

**EFFECT OF CREDIT RISK MANAGEMENT PRACTICES ON GROWTH OF
SACCOS' WEALTH IN NAKURU TOWN**

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Requirements for the Award of Masters in Business Administration Degree of
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DECLARATION AND APPROVAL

Declaration

This study is my original work and has not been presented in any other institution of higher learning for award of a degree.

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This research has been submitted for examination with my approval as the university supervisor

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DEDICATION

This project work is dedicated to my family members who I am proud of for being the sources of inspiration and joy in my entire life.

ACKNOWLEDGEMENT

I give glory and honor to the Almighty Father in heaven for enabling me to successfully accomplish this great task. I also owe my gratitude to Egerton University for granting me an opportunity to undertake my studies at the institution. I am very appreciative of the encouragement, patience and invaluable suggestions and guidance provided by my supervisor Dr Fredrick Kalui. In a special way I too appreciate my family who have continuously supported, encouraged and morally guided me, for without them I would not have attained this degree.

ABSTRACT

The purpose of this study was to investigate the effect of credit risk management practices on growth of SACCOs' wealth. The study was guided by four objectives; to determine the effects of credit risk identification practices on growth of Savings and credit co-operatives wealth, to establish the effects of credit risk analysis practices on growth of Savings and credit co-operatives wealth, to establish the effects of credit risk monitoring practices on growth of Savings and credit co-operatives wealth and to determine the combined effect of credit risk identification, credit risk analysis and credit risk monitoring practices on growth of Savings and credit co-operatives wealth. The study adopted descriptive survey design. The design chosen was because it provided a means to contextually interpret and understand credit risk management and growth of SACCOs, wealth. The target population consisted of all savings and credit cooperative societies licensed by SASRA in Nakuru as at January 2015. The study made use of primary and secondary data. Primary data on credit risk management practices was collected through structured questionnaires while secondary data was collected from financial statements. Descriptive statistics was used to describe the study variables while inferential statistics was used to relate the research variables. The overall effect of the credit risk on growth of wealth of SACCOS was tested by use of a multiple regression model. ANOVA test was used to test statistical significance of the overall effect. From the findings of the study, correlation values of; $r=0.439$; $p=0.000$, $r=0.356$; $p=0.001$ and $r=0.472$; $p=0.000$ provided evidence that credit risk identification, credit risk analysis and credit risk monitoring have significant effect on growth of wealth of the SACCOs. $R\text{-square} = 0.297$ and $p=0.000$ evidenced that credit risk management practices collectively have significant effect on growth of wealth of SACCOS. The study recommends that management of the SACCOs consider risk management as a critical determinant of their growth of wealth. Further studies should be conducted to develop a cost effective model for managing their portfolio without necessarily undertaking all the risk management activities.

TABLE OF CONTENTS

DECLARATION AND APPROVAL	ii
COPYRIGHT	iii
DEDICATION	iv
ACKNOWLEDGEMENT	v
ABSTRACT	vi
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF ABBREVIATIONS	xii
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the study	1
1.2 Statement of Problem.....	5
1.3 Objectives of the Study	5
1.3.1 General Objective	6
1.3.2 Specific Objectives	6
1.4 Research Hypotheses	6
1.5 Scope Of the Study	6
1.6 Limitation and Delimitations of the Study.....	7
1.7 Significance of the Study	7
1.8 Operational Definition of Terms.....	8
CHAPTER TWO	9
LITERATURE REVIEW	9
2.0 Introduction.....	9
2.1 Theoretical Framework.....	9
2.1.1 Endogenous Growth theory	9
2.1.2 Credit Risk Theory.....	9
2.1.3 Financial Sustainability Models.....	10
2.1.4 Tax Theory of Credit	11
2.1.5 Liquidity Theory of Credit.....	11
2.2 Credit Risk Management	12

2.2.1 Credit Risk Identification.....	14
2.2.2 Credit Risk Analysis	14
2.2.3 Credit Risk Monitoring	15
2.3 Growth in SACCOs' Wealth	15
2.4 Credit Risk Management and Growth of SACCOs Wealth.....	17
2.5 Empirical Literature	17
2.6 Research Gap	23
2.7 Conceptual Framework.....	24
CHAPTER THREE	25
RESEARCH METHODOLOGY	25
3.1 Research design	25
3.2 Target Population.....	25
3.4 Data Collection Instruments	25
3.5 Data Collection Procedure	26
3.6 Validity and Reliability Test.....	26
3.7 Data Analysis and Presentation	27
CHAPTER FOUR.....	28
DATA ANALYSIS AND PRESENTATION	28
4.1 Respondents Background Information	28
4.1.1 Highest Level of Qualification.....	28
4.1.2 Current Designation in the Organization	29
4.1.3 Number of years the SACCO industry	29
4.2 Risk Identification.....	30
4.2.1 Risk Identification Methods.....	30
4.2.2 Involvement in Risk Identification	31
4.3 Credit Risk Analysis and Management.....	32
4.3.1 Credit Risk Analysis Aspects.....	32
4.3.2 Credit Risk Analysis Comprehensiveness	33
4.4 Credit Risk Monitoring.....	34
4.4.1 Credit Policy Review Frequency	34
4.4.2 Credit Risk Monitoring.....	35

4.5 Growth of SACCOs Wealth.....	36
4.6 Relationship between Credit Risk Management and Growth of Wealth.....	37
4.8 Hypothesis Testing.....	41
CHAPTER FIVE	43
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS	43
5.1 Introduction.....	43
5.2 Summary of Findings.....	43
5.3 Conclusions	45
5.4 Recommendations.....	46
5.5 Suggestions for Further Research	47
APPENDICES	56
Appendix 1:Questionnaire	56
Appendix II: Secondary Data Collection Sheet	60
Appendix III: LIST of Sarsa licenced SACCOs in Nakuru	61
Appendix IV Target Population.....	62

LIST OF TABLES

Table 3.1: Reliability Test Results.....	27
Table 4. 1: Current Designation in the Organization.....	29
Table 4. 2: Number of Years the SACCO Industry.....	29
Table 4. 3: Focus of Risk Identification Methods.....	30
Table 4. 4: Involvement in Risk Identification.....	31
Table 4. 5: Credit Risk Analysis Aspects.....	33
Table 4. 6: Credit Risk Analysis Comprehensiveness.....	34
Table 4. 7: Credit Policy Review Frequency.....	35
Table 4. 8: Credit Risk Monitoring.....	35
Table 4. 9: Logarithm of Growth of Wealth (Institutional Capital).....	37
Table 4. 10: Relationship between Credit Risk Management and Growth of Wealth.....	38
Table 4. 11: Regression Model Summary.....	39
Table 4. 12: ANOVA Table.....	39
Table 4. 13: Table of Coefficients.....	39

LIST OF FIGURES

Figure 2. 1: Conceptual Framework	224
Figure 4.1: Highest Level of Qualification.....	29
Figure 4.2: Trend in Growth of SACCOs Wealth.....	49

LIST OF ABBREVIATIONS

KUSCCO- Kenya Union of Savings and Credit Cooperatives

SACCO- Savings and Credit Co-operative Societies

SASRA- Sacco Societies Regulatory Authority

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

According to Donald et al. (2006), credit risk simply as the potential that a bank borrower or counterpart will fail to meet its obligations in accordance with agrees terms. Credit risk or default risk involves inability or unwillingness of a customer or counterparty to meet commitments in relation to lending, trading, hedging, settlement and other financial transactions. The goal of credit risk management is to maximize a Savings and Credit Co-operative Societies (SACCO)'s risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters. SACCOs need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions. Sacco should also consider the relationships between credit risk and other risks (Olando et al., 2012). The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any SACCOs (Nelson & Schwedt, 2006)

According to Munyiri (2006), SACCOs, which are started locally, are more attractive to customers thus deeply entrenching themselves in the financial sectors of many countries. In fact, they have solid bases of small saving accounts constituting a stable and relatively low-cost source of funding and low administrative costs (Branch, 2005). SACCOs are able to advance loans at interest rates lower than those charged by other financial providers. In addition, SACCOs have the ability and opportunity to reach clients in areas that are unattractive to banks such as rural or poor areas. The core objective of SACCOs is to ensure members empowerment through mobilization of savings and disbursement of credit (Ofei, 2001). SACCOs in Kenya in their struggle to achieve this objective have been able to mobilize over Kshs.200 billion in savings, the largest in Africa with over 3.5 million members and a \$2 billion loan portfolio (Co-operative Bank of Kenya, 2010).

1.1.1 Credit Risk Management Practices

The provision of credit facilities is the core function of every SACCOs (Olando et al., 2012). Credit management function facilitates efficient management and administration of the SACCO loan portfolio in order to ensure equitable distribution of funds and to encourage liquidity planning. In order to achieve prudence and accepted best practice, credit management should always be guided by clearly spelt out policies and procedures, strategic plan, by-laws, the co-operative act, the SACCO regulatory act and rules and regulations (Olando et al., 2013). Basically SACCOs have three operational aspects namely; the savings, the credit and channeling external funds to members.

Credit risk has become a necessary consequence of a vibrant and ever changing economy, because the economy is supported mostly by the interference of financial institutions (Jennifer et al. 2008). Due to such effect commitment to prudent lending has become a major concern and discussion issue in a global financial institutions context today. In this regard Ahmed (2002) noted that without the provision of credit from country's financial institution especially through SACCOs, no development of modern industrial community and fostering of investment that is achieving the target growth of economy by the state would have been impossible (Kalui & Omwanza, 2015). As a result most of the financial institution and micro finance industries are looking into managing their credit risks in different business cycle and environment that can help to alleviate crisis and major losses that could damage long term functionality of the institutions. Therefore effective credit risk management is very essential to achieve these economic objectives and to foster growth of SACCOs.

1.1.2 Growth in Wealth of SACCOs

Savings mobilization is the main source of funds for SACCOs. Mobilization should therefore be backed by adequate institutional capital which ensures permanency, provide cushion to absorb losses and impairment of members' savings (Evans, 2001). The institutional capital which comprises the core capital and less share capital is mainly accumulated from appropriation of the surpluses. Therefore, SACCOs should strive to maximize on the earnings to build the institutional capital (Branch & Cifunentes, 2001; Ombado, 2010). This institutional capital ensures the permanence and growth of the

SACCOs even in turbulent economic times (Evans, 2001). In fact, it helps the SACCOs to grow and, remain economically and financially viable (Gijssels & Devetere, 2007) and this growth is enhanced through effective credit risk management practices.

Studies by Ngugi & Kabubo (1998) and Bisasi & Pagano (2001) noted that financial institutions including SACCOs mobilize funds majorly to accumulate wealth. The wealth majorly goes to SACCO members and to the SACCO. Olando (2005) discussed financial growth of an institution in terms of returns to members, total assets and institutional capital and. He further pointed out that institutional capital goes into development of capacity of the SACCO which majorly involves acquisition of assets to assist in SACCO operations. In this study, the institutional capital will be used to measure growth of wealth in SACCOs.

