THE EFFECT OF CREDIT RATING POLICIES ON THE LOAN UPTAKE IN SAVINGS AND CREDIT CO-OPERATIVES (SACCOS) IN NAIROBI COUNTY

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DECLARATION

STUDENT DECLARATION

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

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SUPERVISOR DECLARATION

This research project has been forwarded for presentation with my approval as the University Supervisor.

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DEDICATION

I wish to dedicate this research project to my mentor Beth Mwisywa for her support and encouragement during my entire course of study. You have been my inspiration while pursuing my dream of attaining this MBA. I also want to give a special thanks to my Wife Hellen, my Son George for your understanding and being there to give me support and encouragement. I am indebted to you all and may God bless you.

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LIST OF ABBREVIATIONS

CIC   Co-operative Insurance Company of Kenya

CRB   Credit Reference Bureau

GDP   Gross Domestic Product

ICA   International Co-operative Alliance

LR   Logistic Regression

NDM   Natural Decision Making

MC   Misclassification Costs

MFI   Micro Finance Institution

SASRA   Sacco Society Regulatory Authority

SACCO   Savings and Credit Co-operative

SME   Small and Medium Enterprises

ABSTRACT

SACCOs that have adopted effective rating policies have realized significant increases in the loan uptake, reduction in loan default and efficient delivery of timely information to their members and increased total lending. The objective of this study was to establish the effect of credit rating policies on loan uptake in SACCOs in Nairobi County. This was an explanatory study where the research sought to establish a relationship between the use of credit rating policies and the loan uptake in the SACCOs in Nairobi County. A census survey was conducted involving 30 SACCOs within Nairobi County registered and licensed under the Co-operatives Act of 1997. This study used primary data that was collected from the respondents of the survey. Data was captured and analyzed using Statistical Package for the Social Sciences (SPSS) version 20. Regression analysis was used to determine the relationship between rating policies and the loan uptake. The study concludes that there is a relationship between rating policies adopted by each Sacco in Nairobi County. The benefits gained from the use of effective credit rating policies include accuracy in the decision making process. This accuracy leads to better assessments and effective use of reliable data thus reducing judgment based on humanitarian and behavioral factors thus providing better decision making. The study recommends that SACCOs should effectively create systems that gather, correlate data concerning their membership and factually assess their membership applications without prejudice. This in turn improves the credit scoring of individual members. The SACCOs are also encouraged to regularly review their lending policies so that member's funds are not exposed to fraudulent activities.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Savings and Credit Co-operatives organizations (SACCO) first appeared in Germany in the 1870's. The idea moved to North America in 1900 with European immigration (Moody and Gilbert (1984). The SACCOs are best identified by their adherence to cooperative principles, especially related to membership and control and their main aim is to offer members with opportunities to save and borrow at competitive rates. The International Cooperative Alliance (ICA 2004) defines a cooperative as "...an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise".

The concept of credit is one that existed and was in use almost as long as there has been civilization. From its beginnings, credit has been used as a selling tool, to bind customers to a particular vendor and allow them to acquire more substantial goods or services for which they do not have the necessary and adequate capital (Mandell, 1994). Risk is the possibility that the actual return will be different from the expected return on an investment. Credit risk has been defined as the distribution of financial losses due to unexpected changes in the credit quality of a counter party in a financial agreement. The credit granting process leads to a choice between two actions; to give the new applicant credit or to refuse.

1.1.1 Credit Rating Policies

Credit evaluation is one of the most crucial processes in banks and other financial institutions ̈ credit management decisions. This process includes collecting, analyzing and classifying different credit elements and variables to assess the credit decisions. The quality of bank loans is the key determinant of competition, survival and profitability. Credit rating tries to assist in decision making by finding what would have been the best rule to apply on a sample of previous applicants. According to Thomas, Edelman and Crook, (2002) the basis of credit rating approach is to guide the lender to make a decision to accept or reject an application. It allows for case by case risk management assessment when appraising a loan application. It therefore refers to the use of statistical models to transform relevant data into numerical measures that guide credit decisions. It is therefore referred to as the industrialization of trust (Anderson, 2007).

Credit rating has been championed worldwide to be a better means of evaluating a creditworthy borrower as compared to the traditional methods of risk assessment (Lewis, 1992). In an automated system, scoring takes place instantaneously, allowing lenders to assess risk and make account origination decisions more quickly, accurately, and objectively thus improving the portfolio. Finally, it eases adverse selection problem and lowers the cost of credit for a good borrower while increasing credit volume and improving access to credit. Accurate credit-granting decisions are crucial to the efficiency of the decentralized capital allocation mechanisms in modern market economies.

Hand and Jacka (1998) stated that "the process (by financial institutions) of modeling creditworthiness is referred to as credit rating". Information collected by financial institutions from a credit applicant is used to develop a numerical score for each applicant (Thomas et al., 2002; Hand and Jacka, 1998; Lewis, 1992). Recently; credit rating techniques have been expanded to include more applications in different fields. Credit evaluation is one of the most crucial processes in banks and other financial institutions " credit management decisions. The credit rating policies adopted by each firm determines the volume of loans given to individual members. A good credit score increases the value of loans that can be accessed by individual members while a rigid credit scoring method reduces the volume of amount accessible to clients.

1.1.2 Loan Uptake in Sacco

Loan uptake is the ability for a prospective applicant to access credit from a given financial institution or market. According to Micah and Gibbs (2013), loan uptake is a function of the level of collaterals, the ability to pay (earnings), availability of liquidity, the rate of chargeable interest rates, capacity to handle the varying challenges of the lending institutions. The loan uptake in Sacco's is not different from other financial institutions and is subject to the above conditions.

According Berger and Black (2011), the use of credit rating policies have positive effects on the numbers of approved loans to small businesses i.e. their applications leads to much faster and effective loan uptake. In situations where credit rating is used, in addition to existing lending technologies, the effect of an increased number of approved loans is small. However, when credit rating is used as the only lending technology, the effect is strong and results in an increased number of approved loans to small businesses or individuals.

1.1.3 Relationship Between Credit Rating Policies and Loan   Uptake

The process of collecting, analyzing and classifying different credit elements and variables to assess the credit decisions helps to determine the level of loan uptake. The rating policies which are the defined rules which a financial firm has put in place to aid in the appraisal of loans relies on the credit score of each individual and a client with good score will be able to access higher loan amount at reasonable rates those with poor rating wont access the credit. Thus rating policies reliance on the credit scores determines the level of loan uptake. According Berger and Black (2011), the use of credit rating policies has positive effects on the numbers of approved loans to small businesses i.e. their applications leads to much faster and effective loan uptake.

