

**EFFECT OF LOAN POLICIES ON FINANCIAL PERFORMANCE OF CHURCH  
BASED SAVINGS AND CREDIT CO-OPERATIVE SOCIETIES IN KENYA**

**BY**

**MATTHEW KYALO MAITHYA**

**MSC/15/05795**

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## DECLARATION

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

Signed.....

Date.....

Matthew Kyalo Maithya

Msc/15/05795

This dissertation has been submitted for examination with my approval as the candidate's university supervisor.

Signed.....

Date.....

Dr. Briggite Okonga

Lecture, School of Business and Public Administration

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## **DEDICATION**

This project is dedicated to my late Mum, Katheke and my father Maithya who inspired my education at my early age, my beloved wife Jane Muthoni, my sons Mark and Luke for their inspiration to further my studies. It is also dedicated to my mentor Dr. Sammy Mutisya of Maasai Mara University and my spiritual father Dr. Bishop G.N Kambo of Full Gospel Church Kenya –Narok County for their enormous resources support in all my studies. I also dedicate this project to my pastor, brothers, sister, work mates for their constant reminder that i ought to be a role model in life, and more so, in academics.

## **ABSTRACT**

Savings and Credit Co-operatives Societies sector in Kenya has been very vibrant. It has grown to touch every part of our society and sector, but in all these sectors SACCOs are required to adhere to certain loan policies and regulations set by management internally and by SACCO Societies act (2008) for them to be financially sustainable. Therefore the objective of this study was to provide an understanding of how loan policies affect the financial performance of church based SACCO's and bridge the knowledge gap that exists. This study was geared to provide an understanding on how specific loan policies affect the financial performance of SACCO's established and run by churches in Kenya in order to bond the knowledge gap that may have existed. The study adopted descriptive research design study in which secondary data from SASRA reports and the published audited financial statements. The data was gathered between the period 2011 to 2015 for 33 church based SACCOs both registered by SASRA and those regulated by county cooperative commissioner. The study made use of regression analysis to analyze the data by equating dependent variables to the independent variable. All the hypotheses were tested by the researcher in the study and the findings were presented using tables. STATA was utilized to analyze the data collected in this research, as the researcher deems it to be the most appropriate, given its versatility and considering the nature of the data collected. The study found that, loan policies have insignificant effect on ROA of church based SACCOs according to the evidences gathered since the *p*-values were more than the acceptable significance level therefore there is a weak negative relationship between loans lending policies and ROA. There is also weak positive relationship between non performing loan and ROA as well as loan insurance cover policy with ROA. The study recommends that this SACCOs should review their loan policies regularly in order for them to remain competitive against changing financial environment.

**Keywords:** Church, Affect, Financial Performance, Registered SACCOs, Policy

## TABLE OF CONTENTS

<b>DECLARATION .....</b>	<b>i</b>
<b>ACKNOWLEDGEMENT.....</b>	<b>ii</b>
<b>DEDICATION.....</b>	<b>iii</b>
<b>ABSTRACT.....</b>	<b>iv</b>
<b>TABLE OF CONTENT .....</b>	<b>v</b>
<b>DEFINITION OF TERMS.....</b>	<b>viii</b>
<b>ABBREVIATION.....</b>	<b>ix</b>
<b>LIST OF TABLE AND FIGURES.....</b>	<b>x</b>
<b>CHAPTER ONE.....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.1 Background to the study.....	1
1.1.1 Loan Policies.....	2
1.1.2 Financial Performance.....	3
1.1.3 Overview of Church Based Savings and Credit Co-operatives Societies in Kenya .....	3
1.2 Research Problem.....	4
1.3 Research objectives.....	6
1.4 Research Questions.....	7
1.5 Significance of the study .....	7
1.6 Delimitations of the Study.....	8
1.7 Assumptions of the study.....	8
<b>CHAPTER TWO.....</b>	<b>9</b>
<b>LITERATURE REVIEW.....</b>	<b>9</b>
2.1 Introduction.....	9

2.2 Theoretical Review.....	9
2.2.1 Delegated Monitoring Theory.....	9
2.2.2 Modern Portfolio Theory.....	10
2.2.3 Credit Risk theory .....	11
2.3 Empirical review.....	11
2.3.1 Loan lending policy and SACCO financial performance .....	12
2.3.2 Default loan policy and SACCO financial performance.....	13
2.3.3 Loan insurance cover policy and SACCO financial performance.....	16
2.4 Knowledge Gap.....	17
2.5 Conceptual framework.....	18
2.6 Operationalization of terms.....	18
2.7 Hypotheses.....	19
<b>CHAPTER THREE.....</b>	<b>20</b>
<b>RESEARCH DESIGN AND METHODOLOGY.....</b>	<b>20</b>
3.1 Introduction.....	20
3.2 Research Design.....	20
3.3 Target population.....	20
3.4 Sample size and sampling techniques.....	21
3.5 Data Collection Instruments.....	21
3.6 Data Analysis & Presentation.....	22
3.7 Diagnostic test.....	23
3.7.1 Multicollinearity.....	23
3.7.2 Autocorrelation test.....	23
3.7.3 Heteroscedasticity .....	23
3.7.4 Hausman test.....	24

3.8 Ethical Considerations .....	24
<b>CHAPTER FOUR.....</b>	<b>25</b>
4.1 Introduction.....	25
4.2 Descriptive Data Analysis.....	25
4.3 Diagnostic test.....	26
4.3.1 Correlation matrix of the study.....	26
4.3.2 Test of multicollinearity between independent variables.....	26
4.3.3 Heteroscedasticity.....	27
4.3.4 Test for Normality.....	27
4.3.5 Hausman Test.....	28
4.4 Fixed and Random Effect Regression on Return on Assets .....	28
<b>CHAPTER FIVE.....</b>	<b>30</b>
5.1 Introduction.....	30
5.2 summary of major findings.....	30
5.2.1 Effect of loan lending policies on return on assets.....	30
5.2.2 Effect of Defaulted loans policies on return on assets.....	30
5.2.3 Effect of loan insurance policy on return on assets.....	31
5.4 Recommendations.....	31
5.5 Areas of further studies.....	32
5.6 Limitation of the study.....	32
<b>REFERENCES.....</b>	<b>33</b>
<b>APPENDICES</b>	



## DEFINITION OF TERMS

**Affect:** An indication of how policies influences financial performance of Church based SACCOs in Kenya (Damaris2014).

**Church:** Formal organization that is set out to accomplish spiritual and moral purposes, and has force to be figured by general public (Kiundu, 2012).

**Financial Performance:** it is a of well measure of how well SACCOs are utilizing their assets to generate income, the primary indicators profits, return on investments return on assets, all this guides the management on policy making and improve their viability(Al-mazari,2011)

**Policy:** Basic principles which guide SACCO management decisions on loan administration under all circumstances within the framework of their objective and management values, Kamisitu Sacco loan policy (2009).

**Registered SACCO:** A SACCO which is active and files their Audited financial statements with County Co-operative office.(SASRA 2011)

## **ABBREVIATIONS AND ACRONYMS**

**AGM** : Annual General meeting

**BOSA:** Back office saving account

**CAPM:** Capital pricing model

**CBK:** Central bank of Kenya

**CITAM:** Christ is the answer ministries

**CRB** : Credit reference bureau

**DTS:** Deposit taking SACCOs

**FOSA:** Front office saving account

**KCA:** Kenya College of Accountancy

**KSH** : Kenya Shillings

**KUSCO:** Kenya union of saving and credit co-operatives.

**NGO:** Non -Governmental organization

**NPL** : Non-Performing loans

**SACCO:** Saving and credit co-operative society.

**SASRA:** SACCO society regulatory authority

**WOCCU:** World Council of Credit Unions

## LIST OF TABLE AND FIGURES

<b>Figure 2.1: Conceptual Framework.....</b>	<b>19</b>
<b>Table 2.1 Operationalization of Variables.....</b>	<b>19</b>
<b>Table 3.1 Target Population.....</b>	<b>22</b>
<b>Table 3.2 Sample Size.....</b>	<b>22</b>
<b>Table4.1 Descriptive Statistics.....</b>	<b>26</b>
<b>Table 4.2Correlation Matrix of the Study.....</b>	<b>26</b>
<b>Table4.3 Test of Multicollinearity.....</b>	<b>26</b>
<b>Table 4.4 Chi-Square Values for Breuch-Pagan LM Test.....</b>	<b>27</b>
<b>Table 4.5 Skewness/Kurtosis Tests for Normality.....</b>	<b>28</b>
<b>Table 4.6 HuasmanTest.....</b>	<b>28</b>
<b>Table 4.7 Fixed and Random Effect Regressions on Return on Assets.....</b>	<b>29</b>

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Financial and non-financial institutions are gradually changing and responding to ever changing economic and social environment by adopting new approaches and models which must be guided by written policies. These guidelines assist them to develop financial and legal support systems pertaining to financial transaction to suit different environments and operations, Al-Jarhi, et al., (2010).

Church is known to initiate economic and social projects to serve several purposes which include poverty eradication among the church members. This is done by offering financial, non-financial support and evangelizing to non-believers (Kiundu 2012). The prosperity mind set has compelled people to take advantage of the church set up to innovate on how they can pool their meagre resources together to make savings and investments, which is difficult for an individual to achieve. This is how SACCOs have fought their way to church environment but regardless of their operating environments, these church based SACCOs must be guided by loan policies. Precisely, the SACCO sector in Kenya is very vibrant and therefore to ensure stability, loan policies are key pillars to this key sector in the Kenyan economy (WOCCU, 2013). Ironically, the management committees of these church based SACCOs are at the same time the spiritual leaders of the borrowers. Therefore familiarity between the SACCO members and management committees may result to less compliance and sidestepping of such policies which affect the SACCO's financial performance.

Loan policies, being internal guidelines on loan transactions are very vital for any microfinance success regardless of the sector and environment in which they operate. In some instances trust may override the internal controls instituted by the management due to familiarity. In a church based SACCO, the staff, members and management committee are largely drawn from the same church. Therefore loan policies and terms as per the Co-operative Society's Act, 2008 are very significant to avoid any conflict of interest as they must be adhered to in any decision making regardless of the operating environment (Hannah, 2015).

SACCOs have remained the most renowned and instrumental players in the provision of financial products and other services compared to any other financial institutions (Ergetew, 2015). They provide savings, credit and other investment support to a large portion of the population. This is why SACCOs in different sectors and environments must develop loan

policies to guide their operations, ensure best business practices are adhered to, guarantee maximum loan recovery and adherence to credit terms (Alam and Jahan, 2011).

