THE EFFECT OF CREDIT RISK MANAGEMENT PRACTICES ON FINANCIAL PERFORMANCE OF SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN KISUMU COUNTY, KENYA

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DECLARATION

This research project is my original work and has not been presented for examination in any other university.

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DEDICATION

I dedicate this work to my family for their support during my period of study.
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ABBREVIATIONS AND ACRONYMS

ACCOSCA: Africa Confederation of Cooperative Society Savings and Credit Association

CIS: Credit Information Sharing

DTS: Deposit Taking SACCOs

EBIT: Earnings before Interest and Tax

FIs: Financial Institutions

FOSA: Front Office Service Activity

GDP: Gross Domestic Product

KUSCCO: Kenya Union of Savings and Credit Cooperative Societies

MTP: Modern Portfolio Theory

NDTS: Non-Deposit Taking SACCOs

ROA: Return on Assets

SACCOs: Savings and Credit Co-operative Societies

SASRA: Sacco Societies Regulatory Authority

SPSS: Statistical Package for Social Sciences
This study was conducted to establish whether there was a relationship between credit risk management practices and the financial performance of SACCOs in Kisumu County, Kenya. The objective was to determine the effect of credit risk management practices on the financial performance of SACCOs in Kisumu County, Kenya. The Cross-sectional survey design was used for the study. The research was based on all the SACCOs in Kisumu County whose performance was analyzed for the three-year period from 2011 to 2013. Secondary data was obtained from the office of the Commissioner for Cooperative Development and the Kenya Union of Savings and Credit Cooperative Societies. The data collected included the respective SACCOs’ income, total assets, total loans, non-performing loans, total expenses, loan insurance expenses, current assets and current liabilities. Data analysis was done using multiple regression analysis with the regression output being obtained using the Statistical Package for Social Sciences (SPSS). The findings of the study revealed a positive relationship between credit risk management practices and financial performance. The two independent variables had positive coefficients indicating that increase in Loan Insurance cost ratio and liquidity ratio would result in an increase in Return on Assets. The conclusion was that effective management of credit risk by SACCOs would improve their performance hence the need to select appropriate practices to suit their conditions. The study recommends that SACCOs should explore increased and consistent application of credit risk mitigation measures including insurance, 7c’s of credit appraisal, credit committees and regular review of their credit policies. In addition, adequate provision should be made for bad debts to avoid overstatement of their Income. The Government should also review their enforcement mechanisms on the requirement for SACCOs to file their financial returns with the Commissioner for Cooperative development to ensure prompt detection of problems and implementation of measures to safeguard members’ deposits.
CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Risk-taking is an inherent and unavoidable aspect of financial service provision against which reward in the form of profits is sought. While not avoidable, risk is manageable – as a matter of fact most banks live reasonably well by incurring risks, especially “intelligent risks” (Payle, 1997). Coyle (2000) defines credit risk as losses from the refusal or inability of credit customers to pay what is owed in full and on time. It refers to the potential that a borrower or counterparty will fail to meet its obligations in accordance with agreed terms. The risk is primarily to the lender and includes lost principal and interest, disruption to cash flows and increased collection costs. According to Chijoriga (1997) credit default is one of the most expensive risks in financial institutions (FIs) and it has a significant side effect as it directly threatens the institution’s solvency.

According to Boston Consulting Group (2001) credit risk is the oldest and most important risk to which financial institutions are exposed. The importance of credit risk and credit risk management has been increasing with time because of some reasons like; economic crises and stagnation, company bankruptcies, infraction of rules in company accounting and audits, growth of off-balance sheet derivatives, declining and volatile values of collateral, borrowing more easily of small firms, financial globalization and business risk-based capital requirements. Central Bank of Kenya Risk Management Guidelines 2013 lists the main sources of credit risk to include; limited institutional capacity, inappropriate credit policies, volatile interest rates, poor management,
inappropriate laws, low capital and liquidity levels, poor credit assessment, poor loan underwriting, laxity in loan assessment and inadequate supervision.

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 organization (Basel Committee on Banking Supervision, 2000). Financial institutions should adopt credit risk management practices to maximize shareholder value by enhancing the value of the firm. The application of Modern Portfolio Theory to credit risk management requires that financial institutions manage the credit risk inherent in the entire loan portfolio as well as the risk in individual credits or transactions.

The theory of asymmetric information argues that it may be impossible to distinguish good borrowers from bad borrowers (Auronen, 2003) which may result in adverse selection and moral hazard problems. Adverse selection arises because in the absence of perfect information about the borrower, an increase in interest rates encourages borrowers with the most risky projects, and hence least likely to repay, to borrow, while those with the least risky projects cease to borrow. Moral hazard occurs basically because projects have identical mean returns but different degrees of risk, and lenders are unable to discern the borrowers' actions (Stiglitz and Weiss, 2009).

The cooperative sector plays a crucial role in the country’s socio-economic development significantly contributing to Nation’s Gross Domestic Product. Management face the challenge to increase returns and such comes with increases in risks (Kivuvo & Olweny, 2014). According to African Confederation of Cooperative Savings and Credit Association (ACCOSCA, 2011), SACCOS are classified as vehicles for economic growth
as they play a vital role in its sustenance and development. Furthermore co-operatives particularly Savings and Credit Cooperative Societies (SACCOs) are integral part of the government economic strategy for income generating opportunities both in rural and urban areas (Murungi, 2014). SACCOs are a tested instrument for promoting integrated development through a self-help scheme that makes man a total human being (Syed, 1991).

The key idea behind a co-operative society is to pool the scarce resources, eliminate the middlemen and to achieve a common goal or interest (Ministry of Cooperative Development and Marketing, 2007). Micro-credit institutions such as SACCOs have enabled small businesses in Kenya to overcome their major challenge of accessing funds for starting up, survival and growth (Chelogoi 2013). However, the growth of SACCOs has been inhibited by several challenges relating to effective credit risk management strategies. Empirical studies by Trà, and Lensink, (2012) revealed that informal lenders face a higher default risk than formal lenders.

Harrington (1999) observed that most organizations track interest rate risk closely. They measure and manage the firm's vulnerability to interest rate variation. Others organizations with high single-industry concentrations may monitor specific industry concentration risk as well as the forces that affect the fortunes of the industry involved. Financial institutions focus on management of credit risk as it is that risk that can easily and will most likely prompt their failure. (Boateng, 2004)
1.1.1 Credit Risk Management Practices

Risk management is the process by which managers identify key risks, obtain risk measures, choose which risks to be reduced and which to increase and by what means and establish procedures to monitor the resulting risk position (Pyle D, 1997). Similar to general risk management, credit risk management requires identifying its sources, measuring it, and plans to address them (Fuser and Meier, 1997). Credit risk management is defined as identification, measurement, monitoring and control of risk arising from the possibility of default in loan repayments (Coyle, 2000).