According to the International Journal of management Research and Business strategy (*IJMRBS),* (2013) which carried a research on the determinants of loan uptake on SMEs in Nairobi County, Kariobangi District, the level of a loan uptake is a factor of earnings, size of the firm and the collateral amongst others. The researcher stated that the higher the quality of the factors mentioned above the better the accessibility of the funds.

1.1.4. Sacco's in Nairobi County

Currently it is not very clear how the SACCOS in the county of Nairobi carry out the loan appraisal for their members. The impact of each rating policy is not known and that is why I would like to carry out a research to establish the role played by each policy. The area of study will be credit rating practices and policies in at least 35 of the existing SACCO's in the County of Nairobi and the risk associated with credit rating policies in SACCO's and arrears of mitigations. Other areas to be looked at will be the volume and growth in the loan portfolio for the last three years in the firms to be identified. The research question will then be 'What

are the policies that the SACCOs use when appraising loans and how do they contribute to the loan uptake?

1.2 Research Problem

There exist varying relationship between the credit rating policies and its impact on the value of loan uptake. The expected relationship between a good credit scoring and the value of the loan uptake is directly proportionate to each other in that the higher the application of a good credit rating method the more uptakes is anticipated. Loan uptake is a factor of so many functions in an organization, how then does the rating policies contribute to the uptake and growth of a given firm. Credit rating has been vital in allowing the phenomenal growth in consumer credit through accessibility to consumer credit (Thomas et al, 2002).

Many theorist including Al Amari (2002) have highlighted the importance of credit rating in evaluating credit risks. However, AL Amari (2002) also argues that there is no optimal method. This indicates that one type of rating model might work for specific financial institutions but fails to work in others. He also reflects on other factors used in determining the creditworthiness of a customer, for example to what extent is a customer classified as good or bad, which can be measured via statistical techniques. This approach is much more efficient and consistent in comparison to the judgmental approaches which are currently utilized by the creditors and other lending institutions.

Abdou and Pointon (2011) stated that the judgmental approach relies heavily on the past and present experiences of the credit analysts who have to judge whether the customers have the ability to repay a loan within a certain time. Consequently, judgmental approaches are associated with subjectivity, inconsistency and individual preferences motivating decisions. Judgmental approaches have some strengths, such as taking account of qualitative characteristics and having a good track record in evaluating past credit by utilizing the wealth of the credit analyst's past experience" (Abdou and Pointon, 2011).

According Lee, Chiu, Lu, and Chen (2002) an effective credit rating model can have a positive impact on financial institutions, as it can reduce the costs involved in the credit process and also reduce the prospect of bad loans. They also suggested that it improves the decision-making process and can save the bank a lot of time and money, as better decisions can be made.

Githinji (2010) surveyed the relationship between credit scoring on 43 Banks and the loan uptake by Small and Medium enterprises (SMES) in Kenya which revealed that the approval rate for SME loans at banks that used credit scoring was 40 percent higher than those banks that used relationship banking only. The researcher noted that there was room for improvement in the decision making process if more banks were to use credit scoring while assessing loans for SME's. She also noted that accuracy is gained due to the reduction of adverse selection cases where better assessments are made in regards to an application therefore providing better decision making.

Wambugu (2009) on credit management practices in SACCOs offering front office services found out that risk identification is an important stage in credit risk management and should be applied effectively to identify the current credit risks confronting the organization, provide the likelihood of these risks occurring and reveal the type and amount of loss these risks are meant to cause if they occur. He concluded that the establishment of a review system that provided accurate timely and relevant risk information in a clear, easily understood manner is key to risk monitoring.

The above theories points to two fundamental points about the credit rating, i.e. that credit rating policies helps in the management of the credit risks and that crediting rating policies are widely applied to the developed countries. The local study carried out by Githinji (2010) established the impact of the credit rating policies to the loan uptake in SMES. Credit rating would provide a framework where individual applicant would be ranked in accordance with their riskiness thus allowing those with good credit history to receive credit and denying those who would probably default. Accredit rating system may therefore serve to bridge this gap in provision of information and risk assessment making it easier for individual members to access credit. Hence there exists a gap on the impact of the credit rating on the loan uptake in SACCOs since no known study has been documented in this area.

1.3 Research Objective

The objective of this study is to test the effect of credit rating policies on loan uptake in SACCOs in Nairobi County.

1.4 Contribution of the Study

The SACCOs in Kenya will be able to evaluate whether the use of credit rating policies models will benefit them in the long run with the adoption of credit rating policies which are effective in managing the default rate. The study may encourage members to maintain good banking and repayment records so that they may have better access to credit in the future.

SACCOS will also benefit from the study by understanding how credit rating policies impacts the acceptance or rejection decision for member's loans. The SACCOs will learn what rating techniques are most prevalent in the County. The academic Community will benefit from the study because it will provide more information on the use and benefits of credit rating policies as a means to reduce credit risk for SACCOS. The study will also add to the body of knowledge about credit risk management and its practices in Kenyan within the Co-operative movement. The study will equip the industry with the necessary tools in evaluating the credit worthiness of clients through a shared platform of the data which will be collected from various institutions e.g. CRB reports.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The section reviews literature that is already in existence regarding the credit rating policies. It further elaborates on determinants of loan uptake in various financial institutions and the decision making process of the management on credit risk, credit scoring and credit rationing. It also presents both the theoretical and the empirical reviews.

2.2 Theoretical Review

It is argued that financial development is good for growth and probably reduces income Inequality. Recent studies have focused on the links between financial development and the legal institutions that can facilitate credit contracts, exploring the nature of those contracts based on the Power theory of credit, Credit risk theory, Liquidity theory of credit and the Information theory of credit. These theories are complementary rather than alternative; they explain how legal institutions could boost financial intermediation and facilitate access to credit for a larger number of customers, some with new and small projects (McDonald et al, 2007).