### **1.1.1 Loan Policies**

These are guidelines and terms which every SACCO regardless of the sector or environment must adhere to when dealing with loan transactions, Co-operative Societies Act (2008). They must be in writing and applicable to different types of loans. There are no loan policies that are applicable to all SACCOs because each SACCO operates in a different sector and environment in the Kenyan economy Kiragu et.al., (2014). Every financial institution when setting its loan policies should concentrate on loan lending terms, loan collection and risk cover policies among others, Pandey (2012). Loan policies for different loans in the SACCO portfolio is vital for the appraisal process where loans may be approved by the committee on monthly basis or continuously as the application forms are received. Different loans have diverse recovery periods varying from twelve months to seventy two months. Therefore the interest received by the SACCO in each financial year will influence its financial performance. Loan policies which include loan interest rates and repayment periods are key pillars that provide the framework for any successful credit management. They also streamline operations to ensure uniform and best financial practices (Thornburg, 2000).

Therefore all SACCOs are required to implement these loan policies by outlining the minimum standards expected in prudent financial management. In this study, the researcher will concentrate specifically on how loan lending terms, collection of defaulted loans and insurance policies affect church based SACCOs' financial performance. It is therefore the obligation of the supervisory or credit committee (who are elected from amongst the SACCO members) to ensure strict adherence to loan policies, Kirangu (2014). However, in a church set up these committees are comprised of key church leaders and/or volunteers who lack the incentive, motivation and time to make a close follow up on loan repayments. In some cases, loans may become delinquent while the committees still act in trust that all is well and the borrowers will pay if given more time.

These policies must be approved by SACCO members in their annual general meetings (AGM), which are then registered with the ministry of co-operatives in respective counties. The supervisory or credit committee refer to these policies when dealing with loan administration. Nevertheless, in a church set up due to trust and familiarity among the committee members, some of the by-laws may be overlooked, Hannah (2015). In addition,

when these set policies do not work, Viktar (2014) asserts that the management may proceed to incorporate loan collection agents. These are professional bodies or individuals who are licensed to assist financial institutions or individuals on recovery of overdue loans. These collection agents charge a fee which is determined by the size of the overdue amount, an expense in the SACCOs' income statement.

Whenever a borrower defaults on his/her loan obligations, the loan policies applied depend on the characteristics of the lender as well as the internal control systems instituted by the management and supervisory committee, which is a challenge to church based SACCOs, being a new development. It is a question of concern for this study.

### **1.1.2 Financial Performance**

Financial performance is the outcome of an organization's policies and procedures in monetary terms. Therefore, SACCOs' financial performance is a result of several activities undertaken by the management guided by the laid down loan policies. This is indicated by operating income, return on assets and earnings before interest and taxes, which are computed by comparing different items in financial position statement and the statement of comprehensive income, Nancy (2011).

Financial performance involves gauging the results of a financial institution's policies and operations in financial terms. This has been done by calculating the firm's return on investment and return on assets (ROA). This falls within the realm of performance measures on the ability to generate income based on SACCO's assets, Gatuhu (2013). Nancy (2011) asserts that a loan either long term or short term is a major asset and revenue generator of a SACCO which affects the financial performance of all types of SACCOs. The financial performance of financial institutions depends on return on assets (ROA) invested in the business. Therefore when analyzing these SACCOs' financial performance the researcher is concerned with loans advanced, the non performing loans and insurance premiums recovered in a given financial year, all these expressed to total assets and total value of loans respectively.

### **1.1.3 Overview of Church Based Savings and Credit Co-Operative Societies in Kenya**

Church based SACCOs are a new development compared to the traditional SACCOs. Currently there are 10 church-based SACCO's in Kenya registered and regulated by SACCO Society Regulatory Authority (SASRA), (SASRA Report 2015), while the rest are registered and regulated by the county co-operative commissioner. In history, churches have engaged in important economic and social activities affecting human development. They enjoy a Godly influence that contributes to the effective performance of their activities, Kiundu (2012).

Whenever there are any injustices in the economic, political and social areas the church has not shied away from publicly questioning; the church is involved in all areas of our lives. They operate in the rural areas, marginalized areas and in urban areas among the rich and influential. They also operate in other places yet to be reached by Non- Governmental Organizations (NGOs). Churches have existed for a long time than any other organization and are closely connected to the lives of the general public and are strongly rooted in the community.

Churches have a developed structure where members are organized into small informal and formal groups. Members of these groups perform their activities in such settings and strive for common shared goals within the church, Kiundu (2012). Furthermore church members are involved in providing voluntary contribution to activities that the church organizes. They are also committed to fighting poverty and other calamities among their members and community. This is how SACCOs have found their way to the church environment. Church does not only focus on quantitative growth of the congregation but also on qualitative development of its faithfuls (Dreyer 2004). A research conducted in South Korea on religious groups on what needs to change in the local churches to enhance confidence and credibility, revealed that church involvement in the economic welfare of its congregation is essential (GH Korea, 2016). SACCOs were initially establishment with a concern to accord low and middle income population an opportunity to save and borrow at more favorable terms as compared to commercial banks (Chambo, 2005). Church based SACCOs were established on the same idea to provide financial assistance to the clergy and church staffs, but eventually have ended up accommodating other church members and the general public in order for them to grow in membership and financially. These SACCOs are managed by the church members through voluntary or elected committees from amongst themselves. The SACCOs are present in Episcopal, Evangelical, Pentecostal churches and other Christian organizations like the Bible society of Kenya. The attached (Appendix 1) is a list and data of church based SACCOs regulated by SASRA and office of the County co-operative commissioners in Kenya which was considered in this study.

## **1.2 Research Problem**

The concept of common bond of SACCOs in Kenya is changing and evolving. Initially SACCO formation involved interested members who are in the same occupation, activities or geographical area (Mwalimu SACCO, Matatu SACCO, Ukulima SACCO,). However SACCO industry has witnessed opening up of the common bond such that a teacher based SACCO is

now serving business persons, farmers, employees of other organizations. A farmer based SACCO is equally serving the entire community so long as such persons are economically active. This opening up of the common bond has resulted to birth of church based SACCOs in Kenya which has presented new challenges. This includes the loan collection policies whose strength is anchored on social and collaterals which are becoming less effective (SASRA 2013).

Traditional SACCOs, those bound by common activities and those bound by common employer most of them have SASRA rules and regulations to go by. On the other hand the church-based SACCOs are guided by church doctrines which advocate for sincerity and honesty among members and in addition they also operate within the SASRA rules and regulations. Despite this double protection, church based SACCOs just like those operating under SASRA rules and regulations in Kenya are collapsing due to poor policy and governance application. These include La Nyavu SACCO which was operated by CITAM church and Good life SACCO which was operated by Good shepherd Ministries in the year 2015 (Mkala, 2015). Non church based SACCOs have also collapsed, such as: Tena and Ulinzi SACCO which was put under liquidation due to bad governance, Isiolo Teachers SACCO and Ogembo Tea SACCO which collapsed due to non-compliance with SASRA regulatory requirements (SASRA, 2012). This shows that many SACCOs from other sectors are unable to meet the demands of their clients due to poor loan policy application. They are alleged to have swindled their members' funds or just benefited few officials through corrupt deals, misapplication of policies and poor governance.

Diverse studies have been done on the success of SACCOs in various sectors. For instance Faith (2015) studied on financial performance of SACCOs in the Agriculture sector in Kenya and concluded that there was lack of professionalism in areas of loan management. This was attributed to the presence of favoritism and external influence which negatively affected financial performance. A study on loan collection policies in traders' SACCOs in Ilala municipality in Tanzania, shows that there was need to have effective supervision of borrowers to ensure that loan repayment is frequently done (Stella, 2012). The researcher emphasized that this would help reduce loan delinquency that affects SACCOs' financial performance and further adds that loan policies applied by SACCOs in this sector influence growth and financial performance. In his recommendations to rural banks in Ghana Owusu (2008) asserted that credit policies should be carefully applied in the appraisal of credit application in order to avoid inherent credit risk and guide decisions making process.



It was observed by Beck and Honohan (2007) in their study on microfinance institutions in Nigeria that SACCO loan repayment process is not being taken seriously by the members. This is due to poor loan collection methods, lack of suitable securities and low interest rate charged. This intimidates their existence in future since they will not be in a position to grant long term loans. SACCOs in the banking sector, a case study of Family bank of Kenya by Kiaritha, (2014) revealed that financial performance is influenced by loan policies applied by management. Musundi (2015), researched on factors affecting financial performance in the Matatu sector SACCOs in Thika municipality and concluded that the SACCO management should have strict guidelines on loan administration. Maingi (2014) on the other hand studied factors affecting the financial performance of SACCOs in Kenya in different sectors and established that effective loan policies and the credit functions are fundamental to all SACCOs' financial stability.

Regardless of sound loan policies, conflict of interest and church splits affect the financial success of church based SACCOs'. Church leaders who are in influential positions make decisions on behalf of the entire church with minimum or no consultations and consideration of other related projects which include these SACCOs. Such decisions override any loan policy in place (Faith, 2015). While the above research outcomes provide insights on loan policy application, there is no known study to the researcher which has been done on church based SACCOs despite huge investments. Therefore the knowledge gap is present as to whether SACCOs in this sector are affected by loan policy application. Thus this study was pursuing to ascertain the effect of loan policies on church based SACCOs' financial performance

### **1.3 Research Objectives**

The general objective of this study was to determine the effect of loan policies on financial performance of church based SACCOs. The following were specific objectives:

- i. To determine the effect of loan lending policies on financial performance of church based SACCOs.
- ii. To establish the effect of defaulted loan collection policies on financial performance of church based SACCOs.
- iii. To establish the effect of loan insurance policy on financial performance of church based SACCOs.

#### **1.4 Research Questions**

- i. What is the effect of loan lending policy on financial performance of church based SACCOs?
- ii. What is the effect of defaulted loan collection policy on financial performance of church based SACCOs?
- iii. What is the effect of loan insurance policy on financial performance of church based SACCOs?

#### **1.5 Significance of the Study**

The results of this study can be used as a basis of designing loan policies in order for the SACCOs in a church environment to improve their financial performance and smoothen their service delivery. This study can help the SACCO sector in general to identify the factors that create non-performing loans and put in place effective strategies to curb the vice. The findings of this study will be available to the leadership of churches operating SACCOs as a reference when designing different loan products, loan recovery strategies and actions to be taken on non performing loans resulting from unseen calamities.