Credit risk management in a Financial Institution starts with the establishment of sound lending principles and an efficient framework for managing the risk. Policies, industry specific standards and guidelines, together with risk concentration limits are designed under the supervision of Risk Management Committee. (Manganelli & Engle, 2001). Credit risk is managed at both the transaction and portfolio levels but financial institutions increasingly measure and manage the credit risk on a portfolio basis instead of on a loan-by-loan. Banks should also consider the relationships between credit risk and other risks.

Specific credit risk management measures include four kinds of policies. One set of policies include those aimed at avoiding the risk by not performing an activity that could carry risk. An example could be lending to a particular sector in the economy. Avoidance would seem to be the best solution to all risks, but avoiding the risk by not performing a certain activity means losing out on potential gains that accepting risk might have allowed. The second set includes the policies geared towards reducing the chances of loss
or the severity of the loss when it occurs. The third sets of policies include risk retention. This relates to accepting loss and is a viable strategy for small risks where the cost of controlling the risk outweighs the resultant benefits. The forth set of policies include risk transfer. This means causing another party to accept the risk typically by contract, insurance is typically one type of risk transfer (Dorfman, 1997).

Among the credit risk management practices adopted by SACCOs are screening and monitoring, collateral requirements and credit rationing for potential and existing customers. These risk management practices are important for the success of firms since they determine its profitability, liquidity and solvency. According to Fuser and Meier (1997), firms use various credit risk management methods such as credit limits, taking collateral, diversification, loan selling, syndicated loans, credit insurance, and securitization and credit derivatives.

**1.1.2 Financial Performance**

Financial performance is the measure of the results of the firm’s policies and operations within a specified time period in monetary terms. The results are expressed in form of profit or losses. Operating and financial ratios have long been used as tools for determining the condition and the performance of a firm (Ogilo, 2012). In SACCOs, it is the efficiency with which loans are granted and repaid at maximum possible return. Broadly it looks at the number of clients applying for loans, how much they are borrowing, timely payment of installments, security pledged against the borrowed funds and rate of arrears recovery.
In the pursuit of better operational performance and profitability, organizations are looking for strategies to improve their operational performance and boost their profitability (Parast & Fini 2010). As competition intensifies due to changes in the industry structure and the emergence of new technologies, organizations are determined to reduce their operational costs while enhance their profitability. Similarly, financial performance of SACCOs can also be viewed in light of their overall profitability and return on investment. According to Herrmann (2008) when analyzing a firm’s profitability, we are concerned with evaluating a firm’s earnings with respect to a given level of sales / assets / owners’ investment or share value. In doing so, the common profitability measures include: Return on total assets (ROA), Return on equity (ROE), Earnings per share (EPS) and Price/Earning (P/E) ratio. For the purpose of this study, financial performance will be measured by Return on Assets.

1.1.3 Credit Risk Management practices and Financial Performance

Firms recognize how credit concentrations can adversely impact financial performance. As a result, a number of institutions are actively pursuing quantitative approaches to credit risk measurement within the savings and credit industry. SACCOs are also making significant progress toward developing tools that measure credit risk in a portfolio context. They are also using credit derivatives to transfer risk efficiently while preserving customer relationships. Portfolio quality ratios and productivity indicators have been adapted (Kairu 2009). The combination of these developments has vastly accelerated progress in managing credit risk in a portfolio context.
In the recent past, new developments and intense competition in lending industry in Kenya’s economy has been witnessed since the introduction of economic liberalization which has posed serious challenges to the SACCOs which are restricted in terms of where to invest their funds of deposits (SACCO Act, 2008). Therefore credit management practices very much contribute to the sustainability and financial viability of SACCOs given that issuance of loans is their major activity. They operate under the objective of maximizing benefits to members by providing loans and paying a return on their investments. It is the loan performance that guarantees returns on the deposits. Puxty and Dodds (1991) stated that the essence of loan policy is to maximize the value of a firm.

Schroeck (2002) and Nocco and Stulz (2006) stress the importance of good risks management practices to maximize firms’ value. Schroeck (2002) draws the link between good risk management practices with improved financial performances. In particular, the author proposes that prudent risk management practices reduce the volatility in the business entity’s financial performance, namely operating income, earnings, firm’s market value, share return and return on equity. In addition, Schroeck (2002) proposes that ensuring best practices through prudent risk management result in increased earnings.

1.1.4 Savings and Credit Cooperative Societies in Kisumu County

Savings and Credit Cooperative Societies (SACCOs), also known as credit unions are cooperative financial institutions that are owned and controlled by their members and operated for the purposes of promoting thrift, providing credit at low interest rates and
providing other financial services to members (KUSCCO, 2012). Bailey (2001), defines SACCOs as cooperatives which provide its members with convenient and secure way of saving money and obtaining credit at affordable interest rates. They are able to advance loans at interest rates lower than those charged by other financial providers (Branch, 2005). The core objective of SACCOs is to ensure member empowerment through mobilization of savings and disbursement of credit (Ofi, 2001).

In Kenya, the Sacco sub sector can be described as two-tiered given the range of financial services to members and regulatory regime. The traditional Savings and Credit Cooperative Societies (SACCOs), described in law as Non-Deposit Taking SACCOs (NDTS) provide a limited range of savings and credit products, are registered and supervised under the Cooperative Services Act, CAP 490. The Deposit Taking SACCOS (DTS) besides the basic savings and credit products, also provide basic ‘banking’ services (demand deposits, payments services and channels such as quasi banking services commonly known as ATMs), FOSA and are licensed and supervised under the Sacco Societies Act of, 2008. DTSs are licensed, regulated and supervised by SASRA, while NDTSs are supervised by the commissioner of co-operatives.

