CREDIT RISK MANAGEMENT AND FINANCIAL PERFORMANCE OF DEPOSIT TAKING SAVINGS AND CREDIT CO-OPERATIVE SOCIETIES IN NAIROBI CITY COUNTY, KENYA

BWIRE CHARITY AKOCHI

D53/CTY/PT/32422/2015

RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION (FINANCE)

KENYATTA UNIVERSITY

JULY, 2019
DECLARATION

I articulate that this research project is my authentic work and it has not been presented in any establishment for an academic qualification.

.......................................................... ..........................................................
Signature Date

CHARITY AKOCHI BWIRE

D53/CTY/PT/32422/2015

DECLARATION BY SUPERVISOR

This research project has been presented with my consent as the Supervisor for examination

.......................................................... 02/07/2019
Signature Date

DR. Job Omagwa
School of Business
Department of Accounting and Finance
Kenyatta University
DEDICATION

To my loving husband Simon Ondoro, my son Faraja Lemuel, my daughter Furaha Lucille, my mother Joyce Raha and brothers Timothy and Johnson, for their tremendous contribution and support. I am grateful for your love as well as support. God richly bless you.
ACKNOWLEDGEMENT

I appreciate my supervisor Dr. Job Omagwa for being so understanding as well as patient with me throughout the many corrections and revisions which have contributed to the success of this research project. Your tireless effort has made this document to be of high value, may God bless you.

My sincere gratitude goes to God Almighty for kindly granting me strength and being my helper all through the research process. The Kenyatta University City Campus lecturers and administration staff who gave me all the encouragement and unflinching support that I needed to pursue this advanced degree course.
# TABLE OF CONTENTS

DECLARATION.................................................................................................................. ii  
DEDICATION.................................................................................................................... iii  
ACKNOWLEDGEMENT....................................................................................................... iv  
LIST OF TABLES................................................................................................................. ix  
LIST OF FIGURES.............................................................................................................. x  
OPERATIONAL DEFINITION OF TERMS.......................................................................... xi  
LIST OF ABBREVIATIONS AND ACRONYMS................................................................... xii  
ABSTRACT......................................................................................................................... xiii  
CHAPTER ONE .................................................................................................................. 1  
INTRODUCTION............................................................................................................... 1  
  1.1 Background of the Study .......................................................................................... 1  
  1.1.1 Credit Risk Management ...................................................................................... 5  
  1.1.2 Financial Performance ......................................................................................... 6  
  1.1.3 Deposit Taking SACCOs in Kenya ......................................................................... 7  
  1.2 Statement of the Problem ......................................................................................... 8  
  1.3 Objectives of the Study ............................................................................................ 10  
  1.3.1 General Objective ................................................................................................ 10  
  1.3.2 Specific Objectives .............................................................................................. 10  
  1.4 Research Hypotheses ............................................................................................... 10  
  1.5 Significance of the Study ........................................................................................ 10  
  1.6 Scope of the Study ................................................................................................... 11  
  1.7 Organization of the Study ....................................................................................... 11  
CHAPTER TWO ................................................................................................................ 13  
LITERATURE REVIEW .................................................................................................... 13
The specific objectives of the study were to establish the relationship of credit risk monitoring, credit appraisal and credit risk control on the financial performance of deposit taking SACCOs within Nairobi City County, Kenya. The methodology that
was used for the study was descriptive analysis, correlation and multiple regression.

Credit Monitoring and Financial Performance ................................................................. 46
Credit Appraisal and Financial Performance ................................................................. 47
Credit Risk Control and Financial Performance ......................................................... 47
5.3 Conclusions ............................................................................................................ 47
5.4 Recommendations of the Study ............................................................................... 49
5.5 Limitations of the study ........................................................................................ 50

One of the limitations of the study was dealing with busy respondents who were not in a position to avail adequate time to fill in the questionnaire within the time agreed upon by the researcher. The researcher overcame this challenge by making phone call reminders to the respondents. There was a challenge in non-response and the researcher managed to counter the challenge by receiving 102 out of 120 questionnaires that were dispatched.......................................................................................................................... 50

5.6 Contributions to Knowledge .................................................................................. 50
5.7 Areas of Further Research ..................................................................................... 50
REFERENCES .............................................................................................................. 51
LETTER OF INTRODUCTION ..................................................................................... 57
APPENDICES .............................................................................................................. 58
APPENDIX I: QUESTIONNAIRE .............................................................................. 58
Part A: General information........................................................................................... 58
APPENDIX II: SCHEDULE I ..................................................................................... 64
LIST OF TABLES

Table 4.1: Response Rate .............................................................. 27
Table 4.2: Various credit facilities offered by the SACCO .................... 28
Table 4.3: Respondents’ period of service with the current SACCO .......... 29
Table 4.4: Effectiveness of SACCOs’ Credit Risk Management Policy .......... 30
Table 4.5: Credit monitoring ratings .................................................. 30
Table 4.6: Average loan amount mostly applied for by individual members .... 32
Table 4.7: SACCOs’ Credit Appraisal Program ................................... 33
Table 4.8: SACCOs in terms of Credit Risk Control ............................. 34
Table 4.9: Loan Default Rate ............................................................. 35
Table 4.10: Financial Performance ..................................................... 36
Table 4.11: Role of risk management in improving the performance ............ 36
Table 4.12: Correlation Analysis ......................................................... 37
Table 4.13: Model Summary ............................................................... 39
Table 4.14: Regression Coefficients .................................................... 41
Table 4.15: Hypothesis Testing ............................................................. 42
LIST OF FIGURES

Figure 2.1: Conceptual Framework .............................................................. 21
OPERATIONAL DEFINITION OF TERMS

Credit Risk: This is generally defined as the probability of a loss to occur in an organization as a result of non-payment of debt within the stipulated period of time.

Credit Risk Management: These are systems, procedures and controls undertaken by management of a firm to minimize the risk of non-payment of debt. It covers several aspects of credit management such as risk identification, measurement, control, and monitoring.

Credit Monitoring: This is a tool or system that is used to check or observe any changes that may occur in a firm’s lending capacity.

Credit Appraisal: This is the process used by an institution to assess the value of the borrower in terms of economic viability.

Credit Risk Control: This is the process or procedure used to reduce the likelihood of a borrower to fail in honoring obligations as per the agreed terms and conditions.

Financial Performance: An indicator of performance, both financial as well as operational. It measures how well a firm is able to pay its liabilities against the assets it possesses. Financial Performance can basically be assessed by a firm’s profitability by use of its liquidity position.

Deposit Taking Savings and Credit Co-Operatives: These are autonomous institutions governed by SACCO Societies Regulatory Authority.
# LIST OF ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCOSCA</td>
<td>Africa Confederation of Cooperative Society Savings and Credit Association</td>
</tr>
<tr>
<td>KUSCCO</td>
<td>Kenya Union of Savings and Credit Cooperative Societies</td>
</tr>
<tr>
<td>NI</td>
<td>Net Income</td>
</tr>
<tr>
<td>ROA</td>
<td>Return on Assets</td>
</tr>
<tr>
<td>ROI</td>
<td>Return on Investment</td>
</tr>
<tr>
<td>SACCOs</td>
<td>Savings and Credit Co-operative Societies</td>
</tr>
<tr>
<td>SASRA:</td>
<td>SACCO Societies Regulatory Authority</td>
</tr>
<tr>
<td>SPSS:</td>
<td>Statistical Package for Social Sciences.</td>
</tr>
</tbody>
</table>
ABSTRACT

In any nation, the financial sector is an essential segment in the advancement of its economic growth. Most disappointments in the financial sector have been caused by non-performing credits or awful obligations which are ascribed by poor or ineffectual advancing arrangement. While the consequences of credit risk management are surely understood, the bearing of the impacts are anticipated by theories and proof on their size are still rare, and revolve around managing an account segments and protection markets. The study’s general objective was to study in detail the interdependence that exists between the management of credit risk and perceived and real financial strength of SACCOs that take deposits in Nairobi County. The specific study objectives focus on the relationship that exists between credit monitoring, credit appraisal and credit risk control in terms of financial SACCOs’ performance in Nairobi County. Three theories guided the research: Portfolio Theory, Liquidity Preference Theory and Theory of Financial Intermediation. The design of this study was descriptive research. Target population was a total of 40 SACCOs that specialize in deposit taking within Nairobi County licensed by SASRA with a sample size covering 120 respondents (three respondents from each SACCO). The respondents comprised of Credit Risk Manager, Finance Officer and Head of Operations hence, purposive sampling. Data collection was facilitated by using a questionnaire as the instrument of data collection. Data analysis method was descriptive through the multiple regression analysis and standard deviation. Subsidiary data was gathered from SASRA reports and internal audited reports from the deposit taking SACCOs. For data analysis, version 20 of Statistical Package for Social Sciences (SPSS) was the data analysis tool used. Data presentation employed frequency tables, pie charts, histograms as well as bar graphs. The findings of this particular study revealed that although savings and credit co-operative societies had implemented credit monitoring measures, this study conclude that some of the current measure did not adequately address the current borrowing. There exists a positive and real relationship between credit appraisal programmer and SACCOs’ financial performance. The was concluded by this study that credit monitoring, credit appraisal and credit risk control all had positive effect on SACCO’s financial performance. This study recommends for periodic thorough scrutiny and amendment of credit monitoring policies so as to ensure that current loopholes are addressed. Risk control policies should be re-tightened however this should be done factoring in customer considerations as setting appraisal standards too high may limit client trends in loan borrowing and thus negatively affecting lending. Credit management committee must institute measures that ensures follow-ups are made on all loans issued, again some sought of training on loan utilization (business loans) may be introduces prior and after loan issuance so as to minimizes cases of debut in repayment and that Borrowers should be accorded the opportunity to fully understand terms and conditions governing the loan products prior before issuance.
CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Over time, financial as well as operating ratios have been the tools used in determining a firm’s condition performance (Ogilo, 2012). SACCOs’ financial performance entails the going concern of such institutions amidst being exposed to loan defaulting from members. Parast & Fini (2010) have shown that in pursuance of boosting profitability and enhancing operational performance, firms are looking for better strategies. Similarly, their financial performance may be studied in terms of their ROI and overall profitability. Share capital and member deposits contribute to a larger extent on their revenue vis-à-vis loan disbursement to members.