SASRA can find useful information that would help in formulating policies that will lead to regulating of Deposit Taking (DTAs) SACCOs in these church based SACCOs. As SACCOs grow the authority must come up with policies that address their specific challenges within the sector so as to facilitate faster growth with minimum setbacks. County co-operative commissioners can get information to guide church based SACCOs in formulating policies that will help in loan administration and also the SACCO sector in general.

The research paves way for other researchers interested in new developments in the SACCO system, to learn from it and expand their research on this area of SACCO policies that is still growing but has scanty and unreliable information due to the ever changing SACCOs' common bonds. It helps to unearth yet unknown information that will go a long way in facilitating further understanding of the loan policies affecting SACCOs financial performance in general. It also contribute to the existing body of knowledge and fill the gap on loan policies influencing financial performance of SACCOs. Finally, it acts as a source of reference material to other scholars.

### **1.6 Delimitations of the Study**

The study was limited to only church based SACCOs and to only three loan policies. This was due to time and budget constraints, and for this case the researcher has concentrated only on policies published in the SACCOs' websites, SACCOs' audited financial statements, and SASRA reports. Despite all this the researcher has balanced the desired level of accuracy of estimates where applicable and was fairness was maintained throughout the data collecting process.

### **1.7 Assumptions of the Study**

The researcher assumes that SACCOs' financial performance is only affected by loan policies applied by the management. Moreover, the study also assumed that the data collected from the published financial statements is truthful, comprehensive and up to date. As well, it is assumed that the instruments applied measured what they are intended to measure fairly.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

In this chapter the researcher has reviewed theories and literature relevant to this study. Moreover, the chapter will present the study's conceptual framework, critiques, summary and knowledge gap.

#### **2.2 Theoretical Review**

There are several important theories which can be applied by financial institutions inclusive of these church based SACCOs. These theories explain how loan policies and available credit information can be best utilized. These theories include:

##### **2.2.1 Delegated Monitoring Theory**

This theory was developed by Diamond (1996), and it explains the process by which financial institutions and SACCOs are significant in providing financial intermediation services. According to this theory, funds are transferred from savers who make deposits and ultimately enabling SACCOs to act as the delegated monitors by advancing loans to borrowers. The key element in this theory is the analysis of the cost benefit of recovering funds advanced. This is possible through the collection of the required borrowers' information with the aim of minimizing loan default. In addition, these financial institutions impose terms and conditions on the borrower such time and interest. These terms and conditions ensure efficient loan recovery by restricting the borrowers from shifting priority to other obligations other than honoring their SACCO loans.

The idea behind this theory is that the SACCO management should incline much of their time and expertise in monitoring their borrowers' loan repayment schedules in order to minimize the default risk and maximize interest recovered within a given period (Saunders, Cornet 2005). In order to adequately monitor their borrowers' repayment patterns, the church based SACCOs exchange information with third parties. This may be beneficial or detrimental to the SACCOs' loan policies and operations since most of these SACCOs are headed by prominent and influential spiritual leaders. Therefore, any exposure will adversely affect their reputation and that of the church at large and may have a spillover effect to other SACCOs affiliated to the church.

Credit Reference Bureau (CRB) has tried to bridge the gap of information asymmetry between different microfinance institutions Kimasar,et el.,(2012). Whenever there is information asymmetry between the saver and borrower, either party may act in their self-interest which will result to loan default or failure to honor the terms stipulated in the loan contract. This will result to losses of loan interest, forcing SACCO management to impose default penalties at higher percentages in order to force the borrowers to make their remittances on time ( Marius 2008). These terms refer to loan interest rates and loan repayment periods according individual SACCO's standards which vary from one SACCO to another, Kakuru (2000). Loan lending policies dictate interest received on advanced loans. Short term loans attract high interest rates while minimizing the risk of loan default thus high financial performance.

### **2.2.2 Modern Portfolio Theory (MPT)**

The Modern Portfolio Theory explains how a loan portfolio can be used to maximize returns and minimize loan default risk by carefully combining different loan types. The idea behind this theory is that, the loans in a given portfolio should be selected with consideration on the effect they have on each other's returns. This theory was developed by Markowitz (1991) where he argues that investors are risk averse. The theory explains how an individual or institution can achieve the highest returns by practicing diversification of loans in a given loan portfolio. This takes care of borrowers' diverse loan needs and also minimizes loan default risks during adverse economic times.

Craig (2016) asserts that risk and return are correlated meaning that an investor must take on higher risk to achieve greater returns. This thought has been reinforced by Capital Pricing Model (CAPM) which is a theory based on the notion that the risk of a given unit's return is a sum of its systematic risk which is a consequence of its operating environment. The underlying idea is that the performance of a firm is directly linked to its economic environment and its asset portfolio. The practical reality of this is evidenced in SACCOs because the demand and default of different loans is influenced by incomes/earnings of the members and incase of default it will inject cost to the income statement.

Therefore SACCOs management should design different loan types which take advantage of different circumstances and operating environments faced by the borrower. Increasing the loan ceiling as per the result of this study has a negative effect to the SACCO financial performance. In practice, there is increased demand for general developments when SACCOs have enough cash in circulation, emergency loans when the members are faced with

unforeseen circumstances, holiday loans at the end of the year and asset financing loans when the borrower anticipates to acquire an asset. These different types of loan when backed with good loan policies will improve the SACCOs' cash flows and oblige the borrowers to service their loans promptly in order to reduce the risk of loan default and auctioning of assets pledged as security or denial of loans to guarantors (Mwengei, 2013). However, in most instances church based SACCOs are characterized with sidestepping of internal control systems put in place due to trust and faith in their members which results in loan defaults.

### **2.2.3 Credit Risk Theory**

Even though people have been confronting credit risk ever since early ages, there has been very scanty literature on the same. This theory was introduced by Melton (1974), it is the most important of all others in financial management (Crosbie et al., 2003). It asserts that the management should monitor all the information including screening of the borrower's ongoing creditworthiness and ensure that the borrower adheres to the terms of the contract. It also explains how financial institutions like SACCOs can deal with uncertainties when they arise during credit servicing period. According to (Ibrahim, 2004) money loaning continuously encompasses some features of risks arising from situations which result from the failure to honor loan obligation when they fall due.

The theory asserts that, uncertainties which result from unpreceded default can be caused by events that are beyond the control of the management. Therefore the SACCOs need to hedge themselves from such a risk by transferring the risk to third parties such as insurance companies. This entails recouping some amount as premiums from the loans dispatched to members at a given rate. This amount is recognized in the income statement as other operating incomes as this amount is far more than the amount remitted to the insurance company. In view of this reality it is therefore understandable why research effort need to be dedicated to this phenomena of risk hedging by SACCOs. This is very important especially on community based SACCO which do not depend on common check off system.

Therefore this theory when applied to the SACCO loan administration will help the management to hedge their financial transactions against any unforeseen happenings and take an insurance policy.

### **2.3 Empirical Review**

In this section the researcher has reviewed studies on each objective by other researchers on loan policies of microfinance institutions and their effect on financial performance. For

purposes of this study the researcher has review studies done from global perspective and narrowed down to local viewpoints.

### **2.3.1 Loan Lending Policy and SACCO Financial Performance**

These are terms and guidelines which any borrower should adhere to before and after loan advancement. They are the most key features of any financial institution and cannot be ignored by any enterprise engaged in money lending business regardless of nature and environment of their operation. The terms are put in place to ensure that borrowers easily honor their obligations with minimal cost to the institution. Drzik, (2012) discussed these policies as interest rates, time and the procedures the lender will use to collect all the amount due from the borrower.

Normally loan principal is recovered in installments including the loan interest. The loan policies dictate installment periods and the interest rates, which vary from one loan to another. For instance in some SACCOs loans recovery may be thirty six months and below while in others the period may be extend up to seventy two months. The interest rate may vary from the recommended 12% to 15% per annum depending on the loan type. These are internal controls applied by the SACCO management in the administration of different loans (Nancy 2011).

Lending terms of financial institutions presented a moderate positive correlation between borrower's loan size and repayment period as opined by (Ozdemir, 2004) in Turkey. In his study, he revealed that the amount of loan advanced is influenced by the borrower's level of income. He argued that the starting point of any sound lending terms must begin with establishing legitimate financial needs of the potential borrower but not the financial performance of the microfinance firm. Therefore the lending institution must ensure that loan terms are constantly updated because they will affect the growth, stability and economic wellbeing of the financial institution. However, there was no mention on how these lending terms affect financial performance in his study. In Nigeria Chigozie et al., (2013) focusing on the SACCO sector, observed that although risky, lending is the key business of any financial institution. They argued that lending was evil and management of this microfinances are advised that they should put in place sound loan administration policies and an effective and efficient machinery to monitor loan repayments with well established guidelines. Nevertheless, they only gave general knowledge on this loan guidelines therefore the researcher has made effort to relate the loan policies to the financial performance of the church based SACCOs.

Locally, studies have been done on this topic but concentrating on Deposit Taking SACCOs (DTAs) and on specific counties and sectors. For instance, Ngugi (2015), Ikua (2015) and Damaris (2014) all opined that credit terms and guidelines have a positive correlation to the financial performance of DTAs. However, this study has created diversity by looking at lending terms and on SACCOs operating in different environments and specifically in a church set up. Financial performance of SACCOs can also be affected by financial innovation, credit management and working capital management as concluded by (Kennedy et al., 2016) on their study. These variables tested positive in relation to financial performance on their study on factors influencing financial performance of SACCOs in Kilifi County.

More research has been done on SACCOs characterized by a common check off system environment. For instance in the study by Ndubi, (2006) on how SACCOs are responding to the changing operating environment he didn't mention social environment, which is a characteristic of this church based SACCOs. Others like Ajiambo, (2010), Nzaywa, (2013) who studied on the relationship between loan policies and financial performance, concentrated on SACCOs in Nairobi County, and there was no mention of social based SACCOs. This research has diversified on SACCOs operating in different environments, look at specific lending terms and how collecting defaulted loans affect financial performance of church based SACCOs. In any financial institution the management has the responsibility of putting in place these terms and conditions within the confines of their finance management practices and environments Pandey, (2012). These will also ensure that the borrowers are aware of the requirement of each loan and that the same credit issues are not discussed, visited and reviewed every time a member puts forward a loan request. This will also ensure that decisions are consistent and fair and that members applying the same type of facility get standard treatment Dermine et al., (2006). Whether the application of these loan policies affect the financial performance of these church based SACCOs was a research question of this study. No prior well-known study has examined these church based SACCOs which are volatile since they are built on faith and trust.