2.2.1 Power Theory of Credit

The power theory of credit is based on the transfer of control rights upon default. Stronger legal rights give the financial institutions more power to force repayment by seizing collateral, or even by taking control of the borrower's ex post contract, during default. This leads to a higher recovery rate in the event of default and a decrease of the default risk in financial institutions, Additionally , efficient judicial enforcement of legal rights reduces the

uncertainty and cost faced by these institutions in pursuing repayment hence, lenders who operate in an institutional environment characterized by higher legal creditor rights and more efficient enforcement of these rights show more willingness to provide credit, even with limited information about the borrower. Although the power theory of credit mainly emphasizes the recovery of bad loans, it has implications for the prevention of bad loans. Arguably, the power of creditors endowed by better institutional protection creates a more credible threat to borrowers to perform in line with the interest charged, which diminishes the credit risk associated with moral hazard on part of borrowers and the cost of dealing with moral hazard and adverse selection. When lenders can more easily force repayment, grab collateral, or even gain control of the firm, they are more willing to extend credit (Djankov et al, 2005), thus leading to more uptake.

2.2.2 Credit Risk Theory

Although people have been facing credit risk ever since early ages, credit risk has not been widely studied until recent 30 years. Early literature on credit uses traditional actuarial methods of credit risk, whose major difficulty lies in their complete dependence on historical data. Up to now, there are three quantitative approaches of analyzing credit risk: structural approach, reduced form appraisal and incomplete information approach (Crosbie et al, 2003). Merton (1974) introduced the credit risk theory otherwise called the structural theory which said the default event derives from a firm's asset evolution modeled by a diffusion process with constant parameters. Such models are commonly defined "structural model "and based on variables related a specific issuer. An evolution of this category is represented by asset of models where the loss conditional on default is specific. In these models, the default can happen throughout all the life of a corporate bond and not only in maturity (Longstaff and Schwartz.1995).

Many researchers including Al Amari (2002) have highlighted the importance of using credit rating models in evaluating credit risk. However, Al Amari (2002) argues that there is no optimal method. This indicates that one type of rating model might work for specific financial institutions but fails to work in others. He also reflects on other factors used in determining the creditworthiness of a customer, for example to what extent is a customer classified as good or bad, which can be measured via statistical techniques.

2.2.3 Liquidity Theory of Credit

This theory, first suggested by Emery (1984), proposes that credit rationed firms use more trade credit than those with normal access to financial institutions. The central point of this idea is that when a firm is financially constrained the offer of trade credit can make up for the reduction of the credit offer from financial institutions. In accordance with this view, those firms presenting good liquidity or better access to capital markets can finance those that are credit rationed. Several approaches have tried to obtain empirical evidence in order to support this assumption. For example, Nielsen (2002), using small firms as a proxy for credit rationed firms, finds that when there is a monetary contraction, small firms react by increasing the amount of trade credit accepted. As financially unconstrained firms are less likely to demand trade credit and more prone to offer it, a negative relation between a buyer's access to other sources of financing and trade credit use is expected. Petersen and Rajan (1997) obtained evidence supporting this negative relation. According Berger and Black (2011), the use of credit rating coupled with high liquidity has positive effects on the numbers of approved loans to small businesses (Berger et al., 2005) i.e. their applications leads to much faster and effective loan uptake.

2.2.4 Information Theory of Credit

Information theories of credit refer to the amount of credit to firms and individuals would be larger if financial institutions could better predict the probability of repayment by their potential customers. Therefore, more financial institutions know about the credit history of prospective borrowers, the deeper credit markets would be. Public or private credit registries that collect and provide broad information to financial institutions on the repayment history of potential clients are crucial for deepening credit markets. The information that each party to a credit transaction brings to the market will have important implications for the nature of credit contracts; the ability of credit markets to match borrowers and lenders efficiently and the role played by the rate of interest in allocating credit among borrowers. The nature of credit markets can lead to distinct roles for different types of lenders and different types of borrowers (Walsh, 2003). When lenders know more about borrowers, their credit history, or other lenders to the firm, they are not as concerned about the financing of non-viable projects, and therefore extend more credit (Stiglitz et al 1981).

Houge and Loughran (2000) found that investors tend to focus on current earnings and neglect accounting accruals and cash flow statements when assessing a potential applicant, despite the fact that these two neglected factors may provide better information and have greater predictive value than current earnings. One way of improving decision making is to learn from previous mistakes through provision of accurate information on each party.

In a study investigating which information is most influential for a loan officer when evaluating a client, Bruns and Fletcher (2008) found that the client's past profitability was the most important factor. The second most important factor was the client's financial position, which was based on how well the client's company compared to other companies in

the market. Less important factors were the client's competence in the business project and the client's collateral provided. Finally, the share of investment by the SME, the CEO's tenure and the company's risk-taking proclivity (based on the risk of moral hazard when the loan is approved) were taken into account, although to a lesser degree.

Non-financial information is often referred to as information that cannot be obtained from financial records and such information can be important as predictors of default Boot, (2000). Catasus and Grojer (2003) showed that non-financial information, such as information on human resources, advertising and RandD did not affect the loan officers' lending decisions. Wilsonet al. (2007) investigated loan officers' decision making by asking them to recall personal characteristics that they found to be most influential when evaluating recent loan applicants. Their results suggested that neither the gender of the loan officer nor the gender of the loan applicant had any influence on the evaluation. However, when making lending decisions, the most influential information was the information about the applicant's personal characteristics (e.g. the applicant's pleasantness), whereas financial information (e.g. the applicant's net worth) was less important.

In a study of how expertise i.e. personnel who are endowed with more information and experience affects decision making in banks, Anderson (2004) reported that experienced loan officers acquired more information about their clients than novices and also spent more time evaluating the material before they made their decisions. However, experienced loan officers did not differ from novices in consistency regarding credit decisions between different clients. As they did not search for the same type of information in different cases, experienced loan officers did not make a more objective evaluation of the clients. Furthermore, there was no greater consensus on the decisions among the experienced loan

officers than among novices, indicating that the more experienced group did not perform consistently better on the credit-granting task (Bruns and Fletcher 2008).

The debate over whether decision making is based on an intuitive approach (gut feeling) or a rational approach (deliberation) continues (Kahneman and Klein, 2009; Klein, 2008). In a study of loan officers, it was shown that loan officers only use gut feeling to a moderate degree (Khatri and Ng, 2000). In a more recent interview study, Lipshitz and Shulimovitz (2007) found that gut feeling contributed to the credit decision and that loan officers valued gut feeling as a valid cue for making sound decisions thus impacting the loan uptake. In another study, Hensman and Sadler-Smith (2011) found that loan officers used intuition when approving loans. However, these loan officers used the intuitive approach as a complement to the use of the rational approach. Their interviews also revealed a set of factors that influenced the degree of intuition used in the decision making process. More experienced, older and more knowledgeable participants tended to be more confident in their ability to make valid decisions using intuitive reasoning.