The co-operative business of action and structure has not changed substantially over the years, but rather the substance and social dynamics are evolving quickly. The SACCOS Act of 2008 strategically places the supervision as well as the licensing of deposit taking under the authority of the SACCO Societies Regulatory Authority, also known as SASRA under which also fall both deposit taking as well as non-deposit taking SACCOs within the country’s economy. Specifically, in Nairobi City County, the deposit taking are authorized and directed by SASRA. However, non-deposit taking SACCOs have been placed under the Commissioner for Cooperatives. SASRA is only mandated to license those SACCOs that fully meet the requirements described the Cooperative Societies Act, specifically CAP 490 (SASRA, 2012). Through this new lawful structure, prudential directions have been acquainted which manage the development and improvement of SACCOs (Barrales, 2012).
According to the annual report of the Ministry of Co-operative and Marketing – Nairobi City County (2009/2010), growth was noted in the number of active co-operatives throughout the county. The annual report noted that the co-operative movement in the Nairobi County was growing in every aspect with increases in employment numbers as well. Against this growth, the study will carry out a survey aimed at establishing the existing link between Credit Risk Management and SACCOs Financial Performance in the County of Nairobi.

A World Council of Credit Unions (WOCCU, 2008) review indicated that 38.3% of Kenyans still remain outside the coverage of financial services thereby denying access to financial services. This has turned into a stumbling block leading to low investment and a culture of high borrowing in Kenya. Vision 2030’s goal for financial services in Kenya is not far-fetched if members can enhance their borrowing capacity into viable investments that boost the economy. Hence, this study will seek to show how financial performance of deposit taking SACCOs is greatly influenced by credit risk management policies as they relate or influence credit risk management and operations of SACCOs.

The credit capacity of financial institutions improves the capacity of investors to utilize wanted beneficial endeavors. Kargi, (2011) alludes to the fact that financial institutions depend on credit creation to be the fundamental income producing activity. Coyle (2000) defines credit risk as unfortunate happenings arising from the failure of clients (borrowers) to pay the required funds and on time. The study alludes to the potential that a borrower will become neglectful towards meet his or her commitments as per the contract. Essentially, the risk is to the lending party and may incorporate different aspects
like loss of the principal, interest, cash flows streams destabilization, and cost of expanded debt accumulation.

As opposed to the prevalent view that default rate in SACCOs is unimportant, insights from the department of cooperative development and marketing demonstrates an extensive increment in the sum defaulted by individuals every year. The information from the service of industrialization and undertaking advancement (2015), demonstrated that a normal yearly increment in the quantity of defaulters was 44% beginning from the year 2011-2015. This perception demonstrated that the financial performance of these firms was falling apart consistently and there was incredible requirement for earnest measures to rescue them from possible end. This agrees with the (SASRA, 2014) report which uncovered that the rate of non-performing loans was on an expanding pattern and SACCOs expected to allot provisions for loan misfortunes and fix their credit checking strategies. Along these lines, expanding rate of non-performing credits results to higher measures of defaulted advances and this diminishes the interest income and the working capital for the affected SACCOs (Moronya et al, 2016).

An empirical study by Trà, and Lensink (2012) uncovered that compared to formal lenders in the informal sector typically face a higher risk of defaulting. SACCOs contribute a significant percentage of national reserve funds as well as domestic credit (CBK Report, 2011). These firms use the generated deposits to support credit facilities to their members, essentially the main an income generating activity for most of these SACCOs. This takes after the fact that they face various risks and this has been a noteworthy reason for disappointment of numerous financial cooperatives (Sambasivam,
This process of creating credit subjects these firms to high default rate resulting in financial distress complexities including bankruptcy.

The co-operative sector assumes a crucial part in the country’s socio-economic growth altogether adding to the Nation's Gross Domestic Product (GDP). Management confronts the test to expand returns and such accompanies increments in risks (Kivuvo & Olweny, 2014). As per African Confederation of Cooperative Savings and Credit Association ACCOSCA, SACCOs are viewed as important vehicles for the much-needed economic development as they assume an indispensable part in their sustenance and advancement. Furthermore, co-operatives are a vital piece of the government’s economic strategy for income producing opportunities both in rural and urban ranges (Murungi, 2014).

Firms appreciate the negative impact credit concentrations on financial performance. Consequently, a good number of firms working in the savings and credit sector are now actively implementing quantitative approaches towards more effective management of risk. Additionally, SACCOs are realizing some measure of success in terms of developing credit risk measurement tools within a portfolio context. Also, being used are credit derivatives in efficiently transferring risk while at the same time preserving relationships with the customer. Some are also adapting productivity indicators and portfolio quality ratios (Kairu, 2009). Working together, these developments have in a great way accelerated the progress being made in managing credit risk.

Good risk management practices are important in maximizing the real value of an organization (Nocco & Stulz, 2006). A study by Schroeck (2002) has drawn the link that exists between well-implemented risk management practices with better financial performances in a firm. In particular, the study author recommends prudent practices in
risk management in order to reduce volatility in the business entity’s financial performance. These practices should be directed to earnings, operating income, share return, return on equity, and firm’s market value. Additionally, Schroeck (2002) has proposed ensuring that best practices are in place through prudent management of risk management as it leads to increased earning.

1.1.1 Credit Risk Management
This component of SACCOs covers the systems in place, the procedures and controls that a SACCO has towards ensuring the most efficient payments collection with the ultimate goal or objective of minimizing non-payment risk (Naceur & Goaied, 2003). It will mainly focus on risk appraisal, monitoring, and control for the purposes of this study. Manganelli and Engle (2001) examined that for a financial institution to experience economic growth, it must have a robust and well-designed credit risk management operational system with set standards and guidelines, supervised by a competent Risk Management Committee. Credit risk is overseen both at the transaction level as well as the portfolio level. Financial institutions, however, progressively measure and deal with the credit risk on a portfolio premise rather than on loan by loan.

Credit risk monitoring is vital and the committee in place should comprise of competent staff able to handle credit matters as they arise within the institutions. The parties that are involved in the subsequent rating process as well as their respective roles should be elaborately explained in the credit risk management policy (Strutt, 1993). Organizations which are able to collect back debts and minimize the level of bad debts shall increase their profitability (Bagchi & Khamrui, 2012). Credit appraisal as part of credit risk management should also be systematically performed. A credit risk assessment on a
group basis should be performed where applicable after the institution has summed up related obligors. (Baldoni, 1998). Credit risk control is essential in assessing the defaulters’ rate as well as the overall firm’s financial performance. Al-Tamimi and Al-Mazrooei, (2007) emphasize that an institution should perform a balance act to weigh on the use of funds against the intended purposes.

An organization’s system of internal controls forms not just a vital component but an integral part for sound operations within an institution (Drogalas et al., 2005). (Karagiorgos et al., 2010) also support the findings of this study. Determining the effectiveness of a specific internal control system comes from assessing if the five components of risk assessment, Risk Monitoring, Information, Communication, Control Activities as well as the Control Environment are present and working (Hayes et al., 2005). One study concluded that effective controls have reasonable assurance in terms of accomplishing set objectives (Nyakundi et al, 2014). In this study the main focus areas are going to be: the control environment, quality of controls and monitoring of controls, ceteris paribus. Numerous studies carried out in the past on the twin issues of credit risk management and SACCOs financial performance have not attempted to delve into the role of internal control system with regard to credit risk management and performance of SACCOs that focus on deposit taking hence, this study will seek to explore further this area by using internal control system as a moderator.

### 1.1.2 Financial Performance

Gibson (2012) characterizes financial performance as the degree to which the financial objectives and goals of an institution have been realized or are in the process of being achieved. This is a procedure which coordinates the income created by the organization's
objectives and strategies. It is a key measure for surveying the financial wellbeing of a specific organization inside the set time as per the investigation by Waymond (2007). The need to achieve enhanced operational performance and reach more profitability has prompted organizations to look for better strategies towards that goal. As competition continues to intensify due to emerging and challenging changes being witnessed in the basic industry structure as well as the emergence of innovative new technologies, businesses, companies, and organizations are determined more than ever to cut down on their respective operational costs while at the same time enhancing their overall profitability (Parast & Fini, 2010).

Financial performance can be looked at in terms of profitability and ROU (Herrmann, 2008). In assessing a firm’s profitability, the regular profitability measures include, return on total asset (ROA) and liquidity. Return on aggregate resources (ROA) considers the ROI and is useful in determining the viability in potential benefits and the higher they are the better.

1.1.3 Deposit Taking SACCOs in Kenya
Deposit taking SACCOs play a major role in the Kenyan economy especially in the area of economic inclusivity. This means that, they include everyone within the economy without biasness. In the recent years, these SACCOs have continued to help its members achieve the big four agenda in terms of affordable housing and land acquisition. Majority of its members have taken credit facilities in regards to purchase of land or home construction projects. These credit facilities have aided in the furtherance of the country attaining vision 2030 as it endeavors to enhance economic growth and development.
Deposit taking SACCOs have room for growth in the current technological environment. There is need to adopt new technological measures to curb loan defaulters who may otherwise lead these institutions into bankruptcy and liquidation. One of the emerging issues is the need to provide information on loan purpose when acquiring credit facilities. This means that, a member needs to clearly state the economic activity for which the loan acquired is intended so that the loan can be disbursed. This helps in accountability and monitoring of the non-performing loans even as the institutions strive to curb defaulting. These institutions lack a standardized reporting framework as each customizes their operations to suit their needs. In this regard, there is need to bring about standardization which will in the long run curb defaulters and help enhance economic growth and development.

1.2 Statement of the Problem
Financial Institutions are at a risk of collapse if not properly managed hence, efficient governance of credit risk in these firms is important for their existence and expansion (Musimbi, 2015). SACCOs have a greater exposure to credit risk arising from perceived higher levels of risks. This is associated with the unique nature of their clients and the kind of business circumstances that they are operating in. By virtue of the fact that their main line of business activity is credit creation, they are exposed to high levels of default thus exposure to an environment of financial distress including bankruptcy (Sambasivam, 2013). It is therefore important to analyze the extent to which these institutions handle risk management and its effect on financial performance.

These institutions’ contribution to global economic growth is great and even more so in the case of Kenya. Societies are fundamental for the attainment of Kenya’s vision 2030.
This is through the mobilization of savings and in the creation of vital business capital. Studies have, however, shown that compared to other local financial institutions, the financial performance of these firms has been lowly rated (Gathurithu, 2011). In their study, Karagu and Okibo (2014) also confirmed the existence of a high credit default rate among 37 deposit taking SACCOs they covered in Nairobi, attributable to the poor financial performances.