### **2.3.2 Defaulted Loans Collection Policy and SACCO Financial Performance**

The divergence of loan products by SACCO sector in Kenya must be done with thoughtfulness and far-sightedness in order to mitigate large percentage of risk. The SASRA supervision report of 2011 indicated that loans accounts to three quarters of the total assets in SACCOs balance sheet. The pace of loans recovery has therefore been an uphill task as the average gross non-performing loans (NPL) stood at 9.6% for DTAs contrary to the SASRA regulations which provide that the non-performing loans level should not exceed 5%. Therefore for any



microfinance institutions to be stable and sustainable, they must ensure strict loan policies adhere to SASRA regulations which will ensure high loan repayment, deal with loan delinquency and minimize the cost of loan recovery of all advanced loans. Loan default is the failure to pay back the amount advanced to the borrower either by choice or due to change of circumstances which may make the debtor unable to honor his or her obligation (Keiteny 2013). The defaulted loan will be a cost to the SACCO in terms of delayed interest, high recovery cost and administration cost associated with loan follow up and this will affect the capital, asset, earnings and liquidity of the SACCO (Fofack 2005).

In Malaysia, for the period 1996 to 2002 a study done by (Ahmad et, al 2004) compared social SACCOs and conventional SACCOs. Their results revealed that variables namely, management efficiency and weighted average of total assets had positive relationships with loan defaulting. However, the study didn't pin point how specific loan policies on loan default costs in the SACCO portfolios affect their financial performance. Social factors showed a weak influence on loan default by SACCOs in Baringo County as compared to economic factors, but these church based SACCOs are spread in other counties rather than Baringo County (Mitei at el., 2016). Therefore this study was focusing on the same and looked at how social factors affect loan default in other parts of the country and the cost involved.

A study on financial performance of DTAs confined in the Mount Kenya region by Mugambi et al., (2015) used variables namely diverse loan products in a portfolio and credit facility management. These two variables had a positive correlation to DTAs financial performance. Therefore, this study has extended on the same and to other regions. The effect of loan terms and conditions on loan repayment granted by selected DTAs SACCOs in Nyeri county, interest rate charged on loans had also a positive relationship to loan default. Therefore this study futhered on the same and on SACCOs in other areas which are not deposit taking (Damaris et al., 2015). A research by Chege (2006) on how loan size granted by SACCOs affect loan default he concluded that changes in interest rates and different repayment schedules has positive correlation. He recommended that lower interest rates, management involvement on loan policy regulating were very vital in curbing the loan default vice. Nevertheless in his study he didn't show how this default affected the SACCO financial performance. The indications by Sindani (2012) on micro finance sector in Kenya established that credit policies formulated by the microfinance institutions which include all types of SACCOs do affect their financial performance. The study concluded that managing credit

relationships that are based upon all available customer information and consistent throughout the credit life cycle greatly increases profitability and reduces surprises.

The study on the effects of credit management practices on profitability by (Makori,2015) based on deposit taking SACCO's in Nairobi county concluded that there is need of informal relationship between management and borrowers. This will help in monitoring and early detection of potential problems that may arise in non-repayment of loans that finally affect the SACCOs financial performance. In addition, cooperation and coordination among various stakeholders provide additional support to borrowers will help them succeed in financial management. However, this study has extended and covered non-deposit taking SACCOs based on different environment rather than Nairobi county. Mwaura (2005) asserted that loan recovery is a recurring worry for overall SACCO sector in Kenya. Moreover, he also opined that recycling of cash is key, without which SACCO's cash flow and assets are in jeopardy. This will result to shareholders lack benefit of their investment unless borrowers are encouraged to adhere to the SACCOs loan policies. The survival of any SACCO or any other micro finance institutions relies heavily on their capacity to manage their loans efficiently and effectively Mwaura (2005). The socially formed SACCOs are faced with several challenges in effort to introduce workable reforms and policies to improve on their financial performance due to familiarity between the management and the members and therefore this has motivated the researcher.

Huge SACCOs losses are caused by outright loan default due to inability or unwillingness of a borrower to adhere to set standards and policies in relation to loan repayment which will result to deterioration of SACCO credit quality Oloo (2013). When loans become non-performing, SACCO's balance sheet and cash flow are adversely affected, as well as their financial performance which is measured in relation to the strength of their balance sheet and net income. This study will be of great help to determine how loan collection affect return on funds invested and whether revenue generated cover their operating expenses. Fleifel (2009) argued that one of the obstacles on improving financial performance of any micro finance institution is the lack of knowledge about the dynamics of loan recovery strategies affecting them, which may arise due to inability of debtors to meet their financial commitments when they fall due. The effect of loan recovery to the SACCO performance was a concern of this study because loan delinquency is now a threatening factor to the financial performance of the whole SACCO system in Kenya. Although some scholars argue that turbulences of national and international economic factors have impact on their financial performance the widespread loan defaults and low recovery rate on both regulated and non regulated SACCOs has special significance

(Alam et al., 2011). Therefore to ensure high financial performance all types of borrowers and stakeholders must be put into consideration when formulating loan policies to ensure effective loan management and recovery in order to curb adverse effects on the SACCO financial performance.

### **2.3.3 Loan insurance cover policy and Financial Performance**

Nowadays, loans that are advanced to any borrower must be covered by an insurance policy. This is due to uncertainties that surround the borrower's operations such as sickness, accidents, sudden loss of jobs or business or demise (Das, Ghosh 2007). This personal loan protection policy benefits the SACCO since in case of such eventualities it will not stand to lose the entire loan principal and the loan interest, Allianz insurance company (2015). SACCO's management should make quick follow up of the loan arrears as an effective way of ensuring quick loan recovery (Norell 2001). Forming solidarity groups which seek credit facility together, is also another way to ensure joint liability where each member will act as assurance of the other in honoring his or her obligations. This does not fit in all situations and circumstances especially those beyond the control of management such as death or permanent disability. For this reason, SACCOs must take an insurance cover for such unforeseen eventualities especially on personal loans.

Credit risk hedging by management is a new practice on financial management which needs to be encouraged as it was opined by Nancy (2017). She confined herself to DTAs and used variables such as credit analysis, credit monitoring and credit mitigation measures and based her study on primary data. She recommended that these measures need to be put in place to ensure that financial performance is not affected by non-repayment of loans in case of uncertainty. However, there was no mention of loan default hedging by use of insurance cover and how it affects financial performance. This is a measure which the SACCO management applies by recovering these premiums from borrower's loan at a given percentage ranging from 0.1% to 0.5%) and remitting to an insurance company. In case of these eventualities, the SACCO will be covered on the unpaid loans. However, it may not guarantee full recovery because some clients are slower in repayment while others never pay in time (Pandey, 2012) bearing in mind that this insurance policy will only cover the loans which are within the credit period. Its objective is to maximize loan recovery, thus increasing the cash flow and maintaining the bad debts at manageable limits. This amount is recognized in the income statement as other operational incomes because the amount which the SACCO earns from the borrowers in terms of insurance cover is far more than the amount which the SACCO pays to

the insurance company. Revelations by Gaitho (2010) on credit risk management practices by SACCOs in Nairobi county established that majority of them used credit risk management tools to alleviate risks during loan appraisal process. She also proved that majority of SACCOs relied mostly on the ability of loan managers for effective credit risk management practices as opposed to a system that homogenizes credit risk decisions like an insurance policy. Therefore this study was exploring on how loan insurance policy which is applicable to all types of loans advanced by the SACCO effect their financial performance.

There is relationship between risk management practices and financial performance of SACCOs as asserted by Gisemba (2010). Therefore, SACCOs must assume different strategies of risk management such as risk hedging and scrutinizing the potential borrowers before awarding credit so as to minimize cash losses. This will also include establishing loan repayment capacity of borrowers, use of sureties, borrower screening and use of risk analysis methods in attempt to reduce and manage credit risks. He resolved that for SACCOs to manage credit risks effectively they must minimize loan losses and ensure the organization performs better hence increasing the return on assets. Nevertheless, in his study there was no mention on credit risk hedging and its effect to financial performance. Makori (2015) in his study on effects of credit risk management practices on profitability of deposit taking SACCO's in Nairobi county also held the same opinion that strict credit risk governance practices had a positive and significant effect on the financial performance of SACCOs in Nairobi. Based on the findings the study concluded that credit monitoring, debt collection practices and credit risk governance practices have a positive effect on the financial performance of the SACCOs. The study recommended that management of SACCOs should adopt effective credit appraisal practices, credit monitoring, debt collection practices and credit risk governance practices to enhance effective and efficient performance. However, he didn't mention on loan risk hedging which is practiced by many microfinance institutions nowadays.

There is no much research which has been done on how insurance cover may influence financial performance of microfinance institution despite many proposals made in prior studies for instance (Nzaywa, 2011) in her study on relationship between loan policy and financial performance in Nairobi County SACCOs.

## **2.4 Knowledge Gap**

Most of the studies reviewed on different SACCO sectors do not focus on the effect of loan policies on the financial performance of the SACCOs. Therefore there is evidence of a gap in the empirical literature available. The analysis drew the need of developing good loan policies and practices in order to achieve the ultimate goals of setting up these SACCOs in the church

environment, which will result to maximizing loan recovery, adherence to loan terms, maintenance of sound return on assets and credit risk hedging.

## 2.5 Conceptual Framework

The Conceptual Framework in figure 2.1 is conceived as a functional relationship between the three predictor variables, which include loan lending policy, defaulted loan collection policy and loan insurance cover policy and financial performance as the dependent variable. It shows how specific loan policies applied by SACCOs management affect the financial performance of these church based SACCOs. The financial performance will be gauged by relating income before interest and taxes to total assets.