1.1.3 SACCOs in Kenya

In Kenya, SACCOs remain the most important players in provision of financial services and have deeper and extensive outreach than any other type of financial institution (ICA, 2002). They provide savings, credit and insurance services to a large portion of the population. Financial sector reforms were adopted in 1989 through the Structural adjustment programs supported by World Bank credit, which included liberalization of interest rate attained in July 1991, and exchange rate-attained in October 1993. From the year 2010 new developments and intense competition in lending industry in Kenya's economy has been witnessed since the introduction of the economic liberalization which has posed serious challenges to the SACCO's. The emergence of formal and informal segments in the financial sector fragmentation implies that different segments approached problems such as high transactions costs, risk management, mobilization of funds, grants and capitalization (Steel, 1998).

The Cooperative movement in Kenya dates back to 1931 when the first ordinance to regularize the operations of the cooperatives in the country was enacted. The following decade witnessed increased intervention in the sector with the eventual enactment of the Co-operative Ordinance Act of 1945, the predecessor of the current Co-operative Societies Act, Cap. 490 of the laws of Kenya - as amended in 1997. Savings and credit

cooperative societies (SACCOs) are registered and regulated under the Co-operative Societies Act. SACCOs are accorded the same treatment as producer or marketing cooperatives, and to qualify for registration they are not required to raise any capital. In addition, SACCO's are restricted in terms of where to invest their funds of deposits (SACCOs Act, 2008).

Three types of cooperatives are recognized in the Act; Primary Cooperatives, Cooperative Unions and Apex Cooperatives. SACCOs fall in the category of Primary Cooperatives. Before the 1990's, only employer - based SACCOs were operational in the country with employment as the common bond (World Council of Credit Unions, 2005). This system locked out a large number of people who were self-employed. An amendment to the Act in 1997 recognized the possibility of forming a SACCO on a base other than employment. This development ushered in a new category, referred to as rural SACCOs. Their activities derive from agricultural produce being marketed through an organized system such as marketing cooperative societies. The reforms also ushered in the formation of SACCOs among informal sector operators engaged in public transport, textiles and commerce. Informal sector SACCOs are referred to as "rural" and employer - based SACCOs are referred to as "urban" .

The SACCO sub sector comprises both deposit taking and non-deposit taking SACCOs. Deposits taking SACCOs are licensed and regulated by SASRA while non-deposit taking SACCOs are supervised by the Commissioner for Co-operatives. SASRA licenses SACCOs that have been duly registered under the Cooperative Societies Act CAP 490 (Sacco Societies Regulatory Authority, 2012). As at 31st December 2012, the total number of deposit taking SACCOs was 215 of which 124 had been licensed. The remaining 91 SACCOs were at different levels of compliance with the provisions of the law. All deposit taking SACCOs were in operation prior to establishment of SASRA in 2009 and have applied to be considered for licensing as undertaking deposit taking SACCOs business. They are spread across the various counties in the country and are categorized as follows: Government based SACCOs (87); Farmers based SACCOs (74);

Private institutions based SACCOs (24); and, Community based SACCOs (30), (Sacco Societies Regulatory Authority, 2012).

1.2 Statement of Problem

Wealth maximization is a key objective whenever SACCOs chose an investment avenue from a universe of possible investment vehicles. According to report by Central Bank of Kenya (2012), SACCOs account for 75 percent of the total's financial industry assets and deposits. According to Thabo & Gichira (2003), in attempt to maximize wealth, SACCOs face problems due to poor credit risk management practices. Munyiri (2006) pointed out that credit risks hinder achievement of SACCOs key objectives of wealth maximization and even lead to decline in growth of SACCOs' wealth in some instances. It weakens financial viability by enhancing loss of principal and interest. Credit risk management therefore has become an important area of management. While SACCO managers employ a number of strategies to reduce or manage credit risks. Some have not been able to grow their wealth sufficiently. A number of studies have been done to relate credit risk and various aspects of SACCO performance; Mengich (2015) established that credit risk analysis has significant effect on financial growth. He however did not look at other risk management activities making it impractical to generalize the relationship. Similarly, Onkoba (2010) established that credit risk analysis results in improved bank performance. Despite the various studies that have been done on credit risk and SACCO performance, no study has establish clear relationship between the three credit risk management practices (credit risk identification, credit risk analysis and credit risk monitoring) and growth of SACCO's wealth. It is therefore evident that there is research gap that needs to be filled by research. The study therefore attempted to close this gap by providing further insight and information on the effect of credit risk management practices on growth of SACCO's wealth in Nakuru Town.

1.3 Objectives of the Study

This study will be guided by a general objective and three specific objectives discussed below.

1.3.1 General Objective

The main objective of the study was to investigate the effects of credit risk management practices on growth of SACCOs' wealth in Nakuru Town.

1.3.2 Specific Objectives

- i. To determine the effects of credit risk identification practices on growth of Savings and credit co-operatives wealth in Nakuru Town.
- ii. To establish the effects of credit risk analysis practices on growth of Savings and credit co-operatives wealth in Nakuru Town.
- iii. To establish the effects of credit risk monitoring practices on growth of Savings and credit co-operatives wealth in Nakuru Town.
- iv. To determine the combined effect of credit risk identification, credit risk analysis and credit risk monitoring practices on growth of Savings and credit co-operatives wealth in Nakuru Town.

1.4 Research Hypotheses

H₀₁: Credit Risk identification practices have no significant effect on growth of Savings and credit co-operatives wealth in Nakuru Town.

H₀₂: Credit Risk analysis practices has no significant effect on growth of Savings and credit co-operatives wealth in Nakuru Town.

H₀₃: Credit Risk monitoring practices has no significant effect growth of Savings and credit co-operatives wealth in Nakuru Town.

H₀₄: Credit risk identification, credit risk analysis and credit risk monitoring practices do not have significant effect on growth of Savings and credit co-operatives wealth in Nakuru Town.

1.5 Scope Of the Study

The study was conducted in SACCOs operating in Nakuru Town, those SACCOs that have Front Office Services Activities. The study was based in Nakuru Town because the SACCOs' activities in Nakuru cover all sectors of the Kenyan. Secondly, Nakuru is experiencing high growth of SACCOs. The study covered a period of five years i.e. 2010- 2014. The five years were selected since most SACCOs have in the last five years

been changing management philosophies to achieve sustainable growth. The study focused on three credit risk management practices; risk identification, credit risk and analysis and credit risk monitoring. The three practices are related with growth of SACCOs

1.6 Limitation and Delimitations of the Study

During data collection in this study, the researched experienced some resistance from respondents who feared giving the required data that such data could be highly secretive and giving them out would be risky on their part. The study also faced a challenge in obtaining data relating to financial records of the SACCOs as some do not have well-kept records while others consider the records highly secretive and are reluctant in sharing them.

To overcome the limitations, the researcher assured the respondents that the data collected was purely for academic purposes and would not be used or disclosed elsewhere. The respondents were assured that their identities would not be disclosed anywhere or to anyone and they were therefore. In addition, the researcher acquired a letter of introduction from the university that was issued to management of the SACCOs to facilitate access to research data.

1.7 Significance of the Study

The findings of the study will enhance the efforts of government regulators in coming up with regulations that will help in credit risk management in the operations of SACCOs to enhance growth of SACCOs' wealth. The study will contribute to the achievement of the government's policy of prosperity for all through sensitizing the SACCO members on how to benefit from properly run SACCOs. To the government institutions, especially the co-operative department will get to understand on the issues of credit risk management practices and growth of SACCOs' wealth in policy development. It's not only the co-operative department but also the regulatory and licensing authorities in SACCOs will use the information in policy making. SACCOs also will benefit as they will get insight on the effect on credit risk management practices and growth of SACCOs' wealth. The study will help them come up with practices that enhance effective credit risk

management. Lastly, the study will add more information available on credit risk management practices and its effects on the growth of SACCOs' wealth.

1.8 Operational Definition of Terms

Capital: non- current assets and current assets

Credit Risk Management Practices: identification, measurement, monitoring and control of risk arising from the possibility of default in loan repayments

Credit risk: losses from the refusal or inability of credit customers to pay what is owed in full and on time.

Growth of Wealth: the change in SACCOs' earnings from one period to another. This is an increase in the value of investment overtime. Growth in SACCOs' is shown by increase in both capital as a result of increase in profits and membership.

Risk Management: making decisions about how to treat risks that have been previously identified and their effects mitigated.

Risk: any event that could prevent an organization from achieving its objectives.

Institutional Capital: consists of the capital reserves and accumulated surpluses which the SACCO Society has generated through retained surpluses

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This section contains literature that has been reviewed and continues to be reviewed relating to the problem. Literature review involves locating, reading and evaluating reports of previous studies, observations and opinions relating to the planned study. It therefore enables the researcher to know what has been done in the particular field of study, makes one aware of what has been made and what challenges remain, and gives suggestions on the variables and procedures that could be used. Literature review logically leads to objectives on the study.

2.1 Theoretical Framework

The study will be guided by the following theories:

2.1.1 Endogenous Growth theory

Growth can be based on endogenous growth theory or neo-classical growth model. The neo-classical growth theory argues that the rate of growth is exogenously determined using the Harrod Damar model or Solow model. Solow-Swan class growth theory which focuses on capital and labour indicates that capital is added when SACCOs invest but is lost due to depreciation. The indication is that there is capital growth in wealth only when the investment exceeds depreciation (Gardner, 2006). The investment should insist on keeping the capital growing to achieve capital growth. That increase in capital yields leads to an increase in growth of SACCOs' Wealth. The theory explains growth as a factor of accumulation of capital. This model is strongly supported by Harrod Damar Model of development economics (1946) which explains the growth rate in terms of saving and productivity of capital. It explains that increase in investment leads to accumulation of capital.

2.1.2 Credit Risk Theory

Although people have been facing credit risk ever since early ages, credit risk has not been widely studied until recent 30 years. Early literature (before 1974) on credit uses traditional actuarial methods of credit risk ,whose major difficulty lies in their complete

dependence on historical data. Up to now, there are three quantitative approaches of analyzing credit risk: structural approach, reduced form appraisal and incomplete information approach (Crosbie et al., 2003). Melton (1974) introduced the credit risk theory otherwise called the structural theory which is said the default event derives from a firm's asset evolution modeled by a diffusion process with constant parameters. Such models are commonly defined "structural model" and based on variables related a specific issuer. An evolution of this category is represented by asset of models where the loss conditional on default is exogenously specific. In these models, the default can happen throughout all the life of a corporate bond and not only in maturity (Longstaff and Schwartz, 1995).

2.1.3 Financial Sustainability Models

Classic microeconomic theory suggests financial sustainability/growth of wealth can be modeled through a 'Marginal-Revenue-Marginal-Cost' approach. The means for determining the behavior, including viability, of a competitive entity is to calculate and compare, at each price level, amounts that each additional unit of output would add to total revenue on the one hand, and to total cost on the other. That is, in comparing the marginal revenue and the marginal cost of each successive unit of production, any unit whose marginal revenue exceeds marginal cost should be produced and any unit marginal cost whose exceeds marginal revenue should not. The equilibrium point where marginal revenue equals marginal cost is the key to the output-determining rule that suggests the entity will maximize profits or minimize losses by producing at that point where marginal revenue and marginal cost equals (Jackson & McConnell, 1980).