Studies done on various aspects of risk management practices by SACCOs in Kenya form part of empirical studies. Muchira (2010) studied the relationship between management of credit risk and non-performing loans in Kenya. The study found that loan repossession was still a struggle for most SACCOs. Similarly, Essendi (2013) examined the effect of credit risk management on loans portfolio among the SASRA licensed SACCOs within Nairobi County and found that various stakeholders were involved in credit risk management process. The risks experienced by these institutions to a larger extent may largely be attributed to the insufficiency of their internal control system. Internal control system of SACCOs are usually not efficiently reviewed hence the need to document and note their role as a moderating variable on the relationship that exists between management of credit risk and SACCOs financial performance in Nairobi County. The research will therefore seek to enhance literature through examining the relationship that exists between management of credit risk and SACCOs’ financial performance with the role of internal control system as a moderating variable.
1.3 Objectives of the Study

1.3.1 General Objective
To examine the relationship that exists between management of credit risk and deposit taking SACCOs’ financial performance within Nairobi City County, Kenya.

1.3.2 Specific Objectives
i. To establish the relationship between monitoring credit risk and deposit taking SACCOs’ financial performance in Nairobi County, Kenya.

ii. To determine the relationship that exists between credit appraisal and the financial performance of deposit taking SACCOs within Nairobi County, Kenya.

iii. To establish the relationship that exists between control of credit risk and deposit taking SACCOs’ financial performance within Nairobi County, Kenya.

1.4 Research Hypotheses
The study sought to test the following null hypotheses:

H0₁ There is no significant relationship that exists between credit monitoring and the financial performance of deposit taking SACCOs within Nairobi City County, Kenya.

H0₂ There is no significant relationship between credit appraisal and financial performance of deposit taking SACCOs in Nairobi City County, Kenya.

H0₃ There is no significant relationship between credit risk control and financial performance of deposit taking SACCOs in Nairobi City County, Kenya.

1.5 Significance of the Study
It is expected that the outcome of the study will offer an insight into the different credit risk management approaches, their effectiveness and how to reduce exposure to risk. The
research will assist management to improve efficiency as they will learn on various credit risk management practices that they can adopt for better results. The study will be useful in adding to literature that entails investment decisions and efficiency in the management of the shareholders’ funds. The study 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 find it useful to use the study findings as a broad 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 the relationship of credit risk management on financial performance hence providing a basis for future research.

1.6 Scope of the Study
The research will focus on 40 SASRA Licensed deposit taking SACCOs in Nairobi County (SASRA, 2012). Secondary data will be collected from SASRA reports and financial statements for a period of 5 years (2012 to 2016) with the goal of ascertaining their relationship to financial performance. The research will be conducted using a census survey as the sampling design and it will adopt a purposive sampling technique for the sampling design.

1.7 Organization of the Study
This study is structured as follows: Chapter one entails background of the study, statement of the problem, objectives of the study, research hypotheses, significance of the study and scope of the study. Chapter two provides Literature review on the relationship
of credit risk management on financial performance of SACCOs as well as a conceptual framework. Chapter three shows the research methodology used, data collection instrument, data collection procedure, data analysis and presentation as well as ethical considerations. Chapter four presents data analysis, presentation and interpretation while chapter five shows the summary, conclusion and recommendations.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction
This chapter delves into both the theoretical as well as empirical literature that is available on how SACCOs’ financial performance is affected by credit risk management. The literature provides a synopsis of the theories, empirical review, and research gaps plus the conceptual framework which was developed after reviewing available relevant literature.

2.2 Theoretical Review
Broadly, the following theories relate to the study of credit risk management; Portfolio Theory, Liquidity Preference Theory, as well as the Theory of Financial Intermediation.

2.2.1 Portfolio Theory
The modern portfolio theory, to a large extent, was defined by Harry Markowitz in the early 1950s and was developed through to 1970s. This theory asserts that the risk to which an investor is exposed to can be reduced by holding a diversified portfolio of assets (Markowitz, 1952). The portfolio theory explained that an investor can get rid of or diversify risk by having a combination of assets that help to spread the risk. This in turn results in efficient portfolio of individual assets (Bodie et al, 1999). According to Blackwell (2008) a manager can take advantage of the size of the institution by diversifying considerable amounts of credit risk. This is as long as the expected returns on diverse assets are imperfectly correlated in terms of their adjusted default risk returns. An example would be to consolidate a member’s loan which is non-performing with
another one that is performing to achieve a negative correlation hence, having a portfolio which is less risky through diversification.

Portfolios have a way of combining securities that have higher returns with lower risks. (Butterworth, 1990). The portfolio theory main assumption in regard to managing risk is that the market is being run efficiently and is perfect while the investors are rational (Chijoriga, 1997). SACCOs have advanced over the years in spreading risk by use of credit derivatives thus advancing in handling credit risk in a portfolio state. This study will seek to accentuate how managers spread risk while disbursing loans to members which by extension represents the financial performance of a firm and how credit risk is being managed in SACCOs.

2.2.2 Liquidity Preference Theory
Put forward by Keynes John Maynard (1989), the theory stipulates that the interest rate is the reward that someone gets for parting with their liquidity for a defined period of time. The theory contends that, the interest rate is essentially a function of demand for and the supply of money. Further, Keynes proposed three possible motives for holding liquid cash: for transaction purposes, for safeguarding purposes and for postulate purposes in terms of investment. This theory proposes that investors are likely to demand a premium for those securities that come with longer maturity periods as they are associated with greater risk thereby preferring to hold cash associated with less element of risk. This is because the higher the liquidity of an investment, obviously the easier and faster it will get to sell at full value (Mbole, 2004). Keynes further examined that sensitivity to changes in interest rate is as a result of the speculative demand for money. According to Carpenter and Lange (2002), the three motives for holding cash provide an avenue for
controlling risk as well as gain a return on investment. The rationale for putting in place a proper credit risk management policy is to ensure that there is enough liquidity for transactional, precautionary and speculative demand for money.

Financial institutions of which SACCOs are a part of, lend out credit and they could possibly encounter problems associated with liquidity particularly if borrowers cannot meet their loan obligations within the stipulated period. In turn, this may hinder the lending institutions from making profitable investments that promise higher future returns. This theory, therefore, argues that a lending entity ought to retain more cash for purposes of investing hence, its relevance to the study for such institutions to deal with uncertainties which are inevitable.

2.2.3 Theory of Financial Intermediation
Matthews and Thompson (2008) explained financial intermediation as an undertaking whereby deficit units are aided by surplus units which deposit funds with financial institutions. The theory is based on information asymmetry and transaction costs which are reduced by the participation of financial intermediaries in the financial system. SACCOs are financial intermediaries hence, this theory seeks to enhance intermediation between borrowers and lenders. Alin Marius (2009) considers financial intermediaries as information sharing coalitions hence; households will put their deposits with the intermediaries with the hope of gaining a return in the future. This theory is built around the resource allocation model of perfect and complete markets. It holds that it is contentions like asymmetric information and transaction that are critical in terms of understanding intermediation.
Over the years, financial intermediation has grown leading to financial innovations that are focused more on credit risk management rather than transaction costs and information asymmetry (Wensveen, 2003). In this view, financial intermediaries transform savings, given the preferences of the savers with respect to liquidity and risk, into investments according to the needs and risk profile of the investors. The study seeks to intermediate the relationship between SACCO members and lenders thereby ascertaining how well members can be managed or assessed for SACCOs to reduce the risk of loan default.

2.2.4 Stakeholder Theory
It was proposed by Dr. F. Edward Freeman (1984) and it asserts as to what an organization should be and how it should be deliberated. The principle of stakeholder recourse. Stakeholders may bring an action against the directors for failure to perform the required duty of care (Freeman 2004). In essence this theory seeks to equilibrate the interests of all stakeholders in a given institution. Managers who have been given the mandate to run the institutions should always act in the interest of all shareholders in maximizing wealth and not only for their own self benefit.

2.3 Empirical Review
This section presents previous studies undertaken by various authors on credit risk management and financial performance of organizations and firms. This empirical review seeks to analyze various studies and highlight the research gaps in those studies.

The Kibui (2010) study looked into the effects of risk management practices on how Harambee SACCO performed. The study in particular delved into the impacts of strategies directed to credit evaluation, credit policy plan, present day techniques on credit risk control and monitoring, systematic loan defaulting and defaulter report on
SACCOs financial performance. This examination was brought out through a descriptive exploration strategy. The objective populace of this investigation was credit officers of Harambee SACCO, Nairobi. The study found that the firm utilized shareholding, guarantor, collaterization, and insurance as part of the credit risk relief methodologies. The examination additionally discovered that risk management is useful in boosting financial performance to a considerable extent. However, this study did not capture the role of moderator in the study.

Abiola and Olausi (2014) explored the performance of different commercial banks operating in Nigeria in terms managing credit risk. The study that covered 7 years, 2005 to 2011 looked into 7 commercial banks). The multiple regression analysis approach was used with Return on Asset (ROA) and Return on Equity (ROE) as the utilized performance indicators. Two risk management indicators were used in this study: Non-Performing Loans as well as Capital Adequacy Ratio. The Abiola and Olausi (2014) study came to the conclusion that the bank’s profitability was depended highly on credit risk management.

The impact of credit risk on how Nigerian bans performed was also studied by Epure and Lafuente (2012). The findings indicated that a bank’s performance was negatively related to credit risk as by the bank’s ROA. What this means is that the profitability is greatly reduced when credit risk exposure increases. The findings were that the performance of the bank had a positive relationship in relation to total loan. As a result of increasing their profits and curbing nonperforming loans, the banks should adopt a robust system of deposit mobilization so as to increase the availability of credit and develop a reliable credit risk management strategy with enough repercussions for loan defaulters.
Magali (2014) explored Rural SACCOs in Tanzania and the effectiveness of Loan Portfolio Management. Data collection for the study was done in May 2013 and for data analysis, multiple regression was employed. The conclusions indicated a positive relationship between quality of a SACCO’s loan portfolio and the loan size while a negative one exists between gender and borrower’s location. It also came out clearly that loan portfolio quality had a negative relationship to agricultural produce cost and price fluctuations.