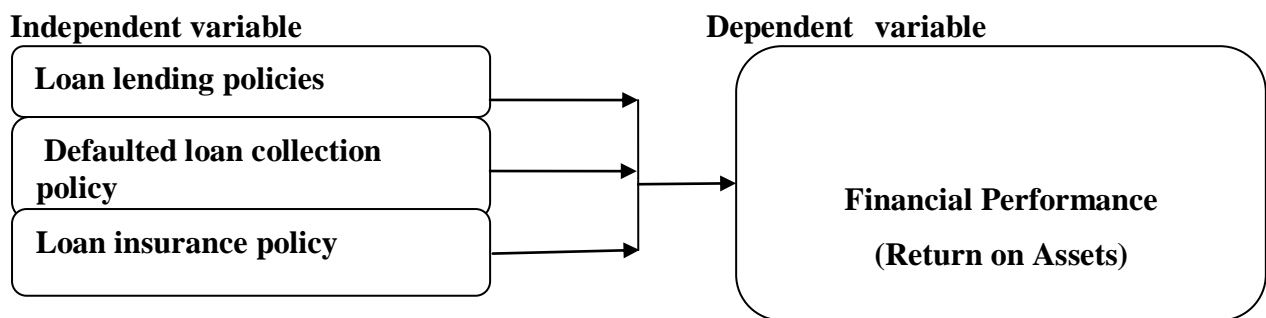


Figure 2.1 Conceptual Framework Source: Researcher (2017)

## 2.6 Operationalization of the Variables

The table below 2.1 shows how different variables has been operationalized and measured which will assist in the data analysis.

Table 2.1 Operationalization of the Variables

Category	Variable	Indicator	Measurement	Hypothesis Direction
Independent variable	Loan lending policies	Loan Ratio	Total Loans /Total assets	Positive/Negative
Independent variable	Defaulted loan collection policy	Default Rate	Non performing loans/Total value of loans	Positive/Negative
Independent variable	Loan insurance cover policy	Loan Loss Coverage Ratio	Total premiums/ Total value of loans	Positive/Negative
Dependent variable	Financial Performance	Return on assets (ROA)	EBIT /Total Assets	Positive/Negative

## **2.7 Summary of Research Hypotheses**

In order to test the relationship of the independent variables and financial performance the following hypotheses has been tested.

**H<sub>01</sub>:** *Loan lending policies have no significant effect on church based SACCO's financial performance*

**H<sub>02</sub>:** *Defaulted loan collection policy has no significant effect on church based SACCO's financial performance*

**H<sub>03</sub>:** *Loan Insurance cover have no significant effect on church based SACCO's financial performance*

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter will focus on the research design to be used, the target population of the study, the sampling design and the sample size, the data collection instruments and the data analysis techniques.

#### **3.2 Research Design**

The research design is a blueprint for conducting the research that specifies the procedures necessary to obtain the information needed to structure and solve the research problems (Cooper et.al., 2003). This study chose descriptive research design because it portrays an accurate profile of different situations and helps to determine the frequency of occurrence to which the variables are related (Kothari 2004). This was designed to portray the characteristics of a particular phenomenon. It was used to obtain information concerning the current status of SACCOs' loan policies and to survey how they affect financial performance of church based SACCOs.

The design aided the researcher to obtain information concerning the current status of the loan policies used by the church based SACCOs, related them to the objectives of the research and therefore made them relevant to the research questions. It also assisted in getting the correlation between loan lending terms, recovery of defaulted loans and the insurance cover affect financial performance (Wilson 2010).

#### **3.3 Target Population**

Target population is the entire group of characters, events or objects having a shared noticeable characteristics, which the researcher is interested in (Kothari, 2004). The population of this study is all SACCOs (whether FOSA or BOSA) under the umbrella of a church. These are found in different parts of Kenya. According to SASRA there are 10 church based deposit-taking SACCOs (SASRA Report, 2015) and 85 church based SACCOs operating back office services (BOSA) (KUSCO, 2014).

**Table 3.1: Target Population**

SACCO	Target population	Percentage
FOSA	10	10%
BOSA	85	90%
<b>Total</b>	<b>95</b>	<b>100</b>

Source: (SASRA 2015, KUSCO 2014)

### 3.4. Sample Size and Sampling Technique

Sampling is the process of selecting a number of individuals or objects from a population such that the selected group contains elements representative of the characteristics found in the entire population (Orodho, 2003). In this study the researcher used Judgmental sampling technique which involves choosing only those samples (SACCOs) which are established and the period covered was 2011-2015. Judgmental sampling is non- probability technique where researcher uses his judgement to select information from the population which he feel gives him the desired or accurate information, Godfred (2016). The sample of 33 church based SACCOs comprising of 10 FOSAs and 23 BOSAs was considered. This constutes 35% of total entire population, this sample fairly represents the whole population and was considered large enough to provide general view of the entire population and serve as a good basis for valid and reliable conclusions, Mugenda and Mugenda (2006).

**Table 3.2 Sample Size**

SACCO	Target population	Percentage	Sample size
FOSA	10	10%	10
BOSA	85	90%	23
<b>Total</b>	<b>95</b>	<b>100</b>	<b>33</b>

Source: Researcher (2017)

### 3.5 Data Collection Instruments

The study used secondary data extracted from SASRA reports, audited financial statements, SACCO loan policies, chairman's and secretary's reports and other annual returns to the county co-operative commissioner for period between 2011 and 2015 which was readily available from the church and SACCO's websites, between this period it appears that among other reasons more churches developed SACCOs to assist the post election victims who ran to their churches for help in 2007. Nevertheless, available information show that most of them become stable during this period.



### 3.6 Data Analysis and Presentation

This study used panel data which warrants sufficient data is accessible to the researcher because it contains both time series and cross-sectional dimensions, therefore minimizing biasness in variables (Kothari, 2005). Data was collected for a period of five (5) years from thirty three (33) church based SACCOs which are regulated by both SASRA and the County cooperative commissioners. Presentation of data was by use of tables. The researcher used STATA in the analysis of the data collected as this is most appropriate for the study, given its versatility and considering the nature of the data collected. Multiple regression model below was applied:

$$Y_{it} = \beta_0 + \beta_1 CR_{it} + \beta_2 LL_{it} + \beta_3 LI_{it} + \varepsilon_{it}$$

$Y_{it}$  = ROA = Financial Performance

$\beta_0$  = Constant Term

$\beta_1, \beta_2, \beta_3$  = Regression coefficients

$LL_{it}$  = loan lending policies

$DL_{it}$  = Defaulted loans policies

$LI_{it}$  = Loan insurance cover policies

$\varepsilon_{it}$  = Error

$i$  = Name of SACCO (1...33)

$t$  = Time (2011—2015).

### 3.7 Diagnostic Tests

According to Yun Shi (2013), the diagnostic test takes diverse procedures in testing hypotheses of different variables in the model, each of which makes available guidance for further stages of a regression analysis. This involved testing for linearity of all variables because if they are not linearly related the outcome of the regression study will not be true correlation and therefore insignificant in explaining the financial performance of the church based SACCOs.

#### 3.7.1 Multicollinearity

This facilitated in ascertaining extreme correlated variables causing the presence of collinearity. This test was performed in this study to detect collinearity where if not controlled

it may result to unstable parameter estimator which makes it very difficult to assess and interpret the effect of independent variables on the dependent variable. This was tested to ensure that there is no strong relationship among the predictor variables.

A mean VIF greater than 5 shows a presence of multicollinearity problem which needs to be corrected. In many cases this problem arises as a result of using too many independent variables to measure the same dependent variable. If this problem persists then, it can be corrected by dropping the variable with high VIF in order to convert the other variables which are non-significant to significant Pallat (2001).

### **3.7.2. Autocorrelation test**

For a model to produce desirable results, it should not have serial correlation or autocorrelation. When carrying out this test, Durbin's alternative test and *B-P* LM test will be done. If the probability (P) of this two tests is less than 0.05 it shows that the model is suffering from serial correlation or autocorrelation which is not desirable. According to (Durbin , 2017) serial correlation can be corrected by introducing lag of dependent variable where autocorrelation disappears after adding a new value of a period Lag.

The correlation constant (R) was calculated to establish the strength and direction between the independent variable and the independent variable. The significance of variables was done and the coefficient of determination ( $R^2$ ) used to check if the selected loan policies have any effect on the church based SACCOs' financial performance. The significance of the regression model will be determined at 95% confidence interval and 5% level of significance.

### **3.7.3 Heteroscedasticity**

This test is was done to establish if the error term in the model has constant variance, Williams (2015 ).According to Roberto (2014) the common test for heteroscedasticity is the White test. It begins by allowing the heteroscedasticity process to be a function of one or more of the independent variables in the model, and if the p-Value > 0.05 it designates that the null hypothesis can be rejected and therefore heteroscedasticity exists. This can be corrected by transforming the dependent variable.

This will be formulated as follows:

H<sub>0</sub>: Homoscedasticity

H<sub>1</sub>: Heteroscedasticity

Probability  $>0.05$  accept the  $H_0$

Probability  $<0.05$  reject the  $H_0$

### **3.7.4 Hausman Test**

Hausman test was performed to establish the model to accept between random effect model and fixed effect model. This was done to test the suitability of the model by determining the fixed or random effect within the SACCO and between the different SACCOs. The fixed effect model assumes that each of the SACCO selected is different. Therefore according to (Andale,2017) null hypothesis will be random effect model which is not appropriate while alternative hypothesis will be fixed effect which is appropriate model. Therefore if the P value is less the 0.05 the researcher will then reject the null hypothesis and accept alternative hypothesis.

### **3.8 Ethical Considerations**

Introduction letter was issued by KCA University to be presented to the selected SACCOs and County co-operative offices. This is incase the information on total loans advanced, non-performing loans and total premiums recouped in any financial year is not readily available on SACCO or church website. This assisted the researcher to gather information extensively on all the objectives of this study. This is meant to assure them that the information will purely be academic and shall be treated with all due care and confidentiality. Due to sensitivity of some of the information collected, the researcher holds a moral obligation to treat the information with utmost propriety.

## CHAPTER FOUR

### DATA ANALYSIS, RESULTS AND DISCUSSION

#### 4.1. Introduction

This chapter was useful in presenting the research results of a study on the effect of loan policies on financial performance of church-based SACCOs in Kenya. The study had targeted a total of 33 church based SACCOs both FOSA and BOSA which were considered valid and appropriate for analysis within a period of five years. This was a sample size taken from a population of ninety five church based SACCOs in Kenya. Presented first is the descriptive statistics, then the diagnostic test which included correlation analysis, test of multicollinearity, heteroscedasticity, normality test and Hausman test to determine whether to use the fixed effect model or random effect model and regression analysis to establish the linear relationship of the variables in the model.