Assuming that price is determined by the broad market forces of supply and demand, as is the case for pure competition, an entity will remain financially sustainable by maximizing profits or minimizing losses in the short run by producing outputs at which marginal revenue equals marginal cost if, and only if, marginal revenue is greater than minimum average variable cost (AVC) (McCallum, 1994). Here, average variable cost is the total of all variable costs i.e., those that vary with output like labour, materials, power, divided by output. If marginal revenue falls short of minimum average variable cost, the entity will minimize its losses in the short run by closing down. In this case, there is no

level of output at which the entity can produce and realize a loss smaller than its fixed costs and it is therefore considered (financially) unviable (Jackson & McConnell, 1980). Note that this assumes the absence of any subsidization over time to ride out short-term losses. SACCOs must therefore price their loan/credit products and structure in a way that the margins will be adequate to meet members' expectations on returns and retain reasonable surpluses for growth and sustainability.

2.1.4 Tax Theory of Credit

According to Brick and Fung (1984) tax effect should be considered in order to compare the cost of trade credit with the cost of other financing alternatives. The main aim for this is that if buyers and sellers are in different tax brackets, they have different borrowing costs, since interests are tax deductible. Firms in a high tax bracket tend to offer more trade credit than those in low tax brackets. Subsequently, only buyers in a lower tax bracket than the seller will accept credit, since those in a higher tax bracket could borrow more cheaply directly from a financial institution. In addition firms allocated to a given industry and placed in a tax bracket below the industry average cannot profit from offering trade credit.

Therefore, Brick and Fung (1984) suggest that firms cannot both use and offer trade credit. The decision whether or not to accept a trade credit depends on the ability to access other sources of funds. A buyer should compare different financing alternatives to find out which choice is the best. In trade between a seller and a buyer a post payment may be offered, but it is not free, there is an implicit interest rate which is included in the final price. Therefore, to find the best source of financing, the buyer should check out the real borrowing cost in other sources of funds

2.1.5 Liquidity Theory of Credit

This theory was postulated by Emery (1984), who proposed that credit rationed firms use more trade credit than those with normal access to financial institutions. The vital point of this idea is that when a firm is financially challenged the offer of trade credit can make up for the reduction of the credit offer from financial institutions. In accordance with this view, those firms presenting good liquidity or better access to capital markets can finance

those that are credit rationed. Several approaches have tried to obtain empirical evidence in order to support this assumption.

Nielsen (2002), using small firms as a proxy for credit rationed firms, finds that when there is a monetary contraction, small firms react by increasing the amount of trade credit accepted. As financially unconstrained firms are less likely to demand trade credit and more prone to offer it, a negative relation between a buyer's access to other sources of financing and trade credit use is expected. Petersen and Rajan (1997) obtained evidence supporting this negative relation

2.2 Credit Risk Management

Credit risk is defined as the potential that a borrower or counterparty will fail to meet its obligations in accordance with agreed terms (Chijoriga, 1997). Deelchand & Padgett (2009) refers to risk as the variability of returns associated with a given asset hence must be controlled or minimized. Pagach & Warr (2008) pointed out that risk is generally considered to be the possibility of outcomes that deviate from what were expected however, it is primarily negative outcomes that are of most concern to organizations.

Risk taking is fundamental to every business (Spira, 2003). Cooperative Financial Institutions have a high exposure to credit risk (Cuevas and Fischer, 2006). According to Wenner, et al (2007) taking credit risk is part and parcel of financial intermediation hence its effective management by financial intermediaries is critical to institutional viability and sustained growth. Bald (2007) re affirms the statement by Wenner et al. (2007) saying it is the conscious engagement in risks that constitutes the economic value of financial intermediation.

SACCOs convert immediately available savings deposits into loans with longer maturities (maturity transformation). Individual savings deposits are also typically much smaller than an average loan, requiring multiple deposits to fund a single loan (size transformation) and these savings deposits are converted by the SACCOs with an absolute expectation of safety and repayment into credit-risky loans to members (credit risk transformation). Most importantly, the loans advanced by SACCOs carry a fixed

interest rate for their entire term, as opposed to those of commercial banks that can be adjusted at any time according to changes in market interest rates (interest rate risk transformation). All of these financial transformations are risky (Bald, 2007).

According to Chijoriga (1997) credit risk is the most expensive risk in financial institutions and its effect is more significant as compared to other risks as it directly threatens the solvency of financial institutions. While financial institutions have faced difficulties over the years for a multitude of reasons, the major cause of banking problems continue to be directly related to lax credit standards for borrowers and counterparties, poor portfolio risk management, or lack of attention to changes in economic or other circumstances that lead to deterioration in the credit standing of financial institution's counterparties (Basel, 1999).

Loans are the largest source of credit risk to a financial institution .However, other sources of credit risk exist throughout the activities of a financial institution including in the banking book and the trading book, and both on and off the balance sheet. The goal of credit risk management is to maximize a SACCOs risk adjusted rate of return by maintaining credit risk exposure within acceptable parameters. SACCOs need to manage credit risk inherent to the entire portfolio as well as the risk in individual credits as transaction (Sinkey, 1992).

The success of Credit management is mainly determined by the level of risk management in place, policies and procedures, professionalism and governance. If there is good risk management then it means they have been well thought by the professionals. A well working system also means that the leaders after they have come up with the policies and procedures leaves to operate an interrupted. Minimizing bad loans has benefits to all parties involved especially the lenders .First and foremost It will help in the identification of potential credit risks related to loan restructuring, underwriting and documentation. Secondly, it will help in gathering information required to monitor borrower relationships for changes in risks including determining the appropriate level of monitoring and identifying information required for both the lender and borrower. Thirdly, it will help in evaluation of changes in credit management that require action including assessing

internal and external factors and recognizing and evaluating warning signals. Fourthly, it will assist in selecting appropriate solutions to solve emerging credit problems by using strategies that optimizes the outcome for the institution; it will also assist in recognition of lending institutions that entail exposure to lender liability. Lastly it will help in identification of the potential impact of bad loans to the institution (Zeller, 2001)

2.2.1 Credit Risk Identification

According to Olando et al. (2012), risk identification is vital for effective risk management, for SACCOs to manage risks facing them effectively they need to know how to identify the credit risks. The first step in risk identification involves identifying and prioritizing key risks which are reviewed and approved by the management committee. There is also need to determine the degree of risk the Sacco should tolerate and to conduct assessments for each risk of the potential negative impact if it is not controlled. Finally analyze the risk faced by the Sacco in the areas of interest rates risk, liquidity, credit, operations and strategic risks (Central Bank of Kenya, 2001).

2.2.2 Credit Risk Analysis

According to Fatemi (2000), a typical risk analysis process consists of two components; financial analysis (quantitative analysis) and qualitative analysis. Financial analysis consists of analysis of financial; data available for the credit applicant, the analysis of annual financial statements has a central position in this context. Mostly financial analysis is carried out by credit analysts, there should be a general guideline stipulating that the analysis is confirmed by the person in charge of the organizational unit supplying the module for credit analysis when this module is handed over to the credit officer managing the exposure (Eldelshain, 2005).

According to Mengich & Njiro (2015), credit risk analysis is an elaborate process. He pointed out that success of credit risk analysis depends on two factors; credit risk analysis strategy/method and credit risk analysis parties. Credit risk analysis strategy and credit risk analysis parties are strong indicators of credit risk analysis outcome. In this study, the researcher adopted the two indicators in conceptualization of credit risk analysis.

2.2.3 Credit Risk Monitoring

The importance of monitoring risks is to make sure that they can be managed after identification. SACCO's play an increasingly important role in local financial economies where competition for customers and resources with Micro Finance Institutions and other commercial banks is high therefore they require effective and efficient risk control and monitoring systems (Olando et al., 2013).

The risk management feedback loop will involve the management and senior staff in the risk identification and must assess, process, as well as to create sound operational policies, procedures and systems. Implementation and designing of policies, procedures and systems will integrate line staff into the internal control processes, thus providing feedback on the SACCO's ability to manage risk without causing operational difficulties. The committee and the manager should receive and evaluate the results on an ongoing basis. Most risk management guidelines in SACCO's will be contained in the policy manuals (Central Bank of Kenya, 2010). According to Mengich & Njiru (2015), credit risk monitoring informs and guides credit risk mitigation strategies.

2.2.4 Credit Risk Management Implementation

Credit Risk Management involves putting in place the credit risk measurement practices and management framework, policies and procedures that are needed to effectively identify risks, analyse risks and monitor the risk management process (Olando et al., 2013). Credit risk management has the following requirements; credit risk data sourcing, credit risk data analysis and storage, credit risk control and modeling and continuous progress reporting (Zeller, 2001). The process requires that there is there is strong credit data management capability, credit risk modeling expert, dedicated assurance services and trackng of credit risk management activities (Muinde, 2012).

2.3 Growth in SACCOs' Wealth

The Savings and Credit Co-operative Society (SACCOs) system encompasses a mutual membership organization involving pooling voluntary savings together from cooperators in form of shares (Olando et al., 2012). SACCOs are user-owned institutions with savings accumulated to act as SACCOs' wealth. The shareholders share a common bond based on

a common area of interest or purpose, namely; their geographical area, employment, community or any other affiliation. The principal services of SACCOs include savings and credit but other services such as money transfers, payment services, insurance and member development are also offered (Maina, 2007).

In the words of Branch (2005), SACCO societies are playing a very key role on savings mobilization for the benefit of the members. The prime concern of a SACCO Society is to build the financial strength that would ensure continued service to members. Apparently, the SACCOs' wealth needs to be well-managed for the achievement of the SACCOs' objectives. In fact, the concern of this study will be that the growth of SACCOs' wealth is grounded on capital structure.

Growth of SACCOs' Wealth is measured by the value of institutional capital and an increase in institutional capital translates to growth of wealth. For sustainable growth to happen, the SACCO should grow its institutional capital since the only other non-withdrawable capital is share capital (Kalui & Omwemba, 2015). Sustainable growth in different financial aspects is important to surpluses and is the key to the success of the SACCOs. So funds invested by the members of the SACCOs should generate enough surpluses to contribute to institutional capital as they provide for dividends and rebates. So, for the growth of wealth to be visible, the surpluses generated should be enough to contribute to capital levels which maintain institutional capital and provide for shareholders dividends and rebates. The institutional capital consists of the capital reserves and accumulated surpluses which the SACCO Society has generated through retained surpluses (Branch, 2005).

Effective decisions on loan disbursement influence the growth potential of SACCOs' wealth while ineffective decisions weaken the earning capacity. The indicators of these loan disbursement decisions include the efficiency of investment, which is the ratio of loan portfolio to the total assets (Kalui & Okeyo, 2014). This is where an efficient loan disbursement grows the loan portfolio which is the core investment which leads to growth of SACCOs' Wealth. When the default risk analysis is effective risk prone loans would be identified and then means of avoiding these risks are established thereby

reducing or avoiding the probability of default. This would increase the growth of SACCOs' wealth by avoiding loan losses (Muinde, 2012). It should be noted that loan recovery is a very critical factor in financial sustainability and growth of the SACCOs where failure to recover loans (loan default) affects the growth of the SACCOs' wealth by causing losses of funds invested and profits to be earned.

2.4 Credit Risk Management and Growth of SACCOs Wealth

Credit risk management has significant effect on financial growth of SACCOs (Mengich & Njiru, 2015). According to Kinuthia (2007) when credit risks occur, they lead to loan default problems in SACCOs thereby leading to poor loan performance and consequently poor growth. In the other hand, when credit risks are effectively management, the SACCOs can experience improved loan performance and consequently, improved growth. Credit risk management enhances management of liquidity problems in SACCOs hence enhancing their financial performance and hence growth. According to Mbaabu (2004), credit risk management is the main strategy of managing loan non-performers in commercial banks. It can enhance greatly performance of loans which translates into organizational growth.