Muraleetharan (2012) examined the relationship existing between Internal Control and how Organizations in Jaffna, India performed financially. The aim of the research was establish whether there exists any positive relationship between these two aspects. Questionnaires were deployed for collecting the required data and the study also incorporated personal interviews. Chi square and regression analysis models were used by the researcher for data analysis. Study outcomes indicated that a positive relationship existed between internal control system and how an organization performed.

Biwott (2015) explored the financial performance of KARI SACCO Limited as it related its management of credit risk. Mainly, the research sought to evaluate KARI SACCO Limited’s financial performance against the importance of credit monitoring practices. The results were that a positive and definite relationship existed between KARI’s financial performance and how it managed its credit monitoring practices. Keitany (2013) recognized a negative relationship that exists between the performance and loan defaulting among SACCOs in operating Nairobi, Kenya. The study results depicted a negative relationship that exists between profitability and defaulting by creditors,
recommending that it’s important for SACCOs to review their credit policies from time to time in the quest of evaluating the character of loan applicants.

Ochogo (2015) looked into the relationship that exists between management of credit risk and SACCOs’ financial performance in Kitui County. The researcher used questionnaires for data gathering and multiple regression analysis in analyzing the data. It became apparent from the findings that a strong and positive relationship exists between SACCOs loan policies, credit monitoring, loan defaulting and their financial performance.

### 2.4 Summary of Literature Review and Research Gaps

<table>
<thead>
<tr>
<th>Author and Year</th>
<th>Objectives of the Study</th>
<th>Key Study Findings</th>
<th>Identified Research Gaps</th>
<th>How the study seeks to fill the gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kibui (2010)</td>
<td>Financial performance and credit risk management practices being practiced at Harambee SACCO</td>
<td>Credit risk management enhances how SACCOs perform</td>
<td>The study did not use moderating variable</td>
<td>The study will incorporate Internal Control System as the moderating variable</td>
</tr>
<tr>
<td>Abiola and Olausi (2014)</td>
<td>Management of risk on commercial banks financial performance</td>
<td>Management of credit risk has an impacts commercial banks profitability</td>
<td>The study used only two indicators to determine financial performance</td>
<td>The study will use more than two indicators to avoid biasness</td>
</tr>
<tr>
<td>Epure and Lafuente (2012)</td>
<td>Credit risk effects on financial performance of Nigerian banks</td>
<td>Credit risk negatively affects the financial performance Nigerian banks</td>
<td>The study used only one indicator</td>
<td>The study will use more than one indicator to draw solid conclusion</td>
</tr>
<tr>
<td>Magali (2014)</td>
<td>Loan portfolio management effectiveness in</td>
<td>Loan portfolio quality was positively influenced by</td>
<td>The loan size is a limited indicator for credit risk</td>
<td>The study will seek to analyze various</td>
</tr>
<tr>
<td></td>
<td>rural SACCOs</td>
<td>loan size</td>
<td>analysis</td>
<td>indicators</td>
</tr>
<tr>
<td>----------------</td>
<td>---------------------------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------------------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Biwott (2015)</td>
<td>Credit risk management impact on the</td>
<td>Credit risk management greatly influenced</td>
<td>The study used only one variable to measure</td>
<td>The study will use more than one variable for</td>
</tr>
<tr>
<td></td>
<td>performance of KARI SACCO</td>
<td>firm’s financial performance</td>
<td>financial performance</td>
<td>analysis</td>
</tr>
<tr>
<td>Keitany (2013)</td>
<td>Credit risk and profitability of</td>
<td>A negative relationship can be seen</td>
<td>Study used only loan default to predict</td>
<td>The study will use various variables to</td>
</tr>
<tr>
<td></td>
<td>Nairobi City County SACCOs</td>
<td>between loan default and levels of</td>
<td>profitability</td>
<td>determine financial performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>profitability</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author (2019)

The findings in the empirical studies indicate that financial performance of financial institutions is greatly affected by credit risk management. However, there is a research gap in linking credit risk management and specifically how SACCOs performed financially. Empirical review does not depict documentation on how the role of the moderating variable which in my study is the internal control system, has been used in relation to management of credit risk and financial performance. The research thus seeks to fill the research gap identified above by establishing the relationship existing between financial performance of firms and credit risk management. It also looks the role played by the moderating variable among deposit taking SACCOs in Nairobi City County.

2.5 Conceptual Framework

This will entail analyzing the variables in the study. Financial performance is dependent on various variables and this can clearly be captured in the diagram below:
Figure 2.1 Conceptual Framework

**Independent Variable**

**Dependent Variable**

**CREDIT RISK MANAGEMENT**

Credit Monitoring
- Check on loan application
- Credit disbursement review

**Credit Appraisal**
- Collateral
- Capacity
- Characters

**Credit Risk Control**
- Penalty
- Credit committee
- Loan default

**FINANCIAL PERFORMANCE**
- ROA
- Liquidity
- Net Income

**Internal control systems**
- Control environment
- Quality control and review of loan
- Monitoring of controls

**Moderating Variable**

Source: Author (2019)
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction
This chapter is on research methodology, covering the research design of the study which is descriptive in nature. The target population consisted of 40 Deposit Taking SACCOs that have been licensed by SASRA to operate in Nairobi City County (SASRA, 2018). The sampling design used was a census survey while a questionnaire was the data collection instrument. The chapter also entails instrument validity and reliability, procedures for data collection, analysis, presentation as well as ethical considerations.

3.2 Research Design
Research design has been defined by Davis (2007) as basically the technique of undertaking an investigation. The research used descriptive survey which entailed establishing the frequency with which an occurrence happens or the relationship between two or more variables. Descriptive research comes with several benefits in that, the study subject is monitored in a natural environment that is completely unchanged and it also allows respondents to make their responses in period (Cooper and Schindler, 2003). Similarly, Mugenda and Mugenda (1999) pointed out that the ultimate objective of a descriptive survey is to gather information describing existing phenomena through posing questions that relate to individual attitudes and perceptions. A descriptive study aims to ascertain as well as describe the key features of the variable of interest in any given situation (Kothari, 2004).
3.3 Target Population

Target population is a selected group picked from the larger study population of the study. This encompasses 40 Deposit Taking SACCOs that have been licensed by SASRA to operate within Nairobi City County (SASRA, 2018). Target respondents comprised of three key employees from each SACCO: Credit Risk Manager, Finance Officer and Head of operations thus bringing the target respondents to 120.

3.4 Sampling Design

The study adopted a census survey in the 40 Deposit Taking SACCOs licensed by SASRA in Nairobi City County (SASRA, 2018). Therefore, no sampling was done for this study. Sampling for respondents, however, was through purposive sampling technique. By the rule of thumb, a sample size of about 30 or more typically gives a sampling distribution for a mean that is generally very close to what can be described as a normal distribution (Saunders et. al., 2009).

Table 3.1: Sampling of Respondents

<table>
<thead>
<tr>
<th>Sampling</th>
<th>Numbers (1 for each of the 40 SACCOs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Risk Manager</td>
<td>40</td>
</tr>
<tr>
<td>Finance Officer</td>
<td>40</td>
</tr>
<tr>
<td>Head of Operations</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
</tr>
</tbody>
</table>

Source: Author (2019)
3.5 Data Collection Instruments
This study utilized a questionnaire for primary data collection. Close and open-ended questions plus the use of a Likert scale in all the independent variables were used to capture the respondents’ input towards the study objectives. Borg and Gall (1996) emphasized the appropriateness of questionnaires in the sense that they depict data that is not directly observable. This implies that the use of individual experiences, attitude, feelings and motivation is more appropriate. The research obtained secondary data from the institutions’ communication tools such as magazines, company annual reports and journals in order to base conclusion on the relevant facts.

3.5.1 Validity of Instrument
Validity has been defined by Mugenda and Mugenda (2003) as the degree to which phenomenon under study is a representation of the results obtained from data analysis. For study results to be valid, the instrument used should measure what it was set to measure. Data was collected through questionnaires which required a detailed pre-test for validity before use. Gillham (2008) examined that the knowledge and skills under an investigation should be a specimen of the larger population being investigated. The instrument was tested to ensure, first and foremost the content validity. Research results can only be said to be valid when data collected is correctly and accurately measured.

3.5.2 Reliability of Instrument
The questionnaire was developed by experts in accounting and finance that was considered okay for using in collecting data. Best and Kahn (2006) describe reliability of a test as scores which are free from errors in the pursuit of conducting a test. A reliable result is possible to obtain only when the instrument for data collection is in itself
reliable. The study employed Cronbach’s alpha in determining the internal consistency used in ascertaining reliability of instrument used for data collection. The acceptable reliability coefficient is expected to be 0.6 and above (Nunnaly, 1978). In case the Cronbach’s alpha registered below 0.6, the questionnaire’s reliability was assumed to be too low and had to be amended.

3.6 Data Collection Procedure
Data collection started when permission was granted by Kenyatta University as well as National Council for Science Technology and Innovation. A formal request to the sampled institutions was sent to seek permission to carry out the research. The study involved research assistants who were tasked with distributing questionnaires to the targeted respondents. The method used to administer the questionnaires was “drop and pick later”. The research assistants underwent training so as to be conversant with the study objectives, the research instrument and ethics of research while in the field.

3.7 Data Analysis and Presentation
Descriptive statistics was adopted in the analyzation of data by use of mean, percentage and standard deviation. Correlation analysis was adopted for data analysis and explanation of the main study findings. The effect of each independent variable was assessed using multiple regression analysis with the help of SPSS program. Data presentation was done through pie charts, frequency tables, histograms as well as bar graphs. The regression model is presented below:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e \]

Where:

\[ Y = \text{Financial Performance} \]
\[ \beta_0 = \text{Constant} \]

\[ \beta_1 - \beta_3 = \text{Beta Coefficients} \]

\[ X_1 = \text{Credit Monitoring} \]

\[ X_2 = \text{Credit Appraisal} \]

\[ X_3 = \text{Credit Risk Control} \]

\[ e = \text{Error term} \]

### 3.8 Ethical Consideration

Ethics is defined as principles that morally rule or guide a person's behavior in the field of research (Bryman et al, 2007). It was the goal of this study to ensure that the research participants’ dignity is prioritized with their consent sought. This ensured that their privacy was upheld with confidentiality of data being adhered to. The study sought to maintain professionalism throughout the entire research process with conflicts of interests being declared. Transparency and honesty was key in enhancing effective communication hence avoiding any kind of misleading information that may lead to biasness.
CHAPTER FOUR
DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction
This section analyzes, presents and interprets the field findings. The chapter presents respondents background information and findings based on the study objectives. Descriptive statistics has been utilized as well as inferential statistics to analyze the findings.