#### 4.2 Descriptive Data Analysis

The researcher explored the study data descriptively to produce output in table 4.1 below. The sampled SACCOs had a ROA mean of 8.9% which means EBIT divided by total assets was 9%. Secondly, the loan lending policies which determines the loan ratio of the sampled SACCOs was in line with the SASRA calculation at a mean of 78.5% (SASRA 2015). Thirdly the default rate which is as a result of different loan collection policies of the SACCOs was 2.88% lower than the average rate exhibited by SASRA registered SACCOs of 5.20%. Lastly the loan insurance cover policies show that every shilling advanced as loan was covered upto 1.05%. This is far below the total average cover of member loans in the deposit taking SACCOs in case of failure to honour loan obligations. Nevertheless, this is not only the security for loans advanced but it is only loan security which has direct implications on the financial statements.

**Table 4.1 Descriptive Statistics**

VARIABLES	(1) N	(2) mean	(3) sd	(4) min	(5) max
SACCO	165				33
Year	165			2011	2015
ROA	165	0.0890	0.0939	0.00572	0.585
Loan lending policies	165	0.785	0.152	0.265	1.182
Defaulted loan policies	165	0.0288	0.0287	0	0.110
Insurance cover policies	165	0.0105	0.0104	0.000795	0.0540

**4.3 Diagnostic Tests**

A number of tests were carried out to explore various features of the study data in order to assess if it was fit for panel regression. These tests and their results are discussed below.

**4.3.1 Correlation Matrix of the Study**

Correlation was tested to establish the linear relationship of the variables in the study as shown in the table 4.2. This findings indicates there is a weak negative relationship between loan lending policies and ROA ( $r = -0.0656; p < 0.05$ ) and there is a weak positive relationship between defaulted loan policies and ROA as well as loan insurance cover policy with ROA ( $r = 0.2950, p > 0.05, 0.2653; p > 0.05$ ) respectively.

**Table 4.2 Correlation matrix of the study variable**

Variables	ROA	Loan lending policies	Defaulted loan policies	Insurance cover policies
ROA	1.0000			
Loan lending policies	-0.0656	1.0000		
Defaulted loan policies	0.2950	-0.2409	1.0000	
Insurance cover policies	0.2653	-0.0847	0.4552	1.0000

**4.3.2 Test of Multicollinearity between independent variables**

The assumption of multicollinearity was tested to ensure that there is no strong relationship among the predictor variables. The test shows how much of the variability of the specified independent variable is not expounded by the other independent variables in the model. From

the table 4.3, it can be observed the VIF has a mean 1.22 which is less than 5 showing absence of multicollinearity problem.

**Table 4.3 Test of Multicollinearity**

Variable	VIF	1/VIF
Loan lending policies	1.33	0.751567
Defaulted loan policies	1.26	0.792136
Insurance cover policies	1.06	0.941195
Mean VIF	1.22	

### 4.3.3 Heteroscedasticity

Heteroscedasticity is a major problem since it inflates the standard error thereby making the researcher not to reject the null hypothesis about a coefficient, this was tested by use of the Breusch-pagan LM test and the result were presented in table 4.4 below which indicated that since (p-value=0.0000<0.01), there is no heteroscedasticity at 1% level of significance for both fixed and random effects models.

**Table 4.4 Breusch and Pagan Lagrangian multiplier test (B-P LM test)**

Estimated results:		
	Var	sd = sqrt(Var)
ROA	.0088203	.0939163
e	.0017336	.041636
u	.0067915	.0824107

Test:  $\text{Var}(u) = 0$

chibar2(01) = 190.83

Prob > chibar2 = 0.0000

Since p-value=0.0000<0.01,

### 4.3.4 Test for Normality

The data points were compared with the reference line to assess the degree of symmetry present in the data. The more symmetric the data is, the closer the points will be to the line. With normally distributed data, runs of points are expected above or below the line. The visual examination of the fit of the normal distribution shows that the data points formed curved lines indicating that the data is skewed to the left as presented in the normal plots (Appendix II). The residuals as shown in the table 4.5 were deemed to be normally distributed (p>0.05) and therefore panel regression model was appropriate. The p-values of both skewness and kurtosis

for the data was 0.000 which is less than the significance level of 0.05, therefore we conclude that the data is not normally distributed, since the (p-value=0.000<0.05).

**Table 4.5 Skewness/Kurtosis Tests for Normality**

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
ROA	165	0.0000	0.0000	60.77	0.0000
<b>Loan lending policies</b>	165	0.0000	0.0096	23.39	0.0000
<b>Defaulted loan policies</b>	165	0.0000	0.5154	16.88	0.0002
<b>Insurance cover policies</b>	165	0.0000	0.0000	.	0.0000

#### 4.3.5 Hausman Test

The Hausman test was performed to determine on whether to use the fixed effect model or random effect model. The outcome of the test presented in table 4.6, since the chi square which is given by difference in coefficients is not systematic that is p-value=0.2704>0.05 we accept the null hypothesis and conclude that the random effect is appropriate model which provided more consistent and reliable coefficient estimates as per the data under review.

**Table 4.6 Hausman Test Results**

	Coefficients			
	(b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b- V_B)) S.E.
Loan lending policies	.0937357	.0782134	.0155222	.015983
Defaulted loan policies	.15632	.2622292	-.1059092	.0978016
Insurance cover policies	-.0752073	1.258343	-1.33355	1.314874

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\text{chi2}(3) = (b-B)'[(V_b-V_B)^{-1}](b-B) = 3.92$$

$$\text{Prob}>\text{chi2} = 0.2704 \text{ Since } p\text{-value}=0.2704>0.05,$$

#### 4.4 Regression Analysis

Adjusted R squared is the coefficient of determination which expresses the variation in the dependent variable due to changes in the independent variable, from the findings in the table 4.7 below it shows the value of adjusted R squared as 10.9% which is the fraction of the variation in dependent variable (ROA) that can be explained by independent variables. In this

case a variation in ROA is explained by loan lending policies, defaulted loans policies put in place by the management and insurance cover policies at 10.9% proportion of the variation in the dependent variable while the rest can be explained by other factors. Defaulted loan policies and loan insurance cover policy has a significant effect on ROA at 5% level of significance while loan lending policies do not have a significant effect on ROA at 10% level of significance.

**Table 4.7 Fixed and Random Effect Regression on Return on Assets**

VARIABLES	(1) OLS	(2) FEM	(3) REM
Loan lending policies	0.000886 (0.0475)	0.0937** (0.0448)	0.0782* (0.0418)
Defaulted loan policies	0.721** (0.281)	0.156 (0.268)	0.262 (0.250)
Loan insurance cover policy	1.496** (0.757)	-0.0752 (1.742)	1.258 (1.142)
Constant	0.0519 (0.0404)	0.0117 (0.0414)	0.00684 (0.0394)
Observations	165	165	165
R-squared	0.109	0.033	
Number of SACCO		33	33

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The general form of the equation to predict return on assets (ROA) using loan lending policies , defaulted loans policies and insurance cover policy is:

**ROA = 0.0519+(0.000886 x loans lending policies ) + (0.721 x Defaulted loans policies) + (1.496 x Insurance cover policy).**The regression equation above has established that taking all factors into account to be constant financial performance will be 0.0519.The findings presented also shows that taking all other independent variables at zero, loans lending policies which will result to a unit increase in loan advanced will lead to a 0.000886 increase in the scores of financial performance of the SACCOs, defaulted loans policies put in place by the management will lead to 0.721 increase in the scores of financial performance, insurance cover policy will lead to 1.496 increase in the scores of financial performance of the SACCOs.This therefore implies that all the three variables have a positive relationship with financial performance contributing most to the dependent variable.



## **CHAPTER FIVE**

### **SUMMARY, RECOMMENDATIONS AND CONCLUSION.**

#### **5.1 Introduction**

This chapter presents a summary of the major findings, recommendations, conclusion and the suggested areas for further research.

#### **5.2 Summary of Major Findings**

This section addresses the summary of the findings from the analysis. This is done in line with the objectives of the study.

##### **5.2.1 Effect of Loan lending Policies on Return on Assets**

The study outcomes points out that an increase of one unit of loan advanced due to loan policies put in place by the SACCO management leads to a 0.000886 increment in the return on assets holding other factors constant. There implies a weak negative correlation between loan lending policies and the overall financial performance of the SACCOs. This findings agree with a research done by Kaloi(2004) which asserted that the loan advanced to borrower contributes less to the performance of SACCOs and other micro financial institutions due to loan default on diverse levels of loans in addition to expenses associated with the loans. Nevertheless, the results of Gatuhu(2011) concluded that the loans issued by SACCOs have a negative effect to the financial performance of SACCOs. Therefore the church based SACCOs should not put more efforts to introduce more types of loans in their portfolio because this does not have much effect on their financial performance.

##### **5.2.2 Effect of Defaulted loans policies on Return on Assets**

The defaulted loans policies has a significant effect on ROA of the SACCOs since they increase the ROA by 0.721. This implied that there was a very strong positive relationship between how management apply the SACCO defaulted loans policies and the financial performance. This findings concur with a research done by Keitany (2011) and Nancy (2013) since the loan repayments which are made on monthly basis are used to advance loans to other borrower and therefore generate more income in terms of interest. However according to Wangui (2016) defaulted loans policies has a negative effect to the financial performance of SACCOs, but Bwoma(2017) asserted that this policies should be applied with caution since they can make borrowers shift to other community based SACCOs whose Co-operative bond

is fast vanishing with many of the SACCOs relaxing or opening up the bond to allow the admissibility of general public into their membership.

### **5.2.3 Effect of Insurance Cover Policies on Return on Assets**

Thirdly, the management should make effort to ensure insurance cover policy is adhered to all the time a loan is being advanced since there is a very strong relationship between the loan insurance premiums and SACCO financial performance since an increase in a unit of insurance cover increases the ROA by 1.496 This practice of recouping insurance premium from loans advanced should be adhered to in order to provide a cover in case of any unforeseeable calamity since loans are granted from member's saving and best practices require that loans be secured by all means, this concur with a study by Makori(2014) and Olando;et,al(2013). Nevertheless, large part of this amount should be recognized in the income statement instead of a liability in the balance sheet as most of the SACCOs are doing as this makes the SACCO financial position weak.

### **5.3 Conclusion**

Based on the findings above, the study concluded that loan lending policies, defaulted loans policies and insurance cover policy have a positive effect on the financial performance of the SACCOs.

Further,the study concluded that due to weak positive relationship between the loan lending policies and the financial performance, the management should not invest much of their time and resources on introducing new loans. New loans comes with new expenses, cost of monitoring and cases of non-repayment of loans that finally leads to increased credit risk.In addition the management should put in place very strict policies to deal with non-performing loans because as per the outcome this may cripple the SACCO future earnings.