2.5 Empirical Literature

Study by Mengich & Njiru (2015) examined the effect of risk management practices on the financial growth of SACCOs in Nakuru County, The study focused on the relationship between risk analysis and growth of wealth. The study found that risk analysis had significant effect on financial growth while risk function profile had a positive but not substantial effect on financial growth. It was recommended that risk function profiling should be upheld and that SACCOs should continue analyzing the levels of risk of prospective borrowers.

Roselyne (2007) conducted a study to review the relationship credit risk analysis and financial performance of Savings and Credit Cooperative Societies using descriptive design. She concluded credit risk risk analysis has positive relationship with financial performance of SACCOs. The study also showed that growth of SACCOs was related to the control of loan default by the stewards. The study did not explain how growth of

wealth would be achieved. The findings of this study relates to those of Kinuthia (2007) management of loan default problems in SACCOs in Nairobi province that reported that growth of SACCOs was related to the control of loan default by the stewards.

Wambugu (2010) conducted a study on credit risk management practices in SACCOs with Front Office Service Activity in Kenya, using exploratory and descriptive methodology. The study concluded that loan portfolio management, risk identification, risk analysis and assessment as well as risk monitoring were instrumental in credit risk management process. The study failed to relate the finding of the study with growth of wealth in SACCOs. Kalo (2004) in study on factors contributing to liquidity problems on saving credit co-operatives, which descriptive research design was adopted conclude that there were delays in remittance; loan default; low monthly earnings and failure to invest in illiquid investments which led to losses hence no growth of wealth. The study only dwelt with issues that affected liquidity; financial stewardship but failed to show they contribution to growth of SACCOs.

Olando et al. (2012) conducted study on determinants of growth of SACCO's wealth. The study findings indicated that Growth of SACCOs wealth depended on financial stewardship, capital structure and funds allocation strategy. The study further found that SACCOs inadequately complied with their by-laws; incomes from investments did not adequately cover their costs. The study recommended that SACCO should; continuously review credit policies, establish irrecoverable loan provision policies, develop sound staff recruitment policies, use appropriate financing mix. It was also suggested that the Government should review legal framework to ensure that institutional capital is used to grow SACCO's wealth. Similarly, Mbaabu (2004) conducted a study to assess determinants of loan non-performers in commercial banks and carried out by adopting descriptive study methodology found that poor management of business; delays in approval; project under financing; and lending not based on security, among others, affected growth of wealth. The main concern of this study by Mbaabu (2004) was on loan delinquency. The study, therefore, failed to identify other factors that lead to growth of wealth. It never said what led to growth of wealth.

Study by Adeyemo & Bamire (2005) whose main objective was to assess saving and investment patterns of Co-operative farmers in South western Nigeria in a study that adopted descriptive statistics to explain the relationship between study variables, and the multiple regression technique concluded that unavailability and inadequacy of credit was a major problem; loan repayment and amount of money borrowed were significant variables that influenced saving patterns; and fund borrowed significantly influenced investment patterns. The study identified lack of funds and poor stewardship and the challenges to growth of wealth. It did not identify the allocation as a determinant of growth of wealth. In another study, Rintaugu (2005) set out to identify and evaluate factors affecting non-recovery of debt owed to National Housing Cooperation adopting quantitative study techniques concluded that poor lending practices; cash flow problems experienced by debtors; lack of follow-up and unharmonized debt recovery statutes affected the growth of wealth. The study identified financial stewardship, capital structure and funds allocation strategy as the main determinants of growth.

Gaita (2007) assessed the financial practice as a determinant of growth of wealth of SACCOs with a view of ameliorating the situation for socio-economic development using descriptive design. The study showed that the lending institutions were not growing significantly due to poor lending practices. It was also evident that failures in SACCOs were related to lending. Growth and sustainability was related to the stewardship and legal framework. However, the study did not explain how growth of wealth would be achieved. These findings were in agreement with the findings of Ominde (2014) that increase internal financing increase led to an increase in Growth of SACCOs wealth. he study recommended that SACCOs should review or design their policies on internal financing to ensure that optimum internal financing was availed review their by-laws and working policies to ensure that the optimum external financing is encouraged. Further studies were suggested to strengthen the information on the area studied.

In another study by Kimani (2007), on inefficiency and in-effectiveness in credit administration carried out using quantitative technique found that the main causes of inefficiency and ineffectiveness in credit administration were unqualified staff in SACCOs; inadequate funds to lend; inadequate training; lack of effective technology;

weak internal control systems; and credit management committee is very powerful and able to manipulate the lending. The study identified the causes of inefficiency and ineffectiveness in credit administration in SACCOs; and growth and sustainability of SACCOs was related to the stewardship and legal framework. The study did not explain how growth of wealth would be achieved.

Similarly, Joseph John Magali (2013) evaluated the rural SACCOS' variables that influence the loans default risks in 37 SACCOS. The study used purposive sampling where the primary and secondary data were collected by using the structured questionnaire and SACCOS' financial reports. The multivariate regression model was used to examine the influence of SACCOS' variables on loans default risks measured by non-performing Loans (NPL). The results from the multivariate regression model revealed that savings and deposits reduce the rural SACCOS loans default risks while the total assets, education of the manager and the number of borrowers increases the loans default risks.

In another study, Olando et al. (2012) examined the financial practice as a determinant of growth of savings and credit co-operative societies' wealth. The study used descriptive design in soliciting information on the determinants of growth of SACCOs' wealth. Data was collected from the census of 44 SACCCOs in Meru County using a questionnaire and document review tool, and analyzed using both descriptive and inferential statistics. The study findings indicated that Growth of SACCOs wealth depended on financial stewardship, Capital structure and Funds allocation strategy. The study further found that SACCOs inadequately complied with their by-laws; incomes from investments did not adequately cover their costs. The study recommends that SACCO should; continuously review credit policies, establish irrecoverable loan provision policies, develop sound staff recruitment policies, use appropriate financing mix. And that the Government should review legal framework to ensure that institutional capital is used to grow SACCOs' wealth.

Cheruiyot et al. (2012) determined the effect of cooperative strategies on members' savings mobilization and analyze the effect of intervening factor (family size, attitude,

and income level) on savings mobilization. The study utilized a sample of 30 SACCOs out of 2,500 and 180 SACCO members out of 150,000 in Nairobi area. A semi structure questionnaire was used to collect data from 210 respondents. Data was analyzed using a multiple linear regression model to test relationship and assess impact of the independent variables on members' savings mobilization. Correlation coefficient revealed that training requirement had an average positive influence on saving mobilization, while investment opportunities and intervening Variables had a strong positive influence on saving mobilization. The most significant factors were investment opportunities, and intervening variables at 99% confidence level. It was therefore concluded that cooperative strategies partially affected members' savings mobilization.

Study was conducted by Tanui et al. (2015) on the effect of credit scoring and credit administration on financial performance of deposit taking SACCOs in Nakuru East Sub-county. The study was based on a descriptive survey design and targeted credit officers and credit managers in deposit taking SACCOs in Nakuru East Sub-County. Data was collected using questionnaire from a sample of 90. The sampling units was picked using census. The results indicated that there existed a strong association between credit scoring and financial performance of the deposit taking SACCOs. Credit administration in deposit taking SACCOs also had a strong association with financial performance. The study recommended that SACCO's should improve on their credit scoring and credit administration as credit management practices so as to improve on their financial performance.

Kinya et al. (2015) investigated the effects of loan terms and conditions on loan volume granted by SACCOs'. Data from the respondents was done by use of questionnaires which contained both open and closed ended questions. Data analysis involved the use of inferential statistics especially the correlation coefficient and coefficient of determination which is a simple descriptive statistics. The study revealed that, loan terms and conditions have significant influence on the loan volume granted by deposit taking SACCOs in Nyeri County. The study recommended that SACCOs should review their credit policy regularly in order for them to remain competitive against the changing lending

environment and that the credit policy should be flexible and responsive enough to the lending environment in order to suit various categories of the customers and situations.

An empirical study done by Khan & Ahmad (2001) found that financial institutions face risks arising from profit-sharing investment deposits. Here, the institutions considered these unique risks more serious than conventional risks faced by financial institutions. The results of survey of risk perception in different modes of financing shows that risk level is considered elevated. According to Iqbal & Mirarkhor, (2007) high perception of risks may be an indication of the low degree of active risk management due to the absent of risk control through internal processes and control, especially in the case of operational risk where banks perceived to be the most important risk.

Wangui (2010) did a study on credit risk management practices by SACCOS in Nairobi using a survey research design. The findings revealed that majority of the SACCOS use credit risk management practices to mitigate risks as a basis for objective credit risk appraisal. The findings also show that the most popular methods of promoting credit risk awareness amongst staff in SACCOS are through regular meetings and supervisions on one on one basis. Wangui also found out that SACCOS relied heavily on the discretion and ability of portfolio managers for effective credit risk management practices as opposed to a system of that standardizes credit and credit risk decisions. Similarly, a study by Silikhe (2008) on credit risk management in microfinance institutions in Kenya found out that despite the fact that MFI's have put in place strict measures to credit risk management. This explains the reasons why most financial institutions are either not growing or about to close down. Similarly, Dhakal (2011) on risk management in SACCOS found out that risk management is not imbedded into the SACCOS institutional cultures and its value is not shared by all employees. He also noted that given the capacity, introduction of sophisticated systems and technical tools risk management does not work in SACCOS and therefore they lack the capacity required for risk management.

Survey by Gaitho (2010) on credit risk management practices by Saccos in Nairobi, findings revealed that majority of Saccos used credit risk management practices to mitigate risks as a basis for objective credit risk appraisal. Gaito also found out that

majority of Saccos relied heavily on the discretion and ability of portfolio managers for effective credit risk management practices as opposed to a system that standardizes credit and credit risk decisions. Githingi (2010) surveyed on operating efficiency and loan portfolio indicators usage by microfinance institutions found out that most microfinance institutions to a great extent used operating efficiency indicator as a credit risk management practice. Efficiency and productivity ratios are used to determine how well microfinance institutions streamline their credit operations. He also noted that microfinance institutions need to employ a combination of performance indicators such as profitability, operating efficiency and portfolio quality indicators to measure their overall performance

Gisemba (2010) researched on the relationship between risk management practices and financial performance of SACCOs found out that the SACCOs adopted various approaches in screening and analyzing risk before awarding credit to client to minimize loan loss. This includes establishing capacity, conditions, use of collateral, borrower screening and use of risk analysis in attempt to reduce and manage credit risks. He concluded that for SACCOs to manage credit risks effectively they must minimize loan defaulters, cash loss and ensure the organization performs better increasing the return on assets

2.6 Research Gap

From literature reviewed in this study, it was evident that scholars have interest on credit risks and their effects in operations and performance of financial institutions. However, the following gaps were identified in the study; while many theories have been put forward to relate credit risks and performance of financial institutions, most of these theories relate credit risk management with financial performance, but do not provide direct link between credit risk management practices and growth of growth. Secondly, the study established that most past studies have focused on either credit risk and loan performance or credit risk management and financial, literature gap still exists on the direct relationship between credit risk/credit risk management and growth of SACCOs. Studies are needed to relate the two variables.