4.1.1 Response Rate
A respondents’ sample size of 120 was targeted. Out of this 102 responded positively to give 85% response rate.

Table 4.1: Response Rate

<table>
<thead>
<tr>
<th></th>
<th>Questionnaires Administered</th>
<th>Questionnaires filled &amp; Returned</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents</td>
<td>120</td>
<td>102</td>
<td>85</td>
</tr>
</tbody>
</table>

Source: Survey Data, (2019)
A 50% response rate is adequate for data analysis and reporting while 60% is deemed good according to Mugenda and Mugenda (2003). A 70% and above response rate is excellent and therefore, the response rate for this study was excellent.

4.2 Background Information
This section presents the respondents background information. It specifically sought areas that include job designation, period of service and various credit facilities offered by the SACCOs.
4.2.1 Designation

Respondents had to indicate their specific job designation on the survey tool. From the research findings, the respondents did indicate that they held various positions among which include, credit risk manager, finance officer and head of operations.

4.2.2 Credit facilities offered by the SACCO

The study sought to establish various loan products offered by the SACCOs. The study outcomes are presented in Table 4.2 below:

<table>
<thead>
<tr>
<th>Credit facilities</th>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal loan</td>
<td>Yes</td>
<td>102</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>102</td>
<td>100</td>
</tr>
<tr>
<td>Development Loan</td>
<td>Yes</td>
<td>67</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>35</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>102</td>
<td>100</td>
</tr>
<tr>
<td>Education Loan</td>
<td>Yes</td>
<td>51</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>51</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>102</td>
<td>100</td>
</tr>
<tr>
<td>Emergency Loan</td>
<td>Yes</td>
<td>91</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>102</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Research Data, (2019)

Results presented in the table above show that SACCOs offered various credit facilities among which include normal loan (100%), emergency loan (89%), development loan (66%), and education loan (50%) among other credit facilities extended include asset financing, salary advance, business startup loans and agribusiness loans. The study also
established that the above facilities were granted 3 times members’ deposits and was recoverable in 40 Months. Qualitative information gathered showed that borrowing from these institutions has several advantages which include lower interest rates currently at 12 per cent per annum.

4.2.3 Period of Service

It was the goal of this research to establish the specific period during which the targeted objects (respondents) had worked with that particular institution.

<table>
<thead>
<tr>
<th>Table 4.3: Respondents’ period of service with the current SACCO.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency</strong></td>
</tr>
<tr>
<td>1 to 3 years</td>
</tr>
<tr>
<td>4 to 6 years</td>
</tr>
<tr>
<td>More than 6 years</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Source: Research Data, (2019)

The findings above indicate that most respondents (63.7%) had actually worked with their respective organization for over 6 years, while 21.6% had worked with the institution for a period between 4 and 6 years while 14.7% had worked between 1 and 3 years. Drawing from the findings, it is evident that most of the respondents were in a good position of giving out credible and reliable information based on their vast experience.

4.3 Credit Risk Management

This section presents an assessment on credit risk management protocols laid by the SACCOs with a major focus on credit risk management policy, credit monitoring and credit appraisal.
4.3.1 Credit Monitoring

The study wanted to find out if the targeted SACCOs had any well-designed Credit Risk Management Policies. Results obtained are presented in Table 4.4 below:

Table 4.4: Effectiveness of SACCOs’ Credit Risk Management Policy

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>58</td>
<td>57.1</td>
</tr>
<tr>
<td>No</td>
<td>44</td>
<td>42.9</td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Research Data, (2019)

Risk Management Policy has a vital role in terms of rating SACCOs’ soundness as found out by the study. Capital adequacy, overall earnings and the levels of liquidity were considered in rating the soundness of the institutions. Credit scoring is a technique that analyzes the risk posed by a borrower hence, survey participants were required to indicate their rating in relation to Financial Performance.

Table 4.5: Credit monitoring ratings

<table>
<thead>
<tr>
<th>Credit Monitoring</th>
<th>Mean</th>
<th>Std deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior before loan disbursement, the applicants credit worthiness is thoroughly checked</td>
<td>3.99</td>
<td>0.48</td>
</tr>
<tr>
<td>The SACCO has standardized credit application forms issued to applicants during the process</td>
<td>4.29</td>
<td>0.51</td>
</tr>
<tr>
<td>Credit disbursement evaluation covers completeness of the credit request process</td>
<td>3.77</td>
<td>0.11</td>
</tr>
<tr>
<td>Loan disbursement procedures adhere to firm’s internal guidelines</td>
<td>4.23</td>
<td>0.23</td>
</tr>
<tr>
<td>The credit risk commission always performs thorough checks to ensure that loans are re-paid within the stipulated</td>
<td>3.83</td>
<td>0.61</td>
</tr>
</tbody>
</table>
The credit risk committee continually monitors the status of loans issued to members.

Source: Research Data, (2019)

These findings show that the institutions’ Credit Risk Managers have been employing a varied mix of methods although the one in most use was the individual’s credit limit. On its heels were credit approval followed by credit control policy. Nearly all SACCOs indicated that they preferred the use of qualitative methods while qualitative credit scoring was only being applied by a couple of them. These findings are in line with Ochogo (2015) whereby, the main aim of credit risk management is to maximize SACCOs’ risk-adjusted rate of return by maintaining credit risk exposure.

The results from the findings indicate that credit must not only be monitored but reviewed as well and that portfolio managers need to keep a sharp eye over the loan. This clearly reflects on the operations of many of these institutions in that regular loan monitoring is given much attention and loan portfolio managers are, in some way, made to account for how the loans are performing. This, however, is also reflective of the fact that majority of these institutions lack, to a large extent, any form of standardized approach towards credit risk management and that much is left to the managers’ discretion. These findings go hand in hand with Magali (2014) whereby, financial institutions need to employ better management techniques and also monitor the credit risk better as well as keep an alert on the potential risk posed by individual credits.

Respondents further indicated that most of the institutions charged between KShs. 1,000 to KShs. 2,000 as the membership application fee. Participants also made it clear that
effective risk management forms an important component of any well-designed risk management approach. It is also crucial in regard to long-term success of these institutions.

4.3.2 Credit Appraisal

Most of the SACCOs have deployed a loan risk management policy. This is very crucial in terms of giving guidelines on ways of managing the various risks encountered during lending activities. Respondents were required to indicate the average amount of loan mostly applied for by individual members. Results are presented in the table below:

<table>
<thead>
<tr>
<th>Average loan amount mostly applied for by individual members</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>KShs 0-Ksh 100000</td>
<td>15</td>
<td>14.7</td>
</tr>
<tr>
<td>KShs 100001-Ksh 300000</td>
<td>16</td>
<td>15.7</td>
</tr>
<tr>
<td>KShs 300001-Ksh 500000</td>
<td>55</td>
<td>53.9</td>
</tr>
<tr>
<td>Above KShs 500001</td>
<td>16</td>
<td>15.7</td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Research Data, (2019)

The findings clearly indicate that SACCOs continue to be competitive in loan issuance despite the interest they charge their members compared to interest rates charged by banking institutions. Loan review on a continual basis and a solid credit risk rating system empower the management to easily identify changes in portfolio trends and individual credits in a timelier manner. In this essence, participants were required to rate SACCOs’ credit appraisal program in relation to financial performance and is presented in table 4.7 below:
Table 4.7: SACCOs’ Credit Appraisal Program

<table>
<thead>
<tr>
<th>Credit Appraisal</th>
<th>Mean</th>
<th>Std deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The collateral availed by members are evaluated against the loan credit applied.</td>
<td>4.38</td>
<td>0.81</td>
</tr>
<tr>
<td>The capacity of individual member to re-pay the loan is weighed against the loan requested</td>
<td>3.88</td>
<td>0.19</td>
</tr>
<tr>
<td>The credit risk committee always checks on members’ source of income before loan disbursement</td>
<td>4.17</td>
<td>0.14</td>
</tr>
<tr>
<td>The ability of individual members to repay the applied credit is thoroughly weighed against the amount applied based on applicant’s lifestyle</td>
<td>3.97</td>
<td>0.15</td>
</tr>
<tr>
<td>The credit risk assessment committee appraises the existing liabilities of borrowers before issuing loan</td>
<td>4.18</td>
<td>0.82</td>
</tr>
<tr>
<td>The credit risk assessment committee must check on the current financial status of the applicant before disbursements of the loan</td>
<td>3.79</td>
<td>0.13</td>
</tr>
</tbody>
</table>

Source: Research Data, (2019)

The findings show that loan review on a regular basis as well as a well-designed credit risk rating system will empower management of these institutions to identify changes in trends and individual credits faster. These findings are in support of the study findings by Keitany (2013) whereby, SACCOs’ credit appraisal program revolve around collateral character capability and capacity. The study found out that SACCOs are relying on more subjective loan lending criteria using qualitative models as opposed to employing more objective quantitative techniques like credit scoring.
These findings concur with the study findings by Abiola and Olausi (2014) where appraisal programs take into account a diversity of factors like the applicant’s dependents, his/her monthly expenditure, respective repayment capacity, their known employment history, period of service as well as other factors which are likely to affect the borrower’s credit rating.

### 4.3.2 Credit Risk Control

SACCOs should ensure that there is an ongoing evaluation and assessment of the credit related risks. An external risk assessment could point to the SACCO, areas of risk or interpretation of risks that the SACCO has not seen or focused before. In this understanding participants were required to rate these institutions in terms of credit risk control in relation to Financial Performance and this is represented in the table below:

**Table 4.8: SACCOs in terms of Credit Risk Control**

<table>
<thead>
<tr>
<th>Credit Risk Control</th>
<th>Mean</th>
<th>Std deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper document verification is done before loan disbursement</td>
<td>4.26</td>
<td>0.19</td>
</tr>
<tr>
<td>The organization has penalty mechanism in place to deal with defaulters</td>
<td>3.93</td>
<td>0.41</td>
</tr>
<tr>
<td>The credit risk committee is in existence and comprises of competent staff.</td>
<td>4.13</td>
<td>0.71</td>
</tr>
<tr>
<td>There is a probability of members to default on the loan disbursed</td>
<td>3.99</td>
<td>0.31</td>
</tr>
<tr>
<td>Audits are usually conducted on portfolio performance to evaluate member performance of loan utilization</td>
<td>4.28</td>
<td>0.27</td>
</tr>
</tbody>
</table>

**Source: Research Data, (2019)**

The study confirmed, a known fact, that an organization’s existing credit policy forms the ideal foundation for developing or designing a new and more effective credit policy.
Other factors taken into account include creditor trends and firm’s overhead costs. The economy’s general state came out as a moderate significance in terms of developing a sound credit policy. Respondents also added that credit risk committee reviews the credit risk management policy annually to harmonize borrowing trends with economic dynamics. These findings are in support of the study findings by Mbole, (2004) which asserts that by implementing risk-based pricing models, firms are able to comprehend in a better way the risk element as well as the range of acceptable risk rates that can assist a firm meet its targets or financial obligations.