Finally, the study concluded that insurance cover policy should be adhered to all the time a loan is being advanced. Nevertheless, large amount recouped should be recognized in the income statement but not as a liability in the balance sheet since this weakness the financial position of the SACCO.

### **5.4 Recommendations**

The study recommends that the church based SACCOs should not put more efforts in introducing different type of loans in their portfolio since this has weak effects on their financial performance. The SACCO management should put strict internal control systems to strengthen the operation of a few loan products.The loans insurance cover should be emphasized nevertheless, other forms of security which have no effect on the financial performance should be put in place such as guarators and assets. Secondly,the management

should also monitor the borrower's loan repayment accounts, make regular review of the borrower's reports and statements and make regular communication with borrowers at any time they are recognized to be in financial hitches. This will ensure that the loans advanced are paid in time. However, this church based SACCOs should be encouraged to register with CRB to instill fear to their borrowers in order to reduce loan default.

### **5.5 Areas for Further Research**

The study sought to determine the effect of loan policies on the financial performance of church based SACCOs in Kenya. Further research is recommended on the relationship between church growth and governance on financial performance of this church based SACCOs in Kenya. Further research should also be done on the relationship between credit management practices and non-performing loans on church based SACCOs in Kenya and on the reasons for persisted loan default in this SACCOs from the member's perspective.

### **5.6 Limitations of the study**

Due to time constrain and lack of information the study drew its sample only from 33 church based SACCOs in Kenya in spite of hundreds. Presently the number of SACCO's in Kenya has increased considerably due to loosening and opening up the co-operative bond to allow the membership of every adult citizen which has made the information sought very complicated. Secondly, most of these SACCO's management which is largely drawn from the church lacks knowledge and expertise to measure their performance due to the nature of church administration structure, therefore information provided in the policy documents was not adequate.

Lastly, the information provided in a number of them was very scanty, therefore the study didn't include all the church based SACCOs but only 33 were chosen for the study. The data used was only from those SACCO's registered with SASRA and those that do annual returns to KUSCCO and County Co-operative offices for a period of five years. However a number of them are not regulated by SASRA, KUSCCO and County Co-operative offices. This is due to trust that exist in a church environment. Further, quality of data provided especially for SACCOs operating as BOSA for non-performing loans makes the data doubtful. However, the researcher recommends additional study on the reasons for persisted loan default from the member's perspective.

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**APPENDIX I:**  
**Individual Sacco Data**

<b>FUGO SACCO</b>	<b>EBIT</b>	<b>TOTAL LOAN</b>	<b>NON PERFORMING LOAN</b>	<b>TOTAL ASSETS</b>	<b>INSURANCE PREMIUMS</b>
2011	681,919	31,423,674	870,676	34,339,045	304,809
2012	573,042	38,321,855	896,168	43,121,457	375,554
2013	539,805	52,102,943	489,738	56,638,231	510,284
2014	673,649	63,525,437	385,860	70,262,623	1,128,617
2015	1,055,095	64,541,200	1,689,665	94,175,552	662,474
<b>WAUMINI SACCO</b>					
2011	32,365,467	1,126,000,000	2,452,211	1,386,326,947	11,034,800
2012	67,944,123	1,424,000,000	2,558,103	1,204,999,335	13,955,200
2013	73,241,302	1,637,000,000	3,045,360	2,131,630,266	16,042,600
2014	83,754,652	2,065,258,749	3,510,940	2,564,239,534	19,826,484
2015	82,323,187	2,470,796,743	4,694,514	2,773,956,585	24,707,950
<b>UKRISTO SACCO</b>					
2011	9,231,409	480,260,840	44,664,268	727,640,067	2,449,330
2012	10,420,230	592,870,928	43,279,957	754,089,926	2,964,354
2013	17,000,000	784,000,000	36,848,000	797,530,791	3,763,200
2014	22,380,258	867,108,810	49,685,334	931,234,975	4,248,833
2015	29,797,218	1,056,510,249	54,093,324	1,120,048,500	5,282,551
<b>EAGLE EYE SACCO</b>					
2011	728,432	70,721,556	6,478,094	75,235,698	606,824
2012	841,283	74,449,846	5,401,442	80,923,745	648,040
2013	980,224	81,894,436	3,836,420	85,593,670	753,630
2014	1,055,139	91,751,242	5,248,171	100,185,298	838,965

2015	1,241,418	98,233,044	5,029,531	112,363,652	911,065
<b>KINGDOM SACCO</b>					
2011	3,671,532	392,520,230	7,681,942	490,650,287	920,521
2012	3,430,608	436,486,350	2,038,098	623,551,928	848,960
2013	3,821,216	378,182,230	4,353,620	538,184,236	935,560
2014	4,822,882	526,346,352	3,010,667	580,208,026	1,029,727
2015	6,070,403	626,673,238	2,087,670	752,520,813	1,192,067
<b>JITEGEMEE SACCO</b>					
2011	8,721,308	562,920,806	4,040,397	792,846,205	967,131
2012	9,139,328	565,370,542	1,272,048	806,772,692	980,218
2013	4,714,514	300,182,190	5,360,000	804,224,356	690,000
2014	3,752,614	383,243,044	11,959,826	778,476,540	743,134
2015	2,069,973	349,600,502	16,501,143	678,213,682	619,520
<b>ALL CHURCHES SACCO</b>					
2011	1,736,688	6,446,466	618,860	15,995,484	96,696
2012	1,941,880	6,385,815	468,718	24,078,307	89,401
2013	2,134,180	8,148,108	377,600	28,160,148	99,200
2014	1,707,524	33,613,743	926,767	50,537,467	436,979
2015	1,947,614	43,672,662	1,011,350	65,696,992	524,072
<b>GOOD FAITH SACCO</b>					
2011	1,003,535	29,252,029	2,808,194	40,343,177	365,651
2012	1,452,786	31,244,461	2,293,343	41,309,767	384,306
2013	1,503,106	40,701,502	888,000	48,168,280	350,400
2014	1,724,770	56,248,725	823,051	62,345,243	697,484
2015	1,282,779	49,148,182	2,517,922	59,765,720	590,138

<b>METHODIST CHURCH SACCO</b>					
2011	7,833,480	110,123,690	10,571,874	262,455,480	1,365,534
2012	38,739,477	133,856,236	9,825,047	259,883,148	1,646,431
2013	42,008,340	140,206,145	6,608,000	237,000,000	1,792,000
2014	56,423,236	189,475,354	10,856,938	273,544,789	2,349,495
2015	61,832,544	228,444,423	11,673,621	321,640,933	2,741,333
<b>MILIKI SACCO</b>					
2011	1,148,832	36,234,447	3,478,507	57,719,000	445,683
2012	1,891,578	47,811,861	3,509,390	62,840,379	597,648
2013	2,007,139	47,005,136	2,184,400	75,214,519	592,200
2014	2,052,648	33,814,151	1,937,550	81,726,361	419,295
2015	2,107,147	21,172,231	1,084,018	29,921,786	254,066
<b>BIBLIA SACCO</b>					
2011	43,101,538	408,283,837	5,106,503	435,953,651	5,021,891
2012	48,394,428	472,925,619	3,899,551	518,884,811	5,958,863
2013	56,992,077	535,860,801	4,363,710	595,961,312	6,644,673
2014	64,900,516	590,736,255	4,120,680	668,518,509	7,384,203
2015	73,701,206	652,824,120	7,418,613	743,620,489	8,160,301
<b>UMOJA WENDANI SACCO</b>					
2011	11,596,206	340,865,864	3,347,123	382,490,283	592,719
2012	11,944,288	379,560,009	5,839,705	386,964,296	1,304,187
2013	11,639,768	374,414,756	3,512,376	367,057,306	1,401,310
2014	13,559,793	515,602,601	9,544,029	550,204,054	581,435
2015	19,138,694	601,137,811	7,078,255	681,586,120	661,251
<b>KANISA SACCO</b>					
2011	11,629,860	136,926,086	542,419	150,468,224	657,242

2012	11,694,028	154,228,444	794,508	173,290,387	755,720
2013	11,740,966	152,805,726	1,320,859	173,642,875	764,028
2014	12,903,617	182,712,582	432,598	202,300,403	1,218,761
2015	13,063,197	217,486,057	331,142	247,486,382	1,503,391
<b>UKOMBOZI SACCO</b>					
2011	114,991,327	1,001,040,210	10,055,131	1,124,765,281	2,412,898
2012	116,824,364	1,004,860,235	12,204,130	1,057,747,616	2,661,238
2013	120,489,993	1,009,175,790	8,532,195	1,051,224,781	2,412,862
2014	125,364,145	1,016,865,640	7,163,729	1,081,771,957	2,609,134
2015	137,854,138	1,180,742,845	13,342,394	1,269,615,962	4,641,211
<b>PEFA CHURCH SACCO</b>					
2011	1,480,243	62,402,042	330,730	63,790,947	307,308
2012	1,525,923	66,391,545	278,844	67,722,160	518,751
2013	1,581,023	81,062,524	470,162	85,103,306	615,251
2014	1,641,980	90,539,090	624,719	94,083,583	708,032
2015	1,769,254	93,243,064	536,466	96,482,082	835,125
<b>KAG SACCO</b>					
2011	2,809,560	583,524,167	3,926,780	720,400,206	735,699
2012	3,300,451	676,190,025	2,899,981	804,988,125	817,137
2013	3,147,331	712,290,906	2,148,072	828,245,240	883,240
2014	3,784,590	759,861,580	2,078,892	870,560,110	1,033,085
2015	3,420,305	816,472,348	3,921,889	960,552,970	1,260,561
<b>PCEA RUIRU SACCO</b>					
2011	1,940,009	374,073,579	1,825,899	497,438,270	460,110
2012	2,124,248	421,036,805	1,683,545	544,678,920	526,290
2013	2,161,913	447,174,806	1,936,138	568,924,690	507,500