2.7 Conceptual Framework

This study sought to relate credit risk management practices and growth of wealth of SACCOs. The figure below presents conceptualization and relationship between the research variables

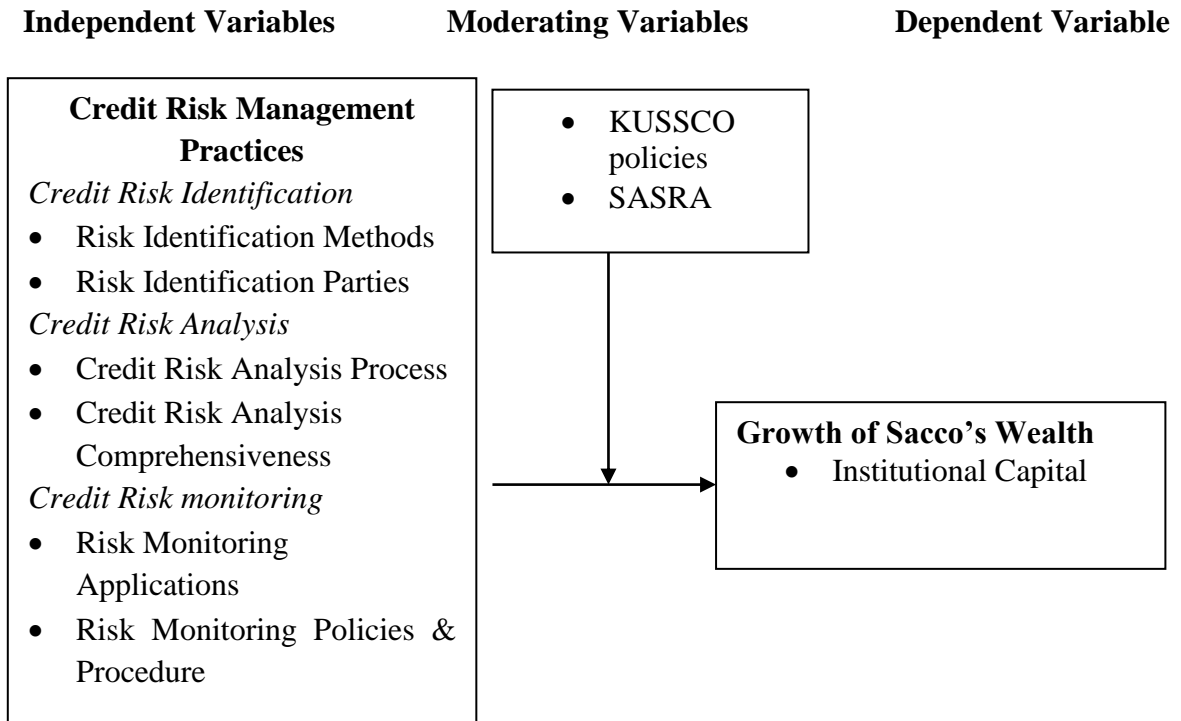


Figure 2. 1: Conceptual Framework

From the conceptual framework, growth of SACCOS' wealth is dependent on credit risks identification, credit risk analysis and credit risk monitoring. Credit risk identification was conceptualized into credit risk identification methods and credit risk identification parties and adopted from Mengich & Njiru (2015). Credit risk analysis was conceptualized into; credit risk analysis process and credit risk analysis comprehensiveness as dopted from Onkoba (2010). Credit risk monitoring was conceptualized into; credit risk monitoring applications and tools and credit risk monitoring policies & procedures while growth in wealth was measured in terms of institutional capita (capital Reserves + accumulated surpluses) as adopted from Kalui & Omwemba (2015). The relation between the variavles are as presented in figure 2.1 above.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research design

A descriptive survey was employed in the study, the design was appropriate because it provided a means to contextually interpret and understand credit risk management and growth of SACCOs, wealth. According to Cooper and Schindler (2003) a descriptive study describes the existing conditions and attitudes through observation and interpretation techniques. The study was therefore able to generalize the findings to all SACCOs licensed by Sasra in Nakuru.

3.2 Target Population

The target population consisted of all SACCOs licensed by SASRA in Nakuru as at January 2015. According to SASRA there are 13 deposits taking SACCOs licensed by SASRA in Nakuru Town. Because of the small number, all the 13 SACCOs were involved in the study. Respondents in the study were however SACCO managers and credit managers.

3.3 Sampling Design

The study purposively sampled employees concerned with credit risk management. From each selected SACCO, the researcher purposively selected SACCO manager, Investment Manager and credit officer to constitute the respondents. This gave a sample of 39 respondents. The SACCO managers were involved in the study since they make key decisions relating to credit risk management, investment managers were involved since they are concerned with growth of SACCOs while credit officers were selected since they experience the direct effect of credit risks in their daily operations.

3.4 Data Collection Instruments

The study made use of primary data and secondary data. The Primary data was collected using questionnaires. Structured questionnaire was used to collect primary data. The questionnaires had adequate research items on research variables. Since independent research variables were qualitative, the researcher developed a five points likert scale (5- Great Extent 4- Some Extent 3- Neutral 2-Low Extent 1- No Extent). Kothari (2004)

terms the questionnaire as the most appropriate instrument due to its ability to collect a large amount of information in a reasonably quick span of time. According to Mugenda & Mugenda (2003), questionnaires are commonly used to obtain important information about a population under study.

3.5 Data Collection Procedure

The questionnaires were administered through drop and pick technique where the respondents were issued with questionnaires and allowed ample time to fill the questionnaires. The researcher took contacts of respondents and followed on filling of questionnaires. Once filled, the questionnaires were collected for analysis.

3.6 Validity and Reliability Test

Before the research tools were finally administered to participants, pre-testing was carried out to ensure that the questions were relevant, clearly understandable and make sense. The pre-testing aimed at determining the reliability of the research tools including the wording, structure and sequence of the questions. This pre-testing involved 10 respondents; the responses gotten were not used in the final analysis. The data collected was analyzed through SPSS. The results were as presented in table 3.1

Table 3.1: Reliability Test Results

Item	N of Items	Cronbach's Alpha
Credit Risk Identification	14	.871
Credit Risk Analysis	12	.796
Credit Risk Monitoring	7	.790

Cronbach alpha of 0.871, 0.796 and 0.790 (>0.7) were obtained for the questionnaire items on risk identification, risk analysis and risk monitoring respectively. This implied that the questionnaires were reliable for data collection. The purpose was to refine the questionnaire so that respondents in the major study had no problem in answering the questions. To ensure content validity, expert opinion was requested on the representativeness and suitability of questions and gave suggestions of corrections that

were made to the structure of the research tools. This helped to improve the content validity and reliability of the data that was collected.

3.7 Data Analysis and Presentation

The data collected was classified, analyzed to determine how credit risk management practices affect growth of SACCOs' wealth. Data was analysed through Statistical Package for Social Sciences (SPSS) version 21. The study used descriptive statistics (means and standard deviations) to describe credit risk management practices while line graph was used to present growth in wealth of SACCOs. Inferential statistics (correlation analysis) was used to establish relationship between credit risk management and growth of SACCO's wealth. The study used multiple regression analysis to establish combined effect of credit risk management practices on growth of SACCOs wealth while ANOVA test was used to test statistical significance of the overall effect. Research hypotheses were tested using t-test at 95 % confidence level. Research findings were presented using tables.

The multiple regression equation below was used to guide the study

$$Y = \beta_0 + \beta_1RI + \beta_2CRA + \beta_3CRM + \epsilon$$

Where;

Y = Growth of SACCO's wealth

RI= Credit Risk Identification

CRA = Credit Risk Analysis

CRM= Credit Risk Monitoring

β_1 , β_2 and β_3 are coefficients of determination and **ϵ** is the error term.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Respondents Background Information

The respondents for the study were drawn from management of SACCOs which were drawn from Nakuru. The SACCOS chosen were those that had been registered SASRA in Nakuru as at January 2015. The results and the findings on background information from the respondents were as follows;

4.1.1 Highest Level of Qualification

The study sought to know the highest level of qualification of the respondents. The chart below shows the results.

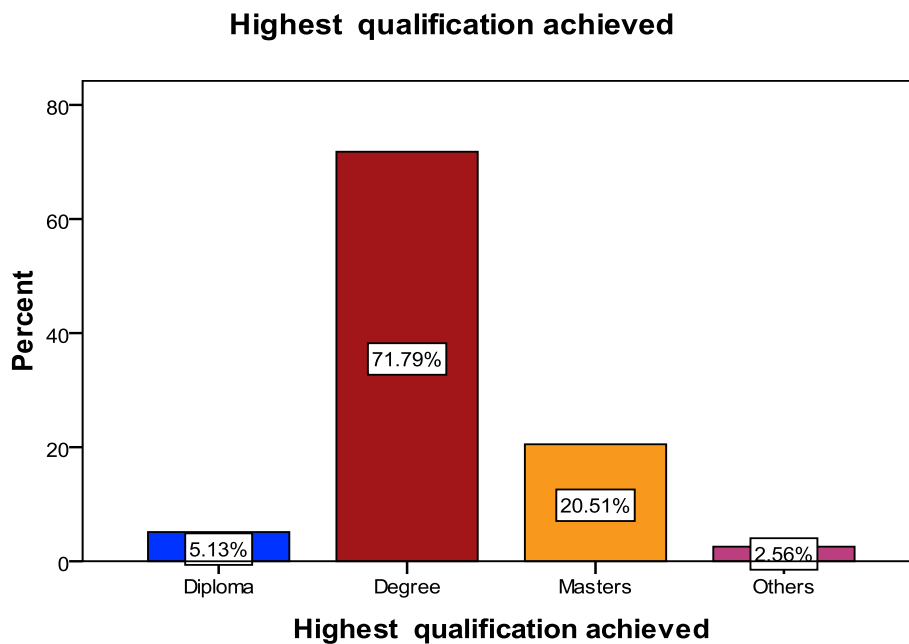


Figure 4.1: Highest Level of Qualification

Majority (71.79%) of the respondents had degree as the highest qualification while diploma and other qualification beyond masters were the least. Low diploma achieved can be attributed to the fact that the respondents were in management.

4.1.2 Current Designation in the Organization

Respondents were asked to give their current designation in the organization and they indicated their designation by ticking the appropriate level. The results were as follows;

Table 4. 1: Current Designation in the Organization

Aspect	Frequency	Percent
Credit manager	19	48.7
Branch Manager	11	28.2
Managing Director	6	15.4
Others	3	7.7
Total	39	100.0

From those interviewed 48.7% were credit managers in their respective SACCOs. 28.2% were branch managers, 15.4% were managing directors while 7.7% were other officers in the credit department. These employees distribution based on position is realistic as SACCOs majorly offer credit facilities and products.

4.1.3 Number of years the SACCO industry

The response to the question on how long the respondents had worked in the SACCO industry yielded the following results as summarized on the table below.

Table 4. 2: Number of Years the SACCO Industry

Years	Frequency	Percent
1-5 years	3	7.7
6-10 years	18	46.2
11-15 years	11	28.2
16-20 years	3	7.7
21 years and above	4	10.3
Total	39	100.0

Majority of the respondents (46.2%) were in the SACCO industry for a period of 6-10 years while 7.7% were there for a period of between 1-5 years, 7.7% for a period of between 16-20 years, 28.2% for 11-15 years and 10.3% for over 20 years. This was good for the study as the respondents were assumed to have knowledge and understanding of

their respective SACCO credit risk management practices which were relevant to the study.