By December 2013 there were over 6,000 registered SACCOs in Kenya, 1,995 of which were active. Out of the 1,995 active SACCOs, 215 conduct deposit taking Sacco business and 1,780 are non-deposit taking Saccos that filed 2013 audited financial statements with the Commissioner for Cooperative Development as required by law (SASRA, 2014). The total SACCO sub-sector assets stood at Kshs 335 billion, the total deposit stood at Kshs 240 billion and the total loans for the same period was kshs 251 billion (SASRA 2014).
The Kenya Union of Savings and Credit Co-operatives (KUSCCO) is the umbrella body for SACCO societies in Kenya. The number of active SACCOs in Kisumu County affiliated to KUSCCO currently stands at 56. This active bracket caters for an aggregate membership of 158,720 (KUSCCO, 2014). Out of these, only 2 have been licenced by SASRA to operate as Deposit Taking SACCOs. The county lags behind other counties with Nairobi having 36, Meru 13, kiambu 11, while Mombasa has 5 among others (SASRA, 2014). The SACCOs provide financial services of savings and various types of loans for development, school fees and emergencies (Odera, 2010). SACCOs in Kisumu County continue to have a positive impact on alleviation of poverty as 95 % of the members fall above poverty level of expenditure of less than KES 100 per day (Odoyo, 2012).

1.2. Research Problem

Adequately managing credit risk in financial institutions (FIs) is critical for the survival and growth of the FIs. In the case of SACCOs, the issue of credit risk is of even greater concern because of the higher levels of perceived risks resulting from some of the characteristics of clients and business conditions that they find themselves in. Given that the main business activity for the SACCOs is credit creation, they are exposed to high default risk which might lead to financial distress including bankruptcy. It is therefore important to find out the extent to which SACCOs engage in the practice of credit risk management and their impact on performance.

The Sacco industry has in the recent past witnessed opening up of the common bond such that SACCOs are now serving members outside their field of operation. A teacher based
DTS for instance is now serving business persons, farmers and employees of private organizations. The opening up of membership introduces new business risks including the guarantee mechanism whose strength is anchored on a social collateral making it become less effective (SASRA, 2014). Contrary to the common belief that default rate in SACCOs is negligible, the statistics from the Ministry of Cooperative development and Marketing indicate a considerable increase in the amount defaulted by Sacco Members each year with the default amounts increasing steadily from 5.5 million in 2005 to 10.6 million in 2009. The number of defaulters also increased from 72,571 in 2005 to 129,398 in 2009 (Ministry of Cooperative development and Marketing, 2009).

Several studies have been done on the various aspects of credit risk management practices by SACCOs in Kenya. Kimari (2013) studied the effect of credit risk management on financial performance of deposit taking savings and credit cooperative societies in Kenya and observed that appropriate credit risk management practices leads to better performance. Muchira (2010) conducted a study on the relationship between credit risk management and non performing loans among savings and credit co-operative societies in Kenya and observed that Loan recovery is still a challenge to the majority of the SACCO's. A related study by Essendi (2013) sought to examine the effects of credit risk management on the loans portfolio among SACCOs licensed by SASRA in Nairobi County and stated that various stakeholders were involved in risk identification and management process.

The previous studies however have concentrated on Deposit Taking SACCOs with a majority limited to Nairobi County. The bulk of SACCOs however are NDTSSs with
statistics from SASRA indicating that as at December, 2013, the number of DTSs was 215 against 1780 NDTSs. It is clear that the majority of SACCOs have been left out in these studies. There is need for a comprehensive study to cover all the SACCOs and also to cover other parts of the country. This study therefore seeks to answer the research question: What is the effect of credit risk management practices on the financial performance of SACCOs in Kisumu County?

1.3 Research Objective
The study’s objective is to determine the effect of credit risk management practices on the financial performance of SACCOs in Kisumu County?

1.4 Value of Study
The outcome of the study will provide an insight into the various approaches to credit risk management, their effectiveness and how to reduce exposure to the risk. The study will assist the management of SACCOs to improve efficiency as they will learn which credit risk management practices have a great impact on performance and review their practices accordingly for better results. The study will be useful in theory-building relating to prudent investment and efficiency in the management of the shareholders’ funds.

It will also assist the regulatory authorities in developing regulatory and legislative framework that will assist SACCOs in developing and adopting sound credit risk management practices. The government may use the findings as a guide on policy
formulation for SACCOs to increase their productivity, as they contribute heavily to the economy of Kenya in terms of employment and domestic savings which contributes significantly to national savings (Ministry of Industrialization and Enterprise Development (MIED), 2014).

To the academic community, the study will broaden the knowledge on credit risk management practices and their effect on performance and will provide a basis for future research.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter contains a review of previous studies on credit risk management. It will discuss the theoretical review, credit risk management practices, determinants of financial performance and finally the empirical studies that have been done within the same area of study. The review is done with the aim of establishing what exists in relation to the area of study and to identify research gaps.

2.2 Theoretical Review

Several theories have been advanced which have implications on credit risk management. The theoretical review covered in this chapter include: Asymmetric Information theory and Modern Portfolio theory.

2.2.1 Asymmetric Information Theory

The asymmetric information theory was advanced by George Akerlof, Michael Spence and Joseph Stiglitz who won the Nobel Prize for their contribution to economic theory. Akerlof (1970) posited that there is a potential for market failure in situations where the buyer and seller possess asymmetrical valuation information as illustrated by the ‘lemons’ problem. Vickrey and Mirrlees, also nobel laureates, explored economic transactions in the real world, where not all players possess the same information about the costs and benefits of a given deal. Information asymmetry refers to a situation where business owners or managers know more about the prospects for, and risks facing their
business, than do lenders (Eppy 2005). It describes a condition in which all parties involved in an undertaking do not know relevant information.

In a debt market, information asymmetry arises when a borrower who takes a loan usually has better information about the potential risks and returns associated with investment projects for which the funds are earmarked. The lender on the other hand does not have sufficient information concerning the borrower (Edwards and Turnbull, 1994). Binks and Ennew (1997) point out that perceived information asymmetry poses two problems for the banks, moral hazard (monitoring entrepreneurial behavior) and adverse selection (making errors in lending decisions). Stiglitz and Weiss (1981) pointed out that in a market with imperfect information the lender is not able to discriminate between different types of borrowers.

It is difficult for financial institutions to overcome these problems because appraisal and monitoring requires a lot of resources and this may not be economical where lending is for relatively small amounts. This is because information needed to screen credit applications and to monitor borrowers is not freely available to lenders. Bankers face a situation of information asymmetry when assessing lending applications (Binks and Ennew, 1997). The information required to assess the competence and commitment of the entrepreneur, and the prospects of the business is either not available, uneconomic to obtain or difficult to interpret. Thus creates two types of risks for the Banker (Deakins and Hussain 1999).
2.2.2 Modern Portfolio Theory

Modern Portfolio Theory (MTP) was developed by Nobel Laureate Harry Markowitz and suggests that you can limit the volatility in your portfolio while improving its performance by spreading the risk among different types of securities that don't always behave the same way. MTP is a theory of finance that attempts to maximize portfolio expected return for a given amount of portfolio risk, or equivalently minimize risk for a given level of expected return, by carefully choosing the proportions of various assets. One principle of investing states that the higher the risk, the higher the potential return and conversely, the lower the risk, the lower the return.