Hertzberg et al.'s (2010) study revealed the importance of accountability that shows that loan officers tend to give higher risk-ratings to clients when they know their decisions are being monitored through clear information sharing environment.

2.3 Determinants of Loan Uptake

2.3.1 Liquidity

Good credit endowed firms are likely to give more loans to its prospective applicants unlike those which are cash stricken firms. According to Emery (1984), credit rationed firms use more trade credit than those with normal access to financial institutions. The central point of this idea is that when a firm is financially constrained the offer of trade credit can make up for the reduction of the credit offer from financial institutions. In accordance with this view, those firms presenting good liquidity or better access to capital markets can finance those that are credit rationed. Several approaches have tried to obtain empirical evidence in order to support this assumption. According to Emery (1984) using small firms as a proxy for credit rationed firms, finds that when there is a monetary contraction, small firms react by increasing the amount of trade credit accepted. As financially unconstrained firms are less likely to demand trade credit and more prone to offer it, a negative relation between a buyer's access to other sources of financing and trade credit use is expected. Thus volume of loans issued is subject to the liquidity of the firm.

2.3.2 Credit Risk

Credit risk has always been the central risk in financial institutions. Credit or default risk refers to "the uncertainty associated with borrowers' repayment of their loans"

According to Berger and Udell (2005) credit risk can be determined by use of a "unique combination of primary information source, screening and underwriting policies/procedures, loan contract structure and monitoring strategies/mechanisms". The appraisal of repayment capacity or the ability-to-pay model of financing and asset-backed lending or equity model of financing are two basic types of examining the probability of credit default. Credit risk

management also includes credit pricing as an important prevention technique for undertaking excess credit risk. It represents a potential loss that may occur for creditors as a result of borrowers' non-payment for matured liabilities. The appraisers use the above parameters to determine the loan uptake without exposing the organization.

2.3.3 Credit Rationing

Credit rationing is a type of risk mitigation or elimination technique which consists of aborting or reducing lending to certain clients due to and not limited to lack of financial funds then avoiding selection of an excessive risk from an individual credit or specific portfolio. Jaffee and Russell (1976) abstracted that credit rationing occurs when lenders quote an interest rate on loans and then proceed to supply a smaller loan size than that demanded by the borrowers (Jaffee and Russell, 1976). They saw the non-raising interest rate in the situation of loan demand surplus as a market failure caused by adverse selection and moral hazard in borrower – lender relationships. Ghosh et al. (2000) point out two forms of credit quantity constraints: micro and macro credit rationing. They refer micro-credit rationing to limited credit availability or unavailability of an individual borrower (limiting the loan size below the borrower's request), while macro-credit rationing is used for randomly denied access "to any credit to a fraction of borrowers" (Ghosh et al., 2000).

2.3.4 Management quality

Management quality, which loan officers sometimes neglect in their decision making (Bruns and Fletcher, 2008), may be important in predicting defaults and determining the loan uptake in organizations. By using both qualitative information (such as the experience of company management) and quantitative information (such as the company's capital structure and

liquidity) more accurate predictions of the risk of default can be made than by using only quantitative information.

2.3.4 Existence of an Effective Credit Rating Policy

According to Lee and Chien (2002) an effective credit rating model can have a positive impact on a financial institution, as it can reduce the costs involved in the credit process and also reduce the prospect of bad loans. They also suggested that it improves the decision-making process and can save a firm a lot of time and money, as better decisions can be made. Applications of credit rating policies have been widely used in different fields, including accounting and finance as cited by Altman and Narayman (1997), marketing (Kumar et al., 1995; Thieme et al., 2000; Chiang et al., 2006) and general applications (Walczak and Sincich, 1999; Usha, 2005).

2.3.5 Economic Factors

The interest rate charged by financial institutions plays an important role in determining the volume of loan of uptake in each firm. The higher the rate of interest discourages the loan uptake thus limiting growth. According to Stutely (2003) borrowers are discouraged by prohibitive charges on the loans and recommends that financial institutions must be as efficient as possible. Stutely, argues that the borrower should be able to put the cost of all financing on the same basis, comparing them and coming with the best option i.e. the least expensive.

2.4 Empirical Review

Gaitho (2010) surveyed on credit risk management practices by SACCOs in Nairobi, findings revealed that majority of SACCOs used credit risk management practices to mitigate risks as a basis for objective credit risk appraisal. She also found out that majority of SACCOs relied heavily on the discretion and ability of portfolio managers for effective credit risk management practices as opposed to a system that standardizes credit and credit risk decisions.

Githingi (2010) surveyed on operating efficiency and loan portfolio indicators usage by microfinance institutions found out that most microfinance institutions to a great extend used operating efficiency indicator as a credit risk management practice. Efficiency and productivity ratios are used to determine how well microfinance institutions streamline their credit operations. He also noted that microfinance institutions need to employ a combination of performance indicators such as profitability, operating efficiency and portfolio quality indicators to measure their overall performance.

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

Hernandez-Canovas and Martinez-Solano's (2010) study supports the claim that SMEs with longer bank relationships are more likely to receive a loan than SMEs with shorter bank relationships, and those longer relationships lead to higher interest rates. The main finding of the study is that loan officers with a high degree of human capital were more attracted to clients with a high degree of human capital, while loan officers with a lesser degree of human capital were more attracted to clients with a lesser degree of human capital. In summary, experienced loan officers make a more thorough evaluation before making a lending decision. They also differ from less experienced loan officers as far as which aspects of the client that they think most important. Furthermore, no matter the level of expertise, loan officers tend to favor clients who have similar personal characteristics as themselves. Moreover, the reviewed studies do not show that experienced loan officers make more valid credit assessments than less experienced loan officers. This is somewhat surprising but is consistent with the Andersons's (2000) review of studies conducted before 2000.