4.2 Risk Identification

The researcher collected data on risk identification methods. The findings were as presented in this section.

4.2.1 Risk Identification Methods

The first objective of the study sought to establish the various methods used by SACCOs in risk identification, extent of involvement of various parties and the importance of risk identification as perceived by the respondents. The findings of the study were as presented in table 4.3 and discussed thereafter.

Table 4. 3: Focus of Risk Identification Methods

Statement	2Great Extent	Some Extent	Neutral	Low Extent	No Extent
Brainstorming	64.1%	30.8%	2.6%	2.6%	0.0%
Event inventories & loss event data	61.5%	38.5%	0.0%	0.0%	0.0%
Interviews and self assessment	66.7%	30.8%	0.0%	2.6%	0.0%
Facilitated workshops	69.2%	17.9%	0.0%	12.8%	0.0%
SWOT analysis	71.8%	25.6%	0.0%	2.6%	0.0%
Risk questionnaires and risk surveys	53.8%	33.3%	12.8%	0.0%	0.0%
Scenario analysis	76.9%	12.8%	0.0%	10.3%	0.0%
Using technology	69.2%	17.9%	10.3%	2.6%	0.0%

From table 4.3, the SACCIOs focus of brainstorming as a method of risk identification as revealed by majority; 64.1% who indicated that brainstorming is adopted to a great extent indicates that brainstorming is a popular method of risk identification in SACCOs in Nakuru. 61.5% of the respondents indicated large extent use of event inventories & loss event data with no respondent indicating otherwise. This indicates that event inventories & loss event data is one of the key methods of risk identification. Majority of respondents (66.7%) indicated that interviews and self-assessment was used as a risk identification method to a great extent. It also emerged from the finding that interviews and self-

assessment are widely used method of risk identification among SAACOs as indicated by high percentage (66.7%) of the respondents.

As to whether facilitated workshops are used as risk identification method, majority of the respondents (69.2%) agreed with the research items confirming that focus of facilitated workshops widely used in risk identification. SWOT analysis was largely used in formulation of strategy as indicated by majority of the respondents (71.8%) who concurred with the research items. Risk questionnaire on both internal and external events was relatively used effectively to identify risks as indicated by (53.8%) who agreed with the research items. However, Scenario analysis is particularly useful in identifying strategic risks as indicated by high percentage, (76.9%) who concurred with the research item. Lastly, majority of the respondents (69.2%) agreed that technology is used as a risk identification method indicating that the SACCOs adopt current technology in risk identification.

4.2.2 Involvement in Risk Identification

The study sought to know the extent of involvement of various parties in risk identification. The respondents were requested to indicate the level of involvement using a scale ranging from no extent to greater extent. The findings were as presented in table 4.4.

Table 4. 4: Involvement in Risk Identification

Statements	Greater Extent	Some Extent	Neutral	Low Extent	No Extent
Executive management	61.5%	28.2%	2.6%	5.1%	2.6%
Board of directors	69.2%	30.8%	0.0%	0.0%	0.0%
Credit committee	84.6%	2.6%	2.6%	10.3%	0.0%
Credit managers	74.4%	20.5%	2.6%	0.0%	2.6%
Employees	56.4%	43.6%	0.0%	0.0%	0.0%
Auditors in risk identification	64.1%	15.4%	2.6%	17.9%	0.0%
Mean Response					

From table 4.4, majority of the respondents (61.5%) indicated that there was active involvement of executive management in risk identification. This implies that the SACCOs actively involved executive managers in risk identification where necessary. Majority of the respondents (69.2%) concurred that boards of directors were involved in risk identification. This implies that board of directors are actively involved in development of strategies involved in risk identification.

This study sought to know the extent of involvement of credit committees in risk identification. The high percentage (84.6%) of respondents that concurred that edit committees were involved in risk identification confirmed that in deed the SACCOs involve credit committes in risk identification. Majority of the respondents (74.4%) indicated that there was involvement of credit managers in risk identification. Risk managers understand aspects of credit risks and assist in strategic identification of risks. Similarly, majority of the respondents (56.4%) confirmed strongly agreed that employees were involved in risk identification while 43.6% of the respondents felt involvement was to some extent confirming that in deed, the SACCOs invove employees in risk identification. Lastly, 64.1% of respondents confirmed that auditors were involved in risk identification technology.

4.3 Credit Risk Analysis and Management

The second objective of the study sought to establish the effects of credit risk management on growth of Savings and credit co-operatives wealth. The findings of the study were as discussed in this section.

4.3.1 Credit Risk Analysis Aspects

The study collected and analysed data on risk analysis aspects. The findings were as presented in table 4.5.

Table 4. 5: Credit Risk Analysis Aspects

Statements	Greater Extent	Some Extent	Neutral	Low Extent	No Extent
Loan protection/security	69.2%	23.2%	0.0%	7.7%	0.0%
Loan repayment period	59.0%	30.8%	10.3%	0.0%	0.0%
Eligibility of the loan	69.2%	0.0%	23.1%	7.7%	0.0%
Credit Risk Policies	84.6%	2.6%	2.6%	10.3%	0.0%

From the findings of the study in table 4.5, majority of the respondents (69.2%) confirmed that loan protection/security was valued in credit management of the SACCOs. Loan securities protect the SACCOs from potential losses of default. Average percentage of the respondents (59.0%) indicated that loan repayment period was valued in credit management of the SACCO. Loan repayment period can be balanced with interest rates protecting the SACCOs from inefficiencies that come with irregular payment patterns. Eligibility for the loan was highly regarded as important by the SACCO as indicated by high percentage (69.2%). Similarly, credit risk policies were largely applied as indicated by majority (84.6%) of the respondents who concurred with the research item.

4.3.2 Credit Risk Analysis Comprehensiveness

The study sought to know whether SACCOs ranked their loans in terms of their magnitude. From the findings of the study, 87.2% indicated that loan ranking was widely done by the SACCOs. The findings also revealed that SACCOs used credit portfolio model as evidenced by (64.1%) followed by rating based approach with (30.8%). Other models were not in use in the SACCOs. The study then sought to know the extent to which risk analysis was comprehensive in the SACCOs. The research findings were as presented in table 4.6.

Table 4. 6: Credit Risk Analysis Comprehensiveness

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Risk analysis is comprehensive in the SACCOs	74.4%	20.5%	2.6%	0.0%	2.6%
Effective credit risk management requires a reporting & review structure	84.6%	2.6%	2.6%	10.3%	0.0%
Risk analysis & assessment comprises estimation of the magnitude of the consequences	56.4%	43.6%	0.0%	0.0%	0.0%
Risk analysis & assessment involves assessment of hazardous outcomes	66.7%	25.6%	7.7%	0.0%	0.0%

From the findings in table 4.6, 94.9% of the respondents indicated that risk analysis is comprehensive in the SACCOs. Similarly, 87.2 % confirmed that effective credit risk management requires a reporting & review structure. Reporting is necessary for coordination of credit risk management activities. All respondents at least agreed that risk analysis & assessment comprises estimation of the magnitude of the consequences. This is important in predicting the potential effect of such risks. Lastly, 72.3 % of the respondents indicated that risk analysis & assessment comprises the probability of those outcomes.

4.4 Credit Risk Monitoring

The third objective of the study sought to establish the effects of risk monitoring on growth of Savings and credit co-operatives wealth. The findings were as presented in this section

4.4.1 Credit Policy Review Frequency

The study analyzed how frequent review of credit policy was done. The findings were as presented in table 4.7

Table 4. 7: Credit Policy Review Frequency

Frequency of Review	Frequency	Percent
Quarterly	20	51.3
Semi-annually	4	10.3
Annually	15	38.5
Total	39	100.0

From the findings in table 4.7, 51.3% of the respondents indicated that their SACCOs review their credit policy quarterly, 10.3% review them semi-annually while 38.5% review them annually. It was evident that most SACCOs review their credit policy on quarterly basis.

4.4.2 Credit Risk Monitoring

The study collected and analyzed data on credit risk monitoring. The findings were as presented in table 4.8.

Table 4. 8: Credit Risk Monitoring

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Risk monitoring used to align risk management practices with proper risk monitoring	51.3%	35.9%	12.8%	0.0%	0.0%
Risk monitoring helps to discover mistake at early stage	53.8%	46.2%	0.0%	0.0%	0.0%
The director's report on risk monitoring enables the shareholders to assess the status of the corporation knowledgeably & thoroughly	48.7%	51.3%	0.0%	0.0%	0.0%

From the findings of the study in table 4.8, majority of the respondents (87.2%) confirmed that risk monitoring can be used to make sure that risk management practices

are in line with proper risk monitoring. All respondents were in agreement that risk monitoring helps the SACCO management to discover mistake at early stage. Similarly, all respondents were in agreement that that the director's report on risk monitoring enables the shareholders to assess the status of the corporation knowledgeably & thoroughly.

4.5 Growth of SACCOs Wealth

The study sought to establish the growth of wealth in terms of institutional capital achieved by the SACCOs. The actual values were converted into log values to facilitate analysis. The findings were as presented in Figure 4.2 and table 4,9 presented below.

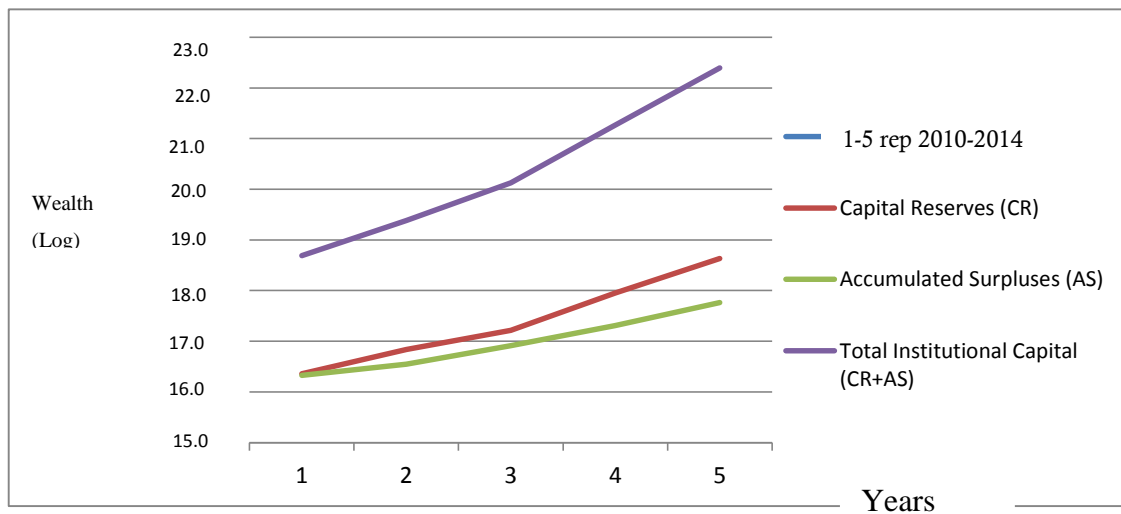


Figure 4.2: Trend in Growth of SACCOs Wealth

Figure 4.2 presents trend in growth of wealth (institutional capital) for the 13 SACCOs that were involved in the study. From the figure, it is clear that there has been steadily increasing trend in growth of wealth from 2010 – 2014.