It was required of the respondents to indicate members’ defaulting rate on the loans disbursed so far and this is presented in the table below:

Table 4.9: Loan Default Rate

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% - 5%</td>
<td>13</td>
</tr>
<tr>
<td>5% - 10%</td>
<td>72</td>
</tr>
<tr>
<td>10% - 15%</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
</tr>
</tbody>
</table>

Source: Research Data, (2019)

From the statistical findings, it is evident that the rate of members’ defaulting on the loans disbursed in most of the SACCOs ranged between 5% - 10%. Based on these findings, this study draws out that these institutions are facing an imminent crash due to high loan appetite. However, default rate by members remained low which is an indication that members were repaying loans within the set timeline.
4.4 Financial Performance

Respondents were asked to also indicate how their respective institutions had performed for five years between 2012 and 2016. This results are represented in the table below:

Table 4.10: Financial Performance

<table>
<thead>
<tr>
<th>Indicator/Year</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Assets (KShs M)</td>
<td>31.3</td>
<td>10.25</td>
<td>29.36</td>
<td>32.16</td>
<td>33.14</td>
</tr>
<tr>
<td>Total Prepayments (KShs M)</td>
<td>6.35</td>
<td>4.36</td>
<td>6.78</td>
<td>9.36</td>
<td>9.44</td>
</tr>
<tr>
<td>Total Current Liabilities (KShs M)</td>
<td>10.25</td>
<td>14.6</td>
<td>12.5</td>
<td>7.58</td>
<td>4.66</td>
</tr>
</tbody>
</table>

Source: Research Data, (2019)

The table above indicate a high net income in 2012 which is followed by a decrease in 2013. The net income increases gradually from 2014 to 2016 depicting a positive trend. Total assets have remained high with a gradual increase all through the five year period except for 2013 where there was a slight decrease. Total current assets have been steady over the period with an increase then a decrease followed by a gradual increase. Total prepayments recorded a high value in 2016 and a low value in 2013. Total current liabilities decreased indicating that members were honoring their obligations over the period.

Respondents were requested to analyze the role of risk management in their institutions and this is presented in the table below:

Table 4.11: Role of risk management in improving the performance

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>102</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>100</td>
</tr>
</tbody>
</table>
From the findings, 100% of the respondents felt that credit risk management helps in improving the financial performance of the institutions. Respondents further reported that credit risk management allows forecasting and predicting as well as measuring or estimating the probable risk factors associated with any transaction. The use of certain credit models by these institutions plays a valuable tool which firms can use in regulating the lending level by measuring the risk.

### 4.5 Inferential Statistics

The SPSS Version 22 was used to code, enter and compute the data so as to establish the multiple regression, correlation analysis, model summary and ANOVA analysis.

#### 4.5.1 Correlation Analysis

It was the objective of this study to find out the relationship of independent variables on the dependent variable with the use of Pearson correlation. The results as shown below:

<table>
<thead>
<tr>
<th>Table 4.12: Correlation Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>SACCOs’ Financial Performance (Y)</td>
</tr>
<tr>
<td>SACCOs’ Financial Performance (Y)</td>
</tr>
<tr>
<td>SACCOs’ Financial Performance (Y)</td>
</tr>
<tr>
<td>SACCOs’ Financial Performance (Y)</td>
</tr>
<tr>
<td>Credit Monitoring (X₁)</td>
</tr>
<tr>
<td>Credit Monitoring (X₁)</td>
</tr>
<tr>
<td>Credit Monitoring (X₁)</td>
</tr>
<tr>
<td>X_1</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>Credit Appraisal</td>
</tr>
<tr>
<td>X_2</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>Credit Risk Control (X_3)</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>N</td>
</tr>
</tbody>
</table>

**Source: Research Data, (2019)**

The study findings established that a positive correlation existed between credit monitoring and performance of these institutions, as indicated by correlation factor of 0.404. Statistically, this strong positive relationship was found to be significant as the p-value stood at 0.000 which is below the 0.05 threshold. The findings supported Ana-María, Francisco and Bernardino (2014) findings that there existed a positive relationship between credit monitoring and Financial Performance of SACCOs.

A strong and positive correlation exists between SACCOs’ performance and credit appraisal as depicted in the table above. This is indicated by a 0.635 correlation coefficient, with a p-value of 0.000 which is below 0.05. The findings supported O’brien (2013) that credit appraisal aided in achieving quality in financial management.

The study found a positive and strong correlation between Financial Performance and Credit Risk Control whose correlation coefficient stood at 0.583. The p-value was 0.000, which is below 0.05. The findings supported Gunday et al., (2011) in that Credit Risk...
Control enhanced SACCOs’ Financial Performance in an environment of fast changing market.

4.5.2 Regression Analysis

The researcher, in addition, undertook a multiple regression analysis with the goal of testing the relationship between the different independent variables of the study and the dependent variable.

4.5.2.1 Model Summary

The study’s model summary supplies information about regression line potential to account for any total variation in the dependent variable. This is demonstrated in the table below that shows how the y-values are being highly dispersed around the variable’s regression line.

Table 4.13: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.933</td>
<td>0.8704</td>
<td>0.793</td>
<td>0.6273</td>
</tr>
</tbody>
</table>

Source: Research Data, (2019)

The coefficient of determination was used in this study in evaluating the fit of the model. In addition, the adjusted $R^2$ (coefficient of multiple determinations), is the variance percent in the dependent as explained jointly or uniquely by the study’s independent variables. The model gave an average adjusted ($R^2$) of 0.793 coefficient of determination. This implies that 79.3% of the SACCOs’ Financial Performance variance are accounted for by the independent variables being studied (credit monitoring, credit appraisal and credit risk).
4.5.2.2 ANOVA Results

Analysis of Variance (ANOVA) entails calculations geared towards providing information about variability levels within a regression model, forming a basis for significance tests. The table below shows the ANOVA results:

Table 4.13: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2.1702</td>
<td>3</td>
<td>0.7234</td>
<td>3.0585</td>
<td>.0179a</td>
</tr>
<tr>
<td>Residual</td>
<td>23.177</td>
<td>98</td>
<td>0.2365</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25.3472</td>
<td>101</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Data, (2019)

From the results above, 0.0179 is the p-value (which is below 0.05). This indicates that statistically the overall model is significant in terms of predicting the effect of credit monitoring, credit appraisal and credit risk control on financial performance of deposit taking SACCOs that are running within Nairobi, Kenya. At 5% level of significance the F critical is 3.23 (Standard F-tables). The F calculated (3.0585) is more than the F critical, therefore the overall model was a good fit.

4.5.2.3 Regression Coefficients

The regression coefficients table is a key output on multiple regression analysis. This is interpreted as the proportion or degree of the dependent variable variance predictable from the study’s independent variable. The results are presented in the table below:
Table 4.14: Regression Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Constant</td>
<td>1.172</td>
<td>.7257</td>
<td>1.615</td>
</tr>
<tr>
<td></td>
<td>Credit</td>
<td>.798</td>
<td>.1889</td>
<td>.152</td>
</tr>
<tr>
<td></td>
<td>Monitoring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Credit</td>
<td>.571</td>
<td>.1533</td>
<td>.054</td>
</tr>
<tr>
<td></td>
<td>Appraisal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Credit</td>
<td>.676</td>
<td>.1717</td>
<td>.116</td>
</tr>
<tr>
<td></td>
<td>Risk Control</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Source: Research Data, (2019)

Table 4.14 displays beta coefficients results including the p-values for each of the independent variables. The extracted regression function, using unstandardized betas is: 

\( Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \epsilon \):

\[
Y = 1.172 + 0.798X_1 + 0.571X_2 + 0.676X_3
\]

According to the regression function, all factors held constant (credit monitoring, credit appraisal and credit risk control), the coefficient for SACCOS’ financial performance comes to 1.172. Further, the findings show that a unit increase in credit monitoring leads to a 0.798 increase in financial performance all factors held constant. A unit increase in credit appraisal leads to a 0.571 increase in financial performance all factors held constant. Lastly, a unit increase in credit risk control leads to a 0.676 increase in the financial performance all factors held constant.
4.5.5.4 Hypothesis Testing

A hypothesis testing was conducted to test whether any significant relationship did exist between the study’s independent variables and the dependent variables and the results are presented in the table below:

**Table 4.15: Hypothesis Testing**

<table>
<thead>
<tr>
<th>Research Hypothesis</th>
<th>β</th>
<th>t</th>
<th>Sig</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>H01 There is no significant relationship existing between credit monitoring and the financial performance of deposit taking SACCOs within Nairobi County, Kenya.</td>
<td>.798</td>
<td>4.223</td>
<td>.0146</td>
<td>Reject H01</td>
</tr>
<tr>
<td>H02 There is no significant relationship existing between credit appraisal and financial performance of deposit taking SACCOs in Nairobi City County, Kenya.</td>
<td>.571</td>
<td>3.724</td>
<td>.0229</td>
<td>Reject H02</td>
</tr>
<tr>
<td>H03 There is no significant relationship existing between credit risk control and deposit-taking SACCOs’ financial performance in Nairobi City County, Kenya</td>
<td>.676</td>
<td>3.936</td>
<td>.0211</td>
<td>Reject H03</td>
</tr>
</tbody>
</table>

*Source: Research Data, (2019)*

The hypothesis testing was conducted at 5 % significance level and because the ‘t' values for all the study variables were more than 2, the null hypothesis was rejected in favor or preference of the alternative. It was further rejected since the p-values for all the values were less than 0.05 (5%) significance level. It was thus deduced that a significant relationship existed between deposit taking SACCOs’ credit monitoring, credit appraisal as well as credit risk with SACCOs’ Financial performance.
4.6 Key findings and Discussion

An assessment on credit monitoring measures showed that most of the SACCOs (57.1%) had implemented effective credit monitoring measures; however, reports given by some of the credit officers (42.9%) indicated the need to amend the current policy to accommodate innovative credit management structures. Credit monitoring is a significant predictor of financial performance. A unit increase in credit monitoring would yield a 0.798 increase in the financial performance. The results revealed prior to loan disbursement, the applicants' credit worthiness is thoroughly checked (M= 3.99), the credit risk committee always performs thorough checks to ensure that loans are re-paid within the stipulated time (M= 3.83) and that credit disbursement evaluation covers completeness of the credit request process (M= 3.77). These findings go hand in hand with Magali (2014) that financial institutions must manage the credit risk within their entire portfolio and that includes the risk posed in individual transactions and credits. Respondents also indicated that the majority of the institutions charged between KShs 1000 to KShs 2000 as the membership application fee.

