sheet derivatives, declining and volatile values of collateral, borrowing more easily for the small firms, financial globalization and business risk-based capital requirements. These findings are consistent with Mwirigi (2006) who found that the most important risk that financial institutions face was credit risk followed by interest rate risk and technological risk and that these risks were managed using swaps, futures, forwards and options. These findings contradict with those of Njiru (2003) who established that the most important risk for banks was liquidity risk followed by credit risk but they agree that banks used forwards and swaps to manage these risks.

Boston Consulting Group (2001) found that the sole determining success factor is not the technical development but the ability to understand risk strategically and also the ability to handle and control risk organizationally. Secondly, in order to realize a risk based management philosophy, the attitude and mindset of the employees need to be changed whereby they must be brought to understand that managing credit risk is crucial for success. This implies that there must be intensive training, clearly defined structures and responsibilities, as well as commitment to change. This finding is consistent with Mwirigi (2006) and Muriuki (2007) who found out that micro finance institution and Oil companies in Kenya (respectively) involved their employees in developing credit risk management policies, use of manuals and regular training to sensitize their employees about credit risk management.

## 2.3 Theories of risk Management

### 2.3.1 Portfolio theory

Portfolio theory of investment which tries to maximize portfolio expected return for a given amount of portfolio risk, or equivalently minimize risk for a given level of expected return, by carefully choosing the proportions of various assets. Although Portfolio Theory is widely used in practice in the financial industry and several of its creators won a Nobel Prize for the theory, in recent years the basic Portfolio Theory have been widely challenged by fields such as behavioral economics.(Marckowitz 1952).

Portfolio Theory is a mathematical formulation of the concept of diversification in investing, with the aim of selecting a collection of investment assets that has collectively lower risk than any individual asset. That this is possible can be seen intuitively because different types of assets often change in value in opposite ways. For example, when prices in the stock market fall, prices in the bond market often increase, and vice versa. A collection of both types of assets can therefore have lower overall risk than either individually. But diversification lowers risk even if assets' returns are not negatively correlated indeed, even if they are positively correlated (Markowitz, 1952).

More technically, portfolio theory models assets return as a normally distributed (or more generally as an elliptically distributed random variable), define risk as the standard deviation of return, and model a portfolio as a weighted combination of assets so that the return of a portfolio is the weighted combination of the assets' returns. By combining different assets whose returns are not perfectly positively correlated, portfolio theory seeks to reduce the total variance of the portfolio return. Portfolio theory also assumes that investors are rational and markets are efficient.(Sharpe 1964).

Portfolio Theory was developed in the 1950s through the early 1970s and was considered an important advance in the mathematical modelling of finance. Since then, many theoretical and practical criticisms have been levelled against it. These include the fact that financial returns do not follow a Gaussian distribution or indeed any symmetric distribution, and those correlations between asset classes. (Micheal, Sproul 1998).

### 2.3.2 Capital Asset Pricing Theory

William Sharpe (1964) published the capital asset pricing theory (CAPM). Parallel work was also performed by Treynor (1961) and Lintner (1965). CAPM extended Harry Markowitz's portfolio theory to introduce the notions of systematic and specific risk. For his work on CAPM, Sharpe shared the 1990 Nobel Prize in Economics with Harry Markowitz and Merton Miller.

In such a simple world. Tobin's (1958) super-efficient portfolio must be the market portfolio. All investors will hold the market portfolio, leveraging or de-leveraging it with positions in the risk-free asset in order to achieve a desired level of risk. CAPM decomposes a portfolio's risk into systematic and specific risk. Systematic risk is the risk of holding the market portfolio. As the market moves, each individual asset is more or less affected. To the extent that any asset participates in such general market moves, that asset entails systematic risk. Specific risk is the risk which is unique to an individual asset. It represents the component of an asset's return which is uncorrelated with general market moves (Lintner ,1965).

No matter how much we diversify our investments, it's impossible to get rid of all the risk. As investors, we deserve a rate of return that compensates us for taking on risk. The capital asset pricing model (CAPM) helps us to calculate investment risk and what return on investment we should expect. Here we look at the formula behind the model, the evidence for and against the accuracy of CAPM, and what CAPM means to the average investor (Sharpe, 1964).

When the CAPM was first introduced, the investment community viewed the new model with suspicion, since it seemed to indicate that professional investment management was largely a waste of time. It was nearly a decade before investment professionals began to view the CAPM as an important tool in helping investors understands risk. The key element of the model is that it separates the risk affecting an asset's return into two categories. The first type is called unsystematic, or company-specific, risk. The long-term average returns for this kind of risk should be zero. The second kind of risk, called systematic risk, is due to general economic uncertainty. The CAPM states that the return on assets should, on average, equal the yield on a risk-free bond held over that time plus a premium proportional to the amount of systematic risk the stock possesses. (Markowitz 1952).

The treatment of risk in the CAPM refines the notions of systematic and unsystematic risk developed by Harry M. Markowitz in the (1950s). Unsystematic risk is the risk to an asset's value caused by factors that are specific to an organization, such as changes in senior management or product lines. For example, specific senior employees may make good or bad decisions or the same type of manufacturing equipment utilized may have different reliabilities at two different sites. In general, unsystematic risk is present due to the fact that every company is endowed with a unique collection of assets, ideas and personnel whose aggregate productivity may vary.

A fundamental principle of modern portfolio theory is that unsystematic risk can be mitigated through diversification. That is, by holding many different assets, random fluctuations in the value of one will be offset by opposite fluctuations in another. For example, if one fast food company makes a bad policy decision, its lost customers will go to a different fast food establishment. The investor in both companies will find that the losses in the former investment are balanced by gains in the latter (Markowitz, 1952).

Systematic risk is risk that cannot be removed by diversification. This risk represents the variation in an asset's value caused by unpredictable economic movements. This type of risk represents the necessary risk that owners of a firm must accept when launching an enterprise. Regardless of product quality or executive ability, a firm's profitability will be influenced by economic trends. In the capital asset pricing model, the risk associated with an asset is measured in relationship to the risk of the market as a whole. (Sharpe, 1964).

Kabiru (2002), indicated that the principles of portfolio analysis play a great hand in the management of credit risk. The effect of credit risk management practices adopted by financial institutions has led to diversifying their exposure limits across the borrowers and among various types of debt facilities. Capital asset pricing model (CAPM) developed by William Sharp is well applicable in investment decisions. It describes the identification of an investment's return and diversification of risk on the investments at hand.

Financial institutions can lend money with rate of interest or buy bond. The market return describes the market which contains the asset and financial institutions can establish limits on the amount of credit to advance to a borrower or firm, diversifying the portfolio composition eventually reducing the risk of credit loss hence achieving higher financial performance. In this regards, management of the financial institutions including SACCOs needs to seek ways of managing credit risks they are exposed to minimise on the credit loss and maximise on financial returns (Kabiru, 2002).

### 2.3.3 Arbitrage pricing theory

The Arbitrage Pricing Theory (APT) was developed primarily by Ross (1976). It is a one-period model in which every investor believes that the stochastic properties of returns of capital assets are consistent with a factor structure. The Arbitrage Pricing Theory (APT) describes the price where a mispriced asset is expected to be. It is often viewed as an alternative to the capital asset pricing model (CAPM), since the APT has more flexible assumption requirements. Whereas the CAPM formula requires the market's expected return, APT uses the risky asset's expected return and the risk premium of a number of macro-economic factors. Arbitrageurs use the APT model to profit by taking advantage of mispriced securities. A mispriced security will have a price that differs from the theoretical price predicted by the model. By going short an over priced security, while concurrently going long the portfolio the APT calculations were based on, the arbitrageur is in a position to make a theoretically risk-free profit. (Ross, 1976).

The basis of arbitrage pricing theory is the idea that the price of a security is driven by a number of factors. These can be divided into two groups: macro factors, and company specific factors. This intuition is sketched out in Section 2. Ross'formal proof shows that the linear pricing relation is a necessary condition for equilibrium in a market where agents maximize certain types of utility. The subsequent work, which is surveyed below, derives either from the assumption of the preclusion of arbitrage or the equilibrium of utility-maximization. A linear relation between the expected returns and the betas is

tantamount to an identification of the stochastic discount factor (SDF). Sections 3 and 4, respectively, review this literature. The APT is a substitute for the Capital Asset Pricing Model (CAPM) in that both assert a linear relation between assets' expected returns and their covariance with other random variables. (Ross, 1976).

The difference between CAPM and arbitrage pricing theory is that CAPM has a single non-company factor and a single beta, whereas arbitrage pricing theory separates out non-company factors into as many as proves necessary. Each of these requires a separate beta. The beta of each factor is the sensitivity of the price of the security to that factor.

Arbitrage pricing theory does not rely on measuring the performance of the market. Instead, APT directly relates the price of the security to the fundamental factors driving it. The problem with this is that the theory in itself provides no indication of what these factors are, so they need to be empirically determined. Obvious factors include economic growth and interest rates. For companies in some sectors other factors are obviously relevant as well - such as consumer spending for retailers. The potentially large number of factors means more betas to be calculated. There is also no guarantee that all the relevant factors have been identified. This added complexity is the reason arbitrage pricing theory is far less widely used than CAPM. (Sharpe, 1992).