Hunte (1996) examined the credit rating technology of lenders and the repayment behavior of borrowers at a rural financial institution based on 504 sample observations. Loan rationing equation and loan repayment equations estimated by employing a Tobit model using survey data at Guyana Cooperative Agricultural and Industrial Development Bank revealed that only 33% of the criteria utilized identified credit worthy borrowers implying that the screening technology was not efficient and needed to be repaired. The results also indicated that tightening the loan contract terms by reducing the grace period on loans and rejecting applications which had long processing times enhanced the pool of credit worthy borrowers. Female borrowers were also not rationed differently than male borrowers, nor were they worse re-payers than male borrowers (i.e. the variable sex was insignificant in both equations), but wealthy borrowers were bad credit risks as their repayment performance were

poor. In general, the study showed that only four out of twelve explanatory variables (fishing, males in food crops and livestock, credit experience and sugar cane) enhance creditworthiness, while other variables especially grace period, delays, and joint borrowers contribute significantly to the default problem.

In Ethiopia an econometric estimation was conducted by Mengistu (1997) based on survey data, on the determinants of loan repayment performance and efficacy of screening mechanism in urban Ethiopia, taking the case of Awassa and Bahir Dar towns (2008). The estimation result using binomial probity model revealed that for Awassa, the number of persons employed and weekly installment repayment period are significantly and positively related with repaying loan in full while loan diversion is significantly and negatively related. In terms of the probability of falling in either of the groups, it was found that there was 53% probability of repaying loan in full. In the case of Bahir Dar (2007), loan expectation and number of workers employed had a positive relation with full loan repayment while loan diversion and availability of other sources of credit have a negative impact. The predicted probability of full loan repayment in this case was 78%.

A study made on loan repayment determinants under the Social Emergency Loan Scheme (SEALS) in Nigeria by Njoku and Odii (1991) employing multiple regression model based on 300 sample beneficiaries (9.3% of the total population) indicated that poor loan repayment performance was due to late release of loan funds, cumbersome loan application and disbursement procedures and emphasis on political considerations in loan approvals.

Owusu (2008) on credit practices in rural banks in Ghana found out that the appraisal of credit applications did not adequately assess the inherent credit risk to guide the taking of appropriate credit decision he also found out that the drafted credit policy documents of the two banks lacked basic credit management essentials like credit delivery process, credit portfolio mix, basis of pricing, management of problem loans among others to adequately make them robust. In his recommendations he stated that credit amount should be carefully assessed for identified projects in order to ensure adequate funding. This situation provides the required financial resources to nurture projects to fruition, thus forestalling diversion of funds to other purposes, which may not be economically viable.

Rukwaro (2001) carried out a study whose main objective was to determine how MFI's allocate credit to SME's. The study focused on the financing aspects of SME's, she considered some aspects of financing such as financing requirements and various sources of financing for SME's. She found that 55% of the funds were from business income, while 15% of the funds came from friends and relatives. In addition, 10% of funding came from MFI's and 20% from personal savings. Some of the credit rationing criteria she cited included particular nature of business, location and savings as the most important factors. Proper books of accounts, no outstanding debt were relatively important as well. In conclusion, Rukwaro's study found that credit rationing and credit size are affected by the operational levels of SME's.

Wambugu (2009) on credit management practices in SACCOs offering front office services found out that risk identification is an important stage in credit risk management and should be applied effectively to identify the current credit risks confronting the organization, provide the likelihood of these risks occurring and reveal the type and amount of loss these risks are meant to cause if they occur. He concluded that the establishment of a review system that provided accurate timely and relevant risk information in a clear, easily understood manner is key to risk monitoring.

Wasonga (2008) carried out a case study to determine the challenges the commercial banks face in the process of financing SME customers in Kenya. He sought out to examine how commercial banks try to address these challenges and also examine the banking needs of SME's. He found that major challenges faced by these banks included lack of banking or credit history to allow SME's to access credit from banks. SME's do 18not have valuable collateral to act as security for financing. Some of these SME's were also not registered and lacked financial statements required for financing. He also found that accounting was not properly done therefore they had no proper books of accounts. In addition, Wasonga finds that banks need to come up with products that address SME needs. Banks should focus on funding for SME working capital needs. Currently, temporary overdrafts are used to finance immediate working capital needs. 60% of SME customers requested for loans ranging between Kshs. 500,000 and 1,000,000, 26.7% seek loans between Kshs. 1Million and 5 Million. Commercial banks were found to be charging various incidental costs that made the loans more expensive. The interest rates charged were between 19.75%-21%. The default rate at Fina bank was found to be very low because of the stringent methods put in place and the various collection methods used

2.5 Literature Summary

Abdou and Pointon (2011) stated that the judgmental approach relies heavily on the past and present experiences of the credit analysts who have to judge whether the customers have the ability to repay a loan within a certain time. Consequently, judgmental approaches are associated with subjectivity, inconsistency and individual preferences motivating decisions. Judgmental approaches have some strengths, such as taking account of qualitative characteristics and having a good track record in evaluating past credit by utilizing the wealth of the credit analyst's past experience".

Abdou and Pointon (2011) went further to point out key determinants of credit rating including characteristics of a client such as gender, age, marital status, educational level, occupation, time at present job and having a credit card, other loan characteristics such as loan amount, loan duration, monthly income, bank accounts, purpose of loan and guarantees. While some determinants are common between different models, there is no universally accepted set of determinants and therefore no optimal credit rating model procedure which can be applied to different banks in different countries.

In investigating how a lending technology affects loan risk, Jimenez and Saurina (2004) found that loans that were approved in close relationships between loan officers and clients were associated with greater risks (higher rates of default) than loans granted in distant relationships. Degryse and Van Cayseele (2000) report had similar findings in their study in which they show that a close relationship between the bank and the client favors the approval of the loan application, and that the demand for collateral decreases with the duration of the relationship, resulting in greater risk for the bank or lending institutions.

The application of various variables of credit rating policies in decision making during loan appraisal have varied impact on the final approvals and hence the volume of the uptake. Despite the applications of the credit rating policies in loan appraisal in SACCO's, the past historical practices by the members appears to continue to be the dominant factor considered in the lending decision. This observation is true and is supported by the above theories regardless of the amounts borrowed by the individual members. This may reflect the value of flexibility in the renegotiation on the part of the applicant. Other factors which play an important role in the decision making include the CRB reports, the earnings amongst other factors. The most valuable assets of a financial institution is the loan portfolio and its continued growth is an assurance that the firm is in business and capable of sustaining itself.

The literature review identifies a range of factors that have been shown to be consistently linked to the growth of the loan portfolio in various financial institutions. These include the historical records of each client, the earnings and capital base of each client, the economic factors, and the liquidity position of the firm amongst other. Evidence on the impact of each is still inconclusive more so in the SACCO industry, although keeping each variable in line with market expectations is certainly critical to increasing the lending capacity to a member.