Participants also added that the effective credit risk management by SACCOs is a critical element of a comprehensive and broad approach towards risk management. This is vital to the long-term success of all types of financial institutions with SACCOs being a part of them. In regard to credit appraisal, the study revealed that it forms a significant and crucial predictor of the financial performance. Most of the customers borrowed between KShs 300,001 to KShs 500,000. The findings showed that collateral availed by members is evaluated against the loan credit applied. (M=4.38), the credit risk assessment committee appraises the existing liabilities of borrowers before issuing loan (M= 4.18).
and that credit risk committee always checks on members’ source of income before loan disbursement (M=4.17). These findings concur with those of Keitany (2013) in that SACCOs’ credit appraisal program revolved around collateral character capability and capacity.

The study further revealed that individual member’s ability to repay the applied credit is thoroughly weighed against the amount applied based on applicant’s lifestyle (M=3.97) the capacity of individual member to re-pay the loan is weighed against the loan requested (M=3.88) and that the credit risk committee must check on the current financial situations of the applicant before disbursement of the loan (M = 3.79). These findings are in concurrence with what Abiola and Olausi (2014) found in that, appraisal programme considers diverse factors such as the applicant’s income, dependents number, monthly expenditure, capacity to repay, employment history, years of service as well as other factors affecting borrower’s credit rating.

Test regression results revealed that a unit increase in credit risk control yields a 0.676 increase in the financial performance all factors held constant. Descriptive results of the analysis show that the rate of members defaulting on the loans disbursed in most of the SACCO’s ranged between 5% - 10%. The institutions carried out periodic audits on portfolio performance to evaluate member performance of loan utilization (M =4.28), the credit risk committee is in existence and comprises of competent staff (M = 4.13), in lack of proper credit risk control measures, there is high probability of applicants to default on the loan issues (M = 3.99) and that the organization has penalty mechanism in place to deal with defaulters (M = 3.93).
Respondents also added that credit risk committee reviewed the credit risk management policy annually to harmonize borrowing trends with economic dynamics. These findings also concur with Mbole, (2004) in that through implementing sound risk-based pricing models, appreciating both the risk and the acceptable range of acceptable risk rates helps institutions in meeting targets financially. A comprehensive assessment on the institutions’ financial performance shows that there is a positive trend in net income over the study period. An assessment on current liabilities revealed a gradual decrease where the highest average scores (KShs. 14.6M) were recorded in the year 2013 and the lowest value (KShs 4.66) in 2016. The study also revealed that sound management of credit risk is useful in terms of helping institutions improve their financial performance. Credit risk management allows forecasting and predicting and also measuring the probable risk factors in any transaction and that SACCOs’ use of specific credit models is a priceless tool to be used in regulating the lending levels and measuring the risk.
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction
This concluding chapter focuses on the summary and main recommendations of the research findings for improvement on the basis of the specific objectives as well as for any further or additional studies.

5.2 Summary
The specific objectives of the study were to establish the relationship of credit risk monitoring, credit appraisal and credit risk control on the financial performance of deposit taking SACCOs within Nairobi City County, Kenya. The methodology that was used for the study was descriptive analysis, correlation and multiple regression.

Credit Monitoring and Financial Performance
An assessment on credit monitoring showed that most of the institutions had implemented effective credit monitoring measures. However reports given by some of the credit officers indicated the need to amend the current policy to accommodate innovative credit management structures. Credit monitoring is a significant predictor of SACCOs’ financial performance in that, a unit increase in credit monitoring leads to an increase in financial performance. Descriptive results revealed that credit risk management committee in most firms continually monitored the status of loans issued to the members. The firms have a standardized credit application form issued to applicants during the process and that loan disbursement procedures adhere to the set internal guidelines.
Credit Appraisal and Financial Performance
The findings disclosed that collateral availed by members are evaluated against the loan credit applied. The credit risk committee appraises the existing liabilities of borrowers before issuing loan and that it always checks on members’ source of income before loan disbursement. The study further revealed that the ability of members to repay the applied credit is thoroughly weighed against the amount applied based on applicants’ lifestyle, the capacity of the member to re-pay the loan. The credit risk committee must check on the current financial status of the applicant before disbursement of the loan.

Credit Risk Control and Financial Performance
Management of credit risk helps in boosting the financial performance of these institutions as found out by the study. Credit risk management allows forecasting and also measuring the probable risk factors in any transaction. The use of certain credit models by SACCOs is a valuable tool which they can employ in regulating the level of lending and measuring the level of risk.

5.3 Conclusions
The findings show that a unit increase in credit monitoring leads to a 0.798 increase in financial performance all factors held constant. This implies that credit monitoring is a significant predictor of the performance of firms in that the credit risk committee in most firms continually monitored the status of loans issued to members. The coefficient of determination (0.793) shows that credit monitoring accounts for 79.3% of the variance in financial performance. In addition, the study findings established that there exists a positive correlation (0.404) between credit monitoring and financial performance. This
implies that credit monitoring is very crucial in ascertaining the financial performance of deposit taking SACCOs within Nairobi City County.

A unit increase in credit appraisal leads to a 0.571 increase in financial performance all factors held constant. This indicates that credit appraisal leads to a fairly positive increase in regards to financial performance. The coefficient of determination (0.793) shows that credit appraisal accounts for 79.3% of the variance in financial performance. A strong and positive correlation exists between credit appraisal and financial performance. A correlation coefficient of 0.635 depicts the importance of credit appraisal in determining the financial performance of deposit taking SACCOs as they aim in achieving quality in financial management.

Lastly, a unit increase in credit risk control leads to a 0.676 increase in financial performance all factors held constant. This implies that credit risk control leads to a positive increase in savings with periodic audits on portfolio performance to evaluate member performance on loan utilization. The coefficient of determination (0.793) shows that credit risk control accounts for 79.3% of the variance in financial performance. This also shows that credit risk committee is in existence and comprises of competent staff and that by implementing sound risk-based pricing models, SACCOs can understand not just the risk but the range of acceptable rates of risk that help them meet their financial obligations. The study found a positive and strong correlation (0.583) between financial performance and credit risk control. In conclusion, this means that credit risk control enhances the financial performance of deposit taking SACCOs in a dynamic and competitive environment.
5.4 Recommendations of the Study

Credit risk committee must institute measures that ensure follow-ups are made on all loans issued. Training on loan utilization (business loans) may be introduced prior to and after loan issuance so as to minimize cases of default. Borrowers should be accorded the opportunity to fully understand terms and conditions governing the loan products prior to issuance. This study recommends for periodic thorough scrutiny and amendment of credit monitoring policies so as to ensure that current loopholes are addressed. The findings have demonstrated that for the bigger part, the firms under study rely on the portfolio manager’s skill and discretion for effective management of risk. SASRA as the regulator should ensure that management is fully competent in terms of skill, expertise and qualification. As these institutions expand to accommodate more members across the different regions of the country, their approach of solely relying on their individual portfolio managers could ultimately prove to be inadequate. It may serve to only increase the number of loan defaulters. A positive relationship was established between the performance of institutions and their credit appraisal programs. Therefore, the study recommends a re-tightening of these policies in factoring in customer considerations since setting appraisal standards too high may limit client trends in loan borrowing and thus affect lending negatively. The study findings recommend the regulator to see to it that customers’ considerations are put to effect.

To the researchers and academicians, in relation to the study findings, it is recommended that future studies should be done in this area. The future researchers should implement and introduce more variables to establish the effect of more independent variables in the study. It is also clear that the SACCOs are utilizing their current credit policy as the basic
document in terms of how they are formulating their new credit policies. Also important to note is that SACCOs are considering using policy documents on credit management from other successful or similar organizations as a viable benchmark for best practices.

5.5 Limitations of the study
One of the limitations of the study was dealing with busy respondents who were not in a position to avail adequate time to fill in the questionnaire within the time agreed upon by the researcher. The researcher overcame this challenge by making phone call reminders to the respondents. There was a challenge in non-response and the researcher managed to counter the challenge by receiving 102 out of 120 questionnaires that were dispatched.

5.6 Contributions to Knowledge
This study will contribute to Finance Theory and Literature by helping management of these institutions to improve efficiency in credit risk. The study may be used as a guide in policy formulation by the regulatory body in increasing productivity of these institutions as the country gears toward achieving vision 2030.

5.7 Areas of Further Research
Since the current business environment is not only dynamic but also presents new opportunities and challenges, it may be important that this study is replicated after 5 years to establish the status then. The study recommends additional variables to assess the effect of financial performance with the use of descriptive and correlation analysis. This will greatly assist in benchmarking with other institutions for the overall financial performance to be achieved.
REFERENCES


http://ijecm.co.uk/ ISSN 2348 0386


Ochogo (2015) Effects of Credit risk management practices on profitability of deposit taking Saco’s in Nairobi County.


LETTER OF INTRODUCTION

Dear Respondent,

RE: SUPPORT ON RESEARCH PROPOSAL

I am a postgraduate student at Kenyatta University. As part of the requirement for the award of the degree in Master of Business Administration (Finance Option), I intend to undertake a research on CREDIT RISK MANAGEMENT AND FINANCIAL PERFORMANCE OF DEPOSIT TAKING SACCOS IN NAIROBI CITY COUNTY, KENYA.

In this regard, I am kindly requesting for your support in terms of time, and by responding to the attached questionnaire. Your accuracy and candid response will be critical in ensuring the objectivity of the research. It will not be necessary to write your name on this questionnaire and for your comfort, all information received will be strictly treated as confidential. Thank you for your valuable time on this.