### 2.4 Need for Credit Risk Management

Lending has been and still is the mainstay of financial institution and this is more true to emerging economies of developing countries where capital markets are not yet well developed. To most of the transition economies, lending activities has been a controversial and difficult matter. This is because business firms on one hand are complaining about lack of credit and the excessively high standards set by financial institutions, while financial institutions on the other hand have suffered large losses on bad loans (Richard, 2006). It has been found out that in order to minimize loan losses thus credit risk, it is essential for financial institutions to have an effective credit risk management system in place (Basel, 2010). Given the asymmetric information that exists

between lenders and borrowers, financial institutions must have a mechanism that ensures that they not only evaluate default risk that is unknown to them ex ante in order to avoid adverse selection, but also that can evolve ex post in order to avoid moral hazards. An effective system that ensures repayment of loans by borrowers is critical in dealing with asymmetric information problems and in reducing the level of loan losses, thus the long-term success of any banking organization. Credit risk management is essential in optimizing the performance of financial institutions (Basel 2010).

According to Greuning and Bratanovic (2003) the basis of a sound credit risk management system include guidelines that clearly outline the scope and allocation of bank credit facilities and the manner in which the credit portfolio is managed that is how loans are originated, appraised, supervised and collected. Derban, Binner and Mullineux (2005) recommended that borrowers should be screened especially by banking institutions in form of credit assessment. Collection of reliable information from prospective borrowers becomes critical in accomplishing effective screening as indicated by symmetric information theory. Qualitative and quantitative techniques can be used in assessing the borrowers although one major challenge of using qualitative models is their subjective nature. However according to Derban, Binner and Mullineux (2005), borrowers attributes assessed through qualitative models can be assigned numbers with the sum of the values compared to a threshold. This technique minimizes processing costs, reduces subjective judgments and possible biases. The rating systems will be important if it indicates changes in expected level of credit loan loss. Brown Bridge (1998) concluded that quantitative models make it possible to numerically establish which factors are important in explaining default risk, evaluating the relative degree of importance of the factors, improving the pricing of default risk, screening out bad loan applicants and calculating any reserve needed to meet expected future loan losses. (Derban ,Binner and Mullineux 2005).

The diversity of the business and economic features has led to the growth of highly complex tools and models to measure the exposure of financial institutions to credit risk.

In case of an individual loan portfolio, the models commonly used to measure the exposure to credit risk include probability of default and loss given default or credit rationing. Various invention of credit scoring models that are used to observe loan applicants features either to calculate a score representing the applicant's probability of default or to sort borrowers into different risk classes bring the ability to address credit risk on a new level. The credit risk faced by lenders to the business in this case, lenders trade off the cost/benefits of a loan according to its risks and the interest charged although interest rates are not the only method to compensate for risk (Lensink and Scholtens, 2004). Lenders are offered some controls written in the loan agreement through protective covenants. Financial institutions have every incentive to improve their modelling and trading of credit risk. The explosive growth of the credit derivatives market has distributed credit risk through the financial system packaged in new forms. An expanding credit risk market raises interesting possibilities for corporate treasurers wishing to minimise exposure to credit risk (Rule, 2001).

Financial institutions (FIs) are very important in any economy. Their role is similar to that of blood arteries in the human body because they pump financial resources for economic growth from the depositories to where they are required (Shanmugan and Bourke, 1992). FIs are key providers of financial information to the economy. They play a critical role in emergent economies where borrowers have no access to capital markets. This is evidence where well-functioning financial institutions accelerate economic growth, while poorly functioning financial institutions impede economic progress and exacerbate poverty (Barth, Caprio and Levine, 2004).

### 2.5 Credit Risk Management Practices

Financial institutions should adopt credit risk management practices to maximize Shareholder value by enhancing the value of the firm. Value enhancement can arise from minimization of the costs of financial distress, minimization of taxes and minimization of the possibility that the firm may be forced to forego positive net present value projects

because it lacks the internally generated funds to do so. However, the managerial risk aversion hypothesis holds that managers will seek to maximize their own personal well being. This clearly indicates that the managers of the financial firms may sometime engage in credit risk management practices without considering the effects it will have on the shareholders. Specifically this arises when the interests of shareholders are not perfectly aligned with those of the managers or when they pursue risk management strategies designed to insulate their own personal wealth from the effects of changes in interest rates, commodity prices, or foreign currency values. Fatemi and Glaum (2000) outline the steps that may be taken without regard for the repercussions of these decisions for shareholders' value.

It therefore follows that regardless of whether shareholder value maximization or managerial risk aversion is the driving force, engagement in risk management practices is to be observed. One of the most important practices involves management of credit risk, particularly for banks and other firms in the financial services industry. The increasing variety in the types of counterparties from individuals to sovereign governments and the ever-expanding variety in the form of obligations from auto loans to complex derivatives transactions have meant that credit risk management has jumped to the forefront of risk management activities carried out by firms in the financial services industry (Smith, 1998).

### 2.5.1 Credit Scoring Mechanism

Credit scoring is a credit risk management technique that analyzes the borrower's risk. In its early meaning, credit scores` were assigned to each customer to indicate its risk level. A good credit scoring model has to be highly discriminative, high scores reflect almost no risk and low scores correspond to very high risk or the opposite depending on the sign condition. The more discriminative the scoring system is, the better are the customers ranked from high to low risk. In the calibration phase, risk measures are assigned to each credit pools. The quality of the credit scores risk ranking and calibration can be verified by analyzing ex-post observed credit losses per score (Bessis, 2003). Credit scores are

often segmented into homogeneous pools. In the past, credit scoring focused on measuring the risk that a customer would not fulfil his/her financial obligations and run into payment arrears. Recently credit scoring evolved to loss and exposure risk as well. Scoring techniques are nowadays used throughout the whole life cycle of credit as a decision support tool or automated decision algorithm for large customer bases. With increasing competition, electronic sale channels and recent saving, credit and cooperative regulations have been important catalysts for the application of semi- automated scoring systems. Since their inception, credit scoring techniques have been implemented in a variety of different, yet related settings such as credit approval.

Originally, the credit approval decision was made using a purely judgmental approach by merely inspecting the application form details of the applicant and commonly focused on the values of the 5 Cs which are character, capital, collateral, capacity and conditions of a customer (Pykhtin, 2005). Character which measures the borrower's personal character and integrity including virtues like reputation and honesty and their willingness to comply with the credit terms and conditions; Capital which measures the difference between the borrower's assets which may include car, house and liabilities for example renting expenses and whether they exist; Collateral evaluation of the assets provided in case payment problems occur for example house hold assets, house, car; Capacity which measures the borrower's ability to pay based on for example job status, source of income and finally; Conditions where the members' borrowing circumstances are evaluated for example market conditions, competitive pressure, and seasonal character (Pykhtin, 2005). This study is consistent with Njiru (2003), Simiyu (2008), Kimeu (2008), Wambugu (2008) and Mwirigi (2006) who found out that financial institution and credit societies use 5C's techniques as a basic tool in credit risk appraisal.

This expert-based approach towards credit scoring is still used nowadays in credit portfolios where only limited information and data is available. The early success of application scorecards drew the attention of the academics and researchers to develop advanced statistical and machine-learning techniques that apply a wide range of

explanatory variables or characteristics. An application scorecard then assigns sub scores to each of the values of these characteristics. These sub scores are determined based on the relationship between the values of the characteristics and the default behaviour and these are aggregated into one overall application score reflecting the total default risk posed by the customer (de Servigny and Renault 2004).

### 2.5.2 Risk identification

Risk identification is vital for effective risk management. For credit unions to manage credit risks facing them effectively, they need to know and identify these credit risks. The first step in risk identification is implementation of the risk management function to establish crucial observation areas inside and outside the corporation. Then, the departments and the employees are assigned with responsibilities to identify specific risks. For instance, interest rate risks or foreign exchange risks are the main domain of the financial department (Christen and Pearce 2005).

Mwirigi (2006) indicated that it was important for firms to ensure that risk management function is established throughout the whole corporation that is the parent companies including subsidiaries have to identify and analyze all risks. There are many approaches for risk identification for instance, scenario analysis or risk mapping. An organization can identify the frequency and severity of the risks through risk mapping which could assist the organization to stay away from high frequency and low severity risks and instead focus more on the low frequency and high severity risk. Risk identification process includes risk-ranking components where these ranking are usually based on impact, severity or dollar effects (Christen and Pearce 2005). Accordingly, the analysis helps to sort risk according to their importance and assists management to develop risk management strategies to allocate resources efficiently.

In relation to commercial banks' practice of risk management, Al-Tamimi (2002) found that the United Arab Emirates (UAE) commercial banks were mainly facing credit risk which they identified through inspection by branch managers and financial statement

analysis methods. The main techniques used in risk management are establishing standards, credit score, credit worthiness analysis, risk rating and collateral. The recent study by Al-Tamimi and Al-Mazrooei (2007) conducted on banks' risk management of UAE national and foreign banks revealed that the three most important types of risks encountered by UAE commercial banks are foreign exchange risk, followed by credit risk and finally operating risk.

### 2.5.3 Risk analysis and assessment

There are many conceptual studies made on risk analysis and assessment reference to measurement and mitigation of risk. In practice, it is useful to classify the different risks according to the amount of damage they possibly cause (Fuser, Gleine and Meier, 1999). This classification enables the management to divide risks that are threatening the existence of the corporation from those which can cause slight damages. Frequently, there is an inverse relationship between the expected amount of loss and its corresponding likelihood that risks that will cause a high damage to corporation like earthquakes or fire occur seldom, while risks that occur daily such as interest rate risks or foreign exchange risks often cause relatively minor losses only, although these risks can sometimes harm the corporations to a great extent (Fatemi and Glaum 2000).