There could be other factors which contribute to the loan uptake other than the above mentioned issues. Some of these factors include the availability of investment opportunities, the Socio Political atmosphere amongst others. The impact of contribution of each variable is difficult to establish but could be investigated during the research.

The Key issues coming from the discussions above shows that there is no clear one factor that determines the loan uptake which is subject to various applications and that the factors affecting one financial institution varies from one institution to another. Arising from the factors above there is need to research on the effects of the credit rating policies currently in practice so that the impact of the policies is established. There is also need to establish the impact of other parameters on the credit performance of each SACCO other than the known human aspects and inherent characteristic of each Sacco. In this aspect my study from the 35 SACCOs in the County of Nairobi will try to breach the gap between the perceived impact of the rating policies to the loan uptake and the actual researched policies that affect the loan uptake in the SACCOs.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter specifies the nature of the research methodology that will be used in the study. The chapter adopts the following structure: Research Design, Target Population, Data collection techniques and data analysis methods that will be followed in the research process.

3.2 Research Design

A descriptive survey will be employed in this study, the design was chosen because it will provide a means to contextually interpret and understand credit risk and rationing in SACCOs. According to Cooper and Schindler (2003) a descriptive study describes the existing conditions and attitudes through observation and interpretation techniques. The study will therefore be able to generalize the findings to all licensed SACCOs in Nairobi County.

3.3 Population of Study

Population in statistics is the specific population about which information is desired. According to Field (2005), a population is a well-defined or set of people, services, elements, and events, group of things or households that are being investigated. The target population of interest in this study shall consist of 2000 licensed SACCOs within Nairobi County.

3.4 Sample

According to Orodho (2003), sampling refers to the process of selecting units (for example, people, organizations) from a population of interest so that by studying the sample we may fairly generalize our results back to the population from which they were chosen. The researcher will adopt random sampling technique for the research to select 30 SACCOs within Nairobi County.

3.5 Data Collection

The study will use both secondary and primary data. Secondary data will be obtained from the SACCOs' financial records while the primary data will be collected using structured questionnaires that shall allow for uniformity of responses to questions. Questionnaires will allow greater uniformity in the way questions are asked, ensuring greater compatibility in the responses. A five point non-comparative Likert scale will be used for the closed ended questions, the intent of the Likert will be that the statement represented different aspects of the same attitude (Brace 2004). Likert scale is simple to construct, and will be easy for the respondents to read, understand and respond appropriately to the statements put across.

3.5.1 Validity and Reliability

According to Mugenda and Mugenda (2003), validity is the accuracy and meaningfulness of inferences, which are based on the research results. Validity per se is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study. To enhance content validity, the lecturers in the field of finance will first appraise the research instruments. Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials (Mugenda and Mugenda 2003).

Reliability in research is influenced by random error, as random errors increase, reliability decreases. Errors may arise from inaccurate coding and ambiguous instructions to the respondents. The questionnaire to be used in this study will be given to three independent experts in consultation with a statistician who shall evaluate it for face and content validity as well as for conceptual clarity and investigative bias.

3.6 Data Analysis

A comparison of data collected with theoretical approaches and documentaries cited in the literature review will be done. Further, data obtained from various respondents will be compared against each other in order to get more relevant on the issues under study. Data will be checked for completeness, accuracy, errors in responses, omissions and other inconsistencies. The data will then be coded using numerals in order to put them in limited number of categories. The data will be analyzed using the Statistical Package for Social Sciences (SPSS) Version 20.0 and presented in the report in the form of tables, bar charts and graphs. Regression analysis shall be done to establish the relationship between the variables.

3.6.1 Measurement of each Variable

3.6.1.1 Loan uptake(Y)

To measure the loan uptake, the number of SACCO members who took loans between 2011-2013 will be determined. The loan uptake will then be shown as a ratio of the total number of SACCO members who took loans between 2011 and 2013 and the total number of SACCO members.

Loan Uptake = Number of SACCO members who took loans between 2011-2013

Total Number of SACCO members

3.6.1.2 POLICIES (X_n VARIABLE)

The various policies used in the appraisal have been identified as shown below and the same will be assigned a numerical number of strength showing the role played by each policy.

The specific policies are shown below:

X_1 = Historical background of each member in a Sacco

X_2 = Capacity to pay members in a Sacco

X_3 = Credit reference report for each member

X_4 = Security to the loan

X_5 = Liquidity of the firm

$X6$ = Credit Rationing

$X_{7 =}$ Management Efficiency

The regression model to be tested will be: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_{7+} E$

Where: - Y = Loan Uptake

Explained Variations of the Model$= = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_{7+} E$

E = Unexplained Variation i.e. error term, it represents all the factors that affect the dependent variable but are not included in the model either because they are not known or difficult to measure.

β_0 = Constant. It defines the level of credit rating without inclusion of predictor variables.

$\beta_1, \beta_2, \beta_3$= Regression Co-efficient. Define the amount by which Y is changed for every unit change of predictor variables. The significance of each of the co-efficient will be tested at 95 percent level of confidence to explain the variable that explains most of the problem.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSION

4.1 Introduction

This chapter presents the quantitative analysis of data collected from the sampled SACCOs in Nairobi County. It gives analysis and interpretation of the data coded from the questionnaires that were used during the study. The data has been analyzed to give clear findings of the study.

4.2 Respondents' Demographic Characteristics

4.2.1 Response Rate

The study targeted 30 respondents in collecting data. Results in table 4.1 below, show that 19 out of 30 target respondents filled in and returned the questionnaire contributing to a 58% response rate. This response rate was good and representative and conforms to Mugenda & Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. This survey can therefore be said to be successful.