According to MPT, a portfolio (a combination of individual investments) exhibits risk and return characteristics based on its composition and the way those components correlate with each other. For each level of risk, there is an "optimal" asset allocation that is designed to produce the best balance of risk versus return. An optimal portfolio will attempt to balance the lowest risk for a given level of return and the greatest return for an acceptable level of risk. The full spectrum of investments must be considered because the returns from all these investments interact hence the relationship between the returns for assets in the portfolio is important (Reilly & Brown, 2011).

The application of portfolio theory to credit risk management requires that financial institutions manage the credit risk inherent in the entire loan portfolio as well as the risk in individual credits or transactions. To manage their portfolios, bankers must understand not only the risk posed by each credit but also how the risks of individual loans are interrelated. These interrelationships can multiply risk many times beyond what it would
be if the risks were not related. These practices provide management with a more complete picture of the bank’s credit risk profile and with more tools to analyze and control the risk (Sinkey, 1992). Financial institutions can minimize their risk exposure by diversification of their loan products. According to Westernhagen (2005), diversification is a tool among others used in handling credit risk; the credit risk of the whole portfolio.

2.3 Credit Risk Management Practices

Proactive credit risk management should be at the core of every Sacco’s strategy and activities. It involves identification, measurement, controlling and monitoring risks. Because of the vast diversity in risk that Saccos face, there is no single prescribed credit risk management system that works for all. Credit risk management practices considered suitable for one Sacco may be unsatisfactory for another. Moreover, in the context of a particular Sacco, the definition of a sound or adequate risk management system is ever changing, as new technology accommodates innovation and better information and as market efficiency grows. Each Sacco should tailor its risk management program to its needs and circumstances and regularly adapt and improve it (SASRA). Financial Institutions reduce credit risk by screening loan applicants, requiring collateral for a loan, credit analysis and diversification of their loan portfolios (Hempel, et, al 1994). Some of the risk management practices by SACCOs are discussed below.

Managing risk in a complex environment requires a comprehensive view of the entire system. The recent global financial crisis exposed many weaknesses in risk management in financial services. Leading up to the crisis, many financial institutions had similar risk exposures, although this fact was not widely deemed important. Institutions held near-
identical classes of investments, most used a high degree of leverage, and many financed themselves through short-term funding. Thus, when liquidity receded following the collapse of housing prices and subsequently of financial assets linked to mortgages, many institutions suffered losses simultaneously and sought to close similar positions. (World Economic Forum, 2010)

2.3.1 Credit Policy

The credit policy establishes the authority, rules and framework for the effective operation and administration of the credit portfolio. A well-structured credit policy is a prerequisite that is able to define the stability and continued profitability, while a poor formulated credit policy could cause a negative financial performance for any financial institution (Agola, 2014). It should set out the criteria and guidelines for the granting, maintenance, monitoring and management of credit at the individual and portfolio levels. The main importance of policies is to ensure operation’s consistency and adherence to uniform sound practices.

It is necessary to establish a proper credit risk environment, sound credit granting processes, appropriate credit administration, measurement, monitoring and control over credit risk by use of an optimum credit policy (Basel, 1999). Credit policy has direct effects on the cash flow of any business. A credit policy that is too strict will turn away potential customers, reduce sales and finally lead to a decrease in the amount of cash inflows to the business. On the other hand, a credit policy that is too liberal will attract slow paying (even non-paying) customers, increase in the business average collection period for accounts receivables, and eventually lead to cash inflow problems. It should be
noted that, it is possible to be profitable on paper but lack the cash to continue with business operations (Edward, 1997). A good credit policy should help management to attract and retain customers, without having negative impact on cash flow (Kimondo, 2013).

A credit policy has three main variables namely credit terms, credit standards and credit procedures (Hulmes, 1992). A good credit policy for SACCOs should include the types of credit facilities to be offered, ceilings for the total loan portfolio and for categories of borrower/counterparty, types of acceptable collateral, authorization levels/limits, delegation of credit authority to management and staff, procedures for the review of loans including a grading/rating system, problem credit identification and administration as well as the minimum information required from loan applicants. Credit policies should be communicated throughout the organization, implemented through appropriate procedures, and periodically revised to take into account changing internal and external circumstances.

2.3.2 Credit Appraisal

Credit Appraisal is a process to ascertain the risks associated with the extension of the credit facility. It is the stage where all required information on the credit is gathered and credit applicants are screened. The quality of the credit appraisal process from a risk perspective is determined in the best possible identification and evaluation of the credit risk resulting from a possible exposure (Raaij, 2005). Effective screening and information collection together form an important principle of credit risk management (Mishkin,
Under no circumstances should funds be disbursed prior to compliance with the pre-disbursement conditions and approval by relevant authorities (Sinkey, 1992).

The appraisal criteria should include a thorough understanding of the borrower or counterparty, as well as the purpose and structure of the credit, and its source of repayment. Weak credit appraisal process is one of the factors that lead to high levels of nonperforming loans (Kanyiri, 2005). The 7Cs credit appraisal model: character, capacity, collateral, contribution, control, condition and common sense has elements that comprehensively cover the entire areas that affect risk assessment and credit evaluation. These elements can be used individually or in combination, depending on the level of quality of credit appraisal required of the amount of credit involved (Abedi, 2000). Credit to related parties should be thoroughly scrutinized, analyzed and monitored so that no senior person in the management overrides the established rules for granting credit (Bank of Mauritius Guideline on Credit Risk Management, 2003). Such loans should be appraised and approved by the Board or its committee in accordance with applicable provisions of the Banking Act.

2.3.3 Monitoring and Restrictive Covenants

A Sacco should have in place a system for monitoring the condition of individual credits. Monitoring of borrowers is very important as current and potential exposures change with both the passage of time and the movements in the underlying variables (Donaldson, 1994 and Mwisho, 2001), and also very important in dealing with moral hazard problem (Derban, Binner and Mullineux, 2005). Key indicators of credit condition should be specified and monitored to identify and report potential problem credits. These would
include indicators from profitability, equity, leverage and liquidity of the borrower and monitor the borrower’s principal and interest repayments, account activity, as well as instances of excesses over credit limits.