### 2.5.4 Risk monitoring

Monitoring is the last step in the corporate risk management process. Effective risk management requires reporting and reviewing the structure to ensure that risks are effectively identified; assessed and appropriate controls and responses are in place. Risk monitoring can be used to make sure that risk management practices are in line and it also helps banks management to discover mistakes at early stages (Al-Tamimi and Al-Mazrooei, 2007). According to them, control has to be established at different levels. The control by the management board will not be enough to ensure effective functioning of the risk monitoring system because the management board members do not have time on their hands to exercise extensive control. Hence, the management board will elect an

independent unit to complete the task of internal supervision. This task is the responsibility of the internal audit. The supervisory board is obliged to control the risk management process and is supported by the auditor. If the auditor discovers a defect, he will inform the supervisory board and the management board (Al-Tamimi and Al-Mazrooei, 2007).

### 2.5.5 Portfolio Asset Quality.

A good credit culture has strong policies and credit standards, while new markets are selected to conform to the existing culture. The effectiveness of the credit risk management is verified by internal risk control and audit that monitor credit discipline, loan policies, approval policies, facility risk exposure (Bessis, 2003) and portfolio level. Portfolio asset quality is only guaranteed when the credit risk department has strong policies and risk systems. The optimal risk strategy is the one that is in line with the business strategy. It is not the one that minimizes losses, but the one that provides a good credit quality in line with the business objectives. risk. The credit culture is supported by the top management and by a strong credit risk management.

A sound credit risk management is built upon a good-quality portfolio of performing assets. The pricing of the loans has to reflect the risk. A good selection strategy aims to avoid high losses Credit scoring is a credit risk management technique that analyzes the borrower's risk. In its early meaning, credit scores" were assigned to each customer to indicate its risk level. A good credit scoring model has to be highly discriminative: high scores reflect almost no risk and low scores correspond to very high risk, or the opposite, depending on the sign condition (Pykhtin, 2005).

The credit culture is similar to the value driven, with emphasis on strong credit quality, but for which deviation can be omitted during periods of low credit demand. Dermine, and Bissada, (2002), indicated that market share and volume growth are the highest priority, which is motivated by the ambition to become or to remain a large player on the market.

Front office lenders are demanded to produce new loans and may experience difficulties with credit risk loan approvers, because of low credit quality and non-adequate pricing. Loan approvers see their influence limited because of the conflicting interests of value and asset quality. Success depends on the strength of the credit risk management to control the approval process and to keep sufficient asset quality in the growing portfolio (Gardner and Mills 1991).

### 2.5.6 Diversification across SACCOs

The allocation process of SACCOs will provide a good diversification of the risk across various Union members of different types, industry sectors and geographies. Diversification strategies spread the credit risk in order to avoid a concentration on credit risk problems. Diversification is easier for large and international SACCO Risk reduction or mitigation implies that one takes a part of the risk, but not the full part of it. For high-risk counterparts, one may require collateral that the credit Unions can sell in the case of a default. The value of the sold collateral reduces the actual value and hence the risk for the Credit Union. One may also ask guarantees from a family. Risk reduction may not always be feasible. One accepts or retains the risk that one has to take as part of the business strategy. Risk acceptance is typically applied for low-risk assets. Credit risk is more easily accepted when it is well diversified (Bessis, 2003).

### 2.5.7 SACCOs Policy Procedures

According to Fallon, (1996), each financial institutions including saving credit and cooperative Unions must apply a consistent evaluation and rating scheme to all its investment opportunities in order for credit decisions to be made in a consistent manner and for the resultant aggregate reporting of credit risk exposure to be meaningful. To facilitate this, a substantial degree of standardization of the process and documentation is required. This has lead to standardized ratings across borrowers and a credit portfolio report that presents meaningful information on the overall quality of the credit portfolio.

In a single rating system, a single value is given to each loan, which relates to the borrower's underlying credit quality.

At some institutions, a dual system is in place where both the borrower and the credit facility are rated. In the latter, attention centres on collateral and covenants, while in the former; the general credit worthiness of the borrower is measured (Donaldson, 1989). Some banks prefer such a dual system, while others argue that it obscures the issue of recovery to separate the facility from the borrower in such a manner. In any case, the reader will note that in the reported system all loans are rated using a single numerical scale ranging between 1 and 10.8. For each numerical category, a qualitative definition of the borrower and the loan's quality is offered and an analytic representation of the underlying financials of the borrower is presented. Parrenas, (2005) hold that such an approach, whether it is a single or a dual rating system allows the credit committee some comfort in its knowledge of loan asset quality at any moment of time. It requires only that new loan officers be introduced to the system of loan ratings, through training and apprenticeship to achieve a standardization of ratings throughout the financial institutions. Given these standards, the financial organization can report the quality of its loan portfolio at any time, along the lines of the report present.

### 2.6 Credit Risk Management Practices and Performance

Linbo Fan (2004) examined efficiency versus risk in large domestic USA banks. He found that profit efficiency is sensitive to credit risk and insolvency risk but not to liquidity risk or to the mix of loan products. Ho Hahm (2004) conducted an empirical study on interest rate and exchange rate exposures of institutions in pre-crisis Korea. Results indicated that Korean commercial banks and merchant banking corporations had been significantly exposed to both interest rate and exchange rate risks, and that the subsequent profitability of SACCOs Institutions was significantly associated with the degree of pre-crisis exposure. The results also indicated that the Korean case highlights

the importance of upgrading financial supervision and credit risk management practices as a precondition for successful financial liberalization.

Credit Risk management dictates that as long as the demand for liquidity from depositors and borrowers is not too highly correlated, the intermediary should pool these two classes of customers together to conserve on its need to hold costly liquid assets the buffer against unexpected deposit withdrawals and loan take downs. Liquidity risk management is entering a new and much more demanding era. The Basel Committee on Banking Supervision and the International Institute of Finance has set high hurdles in terms of principles and recommendations. The UK Financial Services Authority (FSA), meanwhile, will soon be publishing its proposals for reinvigorating its liquidity risk regulations (Financial Sector Deepening, 2009).

Funding growth through core saving has become largely a thing of the past. The advent of nonbank competition and the rise of third-party funding mean that community banks now operate in a dynamic funding market, which requires the use of more sophisticated liquidity risk management practices. Industry experts point to many different underlying causes for the demise of growth in deposits, such as the increased financial sophistication of the public, demographic shifts, the rise of nonbank competitors offering a whole wave of alternative investment products, new delivery systems such as the Internet, and competition from credit unions and insurance companies( Gestalt and Baesen 2009).

**2.7 Empirical Review**

The empirical findings by Al-Tamimi (2002) and Al-Mazrooei (2007) highlighted that UAE banks are efficient in analyzing and assessing risk and there is a significant difference between UAE national and foreign banks in the practice of risk analysis and assessment. Additionally, the findings show that risk analysis and assessment influence risk management practices. Drzik (1995) mentioned that the Bank Administration Institute Risk Management Survey showed that large banks in the US had made substantial progress in their development and implementation of risk measures. The

measures were used not only for risk control purposes but also for performance measurements and pricing. Comprehensive risk measurement and mitigation methods for various risks arising from financing activities and from the nature of profit and loss sharing in the source of funds especially investment account holders are explained by Sundararajan (2007, pp.36-35). He concludes that the application of modern approaches to risk measurement particularly for credit and overall banking risks is important for Banks. He also suggested the need to adopt new measurement approaches critical for Banks because of the role they play and the unique mix of risks in finance contracts. However, Navajas and Tejerina (2006) indicated that Banks are perceived not to use the latest risk measurement techniques and Shari'ah compliant risk mitigation techniques due to different Shari'ah interpretation of these techniques. Appropriate measurement of credit and equity risks in various finance facilities can benefit from systematic data collection efforts including establishing credit and equity registry.

The monitoring of borrowers is very important because current and potential exposures change with both the passage of time and movements in the underlying variables and it is also very important in dealing with moral hazard problem. Monitoring involves frequent contact with borrowers, creating an environment where the bank is seen to solve problems and trusted advisor, developing a culture of being supportive to borrowers whenever they are in difficulties and striving to deal with the situation, monitoring the flow of borrower's business through the bank's account, regular review of the borrower's report as well as an on-site visit, updating borrowers credit files and periodically reviewing the borrowers rating assigned at the time credit was granted (Derban, Binner and Mullineux 2005).

The presence of real options based flexibilities should enhance effective risk management practices that diminish earnings volatility and thereby reduce the costs associated with potential financial distress. The presence of real options based flexibilities should enhance effective risk management practices that diminish earnings volatility and thereby reduce the costs associated with potential financial distress (Andersen, 2008). To the

extent an organization is able to manage credit risks imposed by dynamic global conditions potential under investment problems would be reduced resulting in higher earnings (Froot, Scharfstein and Stein, 1994). Hence, risk management can be extended to include a real options perspective where firms are able to develop opportunities and claims on the future that can be evaluated based of assumptions about underlying risk factors (Leiblein, 2003). Stulz, (1984) carried out a study on the rationale of credit risk management to organizations. He indicated that the there exist a rationale for risk management for lenders and financial institutions in the business of lending. Another rationalization of risk management was done by (Santomero, 1995).