Table 4.1 Response Rate

Response Rate	Frequency	Percentage
Responded	19	58
Not Responded	11	42
Totals	30	100

Source: Research Data 2014

4.2.2 Structure of the Organization
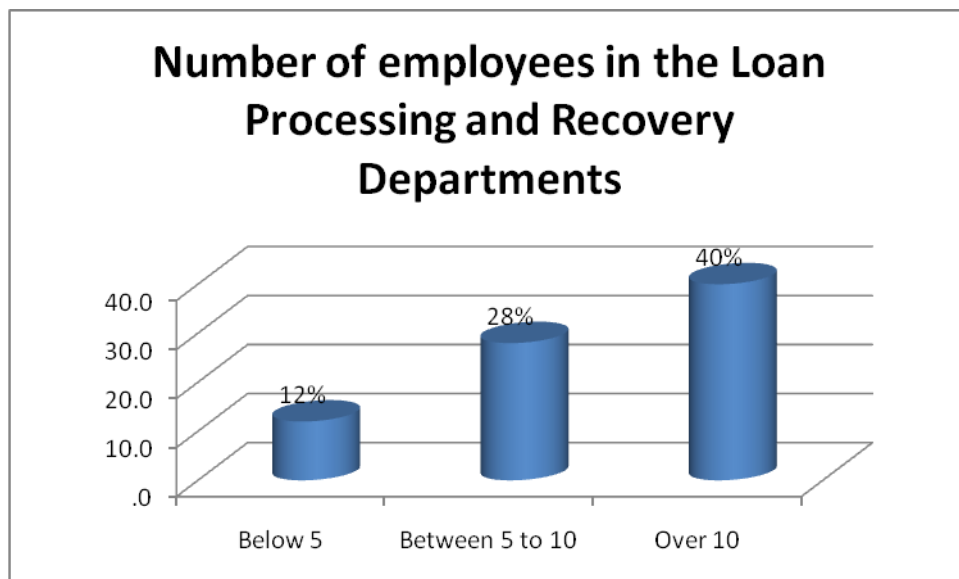
Figure 4.1: Loan processing Employees

Figure 4.1 presents data on the number of employees in the loan processing and recovery department of the SACCOs, based on the data 40% of the SACCOs had over 10 employees in the departments, 28% had between 5 to 10 employees while only 12% had below 5 employees, the findings imply that a greater proportion of the SACCOs had put in place string internal systems by employing more employees to enhance loan processing and recovery to reduce the levels of credit risks.

4.2.3 Loan Requests

Monthly Loan Requests

Kshs. 6,000-500,000	14%
Kshs. 500,001-1,000,000	42%
Kshs.1,000,001-2,000,000	18%
Kshs.2,000,001-3,000,000	16%
Kshs. 3,000,001 and above	10%
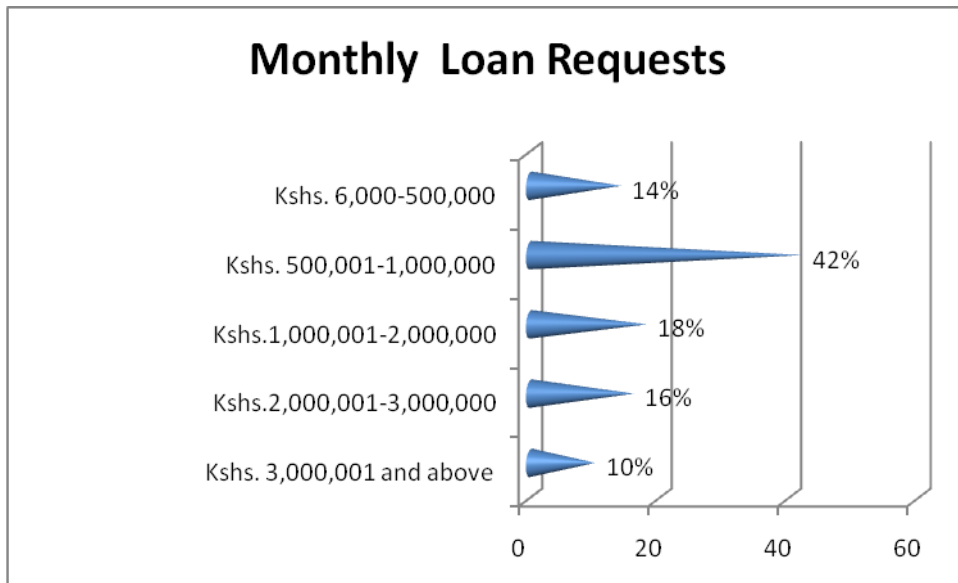
Figure 4.2: Monthly Loan Requests

The researcher sought to establish the amount of loan requested per month from the SACCOs, based on the data presented on figure 4.2, 42% of the SACCOs received loan requests ranging between Kshs. 5,00,0001-1,000,000, 18% received requests of between Kshs. 1,000,001-2,000,000, 16% received requests amounting between Kshs. 2,000,001 and Kshs. 3,000,0000. Only 10% received a monthly request of Kshs. 3,000,000 and above. The findings imply that there was a high demand of loans from SACCOs since a greater proportion of the SACCOs received loan request above Kshs. 500,000 per month.

4.2.4 Loan Disbursement

Table 4.2: Monthly Loan Disbursement

Monthly Loan Disbursements	F	%
Below Kshs. 6,000,000	1	5.2
Kshs.6,000,0001-20,000,000	3	15.8
Kshs. 20,000,001-50,0000,000	2	10.5
Kshs. 50,000,001-75,000,000	3	15.8
Kshs. 75,000,001-100,000,000	7	36.8
Above Kshs. 100,000,000	3	15.8
Total	**19**	**100%**

The data on table 4.1 presents the findings on the average monthly loan disbursements, based on the data, a greater proportion of the SACCOs 36.8% disbursed loan amounting between kshs. 75,000,001-100,000 in a month, while 15.8% disbursed over Kshs. 100,000.Only 5.2% disbursed loans below Kshs. 6,000,000. The findings imply that there is high rate of loans disbursement in the SACCOs.

4.2.4 Rejection Rate

Table 4.3: Loan Rejection Rate

Rejection Rate	F	%
5% of all loan applications	6	31.5
10% of all loan applications	8	42.2
20% of all loan applications	3	15.8
30% of all loan applications	2	10.5
50% of all loan applications	-	-
Total	**19**	**100%**

The researcher sought to establish the   rate of loan rejection in the SACCOs, based on the data presented on table 4.5, a greater proportion of the SACCOs (42.1%) rejected 10% of the loan applications, 31.5% rejected 5% of the loan applications, 15.8% rejected 30% of the loan applications while none of the SACCOs rejected 50% of the loan applications. The findings imply that the SACCOs had put in place adequate internal systems to ensure that loans are not given out to Sacco members who were likely to default.