Failure to adequately monitor borrowers can ultimately result in a failure of the borrower to repay a loan (Ellis, 2010). The borrower’s ability to adhere to pledges and financial covenants stated in the loan agreement should be assessed and breaches detected should trigger prompt action. In addition to monitoring the above risk indicators, a Sacco should also monitor the use of funds to determine whether credit facilities are drawn for their intended purposes. Where a borrower has utilised funds for purposes not shown in the original loan application, the Sacco should determine the implications on the borrower creditworthiness. Exceptions noted during the monitoring process should be promptly acted upon and reported to management.

### 2.3.4 Credit Collateral and Guarantee

Institutions use various techniques of mitigating credit risk. The most common are collateral, guarantees and netting off of loans against deposits of the same counter-party. A collateralized transaction is one in which institutions have a credit exposure or potential credit exposure and the exposure is reduced in whole or in part by collateral. Collateral is generally divided into personal and physical collateral. In the case of personal collateral the provider is basically liable with his entire fortune, for example, surety or guarantee. Under this arrangement, someone else signs a guarantee document promising to repay the loan if the borrower fails. In the case of physical collateral property is promised to the lender as compensation if the borrower defaults. Collateral
value should cover the loan amount and the interest due, legal costs of foreclosure and interest during foreclosure proceedings (Yeager et al, 1989). Some lenders may require a guarantee in addition to collateral as security for a loan (Rose, 2000).

Collateral reduces moral hazard because the borrower has more to lose from a default (Mishkin, 2010). Stulz and Johnson (1985) argue that collateral is useful in mitigating another type of moral hazard: asset substitution. It is important that the Sacco should primarily assess the borrower’s capacity to repay and should not use collateral to compensate for insufficient information. A study by Jiménez, Salas, and Saurina (2006), found that banks with a low level of expertise in small business lending use collateral as a substitute for poor evaluation capabilities.

2.4 Determinants of Financial Performance of SACCOs

Financial institutions’ performance is determined by many factors, both internal and external. Key among them is the risks they face which include: credit risk, interest rate risk, political risk, operational risks, liquidity risks and market risk. Commercial banks have closed due to the poor performance of loans. This calls for effective management of their assets (Naceur, 2003). Drzik (2005) reports that bank investment in risk management during 1990s helped reduces earnings and loss volatility during the 2001 recession. Pagach and Warr (2009) argue that the more leveraged the firms are, the more volatile are their earnings.

One of the factors that determine a SACCOs performance is its credit risk exposure. Credit risk refers to the potential that a borrower or counterparty will fail to meet its obligations in accordance with agreed terms. For SACCOs, credit risk arises principally
from lending activities but may also arise from various other activities where they are exposed to the risk of counter party default, such as trading activities. The importance of the quality of SACCO loans portfolio stems from the fact that poor loans quality may affect SACCO performance. Miller and Noulas (1997), suggest that the higher the exposure to high-risk loans, the higher the accumulation of unpaid loans and the lower the profitability. Poor asset quality is perceived to cause capital erosion and increase credit and capital risks (Hassan and Bashir, 2004).

Performances of SACCOs may also be affected by macroeconomic variables such as Gross Domestic Product, Inflation, Interest Rates and Political instability. The GDP trend for instance affects the demand for SACCO products. During the declining GDP growth the demand for credit falls which in turn negatively affect the profitability of SACCOs. On the contrary, in a growing economy as expressed by positive GDP growth, the demand for credit is high due to the nature of business cycle. During boom the demand for credit is high compared to recession (Athanasoglou et al., 2005).

Capital Adequacy has a direct effect on the profitability of entities by determining its expansion to risky but profitable ventures or areas (Sangmi and Nazir, 2010). Capital adequacy is the level of capital required by the SACCO to enable conduct their operations smoothly despite uncertainties in their business environment. Capital is the amount of own fund available to support the business and act as a buffer in case of adverse situation (Athanasoglou et al. 2005).

The size of the SACCO may also impact on its performance. Large entities are likely to enjoy higher economies of scale and hence be able to produce services at a lower cost and
more cheaply and efficiently than can small entities which would have a positive influence on profitability. Demirguc-Kunt and Huizinga (2000) reported that larger financial institutions tend to have higher margins. Short (1979) argues that large financial institutions are generally able to raise less expensive capital which positively affects profitability. Flamini et al. (2009) argue that large banks with greater domestic market share operating in a non-competitive environment may enjoy higher profits as they pay lower deposit rates to depositors who demand lower deposits rates because they perceive big banks to be safer.

Liquidity means ability of a company to meet its current liabilities when they fall due (Puneet & Parmil, 2012) and has a direct impact on performance. Sufficient investments in liquid assets enable SACCOs to have a greater ability to weather short-term liquidity crisis. Additionally, without adequate cash resources to meet short-term liquidity requirements, a SACCO will find it impossible to continue its operation even if its capital or solvency remains acceptable.

The challenge is to maintain the optimal balance of liquid assets given the risk-return trade-off of holding a relatively high proportion of liquid assets. Generally, higher level of liquidity makes SACCOs less vulnerable to failure but is also usually associated with lower rates of return and may result in lost profitable investment opportunities, which would influence profitability negatively. Martinez Peria and Mody (2003), explains that high liquidity ratios, either self-imposed for prudential reasons or as a result of regulation (i.e., reserve or liquidity requirements) inflict a cost on banks since it implies that banks have to give up holding higher yielding assets.
The capability of the management to deploy its resources efficiently, maximize income while reducing operating costs can be measured by financial ratios such as total asset growth, loan growth rate and earnings growth rate. The performance of management is often expressed qualitatively through subjective evaluation of management systems, organizational discipline, control systems, quality of staff, and others. One of this ratios used to measure management quality is operating profit to income ratio (Rahman et al, 2009; Sangmi and Nazir, 2010). The higher the operating profits to total income (revenue) the more the efficient management is in terms of operational efficiency and income generation. The expense to asset ratio is also used to measure management quality. The ratio of operating expenses to total asset is expected to be negatively associated with profitability. Management quality in this regard, determines the level of operating expenses and in turn affects profitability (Athanasoglou et al, 2005).

2.5 Empirical Review

Several studies have been done relating to credit risk management. Gaitho (2010) conducted a survey of credit risk management practices by SACCOs in Nairobi and observed that majority of the SACCOs use credit risk management practices to mitigate risks as a basis for objective credit risk appraisal and that the credit risk management practices have impacted positively to their organizations by ensuring efficiency in carrying out their obligations and in meeting their objectives.