There are seven reasons as to why there's a sudden surge of interest in risk as it is measured and managed. The reasons are structural increase in bankruptcies calling for accurate credit risk analysis more today than was required in the past, Disintermediation whereby capital markets have expanded and become accessible to small and mid size firms, More competitive Margins brought about by enhanced competition for lower quality borrowers, Declining and volatile values of collateral which have caused banking crises in well developed countries such as Switzerland and Japan; and more recently America and U.K., the growth of off-balance-sheet derivatives extended the need for credit analysis beyond the loan book. Technology where besides analyzing loan loss, the commercial banks can manage loan portfolios based on modern portfolio theory models and techniques, and the BIS risk – based capital requirements which is the greatest incentive for banks to develop new credit risk models (Saunders and Allen, 2002).

According to Parrenas, (2005), the shareholders of the corporation can use their rights to demand information in order to judge the efficiency of the risk management system. The director's report enables the shareholders to assess the status of the corporation knowledgeably and thoroughly. Al-Tamimi and Al-Mazrooei (2007) found that there is a significant difference between UAE national and foreign banks in risk monitoring and controlling. The UAE commercial banks have an efficient risk monitoring and controlling system which has positive influence on risk management practices.

The justification for studying organizations' activities by focusing on risk management can be traced to Merton (1995) who argued that financial systems should be analyzed in terms of a "functional perspective" rather than an "institutional perspective" since over long periods of time functions have been much more stable than institutions. Research on financial services has followed this functional approach by relating organisations' activities to the functions performed by them. Merton (1989) suggested that, inter alia, the central function of a financial institution is its ability to distribute risk across different participants. According to Saunders and Cornett (2006), modern financial institutions are in the risk management business as they undertake the functions of beating and managing risks on behalf of their customers through the pooling of risks and the sale of their services as risk specialists.

Given the importance of credit risk management in SACCO's functioning, the efficiency of microfinance's risk management is expected to significantly influence its financial performance (Harker and Satvros, 1998). An extensive body of literature (Santomero and Babbel, 1997) argues that risk management matters for financial performance of firms. According to Pagano (2001), credit risk management is an important function of financial institutions in creating value for shareholders and customers. The corporate finance literature has linked the importance of risk management with the shareholder value maximization hypothesis. This suggests that SACCOs will engage in risk management policies if it enhances shareholder value (Ali and Luft, 2002). Thus, effective credit risk management either in non-banking firms or in banking entities is expected to enhance the value of the firm and shareholder wealth.

Accvording to Gestel and Baesens (2009) risk management is primarily concerned with reducing earnings volatility and avoiding large losses. In a proper risk management process, one needs to identify the risk, measure and quantify the risk and develop strategies to manage the risk. The highest concern in risk management is the most risky products. The prior concern for the risk management is those products that can cause the highest losses: high exposures with high default risk. Harker and Satvros, (1998)

indicated that a sound credit risk management is built upon a good-quality portfolio of performing assets and the pricing of the loans has to reflect the risk. A good selection strategy aims to avoid high losses. Credit scoring is a credit risk management technique that analyzes the borrower's risk. In its early meaning, credit scores" were assigned to each customer to indicate its risk level. Gestel and Baesens (2009) indicated that good credit scoring model has to be highly discriminative: high scores reflect almost no risk and low scores correspond to very high risk, (or the opposite, depending on the sign condition). The more highly discriminative the scoring system, the better are the customers ranked from high to low risk (Gestel and Baesens 2009).

In case of financial institutions like banks, studies made especially on risk identification and risk mitigation includes the work of Haron and Hin Hock (2007) on market, credit risk and specifically on operational risk. They explain the inherent risk in banks; credit and market risk exposures and they illustrate the notion of displaced commercial risk that is important in Banks. According to Kimeu (2008) that certain risks may be considered as being inherent in the operations of conventional banks. Although the risk exposures of commercial Banks differ and may be complex than other conventional financial institution, the principles of credit and market risk management are applicable to both. In addition, the IFSB's standards on capital adequacy and risk management guiding principles mark the first steps in an ongoing process of developing prudential standards.

According to Ongweso (2006) loan losses were attributed to ineffective credit risk management approaches adopted by the financial institutions and therefore there exist a relationship between credit risk management practices and firm performance. Muriuki, (2007) investigated credit risk management practices adopted by the oil companies and formulated and documented credit policy document and procedures which was to guard the oil firm's assets and improve performance. Mutie, (2006) also established that the credit risk management approaches has effects on general firm performance .He evaluated the effects of credit scoring practices in Kenyan commercial banks on asset Quality management.

## 2.8 Conclusion

In conclusion SACCOs, has to adopt better internal risk management which wills yields similar benefits. As SACCOs continue expand their serving more customers and attracting more mainstream investment capital and funds, they need to strengthen their internal capacity to identify and anticipate potential risks to avoid unexpected losses and surprises. Creating a credit risk management framework and culture within a SACCOs is the next step after mastering the fundamentals of individual risks, such as credit risks. Further, more clarity about the roles and responsibilities of managers and board members in credit risk management helps build stronger institutions.

The Central Bank of Kenya (CBK) in their Annual report for the period 2006-2007 corroborated the fact that Credit risk management practices can be a contributory factor to the efficient management and better performance of the financial institutions. Previous studies on credit risk management have not focussed on the effects on the credit risk management practices on financial performance of the credit unions. Ngare (2008) undertook a survey of credit risk management practices by commercial banks in Kenya while Simiyu (2008) carried out a survey of techniques or credit risk management in micro-finance institutions in Kenya.This study has critically analysed credit risk management practices which could be used by conventional financial institutions and suggest ways in which SACCOs further adapt and innovate to create the optimal risk management culture within their own organizations.

The construction of portfolios that benefit from diversification across borrowers and that reduce the effects of any one loss experience is another. The implementation of incentive-compatible contracts with the institution's management to require that employees be held accountable is the third. In each case the goal is to rid the firm of risks that are not essential to the financial service provided, or to absorb only an optimal quantity of a particular kind of risk (Maina 2008).

# CHAPTER THREE

# RESEARCH DESIGN AND METHODOLOGY

## 3.1 Introduction

This chapter presented the research design and methodology that was used to carry out the research. It presents the research design, the population, sample size and sampling procedure, data collection, data analysis, validity and reliability.

## 3.2 Research design

Research design refers to the way the study is designed, that is the method used to carry out the research (Mugenda and Mugenda (2003). Descriptive Research was the investigation in which quantity data will be collected and analysed in order to describe the specific phenomenon in its current trends, current events and linkages between different factors at the current time. Causal research design is chosen because it enables the researcher to generalise the findings to a larger population. This study will therefore be able to generalise the findings to all the SACCOs in Nairobi.

## 3.3 Target Population

The study population consisted of all 4233 SACCOs registered under the societies Act in Kenya (Survey Report, February 2010). The list of the SACCOs was obtained from the Ministry of Cooperative and marketing.

## 3.4 Sampling Methods

The sample size of the study was 41 SACCOs. Mugenda and Mugenda (2003) indicated that a sample size of 30 and above of the population is sufficient sample size for the study. The SACCOs was selected through simple random sampling method .The researchers collected data from the selected SACCOs based in Nairobi for convenience purposes.

### 3.5 Data collection

Questionnaires were used to obtain important information about the population. According to Sproul (1998), a self administered questionnaire is the only way to elicit self report on people's opinion, attitudes, beliefs and values. The questionnaire contained both closed-ended and also a few open ended questions.

The study used both primary and secondary data. Primary data was the information the researcher l obtained from the field. Primary data was collected using semi-structured questionnaires. The questionnaires was administered using drop and pick method. The questionnaires was used because allowed the respondents who were credit managers to give their responses in a free environment and help the researcher gather information that would not have been given out had interviews been used. The questionnaire was self-administered to some respondents while for others the researcher administered. Secondary data refers to the information obtained from articles, books, newspapers, internet and magazines. Thus secondary data was collected from the financial statements of the SACCOs and books to collect information on annual earnings of the SACCOs.

### 3.6 Data analysis

For collected data to be understood by the common man easily, it needs to be analyzed. The researcher used qualitative and quantitative techniques in analyzing the data. After receiving questions from the respondents, the responses were edited, classified, coded and tabulated to analyze quantitative data using Statistical Package for Social Science (SPSS version 17). Tables and charts were used for further representation for easy understanding and analyzes. The collected data was thoroughly examined and checked for completeness and comprehensibility. The data was then be summarized, coded and tabulated. Inferential statistic was used to establish the relationship between credit risk management practices and the financial performance of SACCOs, performance of SACCOs was measured by their profitability in term of Return on Assets. The inferential statistic seeks to establish a causal effect relating independence variables to the dependent

variable. While credit risk management practice was quantified from Liekert questions. Correlation analysis was used to establish the strength of the relationship between credit risk management practices and the financial performance of SACCOs.