To facilitate relating credit risk management and growth of wealth of SACCOs, the values of institutional capital were converted to logarithm. The logarithm values were correlated and regressed with means of credit risk management practices. The logarithm values are presented in table 4.9

Table 4. 9: Logarithm of Growth of Wealth (Institutional Capital)

SACCOS	2010	2011	2012	2013	2014	Mean Institutional Capital	Mean Increase Institutional Capital
Unaitas	22.08	22.23	22.41	22.61	22.65	22.40	0.57
Metropolitan	21.36	21.82	22.09	22.34	22.63	22.05	1.27
Mwalimu national	23.47	23.68	23.79	23.92	24.08	23.79	0.61
Cosmopolitan	20.82	20.95	21.16	21.36	21.67	21.19	0.85
Stima Sacco	23.41	23.45	23.59	23.63	23.80	23.57	0.39
Uni- County Sacco	20.94	21.11	21.08	21.23	21.32	21.14	0.38
Vision Africa	18.40	18.76	20.31	20.45	20.60	19.70	2.2
Tupendane Sacco	18.77	18.88	18.91	18.98	19.01	18.91	0.24
Boresha	18.64	18.68	18.72	18.79	18.87	18.74	0.23
Nakuru County Youth	16.62	16.73	16.93	17.00	17.39	16.93	0.77
Egerton University Sacco	20.03	20.14	20.29	20.48	20.58	20.30	0.55
Ukombozi	16.08	16.25	16.42	16.46	16.56	16.36	0.48
Harambee	23.80	23.91	24.00	24.27	24.38	24.07	0.58
Mean	20.34	20.51	20.75	20.89	21.04	20.70	0.7

The wealth of the Sacco was measured in terms of increase in institutional capital (Capital Reserves + Accumulated Surpluses) and transformed to logarithms. The mean institutional capital each year were obtained as shown in the table above. It was evident that institutional capital increased steadily between 2010 and 2014.

4.6 Relationship between Credit Risk Management and Growth of Wealth

The study conducted correlation analysis to establish the relationship between credit risk management practices and growth of wealth in SACCOs. The findings were as presented in table 4.10.

Table 4. 10: Relationship between Credit Risk Management and Growth of Wealth

		Credit Risk Identification	Credit Risk Analysis	Credit Risk Monitoring	Growth of SACCOS
Credit Risk Identification	Pearson Correlation	1	.162	.655**	.439**
	Sig. (2-tailed)		.149	.000	.000
	N	39	39	39	39
Credit Risk Analysis	Pearson Correlation	.162	1	.391**	.356**
	Sig. (2-tailed)	.149		.000	.001
	N	39	39	39	39
Credit Risk Monitoring	Pearson Correlation	.655**	.391**	1	.472**
	Sig. (2-tailed)	.000	.000		.000
	N	39	39	39	39
Growth of SACCOS	Pearson Correlation	.439**	.356**	.472**	1
	Sig. (2-tailed)	.000	.001	.000	
	N	39	39	39	39

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

From table 4.10, the results revealed significant positive relationship between credit risk identification and growth of wealth of SACCOS as evidenced by $r=0.439$ and $p=0.000$ (<0.05). There was significant positive relationship between credit risk analysis and growth of wealth of SACCOS as evidenced by $r=0.356$ and $p=0.001$ (<0.05). Similarly, credit risk monitoring has significant positive relationship with growth of wealth of SACCOS at $r=0.472$ and $p=0.000$ (<0.05).

The findings concurred with the findings of Wangui (2012) that while SACCOS rely heavily on the discretion and ability of portfolio managers for effective credit risk management practices as opposed to a system of that standardizes credit and credit risk decisions. Silikhe (2008) similarly established positive relationship between credit risk management and financial growth in microfinance institutions in Kenya.

4.7 Regression Results

Multiple regression was used to test the collective effect of credit risk management practices on growth of wealth of SACCOs. The findings were as presented in table 4.11, 4.12 and 4.13.

Table 4. 11: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.545 ^a	.297	.270	.44794	2.590

a. Predictors: (Constant), Credit Risk Monitoring, Credit Risk Analysis, Credit Risk Identification

Table 4. 12: ANOVA Table

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.527	3	2.176	10.843	.000 ^a
	Residual	15.450	35	.201		
	Total	21.977	38			

a. Predictors: (Constant), Credit Risk Monitoring, Credit Risk Analysis, Credit Risk Identification

b. Dependent Variable: Growth of SACCOS

Table 4. 13: Table of Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	2.248	.195		11.553	.000
	Credit Risk Analysis	.094	.042	.232	2.214	.030
	Credit Risk Identification	.101	.049	.265	2.076	.041
	Credit Risk Monitoring	.118	.077	.208	1.521	.032

a. Dependent Variable: Growth of SACCOS

From table 4.11, the Durbin-Watson Statistic was used to test for the presence of serial correlation among the research variables. The value; 2.590 closer to four indicates weak positive relationship between between risk identification, credit risk analysis and credit risk monitoring and growth of wealth. Durbin-Watson, 2.590 which is above 1.5 indicates that the variables are independent. The value R square of 0.297 indicates that collectively, credit risk identification, credit risk analysis and credit risk monitoring explain 29.7% of the changes in growth of wealth in SACCOs.

ANOVA test was used to test the significance of the overall effect of credit risk identification, credit risk analysis and credit risk monitoring on growth of wealth of SACCOs. From table 4.12, the p value of 0.000 (<0.05) implies that the effect of the three factors is significant. Credit risk management is therefore significant determinant of growth of wealth in SACCOs. These findings agreed with findings of Ngetich (2015) that credit risk management has significant effect on financial growth.

From table 4.13, the following regression model was developed.

$$Y = 2.248 + 0.094CRI + 0.101CRA + 0.118CRM \dots\dots\dots(i)$$

Where Y = Growth of SACCO's wealth

CRI= Credit Risk Identification

CRA = Credit Risk Analysis

CRM= Credit Risk Monitoring

Model (i) indicates the multiple regression model for the entire study, relating the three independent variables (credit risk identification, credit risk analysis and credit risk monitoring) with the dependent variable (growth of wealth of SACCOs). The constant 2.248 indicates the level of growth in wealth achieved by SACCOs in the absence of the credit risk management practices. The coefficient, 0.094 indicates the level of growth of wealth achieved by SACCOs when the SACCOs implement risk identification holding other practices constant, 0.101 indicates the level of growth of wealth achieved by the SACCOs when credit risk analysis holding other practices constant. Lastly, the coefficient 0.118 indicates the level of growth of wealth achieved by the SACCOs when the SACCOs implement credit risk monitoring holding other credit risk management

practices. The positive coefficients for credit risk identification, credit risk analysis and credit risk monitoring indicate that there is a direct relationship between credit risk identification, credit risk analysis and credit risk monitoring and growth of wealth.

4.8 Hypothesis Testing

The researcher used t-statistic to test the hypotheses. The metrics of the independent variables were individually regressed against the dependent variable at 0.05 significance level. Where p-value obtained in the analysis was greater or equal to 0.05, the null hypothesis was accepted. The t-values and significance (p) values presented in table 4.13 were used to test research hypotheses.

4.8.1 Effect of Credit Risk Identification on Growth of Wealth of SACCOs

The first hypothesis was; **H₀₁: Credit Risk identification practices have no significant effect on growth of wealth of Savings and credit co-operatives.**

From table 4.13, $t=2.214$ and significance value, 0.030 (<0.05) implies statistically significant effect of risk identification on growth of wealth of SACCOs. The first hypothesis is therefore not accepted and it is concluded that risk identification has significant effect on growth of SACCOs. The study findings were in agreement with the findings of Muinde & Nyamute (2012) that loan portfolio management, risk identification is instrumental in credit risk management process.

4.8.2 Effect of Credit Risk Analysis on growth of SASSOs

The second hypothesis was; **H₀₂: Credit Risk analysis has no significant effect on growth of wealth of Savings and credit co-operatives.**

The results in table 4.13, $t=2.076$ and $p=.041$ (<0.05) implies statistically significant effect of credit risk analysis on growth of wealth of SACCOs. The study rejected the second hypothesis and concluded that credit risk analysis has significant effect on growth of Savings and credit co-operatives wealth. Similarly, Gisemba (2010) researched on the relationship between risk analysis and financial performance of SACCOs and established that risk management can be adopted as a strategy in achieving financial growth as there is significant relationship between risk analysis strategies and financial performance.

Similarly, Olando et al. (2012) in their study established significant relationship between loan risk analysis and management and growth of wealth of SACCOs.

4.8.3 Credit Risk monitoring on Growth of SACCOs

The third hypothesis was; **H₀₃: Credit Risk monitoring has no significant effect growth of wealth of Savings and credit co-operatives.**

The values; $t=1.521$ and $p=.032$ (<0.05) implies statistically significant effect of credit risk monitoring on growth of wealth of SACCOs. The last hypothesis was equally rejected and conclusion made that credit risk monitoring has significant effect on growth of wealth of SACCOs. The findings agree with the findings of Iqbal and Mirarkhor, (2007) that the high perception that existence of poor risks monitoring may be an indication of the low degree of low performance. They established that the relationship between risk monitoring and growth is significant.

4.8.4 Overall effect of Credit Management Practices on Growth of Wealth Savings and Credit Co-operatives

The fourth hypothesis was stated as;

H₀₄: Credit risk identification, credit risk analysis and credit risk monitoring do not have significant effect on growth of wealth of Savings and credit co-operatives wealth in Nakuru Town.

Multiple regression analysis and ANOVA test were conducted to establish combined effect and statistical significance respectively. From tables 4.11 and 4.12, R square of 0.297 and p value of .000 (<0.05) indicates statistically significant effect of credit risk management on growth of wealth of SACCOs. The last hypothesis was therefore rejected and conclusion made that credit risk identification, credit risk analysis and credit risk monitoring are significant determinants of growth of Savings and credit co-operatives wealth. Study by Essendi (2013) established that risk management is important in SACCOs to enhance capital adequacy, management quality, earnings and liquidity.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter gives a summary of the study based on the purpose of the study, specific objectives of the study as well as major findings of the study. It also gives the conclusions arrived at and the recommendations made to the SACCOs and to other researchers on areas for further research.

5.2 Summary of Findings

From the findings, it was evident that various methods are used for risk identification in SACCOs. Brainstorming, event inventories and loss event data, interviews and self-assessment, SWOT analysis, scenario analysis and use of technology methods have been adopted by majority but not all SACCOs use them as some cited it being used to a low extent. It can be concluded that no method is used exclusively in risk identification. The methods are used mutually in risk identification.

It was evident that there is active involvement of executive management in risk identification in the SACCOs. Executive management have responsibility for implementing the credit risk strategy approved by the board of directors and for developing policies and procedures for identifying, measuring, monitoring and controlling credit risk. Boards of directors are actively involved in development of strategies involved in risk identification. Similarly, edit committees were involved in risk identification to especially in formulation of strategies. Involvement of credit managers in risk identification was clearly evident as credit managers are directly involved with credit risks. Lastly, employees were involved in risk identification with auditors majorly involved in risk identification technology. The findings indicate that the SACCOs involve stakeholders in risk identification to enhance risk identification process.