2014	4,222,949	495,300,974	1,175,767	634,560,585	525,000
2015	3,957,387	684,588,542	1,358,505	915,192,816	544,300
<b>GOSPO SACCO</b>					
2011	251,320	1,618,172	0	2,609,955	22,654
2012	268,415	1,941,902	40,494	2,942,276	24,079
2013	322,022	2,404,468	10,543	3,386,575	29,574
2014	340,515	2,616,985	69,508	3,738,550	32,974
2015	389,326	3,154,919	10,123	4,321,807	39,436
<b>DHAMINI SACCO</b>					
2011	953,171	181,334,922	610,750	232,480,670	430,419
2012	937,349	185,003,130	777,013	246,670,840	440,388
2013	1,074,547	211,924,591	591,626	298,485,340	627,864
2014	1,410,320	209,661,402	328,853	310,094,075	793,228
2015	1,421,864	250,137,060	554,880	258,559,077	992,741
<b>KIBERA SDA SACCO</b>					
2011	1,184,951	51,004,675	609,330	73,919,819	703,247
2012	1,382,633	63,768,524	143,035	79,710,656	888,426
2013	1,663,154	71,797,699	602,546	81,588,295	961,682
2014	1,862,904	75,160,711	730,034	87,396,176	983,518
2015	2,183,658	79,925,488	740,011	94,029,986	1,056,125
<b>ADVETIST SACCO</b>					
2011	13,123,526	622,180,829	7,030,653	768,124,480	777,260
2012	15,128,424	640,360,096	7,940,465	800,450,120	896,609
2013	18,320,148	652,006,868	8,280,487	825,325,150	884,885
2014	22,254,167	750,089,934	7,180,580	960,480,147	925,274
2015	13,200,059	800,210,340	10,601,670	1,090,381,587	1,123,488
<b>UTELE SACCO</b>					

2011	580,414	10,046,408	602,784	14,774,129	306,033
2012	704,012	10,325,809	929,322	14,964,940	342,355
2013	924,018	13,068,275	1,045,462	19,218,051	437,510
2014	1,010,123	14,732,535	1,617,357	21,410,033	764,390
2015	1,240,113	16,403,382	1,148,236	24,212,743	640,338
<b>UKOMBOZI RUIRU SACCO</b>					
2011	1,624,808	48,480,160	545,402	97,959,184	601,154
2012	1,806,908	52,448,124	120,630	115,680,560	650,356
2013	2,041,124	58,126,480	651,016	138,095,238	726,581
2014	2,165,276	60,794,136	273,543	157,985,220	753,847
2015	7,661,332	62,382,523	668,735	110,629,679	773,543
<b>CHRIST AMBASSADOR SACCO</b>					
2011	8,200,132	524,022,640	8,216,882	595,450,720	2,777,320
2012	9,700,213	584,022,840	6,936,662	654,700,619	3,427,589
2013	7,724,671	645,338,382	5,819,025	752,619,377	3,512,257
2014	8,350,713	701,922,679	12,307,628	882,012,131	3,699,979
2015	9,870,877	707,373,979	2,829,495	967,895,091	3,898,195
<b>REDEEMED GOSPEL SACCO</b>					
2011	1,230,412	48,128,142	2,668,429	60,759,949	866,306
2012	1,832,804	52,012,040	1,796,878	67,532,467	936,216
2013	2,259,041	56,247,025	1,654,859	74,429,822	949,738
2014	6,893,698	61,279,324	2,511,305	82,941,836	882,815
2015	7,281,142	64,127,424	2,283,324	84,409,810	920,360
<b>ZABIBU SACCO</b>					
2011	816,376	60,346,528	138,797	68,575,615	120,693
2012	911,286	64,650,336	724,083	73,490,745	129,301



2013	1,200,954	80,714,564	924,000	84,810,630	240,240
2014	3,004,423	88,702,729	212,000	98,015,325	204,500
2015	3,095,642	94,520,342	586,627	101,124,326	289,040
<b>UFANISI SACCO</b>					
2011	3,694,888	85,169,617	4,513,989	110,781,135	1,056,103
2012	5,018,239	90,537,611	3,802,579	105,488,066	1,122,666
2013	8,040,000	98,000,106	5,684,006	115,144,314	1,205,401
2014	10,469,434	120,408,437	8,301,812	139,229,635	1,505,105
2015	14,294,551	126,155,637	4,255,587	153,425,587	1,589,561
<b>FAULU FOUNTAIN SACCO</b>					
2011	477,422	5,388,051	422,640	6,820,317	66,811
2012	444,877	6,079,989	443,839	7,414,620	74,783
2013	693,573	6,903,615	325,850	8,218,590	85,604
2014	790,186	8,521,041	488,245	9,081,876	104,808
2015	956,831	7,137,493	365,440	10,985,220	88,504
<b>CENTENARY SACCO</b>					
2011	12,060,847	87,192,877	7,986,875	103,191,511	4,560,187
2012	13,938,389	134,377,373	9,755,797	151,136,363	7,001,061
2013	14,000,108	185,142,000	8,676,527	229,930,201	9,990,000
2014	16,084,926	296,181,606	6,941,587	331,464,589	15,490,301
2015	18,383,314	341,087,834	7,463,697	431,325,354	17,736,567
<b>CHRISTIAN ENTERPRENUERS SACCO</b>					
2011	3,284,628	78,324,148	7,597,442	88,428,806	971,219
2012	3,604,722	83,661,440	6,107,285	94,836,821	1,029,035
2013	3,801,824	85,264,130	4,024,466	98,801,728	1,057,275

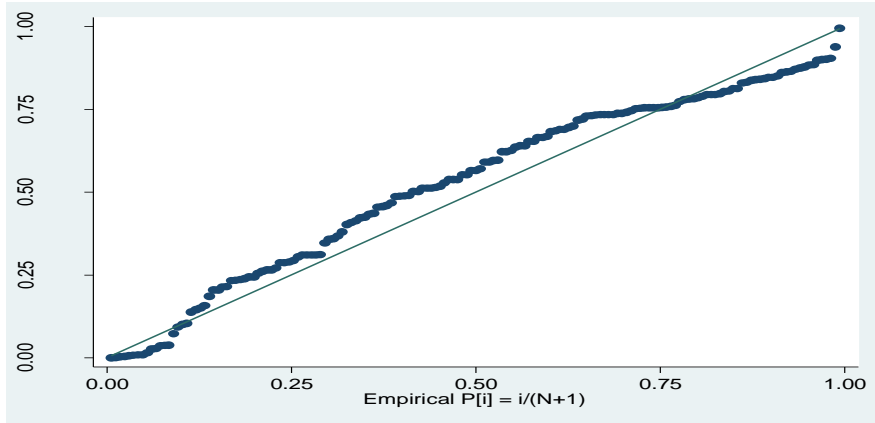
2014	4,331,833	86,333,833	4,946,928	103,701,749	1,061,906
2015	4,841,228	92,448,520	4,733,364	110,843,373	1,146,361
<b>FARIJI SACCO</b>					
2011	17,249,377	69,205,501	3,965,475	116,510,033	858,148
2012	17,642,822	57,258,164	3,280,893	90,539,794	704,275
2013	16,358,779	87,460,859	5,020,253	110,709,949	1,093,260
2014	15,249,910	86,358,779	4,848,358	103,040,072	1,088,121
2015	31,472,722	84,032,624	4,815,069	107,558,456	1,042,004
<b>INJIRI SACCO</b>					
2011	1,289,086	185,672,239	1,052,406	261,272,760	644,152
2012	1,465,233	148,883,040	902,530	290,382,480	283,612
2013	1,554,494	213,126,082	2,090,438	315,971,460	556,610
2014	1,240,587	229,621,393	1,457,613	340,079,250	525,290
2015	1,530,021	312,165,204	1,498,608	534,842,000	880,940
<b>CONERSTONE CHRISTIAN SACCO</b>					
2011	881,392	17,532,982	0	19,699,980	474,409
2012	1,136,361	27,338,368	366,207	33,339,474	336,262
2013	1,543,047	42,546,198	801,054	47,804,817	527,572
2014	1,659,066	49,368,972	872,334	54,251,618	612,175
2015	1,914,261	68,737,958	863,623	75,536,218	858,797

**APPENDIX: II**

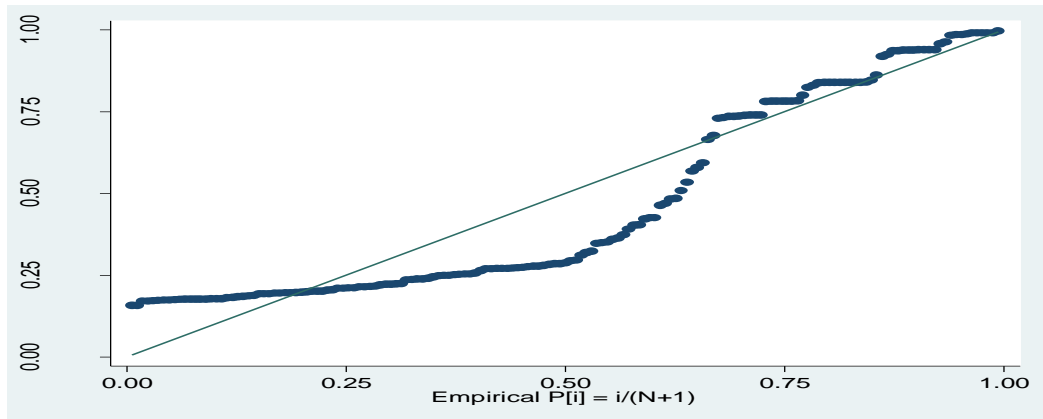
**Standardized Normal Probability Plots**

Total loans, Non performing loan, Insurance premiums, ROA

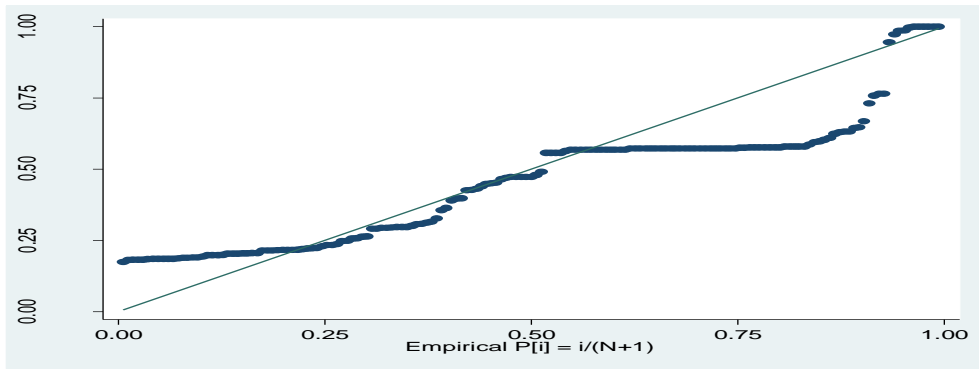
**Loan Lending policy**



**Default Loan policy**



### Loan insurance Cover



### Return On Asset