A linear regression model of financial performance versus credit risk practices was applied to examine the relationship between the variables. The model treats financial performance of SACCOs as the dependent variable while the independent variables were the credit risk management practices which include Credit Scoring Mechanism, Risk identification, Risk analysis and assessment, Diversification of Assets, Portfolio Asset Quality and SACCOs Policy Procedures. The response on credit risk management practices were measured by computing indices based on the responses derived from the Likert-Scaled questions. The relationship equation represented in the linear equation below.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon$$

Where

Y= Return on Assets

$\alpha$ = Constant Term

$\beta_1$= Beta coefficients

$X_1$= Credit Scoring Mechanism

$X_2$= Risk identification

$X_3$= Risk analysis and assessment

$X_4$= Diversification of Assets .

$X_5$= Portfolio Asset Quality

$X_6$= SACCOs Policy Procedures

$\varepsilon$ = Error Term

Return on Assets is an indicator of how profitable a SACCO is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA will display as a percentage. Using ROA as a comparative measure is best to compare it against a company's previous ROA numbers or the ROA of a similar company. This will indicate the how effective credit risk management practices will leads to profitability on the SACCOs in Kenya.

### 3.7 Validity and reliability

Piloting was carried out to test the validity and reliability of the instruments. Validity indicated that degree to which the instrument measures the constructs under investigation (Mugenda and Mugenda, (2003). There are three types of validity test which include content, criterion and related construct validity. This study used content validity because it was measured the degree to which the sample of the items represents the content that the test was designed to measure.

A pilot study was conducted by the researcher taking some questionnaires to the SACCOs headquarter in Nairobi which was filled by some respondents at random. From this pilot study the researcher was able to detect questions that need editing and those that are ambiguous. The final questionnaire was then printed and used to collect data to be used for analysis.

# CHAPTER FOUR

# DATA ANALYSIS AND INTERPRETATION OF FINDINGS

## 4.1 Introduction

This chapter presents the discussion and conclusion of the study. From the study, the target population was 41, 36 respondents responded and returned the questionnaire .This constituted 83.30%response rate.

## 4.2 General Information

### Position of the respondents

The respondents were requested to state their position in the organization. From the findings it was found out that some of the respondents were loan officers, marketing officers, customer care representative, finance managers, operations managers administration managers, credit officers accountants and assistant accountants,

### Years served in the Sacco

**The study requested the respondents to state the** period that they have been working in the organization. From the findings it was found out that respondents had worked for 13years, 12 years, 11 years, 14 yeas and even 2, 3, 4, 5 years.

**Table 4. 1: Number of employees in the SACCO**

| | Frequency | Percent |
|---|---|---|
| 1-250 employees | 20 | 55.6 |
| 251 -500 employees | 11 | 30.6 |
| 501-750 employees | 5 | 13.9 |
| Total | 36 | 100.0 |

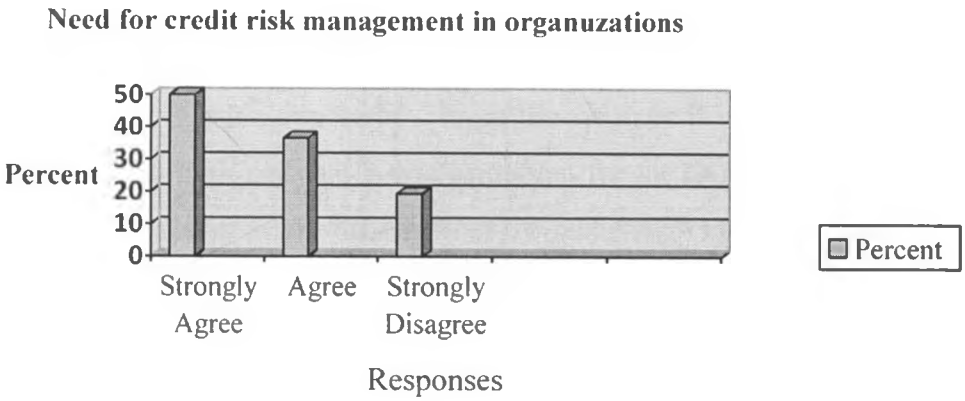
Source : Researcher (2010)

The study sought to find the number of the employees in the firm. From the findings

majority 55.6% of the respondents indicated that the number of employees in the firm ranged between 1-250 employees, 30.6% of the employees indicated that the number of the employees ranged between 251-500 while 13.9% of the respondents indicated the number of the employees ranged between 501-750 employees.

### 4.3 Credit Risk Management Practices

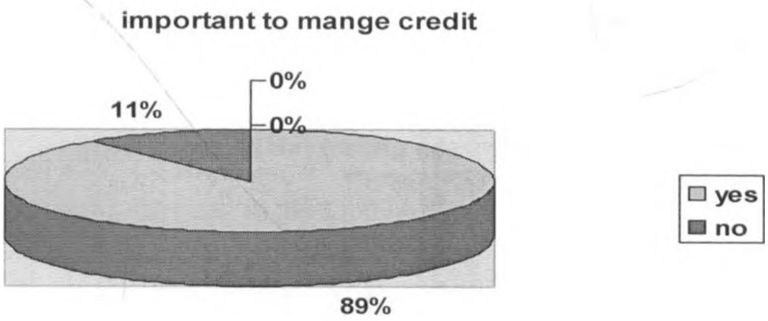
**Figure 4. 1: Extent of agreeing that SACCOs needs to ensure credit risk management is well done**




Source: Researcher (2010)

The respondents were requested to indicate the extent to which they agreed with the statement that SACCOs needs to ensure credit risk management is well done to prevent it from failing in its obligation and meeting its objective. From the findings, majority 50% of the respondents strongly agreed that SACCOs need to ensure credit risk management is well done as indicated by of the respondents. 30.6% of the respondent agreed that SACCOs needs to ensure credit risk management is well done while 19.4% of the respondents agreed the SACCOs needs to ensure credit risk management is well done. This implies that SACCOs required management it credit risks effectively to enhance it financial performance.

**Figure 4. 2 : Whether is important to manage credit Risk management**




Source: Researcher (2010)

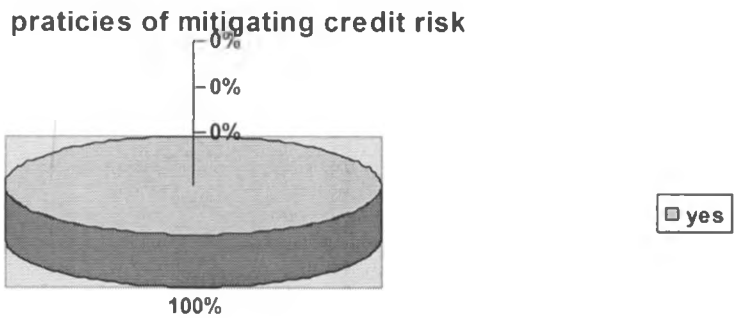
The study requested the respondents to give indicate whether it was important for SACCOs to manage credit risk that it's exposed to. From the findings it was found out that majority of the respondents indicated that it was important for the to manage credit risk as indicated by 89% of the respondents while 11% of the respondent indicated that it was not important for the SACCOs to manage credit risk.

**The importance of adopting credit risk management practices**

The study sought to investigate the importance's of credit risk management. From the findings, respondents indicated that the importance of credit risk managements were that it minimizes loan defaulters, cash loss and ensures the organization performs better increasing the return on assets. It was also found that it helps the organization in adopting the most efficient and effective method of concurring various credit risk in the organization.

### 4.3.1 Practices of mitigating credit risk

**Figure 4. 3 : Practices of mitigating credit risk**




Source: Researcher (2010)

The study sought to find whether the SACCOs had in place practices of mitigating credit risk. From the findings. All 100% of the respondents indicated that the SACCOs has in place the practices of mitigating credit risk to maximize on performance.

**Table 4. 2: Practices adopted by SACCOs in credit risk management**

| | Frequency | | | |
|---|---|---|---|---|
| | **Yes** | **No** | **Total** | **% of yes** |
| credit scoring mechanism | 24 | 12 | 36 | 66.7 |
| risk identification | 20 | 16 | 36 | 55.5 |
| risk analysis and assessment | 26 | 10 | 36 | 72.2 |
| risk monitoring | 18 | 18 | 36 | 50 |
| SACCOs loan policy procedure | 31 | 5 | 36 | 86.1 |
| diversification across union members | 15 | 21 | 36 | 41.6 |
| portfolio asset quality/portfolio management | 18 | 18 | 36 | 50 |

Source: Researcher (2010)

The study sought to find the practices that were adopted by the SACCOs in credit risk management. From the findings, majority 86.1%, 72.2%, 66.7%, 55.5% and 52.8% of the respondents indicated that SACCOs adopted loan policy procedure, risk analysis and assessment, credit scoring mechanism, risk identification, and diversification across union members as practices used by the SACCOs in credit risk managements.

### 4.3.2 Approaches used in screening and risk analysis before awarding credit to customer

**Table 4. 3 : Approaches used in screening and risk analysis before awarding credit to customer**

| | Not at all | least | Moderate | most | N | Mean | Std dvt |
|---|---|---|---|---|---|---|---|
| character of borrower | 4 | 0 | 14 | 18 | 36 | 3.27 | 0.94 |
| capacity/competition | 0 | 4 | 2 | 30 | 36 | 3.7 | 0.65 |
| Conditions | 2 | 4 | 3 | 27 | 36 | 3.52 | 0.90 |
| collateral/security | 4 | 0 | 7 | 25 | 36 | 3.47 | 0.970 |

The study sought to find the approaches that are used by the SACCOs in screening and risk analysis before awarding credit to clients. From the findings, most of the respondents agreed to a great extent that capacity/competition and conditions are the approaches mostly used as in screening and risk analysis before awarding credit to clients as indicated by a mean of 3.72 and 3.52 respectively. It was further found that most of the respondent agreed to a moderate extent that collateral/security and character of borrower were used in screening and risk analysis before awarding credit to clients as indicated by a mean of 3.47 and 3.28 respectively.