Murungi (2014) studied the effect of credit default on the growth in turnover of SACCOs regulated by SASRA and concluded that credit default affected annual turnover of SACCOs. It was recommended that SACCOs must continuously review their credit
policies and procedures to capture the character and creditability of Credit applicants for recovery of all credits disbursed.

A study on the effect of credit risk management on financial performance of deposit taking savings and credit cooperative societies in Kenya done by Kimari (2013) revealed that there was a direct relationship between credit risk management practices and financial performance of SACCOs. The recommendation was that management of SACCOs in Kenya should ensure the adoption and implementation of sound credit risk management practices, appropriate credit risk policy and that appropriate credit risk limits are set as they impact on the financial performance of the SACCOs.

Mutua (2014) sought to determine the effect of credit risk management on the performance of commercial banks in Kenya and concluded that risk management contributed to financial performance of commercial banks. The application of modern approaches to credit risk identification, measurement and analysis helps the bank management to discover risks at early stages for corrective action. The study recommended that commercial banks management should understand how they can edge themselves against the eminent dangers of over exposure to credit risk which can impact negatively on their profitability.

Essendi (2013) explored the effect of credit risk management on loans portfolio among saccos licensed by Sasra in Nairobi County. Results indicated that capital adequacy, earnings, liquidity and management quality have positive coefficients in relation to loan allocations while asset quality was found to have a negative coefficient.
Kimondo (2013) conducted a study on the effect of credit policy on the financial performance of deposit taking microfinance institutions in Kenya concluding that credit policies affect the financial performance of deposit taking microfinance organization with a minimal effect since there other more factors that affect financial performance with a greater effect.

A study by Saleh (2012) revealed the positive association between the cooperative performance and self-reliance ratio, annual sales and type of cooperative activities in Egypt whereas Fernández et al. (2012) found out that determinants of margin in SACCOs in Spain are operating costs, solvency, risk, size, age, financial inclusion status, outreach (average loan balance per borrower and percentage of women borrowers), donations, deposits and type of entity.

2.6 Summary of Literature Review

Proactive credit risk management should be at the core of every Sacco’s strategy and activities. Each Sacco should tailor its risk management program to its needs and circumstances and regularly adapt and improve it. Financial institutions’ performance is determined by many factors, both internal and external, but credit risk management is one of the key factors.

From the empirical studies, it is evident that credit risk is a major problem faced by SACCOs in Kenya. The studies have however concentrated on Deposit Taking SACCOs with a majority limited to Nairobi County hence the majority of SACCOs have been left out as Deposit Taking SACCOs constitute just about 10% of the total SACCOs in Kenya. (SASRA, 2014). There is need for a comprehensive study to cover all the SACCOs and
also to cover other parts of the country. This study therefore seeks to partly fill this literature gap by establishing how the credit risk management practices adopted by SACCOs in Kisumu County impact on performance.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methods to be used to achieve the objectives of the study i.e. the research design, population, sample design, data collection and data analysis.

3.2 Research Design

Cross-sectional research design was used for the study. A cross-sectional study involves conducting a survey of the population elements at one point in time. It provides a quick snapshot of what is going on with the variables of interest and hence it is considered to be appropriate for this study.

3.3 Target Population

According to Mugenda & Mugenda (2003) population refers to an entire group of individuals, events or objects having a common observable characteristic. The target population of the study comprised of the 56 SACCOS in Kisumu County (Appendix II). A census survey was conducted to ensure a sufficient number of data points was obtained for analysis.

3.4 Data Collection

The study made use of Secondary data collected mainly from the office of the Commissioner of Cooperatives, Ministry of Industrialization and Enterprise Development in Kisumu County. It was limited to the active SACCOs i.e those that had filed their financial statements with the commissioner as required by law. The study made use of
data for 3 years, 2011 to 2013 as opposed to the initial plan of 5 years since data for some of the SACCOs for 2014 and 2010 was not available. The information collected from the financial statements included the net income, total assets, total loans, non-performing loans, Loan insurance cost, current assets and current liabilities. Secondary data has the advantage of saving of time (Ghauri, 2005) and generating new insights from previous analyses (Fabregues, 2013).

Other sources of data were KUSSCO and the respective SACCOs’ Credit Policy documents.

### 3.5 Data Analysis

The findings of the research were analyzed using inferential statistics. The statistical tool for the analysis was the statistical package for the social sciences (SPSS), which was used to generate the results of the regression model.

The regression model that was used in analyzing the effects of credit risk management practices on financial performance of the SACCOs was as follows:

\[
Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \epsilon
\]

Where: \(Y = \text{Financial Performance}\)

\(X_1, X_2, \text{ and } X_3 = \text{Independent Variables}\)

\(X_1 = \text{Asset quality}\)

\(X_2 = \text{Loan Insurance Cost ratio}\)
X3 = Liquidity

β0 = Constant

β1, β2, β3, = Regression coefficients or Change included in Y by each unit change in X

ε = error term

The dependent variable was the financial performance of the SACCOs measured by Return on Assets (ROA) while the independent variables are the Asset quality, Bad Debt Cost and Liquidity. The variables were measured as follows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Performance (ROA):</td>
<td>EBIT /Total assets</td>
</tr>
<tr>
<td>Asset quality:</td>
<td>Non-performing loans/Total loans</td>
</tr>
<tr>
<td>Loan Insurance Cover cost Ratio:</td>
<td>Loan Insurance cost / Total cost</td>
</tr>
<tr>
<td>Liquidity:</td>
<td>Current Assets/Current Liabilities.</td>
</tr>
</tbody>
</table>
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the analysis of data collected and discusses the findings of the effect of credit risk management practices on the financial performance of SACCOs in Kisumu County.

The results are presented in the form of summary tables and figures.

4.2 Regression Analysis

Data analysis involved exploratory analysis and regression modeling whereby the dependent variable was the financial performance of the SACCOs which was measured using Return on Assets (ROA) whereas the independent variables were Asset quality, Loan Insurance cost ratio and Liquidity.

The model used was a multiple regression model of the form;

\[ Y_i = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + e \]

With \( Y_i \) being the estimated value of \( Y \) (dependent variable), \( B_0 \) being the constant, \( B_1 \), \( B_2 \) and \( B_3 \) being the coefficients for the independent variables \( X_1 \), \( X_2 \) and \( X_3 \).