It was established that risk analysis is comprehensive in the SACCOs. However, it came out that effective credit risk management requires a reporting & review structure. Risk assessment in the SACCOs comprises estimation of the magnitude of the consequences and assessment of hazardous outcomes. It was clear that risk monitoring can be used to

make sure that risk management practices are in line with proper risk monitoring, risk monitoring helps the SACCO management to discover mistake at early stage while the director's report on risk monitoring enables the shareholders to assess the status of the corporation knowledgeably & thoroughly.

It was clear that the majority of the SACCOs review their credit policy quarterly with some reviewing semi-annually and annually. Credit risk monitoring can be used to make sure that risk management practices are in line with proper risk monitoring. It was evident that risk monitoring helps the SACCO management to discover mistake at early stage. Similarly, the director's report on risk monitoring were used by shareholders to assess the status of the corporation knowledgeably with respect to credit risk management.

Lastly, the study revealed that the SACCOs were experiencing steady growth in wealth with the average increase between the years steadily increasing from year to year. The growth was evident both for individual SACCOs and collectively for all the SACCOs that were involved in the study.

5.2.1 Effect of Credit Risk Identification on Growth of SACCOs' Wealth

The study sought to determine the effect of credit risk identification on growth of SACCOs' wealth. Through correlation and regression analyses, the study established that credit risk identification has statistically significant positive effect on growth of wealth of SACCOs. Having an intensive and elaborate credit risk identification system would lead to growth in the SACCOs wealth. It therefore implies that credit risk identification is a critical determinant of growth of wealth of SACCOs.

5.2.2 Effect of Credit Risk Analysis on Growth of SACCOs' Wealth

The second objective related credit risk analysis with growth of SACCOs' wealth. The study used correlation and regression analyses to achieve the objective. The study revealed that credit risk analysis has significant effect on growth of wealth of SACCOs. The SACCOs can invest in credit risk analysis to enhance growth of SACCOs.

5.2.3 Effect of Credit Risk Monitoring on Growth of Wealth of SACCOs.

The third objective sought to establish the effect of credit risk monitoring on growth of wealth of SACCOs. From correlation and regression analyses, the study revealed that credit risk monitoring has significant effect on growth of wealth of SACCOs. Credit risk monitoring is therefore a significant determinant of wealth of SACCOs and can be used to improve SACCOs wealth.

5.2.4 Combined effect of Credit Risk Management on Growth of Wealth of SACCOs

The last objective of the study was to determine the effect of credit risk management practices on growth of wealth of SACCOs. The study used multiple regression analysis to achieve this objective. The results revealed statistically significant positive relationship between credit risk identification, credit risk analysis, credit risk monitoring and growth of wealth of SACCOs. The three credit risk management practices can be adopted by an organization in an attempt to increase their wealth.

5.3 Conclusions

From the research findings, the study made conclusions as follows;

The first conclusion was made that credit risk identification significant positive effect on growth of wealth of SACCOs. Credit risk identification is therefore a key determinant of growth of wealth and can be adopted as a strategy to increase wealth in SACCOs wealth. Credit risk identification aids in identifying potential credit risks that could hinder SACCOs wealth generation activities.

The study made the second conclusion that credit risk analysis has positive effect on growth of wealth of SACCOs. Similarly, the effect was statistically significant implying that credit risk analysis is a significant determinant of wealth of SACCOs. Risk analysis assists in examination of existing credit risks and facilitates development of credit risk management.

The third conclusion was made that credit risk monitoring has significant positive effect on growth of wealth of SACCOs. This indicated that credit risk monitoring is a significant determinant of wealth of SACCOs and can therefore determine the level of

wealth in a SACCO. Credit risk monitoring helps in containing credit risks thereby protecting the SACCOs from adverse effects of credit risks.

Lastly, the findings led to conclusion that collectively, credit risk identification, credit risk analysis and credit risk monitoring have significant effect on growth of SACCOs. It was evident that credit risk management is key determinant of wealth of SACCOs and therefore SACCOs need to invest in such practices in attempt to achieve improved growth in wealth.

5.4 Recommendations

From the outcome of the study, the following recommendations were made;

Credit risk management should be considered as a critical determinant of their growth of wealth. There is need for the SACCOs to develop risk identification procedures and policy to enhance effectiveness in credit risk identification process

Clear methods and policies should be put into place to ensure effective risk analysis activities. This is because risk analysis assesses that level of organizations to credit risks. It is also important that the SACCOs take a critical look at their risk analysis approaches so as to ensure the outcomes of risk analysis are realistic.

Risk monitoring being a continuous process should be implemented in a progressive manner that allows the SACCOs to understand their potential risk and hence guide in the use of other risk management activities.

It is also important for the SACCOs to adopt new approaches and tools for carrying out their risk evaluation, reliance on the traditional and historical information and records as key sources for evaluation process may lower the chances of understanding the inherent risks in their growth of wealth.

Lastly, the study recommends to policy makers in the financial sectors to develop guidelines on how SACCOs can go about managing credit risk as credit risk management can enhance growth of wealth in SACCOs.

5.5 Suggestions for Further Research

From the findings and conclusions of the study, the following areas are suggested for further studies;

A study to critically look at the relationship between the different risk managements factors with the aim of revealing how they influence each other.

The need to isolate a few of the risk management elements that will allow the SACCOs to develop a cost effective model for managing their portfolio without necessarily undertaking all the risk management activities

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APPENDICES

Appendix 1: Questionnaire

This questionnaire will be seeking on the staff of SACCOs in Nakuru County to provide information on the topic “*EFFECT OF CREDIT RISK MANAGEMENT PRACTICES ON GROWTH OF SACCOS' WEALTH IN NAKURU TOWN*” The Information is intended for academic purposes only and will not be divulged to any other person. Please complete all sections of this document. All questions are interrelated and are very important for the study

SECTION A: DEMOGRAPHIC INFORMATION

1. What is your highest qualification achieved?
 - i. Certificate
 - ii. Diploma
 - iii. Degree
 - iv. Masters
 - v. PhD

2. What is your current designation within the organization?
 - i. Credit Manager
 - ii. Branch Manager
 - iii. Managing Director
 - iv. Others

3. How many years have you been in the Micro Finance industry?
 - i. 1– 5 years
 - ii. 6– 10 years
 - iii. 11– 15 years
 - iv. 16– 20 years
 - v. 21 years and above

SECTION B: CREDIT RISK IDENTIFICATION

4. Please rate the extent to which your organization focuses on the following risk identification methods. Use a scale of 1 to 5 where; 5- Great Extent 4- Some Extent 3- Neutral 2-Low Extent 1- No Extent

Credit Risk Identification Methods/Strategies	1	2	3	4	5
Brainstorming					
Event inventories and loss event data					
Interviews and self-assessment					
Facilitated workshops					
SWOT analysis					
Risk questionnaires and risk surveys					
Scenario analysis					
Using technology					

5. To what extent does your Sacco involve the following parties in risk identification? Use scale 1 to 5 where 5- Great Extent, 4- Some Extent, 3- Neutral, 2-Low Extent and 1- No Extent

Credit Risk Identification Parties	1	2	3	4	5
Executive management					
Board of directors					
Credit committee					
Credit managers					
Employees					
Auditors					

SECTION C: CREDIT RISK ANALYSIS

6. To what extents are the following aspects of credit risk analysis are valued in your Sacco. Use scale; 5- Great Extent, 4- Some Extent, 3-Neutral, 2-Low Extent and 1- No Extent.

Credit Risk Analysis Aspects	1	2	3	4	5
Repayment period					
Loan protection/security					

Loan repayment					
Eligibility of the loan					
Credit Risk Policies					
Comprehensiveness of risk analysis					

7. Do your SACCOs rank loans in terms of their magnitude in risks?

Yes ()

No ()

8. Which of the following model is used by your Sacco to identify credit worthiness of customers to help identify risks?

i. Credit portfolio view ()

ii. Scenario analysis ()

iii. Equity based approach ()

iv. Ratings base approach ()

v. Stress test approach ()

vi. Sensitivity analysis ()

9. To what extent do you agree with the following statement about risk analysis and credit risk management? Use scale; 5-Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree and 1-Strongly Disagree.

Credit Risk Analysis Comprehensiveness	1	2	3	4	5
Risk analysis is comprehensive in the SACCOs					
Effective credit risk management requires a reporting & review structure					
Credit risk analysis comprises identification of the outcomes					
Credit risk analysis and assessment comprises estimation the magnitude of the consequences					
Risk analysis & assessment involves assessment of hazardous outcomes					

SECTION D: CREDIT RISK MONITORING

10. How regularly do you review your credit policy?

- i. Quarterly
- ii. Semi-annually
- iii. Annually

11. To what extent do you agree with the following statement about risk monitoring in credit risk management? Use scale; 5-Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree and 1-Strongly Disagree.

Credit Risk Monitoring Applications	1	2	3	4	5
Risk monitoring used to make sure that risk management practices are effective					
Risk monitoring helps the bank management to discover mistake at early stage					
The director’s report on risk monitoring enables the shareholders to assess the status of the corporation knowledgeable and thoroughly					

12. To what extent do you agree with the following statements about credit risk management procedures in your organization? Use scale; 5-Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree and 5-Strongly disagree.

Credit Risk Management Procedures	1	2	3	4	5
The SACCOs have credit risk management procedures					
To SACCOs use credit risk management procedures to facilitate credit risk management					
The SACCOs use credit risk management procedures to standardize ratings across borrowers					
SACCOs use credit risk management procedures to ensure that all credits must be monitored, and reviewed periodically.					

THANKS YOU

Appendix II: Secondary Data Collection Sheet

This data collection sheet is intended to collect data on Total Institutional Capital.

Institutional Capital is broken down into Accumulated Surpluses and Accumulated Reserves. Kindly fill in the information requested in the spaces provided.

Name of the SACCO.....

Year	2010	2011	2012	2013	2014
Capital Reserves (CR)					
Accumulated Surpluses (AS)					
Total Institutional Capital (CR+AS)					

Thank You

Appendix III: LIST of Sarsa licenced SACCOs in Nakuru

1. COSMPOLITAN SACCO SOCIETY LTD	P.O BOX 1931-20100,NAKURU
2. HARAMBEE SACCO SOCIETY LTD	P.O BOX 47815-00100,NAIROBI
3. METROPOLITAN SACCO SOCIETY LTD	P.O BOX 871-00900,KIAMBU
4. MWALIMU NATIONAL SACCO SOCIETY LTD	P.O BOX 62641-00200,NAIROBI
5. STIMA SACCO SOCIETY LTD	P.O BOX 75629-00100,NAIROBI
6. UNAITAS SACCO SOCIETY LTD	P.O BOX 1145-10200,MURANG'A
7. UNI-COUNTY SACCO SOCIETY LTD	P.O BOX 10132-20100,NAKURU
8. VISION AFRICA SACCO SOCIETY LTD	P.O BOX 18263-20100,NAKURU
9. TUPENDANE CO-OPERATIVE SACCO	P.O BOX 1931-20100
10. BORESHA SACCO	P.O BOX 332-20100
11. NAKURU COUNTY YOUTH	P.O BOX 00200 -20100
12. UKOMBOZI SACCO	P.O BOX 2758-20100
13. HARAMBEE SACCO SOCIETY LTD.	P.O. Box 47815 –00100

Appendix IV Target Population

Target population	Target
Branch manager	13
Assistant branch manager	8
Credit officer	13
Salesperson	8
Total	32