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**Table 4. 4: Extent to which issues of credit risk management are agreed upon**

| | Strongly agree | Agree | Neutral | Disagree | Strongly disagree | Mean | Std dvt |
|---|---|---|---|---|---|---|---|
| for credit risk decision to be made standardization of process and documentation is required | 22 | 10 | 0 | 0 | 4 | 4.72 | 0.25 |
| credits must be monitored and reviewed periodically for quality credit control | 17 | 10 | 0 | 9 | 0 | 4.02 | 0.23 |
| portfolio managers should watch over loan portfolio's degree of concentration and exposure | 14 | 8 | 5 | 5 | 4 | 4.56 | 0.41 |
| member lending facility is reported to the credit risk management committee | 16 | 7 | 0 | 5 | 8 | 3.50 | 1.68 |
| risk management practices are monitored and set by the credit committee | 12 | 11 | 4 | 4 | 5 | 4.41 | 1.42 |

Source: Researcher (2010)

The tables indicate the Responses of the respondents on the statement on issues about credit risk management in the SACCOs. From the findings majority of the respondents strongly agreed that credit risk decision was made for standardization of process and documentation was required and that portfolio managers should watch over loan portfolio's degree of concentration and exposure were issues of credit risk management as indicated by a mean of 4.72 and 4.56 respectively. Most of the respondents agreed risk management practices are monitored and set by the credit committee, credits must be monitored and reviewed periodically for quality credit control and member lending

facility is reported to the credit risk management committee as indicated by a mean of 4.41, 4.02 and 3.50 respectively. This clearly indicated that SACCOs management emphasize on enhancing credit risks management to maximize on their financial performance.

**Table 4. 5: Means of making awareness of credit risk**

| | Not at all | least | Moderate | most | Mean | Std dvt |
|---|---|---|---|---|---|---|
| regular meetings | 0 | 8 | 9 | 19 | 3.31 | .82 |
| regular training | 0 | 4 | 15 | 17 | 3.85 | .68 |
| using supervision on one to one basis | 5 | 0 | 16 | 15 | 3.13 | .99 |

Source: Researcher (2010)

The study sought to investigate the mean by which the SACCOs staffs are made aware of credit risks. From the findings majority of the respondents indicated that they undergoes regular trainings as the mostly used means make the staff aware of the credit risk as indicated by a mean of 3.85. It was further found that majority of the respondents indicated that regular meetings and supervision on one to one basis were moderately used mean in making staff aware of the credit risks as indicated by a mean of 3.31 and 3.13 respectively.

### 4.3.3 Extent to which SACCOs consider risk identification process

**Table 4. 6: Extent to which SACCOs consider risk identification process in credit risk management**

| | Frequency | Percent |
|---|---|---|
| very great extent | 23 | 63.9 |
| great extent | 9 | 25.0 |
| moderate extent | 4 | 11.1 |
| Total | 36 | 100.0 |

Source: Researcher (2010)

The respondents were requested to indicate the to which SACCOs consider risk identification process in credit risk management. From the findings, majority of the respondents 63.9% indicated that SACCOs consider risk identification process in credit risk management to a very great extent, 25.0% indicated that SACCOs consider risk identification process in credit risk management to a great extent while 11.1% of the respondents indicated that SACCOs consider risk identification process in credit risk management to a moderate extent. This clearly implied that risk identification was used as a credit risk management practices in SACCOs to a greater extent.

### 4.3.4 Extent to which SACCOs apply the following methods in loan recovery

**Table 4. 7: Extent to which SACCOs apply the following methods in loan recovery**

| | Not at all | Least extent | Moderate | Fair extent | Great extent | N | Mean | Std dvt |
|---|---|---|---|---|---|---|---|---|
| use auctioneers to recover | 4 | 7 | 16 | 0 | 9 | 36 | 3.08 | 0.29 |
| The firm recover the defaulted loans from Guarantors | 3 | 13 | 7 | 4 | 9 | 36 | 4.18 | 0.36 |
| write the debt off and account it as bad debts | 0 | 3 | 23 | 5 | 5 | 36 | 3.33 | 0.82 |
| write off interest and allow them to pay the principle | 0 | 9 | 13 | 5 | 9 | 36 | 3.38 | 0.12 |

Source: Researcher (2010)

The study sought to know the extent to which SACCOs apply the given methods in loan recovery. From the findings, most of the respondents indicated that management of SACCOs use the SACCOs management recover the defaulted loans from Guarantors to recover the money as methods in loan recovery to a great extent as indicated by a mean of 4.18.other respondents indicated that writing the debt off and account it as bad debts and writing off interest and allowing client to pay the principle were use as a methods in loan recovery to a moderate extent as indicated by a mean of 3.33 and 3.08 respectively. This clearly indicated that SACCOs do adopt various methods of loan recovery to avoid loan loss which may limit the performance of the organizations.

**Table 4. 8: Time of decision on whether the client has defaulted on loan payment**

| | Not at all | Least extent | Moderate | Most | N | Mean | Std dvt |
|---|---|---|---|---|---|---|---|
| one month late payment | 4 | 15 | 4 | 13 | 36 | 2.72 | 0.08 |
| three months loan payment | 1 | 6 | 17 | 12 | 36 | 3.11 | 0.78 |
| more than twelve months late payments | 0 | 3 | 11 | 22 | 36 | 3.52 | 0.65 |
| using supervision on one to one basis | 9 | 0 | 4 | 23 | 36 | 3.13 | 0.29 |

Source: Researcher (2010)

The respondents were requested to indicate the time of decision on whether the client has defaulted on loan payment. From the findings, most of the respondent agreed to a greater extent that client is said to have defaulted the loan after more than twelve months' late payments as indicated by a mean of 3.52. The study also found that most of the respondents agreed that client default loan payment after using supervision on one to one basis and three months failure of loan repayment to a moderate extent as indicated by a mean of 3.13 and 3.11 respectively. The study further found that most respondents were indifferent on whether is the decision taken that the client had defaulted after one month late payment indicated by a mean 2.72 .This clearly indicates that the management of the SACCOs made decision regarding when the client had defaulted the credit facility for action to taken on how loans can be recovered.

**Table 4.9: Extent of agreeing with the statement on issues of credit risk management**

| | Strongly agree | Agree | Neutral | Disagree | Strongly disagree | N | Mean | Std dvt |
|---|---|---|---|---|---|---|---|---|
| credit risk management is essential to optimizing the performance | 22 | 10 | 0 | 0 | 4 | 36 | 4.72 | 0.25 |
| sound credit risk management practices are built on good quality portfolio management | 3 | 25 | 0 | 4 | 4 | 36 | 4.67 | 0.15 |
| credit union adopted credit documentation as a ways of managing credit risk | 11 | 9 | 5 | 4 | 7 | 36 | 4.63 | 0.51 |
| the use of collateral | 25 | 7 | 0 | 0 | 4 | 36 | 4.63 | 0.6 |
| better portfolio monitoring | 4 | 28 | 0 | 4 | 0 | 36 | 4.11 | 0.74 |
| credit officers must posses adequate appraisal | 16 | 12 | 8 | 0 | 0 | 36 | 3.77 | 0.79 |
| customers are offered good free consultant services | 9 | 22 | 1 | 4 | 0 | 36 | 3.00 | 0.86 |

Source: Researcher (2010)

The study sought to find the extent to which the respondents agree with the issues concerning credit risk management in the SACCOs. From the findings majority of the respondents strongly agreed that credit risk management is essential to optimizing the performance and that sound credit risk management practices were built on good quality portfolio management, credit union adopted credit documentation as a ways of managing

credit risk and the use of collateral enhances risk management in SACCOs as indicated by a mean of 4.72, 4.67, 4.64 and respectively .4.63. Most of the respondents agreed that better portfolio monitoring and adequate appraisal of the credit officers enhances credit risk management in SACCOs.

### 4.4 Regression Analysis

A multivariate regression model was applied to determine the relationship between credit risk management practices on financial performance of SACCOs in Kenya. The logistic regression used in this model was:

$$Y = \alpha + \beta_1 X_1 + \beta_1 X_2 + \beta_1 X_3 + \beta_1 X_4 + \beta_1 X_5 + \beta_1 X_6 + e$$

Where Y= Return on Assets = Constant Term, $\beta_1$= Beta coefficients $X_1$= Credit Scoring Mechanism, $X_2$= Risk identification, $X_3$= Risk analysis and assessment, $X_4$= Diversification of Assets, $X_5$= Portfolio Asset, Quality, $X_6$=SACCOs Policy Procedures and e = Error Term

Table 4. 10: Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .072(a) | .0518 | .418 | 0.24 | 1.841 | 6 | .307 | 5.191 | .001(a) |

a Predictors: (Constant), portfolio asset quality/portfolio management, SACCOs loan policy procedure, risk monitoring , risk analysis and assessment, credit scoring

mechanism, Diversification of Assets

Adjusted $R^2$ is called the coefficient of determination and tells us how the financial performance of the SACCOs will varies with variation in credit risk management practices which include portfolio asset quality/portfolio management, SACCOs loan policy procedure, risk identification and, risk analysis and assessment, credit scoring mechanism, Diversification of Assets. From table above, the value of adjusted $R^2$ is 0.481. This implies that, there was a variation of 48.1% of financial performance varied with variation in credit risk management practices which includes portfolio asset quality /portfolio management, SACCOs loan policy procedure, risk identification , risk analysis and assessment, credit scoring mechanism and Diversification of Assets at a confidence level of 95%.