The variables were as follows:

\[ Y = \text{Financial Performance} \]
X1= Asset quality

X2= Loan Insurance Cost ratio

X3= Liquidity

B_0 = Constant

The model could thus be presented as:

Return on Assets = B_0 + B_1 \times Asset quality + B_2 \times Loan Insurance Cost ratio + B_3 \times Liquidity + e

4.2.1 Exploratory analysis

This was done graphically using the scatter plots to confirm the relationship between the variables.

The scatter plot show the relationships between all the variables in the study and the indication is that there is no linear trends between dependent variable (Return on Assets-Y) and all the independent variables (Asset Quality-X1, Loan Insurance cost ratio –X2 and Liquidity-X3) as shown in figure 4.1 below.
4.2.2 Regression Analysis Results

The regression modeling was done using both the Enter method that included the entire variables in the model irrespective of whether significant or not and Stepwise method which runs the regression iteratively excluding independent variables that were not significantly contributing to the response. The model summary is as shown in Table 4.1 below.
Table 4.1: Model Summary

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model R</td>
<td>R Square</td>
</tr>
<tr>
<td>1</td>
<td>.271a</td>
</tr>
<tr>
<td>2</td>
<td>.271b</td>
</tr>
<tr>
<td>3</td>
<td>.252c</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Liquidity, Insurance cost ratio, Asset Quality
b. Predictors: (Constant), Liquidity, Insurance cost ratio
c. Predictors: (Constant), Liquidity
d. Dependent Variable: Return on Assets

The $R^2$ for the three models was quite low at 0.073, 0.073 and 0.063 for the full model and reduced models 2 and 3 respectively. The full model with $R^2$ of 0.073 indicated that the independent variables i.e. Asset Quality, Insurance cost ratio and liquidity only account for 7.3% of the variability of the dependent variable which is financial performance. This shows that other factors not in the model affect the response variable and they account for the remaining 92.7%. The same applies to reduced model 2 which has a similar value for $R^2$ whereas model 3 with $R^2$ value of 0.063 indicates that the independent variable, liquidity accounts for 6.3% of the variability in financial performance.

4.3 Analysis of Variance (ANOVA)

The Analysis of variance (ANOVA) table below showed that the full model (model 1) with all the independent variables included was not significant with the p-value of 0.096 which was greater than the alpha of 0.05. The reduced model 2 with independent
variables Liquidity and Insurance cost ratio showed significance with the p-value of 0.041 which was less than significance level of 0.05. The reduced model 3 was also significant with a p-value of 0.019. The implication is that model 1 cannot be relied on to predict the financial performance (ROA) whereas models 2 and 3 can accurately predict the financial performance of SACCOs in Kisumu County at a confidence level of 95%.

Table 4.2: Analysis of Variance (ANOVA)

<table>
<thead>
<tr>
<th>ANOVA^d</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Regression</td>
<td>0.067</td>
<td>3</td>
<td>0.022</td>
<td>2.186</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>0.851</td>
<td>83</td>
<td>0.010</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>0.918</td>
<td>86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Regression</td>
<td>0.067</td>
<td>2</td>
<td>0.034</td>
<td>3.317</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>0.851</td>
<td>84</td>
<td>0.010</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>0.918</td>
<td>86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Regression</td>
<td>0.058</td>
<td>1</td>
<td>0.058</td>
<td>5.748</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>0.860</td>
<td>85</td>
<td>0.010</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>0.918</td>
<td>86</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- a. Predictors: (Constant), Liquidity, Insurance cost ratio, Asset Quality
- b. Predictors: (Constant), Liquidity, Insurance cost ratio
- c. Predictors: (Constant), Liquidity
- d. Dependent Variable: Return on Assets

4.4 Coefficient Estimates

Model 1 was estimated as follows:

\[ Y = -0.064 + 0.008X_1 + 0.158X_2 + 0.38X_3 \]
The intercept was negative standing at -0.064. It indicated that holding all the other factors constant (Asset Quality, Insurance cost ratio and liquidity), the Return on Assets (ROA) would be -0.064 indicating negative performance. This arises from other factors that were not considered in the model.

Asset Quality had a positive relation with performance indicating that a unit change in Asset Quality would result in a change of performance by 0.08 units in the same direction after holding other factors constant. However, according to the data, Asset Quality doesn’t significantly affect performance as the p-value was 0.948 which was much greater than the significance level of 0.05

Loan Insurance cost ratio also had a positive relation with performance indicating that a unit increase in it would increase performance by 0.158. Again Loan Insurance cost ratio was not significant in influencing performance as indicated by the p-value of 0.350.

Liquidity also had a positive relation with performance and indicated that a unit increase in it would increase performance by 0.038. It was the only variable in the model that had a significant influence on the performance with p-value of 0.015.

The independent variables (Asset Quality, Insurance cost ratio and liquidity) were not in any way collinear with one another as the variance inflation factors were all within the recommended figures (<5). These are as shown in the table 4.3 below.
Table 4.3: Coefficient Estimates – Model 1

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>95.0% Confidence Interval for B</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>t</td>
</tr>
<tr>
<td>Model 1</td>
<td>(Constant)</td>
<td>-.064</td>
<td>.025</td>
<td>-2.608</td>
</tr>
<tr>
<td></td>
<td>Asset Quality</td>
<td>.008</td>
<td>.124</td>
<td>.007</td>
</tr>
<tr>
<td></td>
<td>Loan Insurance cost ratio</td>
<td>.158</td>
<td>.168</td>
<td>.101</td>
</tr>
<tr>
<td></td>
<td>Liquidity ratio</td>
<td>.038</td>
<td>.015</td>
<td>.267</td>
</tr>
</tbody>
</table>

a. Dependent variable: Return on Assets

The reduced model 2 was estimated as follows

\[ Y = -0.064 + 0.157X_2 + 0.38X_3 \]

As in the full model (model 1), the intercept was negative standing at -0.064. It indicated that holding all the other factors constant, the Return on Assets (ROA) would be -0.064 indicating negative performance. This arises from other factors that were not considered in the model.

Loan Insurance cost ratio had a positive relation with performance indicating that a unit increase in it would increase performance by 0.157. The Loan Insurance cost ratio was not significant in influencing performance as indicated by the p-value of 0.347.
Liquidity also had a positive relation with performance and indicated that a unit increase in it would increase performance by 0.038. This is the same as it was in the full model. It had a significant influence on the performance with p-value of 0.014.