Yours Faithfully,

CHARITY BWIRE

REG: D53/CTY/PT/32422/2015
APPENDICES

APPENDIX I: QUESTIONNAIRE

Part A: General information

1. Designation................................................................................................................................

2. Type of loan products offered by the SACCO

   a) Normal loan [ ]  
   b) Development Loan [ ]  
   c) Education Loan [ ]  
   
   d) Emergency Loan [ ]  
   e) Others (Kindly Specify)........................................................................................................

3. How long have you been employed in the company?

   a) Less than 1 year [ ]  
   b) 1 to 3 years [ ]  
   c) 4 to 6 years [ ]  
   d) More than 6 years [ ]

Section B: CREDIT RISK MANAGEMENT

Subsection B1: CREDIT MONITORING

4. Do you consider your SACCO’s Credit Risk Management Policy to be effective?

   Yes [ ]  
   No [ ]

5. Please explain your answer above
6. What would be your rating in terms of Credit Monitoring in relation to Financial Performance using the below scale?

(Strongly Disagree-1, Disagree-2, Moderate-3, Agree-4, and Strongly Agree-5)

<table>
<thead>
<tr>
<th>Credit Monitoring</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to disbursing the loan, the member’s credit worthiness is subjected to a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>final check</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The organization has a standardized loan application form given to members during</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>loan application process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loan disbursement review covers completeness of the credit application process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The process of loan disbursement adheres to internal guidelines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The credit risk committee always performs a check to ensure the loan is paid in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The credit risk committee always monitors the status of loan disbursed to the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Kindly outline other measures put in place by your organization to enhance Credit Monitoring
8. How much does your institution charge as the membership application fee?

........................................................................................................................................

...........

Subsection B2: CREDIT APPRAISAL

9. On average, how much loan do individual members usually request for?

KSH 0-KSH 100000 [ ]  KSH 100001-KSH 300000 [ ]

KSH 300001-KSH 500000 [ ]  Above KSH 500001 [ ]

10. What would be your rating in terms of Credit Appraisal in relation to Financial Performance using the below scale?

(Strongly Disagree-1, Disagree-2, Moderate-3, Agree-4, and Strongly Agree-5)

<table>
<thead>
<tr>
<th>Credit Appraisal</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The collateral of members is always weighed against the loan applied for</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. The capacity of members to repay the loan is weighed against the loan requested</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. The credit risk committee always checks on members’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>source of income before loan disbursement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The character of members to repay the loan is weighed against the loan requested based on their lifestyle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The credit risk committee evaluates the existing liabilities of members before disbursing loan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The credit risk committee always checks on the prevailing financial conditions of members before loan disbursement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. On average what would be the members’ monthly income in KSH in relation to the loan applied for?

………………………………………………………………………………………………………………………………………………

……...

**Subsection B3: CREDIT RISK CONTROL**

12. How often does the credit risk committee review the credit risk management policy?

………………………………………………………………………………………………………………………………………………

……...

13. What would be your rating in terms of Credit Risk Control in relation to Financial Performance using the below scale?

(Disagree Strongly-1, Disagree-2, Moderate-3, Agree-4, and Agree Strongly-5)
Proper document verification is done before loan disbursement

A penalty mechanism is in place to deal with defaulters

The credit risk committee is in existence and comprises of competent staff

There is a probability of members to default on the loan disbursed

Audits are usually conducted on portfolio performance to evaluate member performance of loan utilization

14. What is the rate of members defaulting on the loans disbursed?

0% - 5% [ ]

>5% - 10% [ ]

>10% - 15% [ ]

15. Please explain your interpretation of the default rate faced above

.................................................................

Section C: FINANCIAL PERFORMANCE

Please indicate how the organization performed in the last five years in the table below:
<table>
<thead>
<tr>
<th>Indicator/Year</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Income (KShs M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Assets ( KShs M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Current Assets (KShs M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Prepayments (KShs M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Current Liabilities (KShs M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. In your opinion would you allude to the fact that credit risk management helps in improving the performance of your institution?

YES [ ] NO [ ]

16. Kindly explain your answer above

........................................................................................................................................

****************THANK YOU FOR YOUR COOPERATION*******************
APPENDIX II: SCHEDULE I
LICENSED SACCO SOCIETIES IN NAIROBI CITY COUNTY FOR PERIOD
ENDING 31ST DECEMBER, 2016

1. AFYA SACCO BOX OFFICE 11607 – 00400, NAIROBI.
2. AIRPORTS SACCO BOX OFFICE 19001-00501 NAIROBI.
3. ARDHI SACCO BOX OFFICE 28782-00200, NAIROBI.
4. ASILI SACCO BOX OFFICE 49064 – 00100, NAIROBI.
5. CHAI SACCO BOX OFFICE 278-00200, NAIROBI.
6. CHUNA SACCO BOX OFFICE 30197 – 00100, NAIROBI.
7. ELIMU SACCO BOX OFFICE 10073-00100, NAIROBI.
8. FUNDILIMA SACCO BOX OFFICE 62000 – 00200, NAIROBI.
9. HARAMBEE SACCO BOX OFFICE 47815 – 00100, NAIROBI.
10. HAZINA SACCO BOX OFFICE 59877 – 00200, NAIROBI.
11. JAMII SACCO BOX OFFICE 57929 – 00200, NAIROBI.
12. KENVERSITY SACCO BOX OFFICE 10263 – 00100, NAIROBI.
13. KENYA BANKERS SACCO BOX OFFICE 73236 – 00200, NAIROBI.
14. KENYA POLICE SACCO BOX OFFICE 51042 – 00200, NAIROBI.
15. KINGDOM SACCO BOX OFFICE 8017 – 00300, NAIROBI.
16. MAGEREZA SACCO BOX OFFICE 53131 – 00200, NAIROBI.
17. MAISHA BORA SACCO BOX OFFICE 72713 – 00200, NAIROBI.
18. METROPOLITAN NATIONAL SACCO BOX OFFICE 5684 – 00100, NAIROBI.
19. MWALIMU NATIONAL SACCO BOX OFFICE 62641 – 00200, NAIROBI.
20. MWITO SACCO BOX OFFICE 56763- 00200, NAIROBI
21. NACICO SACCO BOX OFFICE 34525 – 00100, NAIROBI.
22. NAFAKA SACCO BOX OFFICE 30586 – 00100, NAIROBI.
23. NASSEFU SACCO BOX OFFICE 43338 – 00100, NAROBI.
24. NATION SACCO BOX OFFICE 22022 – 00400, NAIROBI.
25. NYATI SACCO BOX OFFICE 7601 – 00200, NAIROBI.
26. SAFARICOM SACCO BOX OFFICE 66827 – 00800, NAIROBI.
27. SHERIA SACCO BOX OFFICE 34390 – 00100, NAIROBI.
28. SHIRIKA SACCO BOX OFFICE 43429-00100, NAIROBI.
29. SHOPPERS SACCO BOX OFFICE 16 – 00507, NAIROBI
30. STIMA SACCO BOX OFFICE 75629 – 00100, NAIROBI.
31. TAQWA SACCO BOX OFFICE 10180–00200, NAIROBI.
32. TEMBO SACCO BOX OFFICE 91 – 00618, RUARAKA NAIROBI.
33. UFANISI SACCO BOX OFFICE 2973-00200, NAIROBI.
34. UKRISTO NA UFANISI WA ANGALICANA SACCO BOX OFFICE 872-
    00605, NAIROBI.
35. UKULIMA SACO BOX OFFICE 44071 – 00100, NAIROBI.
36. UNAITAS SACCO BOX OFFICE 38721– 00100, NAIROBI.
37. UNITED NATIONS SACCO BOX OFFICE 2210-00621, NAIROBI.
38. WANAAANGA SACCO BOX OFFICE 34680 – 00100, NAIROBI.
39. WANANDEGE SACCO BOX OFFICE 19074 -00501, NAIROBI.
40. WAUMINI SACCO BOX OFFICE 66121 – 00800, NAIROBI.

Source: SASRA (2016)
KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

Our Ref: D53/CTY/PT/32422/2015
DATE: 2nd November, 2018

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR BWIRE CHARITY AKOCHI — REG. NO.
D53/CTY/PT/32422/2015.

I write to introduce Bwire Charity Akochi who is a Postgraduate Student of this University. The student is registered for MBA degree programme in the Department of Accounting and Finance.

Bwire intends to conduct research for a MBA Project Proposal entitled, “Credit Risk Management and Financial Performance of Deposit Taking Savings and Credit Co-operative Societies in Nairobi City County, Kenya”.

Any assistance given will be highly appreciated.

Yours faithfully,

[Signature]

PROF. PAUL OKEMO
DEAN, GRADUATE SCHOOL

https://mail.google.com/mail/u/0/#label/MBA+Project/FMfcgxxvzLXKrcwDqcFGrTTWGmzfjrJK?projector=1
THIS IS TO CERTIFY THAT:
MS. CHARITY AKOKHI BWIRE
of KENYATTA UNIVERSITY, 61253-200
Nairobi, has been permitted to conduct
research in Nairobi County

on the topic: CREDIT RISK
MANAGEMENT AND FINANCIAL
PERFORMANCE OF DEPOSIT TAKING
SAVINGS AND CREDIT CO-OPERATIVE
SOCIES IN NAIROBI CITY COUNTY,
KENYA

for the period ending:
14th February, 2020

Director General
National Commission for Science,
Technology & Innovation

THE SCIENCE, TECHNOLOGY AND
INNOVATION ACT, 2013
The Grant of Research Licenses is guided by the Science,
Technology and Innovation (Research Licensing) Regulations, 2014,

CONDITIONS
1. The License is valid for the proposed research, location and
specified period.
2. The License and any rights thereunder are non-transferable.
3. The Licensee shall inform the County Governor before
commencement of the research.
4. Excavation, filming and collection of specimens are subject to
further necessary clearance from relevant Government Agencies.
5. The License does not give authority to transfer research materials.
6. NACOSTI may monitor and evaluate the licensed research project.
7. The Licensee shall submit one hard copy and upload a soft copy
of their final report within one year of completion of the research.
8. NACOSTI reserves the right to modify the conditions of the
License including cancellation without prior notice.

National Commission for Science, Technology and Innovation
P.O. Box 36023 - 00100, Nairobi, Kenya
TEL: 020 400 7000, 0713 788787, 0735 404245
Email: dp@nacostil.go.ke, registry@nacostil.go.ke
Website: www.nacostil.go.ke