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .720(a) | .518 | .418 | .24313 |

**Source, Researcher (2010)**

**ANOVA (b)**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 1.841 | 6 | .307 | 5.191 | .001(a) |
| | Residual | 1.714 | 29 | .059 | | |
| | Total | 3.556 | 35 | | | |

a. Predictors: (Constant), portfolio asset quality/portfolio management, SACCOs loan pollicy procedure, risk monitoring, risk analysis and assement, credit scoring mechanism, credit enhancement.

b. Dependent Variable: whether is important to manage credit.

**Coefficients (a)**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.000 | .275 | | 3.640 | .001 |
| | credit scoring mechanism | .571 | .195 | .857 | 2.931 | .007 |
| | risk analysis and assessment | 3.817 | .246 | .000 | .000 | 1.000 |
| | risk monitoring | 1.128 | .128 | .000 | .000 | 1.000 |
| | SACCOs loan policy procedure | -.571 | .290 | -.629 | 1.972 | .058 |
| | Diversification of Assets | 4.161E-16 | .429 | .000 | .000 | 1.000 |
| | portfolio asset quality/portfolio management | 3.964E-16 | .501 | .000 | .000 | 1.000 |

a. Dependent Variable: whether is important to manage credit

b. Predictors: (Constant), portfolio asset quality /portfolio management, SACCOs loan policy procedure, risk identification , risk analysis and assessment, credit scoring mechanism and Diversification of Assets .The established regression equation was;

$Y = 1.000 + 3.964\ X_1 + 1.128X_2 + 3.817X_3 + 0.571X_4 + 4.161X_5 + 3.96X_6$

Where $X_1$= Credit Scoring Mechanism $X_2$= Risk identification, $X_3$= Risk analysis and assessment $X_4$= Diversification of Assets, $X_5$= Portfolio Asset, Quality $X_6$= SACCOs Policy Procedures

From the above regression model, it was found that financial performance of the SACCOs would be at 1.000 when the organization do not apply or holding credit risk management practices constant, Credit Scoring Mechanism, Risk identification, Risk analysis and assessment, Diversification of Assets , Portfolio Asset Quality in the management of the credit risks. A unit increase in Credit Scoring Mechanism would lead to increase in financial performance of the SACCOs by factor of 3.964 , a unit increase in risk identification and monitoring of credit risks in SACCOs lead to an increase in financial performance by a factor of 1.128 .The study also found that a unit increase in Risk analysis and assessment would result to an increase in financial performance of the SACCOs by a factor of 3.817 while a unit increase in SACCOs loan policy procedure would result to an increase in financial performance of SACCOs by factor of 0.571,further unit increase in diversification of assets would result to an increase in financial performance of the SACCOs by factor of 4.161 while a unit increase in Portfolio Asset Quality would lead to an increase in financial performance by a factor of 3.96. This clearly indicates that adoption of credit risk management practices in management of credit risks that faces SACCOs has positive effects on financial performance.

**4.5 Summary and Implications of the findings**

From the findings, SACCOs needs to ensure credit risk management is well done to prevent it from failing in its obligation and meeting its objective and also enhance it financial performance. The study further found there were importance of managing credit risk and that the SACCOs has in place the practices of mitigating credit risk to maximize on performance. The study further found that SACCOs adopted loan policy

procedure, risk analysis and assessment, credit scoring mechanism, risk identification, and diversification across union members as practices used by the SACCOs in credit risk managements

The study found that SACCOs management emphasize on enhancing credit risks management to maximize on their financial performance as it was found that respondents strongly agreed that credit risk decision was made for standardization of process and documentation was required and that portfolio managers should watch over loan portfolio's degree of concentration and exposure were issues of credit risk management. Most of the respondents agreed risk management practices are monitored and set by the credit committee, credits must be monitored and reviewed periodically for quality credit control and member lending facility is reported to the credit risk management committee

The study found that regular trainings was mostly used means in making the staff aware of the credit risk while regular meetings and supervision on one to one basis were moderately used mean in making staff aware of the credit risks.The study further found that SACCOs consider risk identification process in credit risk management to a very great extent, risk identification process in credit risk management to a great extent while risk identification process in credit risk management was considered to a moderate extent. This clearly implied that risk identification was used as a credit risk management practices in SACCOs to a greater extent.

From the findings, most of the respondent agreed to a greater extent that client is said to have defaulted the loan after more than twelve months' late payments, most of the respondents agreed that client default loan payment after using supervision on one to one basis and three months failure of loan repayment to a moderate extent while most respondents were indifferent on whether is the decision taken that the client had defaulted after one month late payment. This clearly indicates that the management of the SACCOs made decision regarding when the client had defaulted the credit facility for action to taken on how loans can be recovered. From the findings majority of the respondents

strongly agreed that credit risk management is essential to optimizing the performance and that sound credit risk management practices were built on good quality portfolio management, credit union adopted credit documentation as a ways of managing credit risk and the use of collateral enhances risk management in SACCOs.The study found that adoption of credit risk management practices in management of credit risks that faces SACCOs has positive effects on financial performance.

The study also found that there was a variation of 78.1% of financial varied with variation in credit risk management practices portfolio asset quality/portfolio management, SACCOs loan policy procedure, risk monitoring , risk analysis and assessment, credit scoring mechanism, Diversification of Assets at 0.05 significant level or confidence level 95%.The study established that there was a variation of 48.1% of financial performance varied with variation in credit risk management practices which includes portfolio asset quality /portfolio management, SACCOs loan policy procedure, risk identification, risk analysis and assessment, credit scoring mechanism and Diversification of Assets at a confidence level of 95% .The established regression equation was;

$$Y = 1.000 + 3.964\ X_1 + 1.128X_2 + 3.817X_3 + 0.571X_4 + 4.161X_5 + 3.96X_6$$

The equations depicts clearly that adoption of credit risk management practices in management of credit risks that faces SACCOs has positive effects on financial performance.

# CHAPTER FIVE

# SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## 5.1 Summary

The study established that SACCOs needs to ensure credit risk management is effective to prevent it from failing in its obligation and meeting its objective. From the findings it the study indicated that it's important for SACCOs to manage credit risk so as to maximize on its return on assets. The study discovered that SACCOs needs effective credit risk managements to minimize loan defaulters, cash loss and ensures the organization performs better increasing the return on assets. It was also found that credit risk management helps the organization attains maximum financial returns.

The study established that there approaches that are used by the SACCOs in screening and risk analysis before awarding credit to clients to minimize on loan loss. From the findings, the capacity/competition and conditions are the approaches mostly used as in screening and risk analysis before awarding credit to clients.

It was further found that most of the respondent agreed to a moderate extent that collateral/security and character of borrower were used in screening and risk analysis. Credit risk management is essential to optimizing the performance and that sound credit risk management practices were built on good quality portfolio management, credit union adopted credit documentation as a ways of managing credit risk and the use of collateral enhances risk management in SACCOs

The study also conclude that SACCOs adopt various approaches in screening and analyzing risk before awarding credit to clients to minimize on loan loss. This included establishing capacity/competition and conditions and use of collateral/security and character of borrower were used in screening and risk analysis in attempt to reduce manages credit risks

## 5.2 Conclusion

From the findings, the study concludes that SACCOs needs management credit risk effective to prevent it from failing in its obligation and meeting its objective, minimize loan defaulters, cash loss and ensures the organization performs better increasing the return on assets and helps the organization in attaining maximum financial returns.

From the findings the study concludes that SACCOs adopted loan policy procedure, risk analysis and assessment, credit scoring mechanism, risk identification, credit enhancement and diversification across union members as practices used by the SACCOs in credit risk managements. .The study also conclude that the management of the SACCOs were involved in the management of the credit risk through making credit risk decision through standardization of process and documentation watch over loan portfolio's degree of concentration and exposure for credit risk management .

The study s also establishes way through which the firm staffs were made aware of credit risks. It was established that regular meetings and supervision on one to one basis for staff enable the staff be wary risks facing the organization and what action to take to mitigate it. The study further concludes that SACCOs consider risk identification process in credit risk management SACCOs as important in credit risk management as essential in optimizing the performance and that sound credit risk management practices were built on good quality portfolio management, credit union adopted credit documentation as a ways of managing credit risk and the use of collateral enhances risk management in SACCOs

The study further concludes that there was a positive relationship between credit risk management practices and the financial performance of SACCOs, depicting the relationship between credit risk management practices and financial performance in organizations. $Y = 1.000 + 3.964\ X_1 + 1.128X_2 + 3.817X_3 + 0.571X_4 + 4.161X_5 + 3.96X_6$

### 5.3 Policy Recommendation

Given the findings from this study, there are a number of policy recommendations that can be adopted by the SACCOs Management in militating against credit risks facing to enhance their financial performance .A policy recommendation is simply written policy advice prepared for some group that has the authority to make decisions. The SACCOs policy recommendations are the key indicators through which SACCOs policy decisions will be made in most levels of SACCOs

SACCOs management should also enhance construction of employee teams through providing training to improve the business knowledge by employees, train and attract persons with compound abilities to enhance the capability to prevent and mitigate the credit risk, strengthen the admittance and exit management of qualification of credit members, and establish capable and self-disciplined teams based on the combination of employee team building and construction of credit culture and motivation mechanism. This will ensure effective risk identification and assessment is carried out before disbursement of credit to creditors mitigates the occurrence of the credit risk and improves financial performance.