Also the independent factors (Loan Insurance cost ratio and liquidity) were not in any way collinear with one another as the variance inflation factors (VIF) were all within the recommended figures (<5). These are as shown in the table below:

### Table 4.4: Coefficient Estimation – Model 2

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>95.0% Confidence Interval for B</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Std. Error</td>
<td>Beta</td>
<td>t</td>
<td>Sig.</td>
</tr>
<tr>
<td>2 (Constant)</td>
<td>-.064</td>
<td>.024</td>
<td>-2.650</td>
<td>.010</td>
</tr>
<tr>
<td>Insurance cost ratio</td>
<td>.157</td>
<td>.166</td>
<td>.100</td>
<td>.945</td>
</tr>
<tr>
<td>Liquidity</td>
<td>.038</td>
<td>.015</td>
<td>.267</td>
<td>2.510</td>
</tr>
</tbody>
</table>

a. Dependent variable: Return on Assets

The reduced model 3 was estimated as;

\[ Y = -0.055 + 0.36X_3. \]

However given the 2nd model with the two independent variables was significant it is adopted instead of this 3rd model with one independent variable. The coefficients are shown in table 4.5 below:
Table 4.5: Coefficient Estimation – Model 3

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>95.0% Confidence Interval for B</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Std. Error</td>
<td>Beta</td>
<td>t</td>
<td>Sig.</td>
</tr>
<tr>
<td>Model 1 (Constant)</td>
<td>-0.055</td>
<td>0.022</td>
<td>-2.483</td>
<td>0.015</td>
</tr>
<tr>
<td>Liquidity</td>
<td>0.036</td>
<td>0.015</td>
<td>0.252</td>
<td>2.398</td>
</tr>
</tbody>
</table>

a. Dependent variable: Return on Assets

4.5 Summary of Discussion

The Stepwise method which runs the regression iteratively excluding independent variables that were not significantly contributing to the response was used to generate three models. Model 1 with the entire set of variables was found to be insignificant with a p-value of 0.096 whereas the reduced model 2 and 3 were found to be significant with p-values of 0.041 and 0.019 respectively. Model 2 was adopted since it had a higher number of variables than model 3.

From the regression results, Loan insurance cost ratio and liquidity accounted for 7.3% of the variability in Return on Assets. Both had positive coefficients indicating that an increase in insurance cost and increase in the ratio of current Assets to current liabilities would result in an increase in performance. With the assumption that increase in insurance cost means increase in loan amounts covered by insurance, then the implication is that increased use of insurance as a credit risk mitigation measure would result in better
performance. Similarly, increased and consistent use of credit risk mitigation measures such as appraisal/screening and borrower monitoring would improve loan repayment hence the liquid asset available to the SACCOs. This would in turn lead to higher income.

This is in agreement with a study on the effect of credit risk management on financial performance of Deposit Taking Savings and Credit Cooperative Societies in Kenya done by Kimari (2013) which revealed that there was a direct relationship between credit risk management practices and financial performance of SACCOs. There is also concurrence with a study by Essendi (2013) on the effect of credit risk management on loans portfolio among saccos licensed by Sasra in Nairobi County which revealed that liquidity was one of the factors that had positive coefficients in relation to loan portfolio hence performance.
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the findings of the study. The first section provides a summary of the findings followed by the conclusions of the study, recommendations for policy, limitations of the study and suggestions for further research in that order.

5.2 Summary of Findings

In determining the effects of credit risk management practices on the financial performance of SACCOs in Kisumu County, the financial performance of the SACCOs was first evaluated. Financial performance was measured by ROA as the dependent variable with the independent variables being Asset Quality, Insurance Cost Ratio and Liquidity.

From the findings, the positive value of the coefficient for Asset quality implies that an increase in non-performing loans would result in increase in performance which is contrary to expectations. This can be explained by the fact that despite having non-performing loans, most of the Saccos did not make provisions for bad debts resulting in overstatement of their earnings before tax.

Loan insurance cost ratio also had a positive coefficient indicating that an increase in insurance cost would result in an increase in performance. Assuming that increase in insurance cost means increase in loan amounts covered by insurance, then the implication
is that increased use of insurance as a credit risk mitigation measure would result in better performance.

The third variable, liquidity ratio had a positive relationship with performance as well, which can be interpreted to mean that an increase in current assets or a decrease in current liabilities would lead to better performance. Credit risk management practices here would include appraisal/screening, diversification of loan products and borrower monitoring which would help to ensure timely repayment of loans advanced, hence the liquid assets available to the SACCOs.

5.3 Conclusion

From the findings, the study concludes that SACCOs in Kisumu County need to adopt sound credit risk management practices for their long-term survival. Appropriate credit risk management practices have the potential of positively affecting financial performance of SACCOs in Kisumu County by at least 7.3%.

5.4 Recommendations

The study recommends that SACCOs in Kisumu County should increasingly adopt the 7Cs risk assessment criteria comprising of Character, Capacity, Conditions, Collateral, Contribution and Common sense before awarding credit to customers. They should also explore various risk mitigation measures and especially consider increased adoption of insurance of the loans. Regular review of their credit policies to conform to changing conditions will also go a long way in reducing default.
The Government of Kenya should consider review of their enforcement mechanism for SACCOs to file their annual returns with the Commissioner for Cooperative Development as required by law. This will ensure that SACCOs are adequately supervised and problems promptly detected and managed to protect the members’ deposits.

**5.5 Limitations of the Study**

A limitation for the purposes of the study is regarded as a factor that contributes to the researcher getting inadequate data for the purposes of effectively establishing the relationships between the study variables. The Study was limited to those SACCOs that had filed their returns with the Commissioner for Cooperative Development. Other SACCOs whose data was not available were not considered hence the study findings may not accurately be relied upon to establish the intended objectives.

Another limitation of the study is that it relied solely on quantitative data to draw conclusions on the relationship between credit risk management practices and financial performance. Analysis of qualitative data to supplement the quantitative data would have given a more conclusive outcome of the study.

Finally, the choice of credit risk management indicators was at the discretion of the researcher, hence different studies on similar topics may lead to different conclusions.

**5.6 Recommendations for Further Research**

Further research can be carried out on SACCOs in other Counties in Kenya. This will provide additional information on whether the same conclusions can be arrived at in
different contextual settings on the relationship between credit risk management practices and financial performance.

It is also recommended that future researchers should adopt other sets of credit risk management indicators to test how respective risk practices influence the companies’ financial performance.
REFERENCES


## APPENDICES

### Appendix I: Secondary Data Collection Form

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Appendix II: List of Saccos In Kisumu County

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