SACCOs have suffered credit losses through relaxed lending standards, unguaranteed credits, and the borrowers' perceptions. .The study recommends that SACCOs should make a fairly accurate personality-morale profile assessment of prospective and current borrowers and guarantors this will minimise credit risks by securing the borrower's guarantee.

The complicated, specialized management is the basis of high level centralized management in SACCOs which will promote integration and unifying the credit union operations, bring forward capital constrained risk asset management, improve limited management on industrial and regional risk, enhance quantitative management skills, based on deep data mining and analysis as well as advanced risk management

instruments minimising occurrence of credit risks facing the Credit unions and eventually enabling the SACCOs to gain higher financial performance .

From the finding and conclusions the study recommends that organizations should enhance credit risk management practices which includes portfolio asset quality/portfolio management, SACCOs loan policy procedure, risk monitoring, risk analysis and assessment, credit scoring mechanism, Diversification of Assets to earns high financial performance as the study established that there exist a positive relationship between credit risk management practices and financial performance of financial institutions.

### 5.4 Limitations of the study

The main limitation of study was inability to include more organizations. This study only sampled selected SACCOs. The study would have covered more institutions across all sectors so as to provide a more broad based analysis. However, resource constraints placed this limitation.

The study also faces challenges of time resources limiting the study from collecting information for the study particularly where the respondent delay in filling the questionnaire and travelling for collection the filled questionnaire.

The study faces various limitations .The respondents were found to be uncooperative from the respondents because of the sensitivity of the information required for the study. The research explained to the respondents that the information they provided was to be held confidential and was only for academic purpose only.

### 5.5 Recommendations for further study

The study investigated the relationship between credit risk management practices and financial performance in SACCOs. A further research should be carried to determine impact of credit risk management practices on profitability of SACCOs to established the

extent to which the credit risk management practices influence profitability of the SACCOs.

The study also recommends that a further study should be carried out to determine the effects portfolio quality management financial institutions in Kenya to determine it impact on financial performance.

The study further recommends that a further study should be carried out to determine the effects of credit risk management practices on financial performance of the Microfinance institution in Kenya.

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## APPENDICES

## APPENDIX 1: INTRODUCTION LETTER

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MBA PROGRAM – LOWER KABETE CAMPUS

Telephone 020-2059162
Telegrams "Varsity", Nairobi
Telex 22095 Varsity

P O Box 30197
Nairobi, Kenya

DATE 1st 10 2010

**TO WHOM IT MAY CONCERN**

The bearer of this letter PETER N GISEMBA

Registration No: D61/70243/2009

is a Master of Business Administration (MBA) student of the University of Nairobi.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate if you assist him/her by allowing him/her to collect data in your organization for the research.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MBA OFFICE
P. O. Box 30197
NAIROBI

DR. W.N. IRAKI
CO-ORDINATOR, MBA PROGRAM

## APPENDIX 2: QUESTIONNAIRE

**Part A: General information**

1. Name of the SACCO (optional) .....

2. Position of respondent .....

3. Years served in the SACCO.....

4. Number of employees in the SACCO

| | |
|---|---|
| 1-250 | [ ] |
| 251-500 | [ ] |
| 501- 750 | [ ] |
| 751-1000 | [ ] |
| Over 1000 | [ ] |

5. How long has the SACCO been in existence? .....

**Part B: Credit Risk Management Practices**

1. To what extent do you agree with the statement, SACCOs need to ensure that credit risk management is well done to prevent it from failing in its obligations and meeting it objective.

| | |
|---|---|
| Strong Disagree | [ ] |
| Disagree | [ ] |
| Neutral | [ ] |
| Agree | [ ] |
| Strongly Agree | [ ] |

2. Is it important for SACCOs to manage credit risk that it's exposed to?

Yes [ ]

No [ ]

If yes, explain your Answer

.....

.....

3. Does your SACCO have in place practices of mitigating credit risk?

Yes [ ]

No [ ]

4. What is the importance of adopting credit risk management practices?

.....

.....

.....

5. The following are practices used in credit risk management, please indicate the ones your SACCO has adopted. (Tick where applicable)

Credit Scoring Mechanism [ ]
Risk identification [ ]
Risk analysis and assessment [ ]
Risk monitoring [ ]
SACCOs loan policy procedure [ ]
Diversification across union members [ ]
Portfolio asset quality/Portfolio management [ ]

.Any other, please specify

.....

.....

.....

6. Which approach(s) among the following does your SACCO use in screening and risk analysis before awarding credit to a customer? Tick appropriately? Where 1 represents least considered and 5 represents most considered

| Approach | Not at All | Least | Moderate | Most |
|---|---|---|---|---|
| Character of borrower | | | | |
| Capacity /completion: | | | | |
| Conditions | | | | |
| Collateral /security | | | | |

Any other, Specify

.....

.....

7. To what extent do you agree with each of the following statement about credit risk management procedures in your SACCOs?

| Procedure | Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
|---|---|---|---|---|---|
| In order for credit decision to be made, standardization of process and documentation is required. | | | | | |
| Credits must be monitored and reviewed periodically for quality credit control. | | | | | |
| Portfolio managers should watch over the loan portfolio's degree of concentration and exposure. | | | | | |
| Member lending facility is reported to the credit risk management committee. | | | | | |
| Risk management practices are monitored and set by the credit committee | | | | | |

8. Through what means are your SACCO staff made aware of credit risk?

Where 1 represents means not used at all and 4 most used means.

| Means | Not At All | least | Moderate | Most used |
|---|---|---|---|---|
| Regular meetings | | | | |
| Regular training | | | | |
| Using supervision on one to one basis | | | | |

9. To what extent does your SACCO consider risk identification process in credit risk management?

To a very great extent [ ]

To a great extent [ ]

To a moderate extent [ ]

To a little extent [ ]

Not at all [ ]

10. To what extent does your SACCO apply the following methods in loan recovery when it is difficulty for the client to repay the loan on time? Where1 indicates least used and 4 highly used.

| Method | Not at all | Least extent | Moderate | Fair extent | Great extent |
|---|---|---|---|---|---|
| Use auctioneers to recover | | | | | |
| Sale of the property to recover the money | | | | | |
| Write the debt off and account it as bad debts | | | | | |
| Write off interest and allow them to pay the principle | | | | | |

Any other, specify, Please specify,

.....

.....

11. When does your organization decide that a client has defaulted on loan repayment?

| Period | Not at all | least | Moderate | Most used |
|---|---|---|---|---|
| One month late payment | | | | |
| Three months late payments | | | | |
| More the twelve months late payments | | | | |
| Using supervision on one to one basis | | | | |

12. To what extent do you agree with each of the following statement about credit risk management in your SACCOs?

| Statement | Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
|---|---|---|---|---|---|
| Credit risk management is essential to optimizing the performance of the SACCO | | | | | |
| Sound credit risk management practices are built on good-quality portfolio management | | | | | |
| Credit unions have adopted credit documentation as a ways of managing credit risk. | | | | | |
| The use of collateral particularly fixed assets to recover defaulted loans is successful to some extent in recovering defaulted loan. | | | | | |
| Better portfolio monitoring and delinquency tracking through the use of appropriate reporting tools help in delinquency management. | | | | | |
| Credit officer's must posses adequate appraisal and monitoring skills, experience and good knowledge of credit risk management practices. | | | | | |
| Customers are offered good free consultant service. | | | | | |

**List of SACCOs in Kenya based in Nairobi**

1. Afya SACCO
2. Balozi SACCO
3. Bank Kuu SACCO
4. Bomas SACCO
5. Chai SACCO
6. CHAK SACCO
7. Chuna SACCO
8. Comoco SACCO
9. Elimu SACCO
10. Harambee SACCO
11. Hazina SACCO
12. Jamii SACCO
13. Kemri SACCO
14. Ken versity SACCO
15. Kenatco SACCO
16. Kencom SACCO
17. Kenya Bankers SACCO
18. Kenya Institute of Administration SACCO
19. Kenya Pharmaceutical SACCO
20. Kenya Police SACCO
21. Longhorn SACCO
22. Magereza Staff SACCO
23. Mwalimu SACCO
24. Nacico SACCO
25. Nyati SACCO
26. Safaricom SACCO
27. Stima SACCO

28. Teleposta SACCO
29. Ufundi SACCO
30. Wauminins SACCO
31. Mhuburi SACCO
32. Tembo SACCO
33. Ubani SACCO
34. Mawasiliano SACCO
35. Inddustrial Development SACCO
36. Minet SACCO
37. Peugeot SACCO
38. Kentours SACCO
39. Housing Magadi SACCO
40. Makataba SACCO
41. Kenpipe SACCO