4.2.5 Effect of Credit Rating Policies

Table 4.4: Rating Policies

Universal Credit Rating Policies	F	%
Linear probability and Logit Model	7	36.8
Risk Adjusted Return on Capital	5	26.3
Option Pricing Theory Models	3	15.7
Neural Networks	4	21.2
Total	**19**	**100%**

The data on table 4.6 presents the findings on the credit rating policies used by the SACCOs, based on the findings, 36.8% 0f the SACCOs used linear probability and logit model, 26.3% used risk adjusted return on capital, 15.7% used option pricing theory models while 21.2 used neural networks. The findings imply that most of the Sacco's mostly rely on past data to forecast default probabilities on new loans.

4.2.6 Loan Approvals Rates
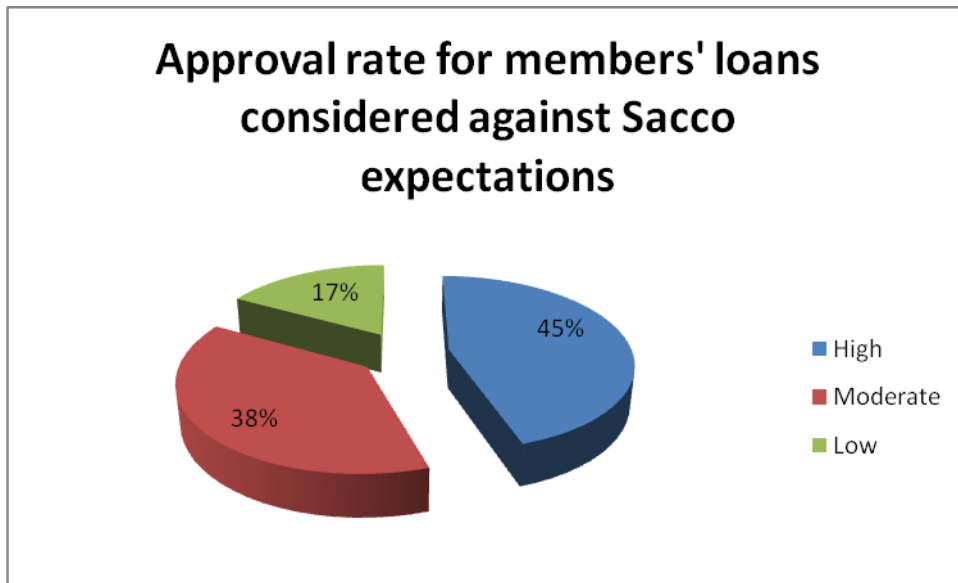
Figure 4.3: Loan Approvals Rates

The data presented on figure 4.3 shows the loan approval rate for members loans considered against the Sacco expectations. Based on the findings 45% reported high loan approval rates, 38% reported moderate loan approval rates while 175 reported low loan approval rates. The findings imply that loan approval rate for members' loans considered against Sacco expectations were high.

4.2.7 Methods of Loan Assessment

Table 4.5: Assessment Methods

Credit Assessment Methods	F	%
Relationship Banking	4	21.1
Statistical Methods	6	31.5
Both	9	47.4
Total	**19**	**100%**

The researcher sought to establish the credit assessment methods used by the SACCOs, based on the data presented on table 4.7, 47.4% of the SACCOs used both relationship banking and statistical methods, 21.15% used relationship banking while 31.5% used statistical methods. The findings imply that most Sacco used both relationship banking and statistical methods to reduce the chances of loan defaults which is highly prevalent in SACCOs.

4.2.8 Financial Position

Average Turnover of Saccos in Millions
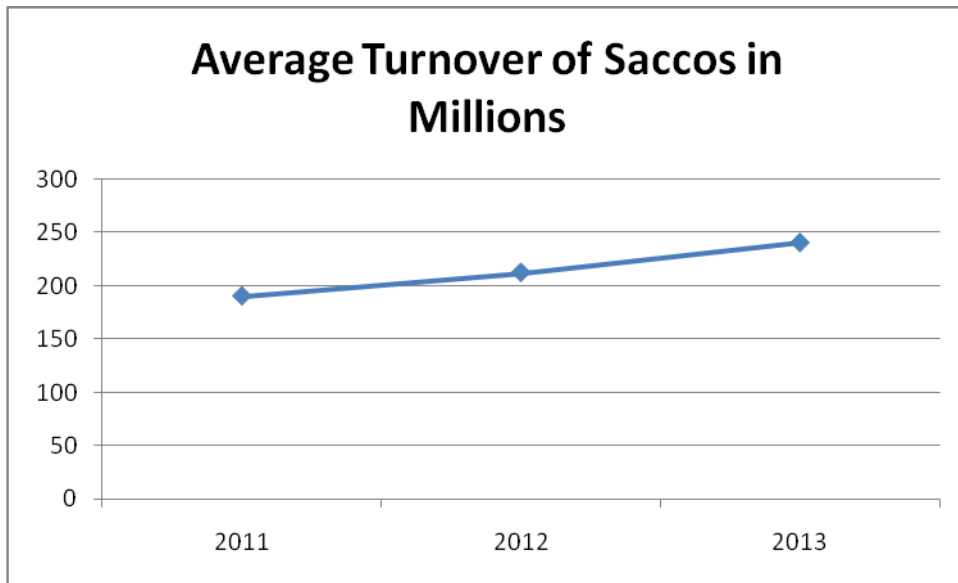
Figure 4.4: Average Turnover

Figure 4.4 presents the data on the average turnover of the SACCOs between 2011 and2013, based on the data, the SACCOs show a significant growth in turnover, with average turnover being Kshs. 158.7 million in 2011, Kshs. 211.8 Milliion in 2012 and Kshs. 249 million in 2o13. This significant growth in annual turnover of the SACCOs could be attributed to the increased investments by the SACCOs in other securities as well interest earned from the increased amount of loans given to members. The growth implies that the SACCOs are spreading risks by investing in other ventures and not only relying on loan given to members as well as income from FOSA services.

4.2.9 Contributions To Turnover

Table 4.6: Contributors to Turnover

Major contributor to turnover	F	%
Investments in other securities	0	0
Interest from loan to members	14	73.7
Interest income from FOSA services	5	26.3
Total	**19**	**100%**

The researcher sought to establish the major contributor to turnover in the SACCOs, based on the data presented on table 4.8, a greater proportion (73.7%) of the SACCOs obtained most of their income from investment in members through loans. Only 26.3% obtained their income mainly from interest levied on FOSA services. The findings imply that SACCOs are no-longer relying on interest from loans given to members and FOSA services but they are investing highly in other securities.

Figure 4.5: Average Percentage turnover of the SACCOs
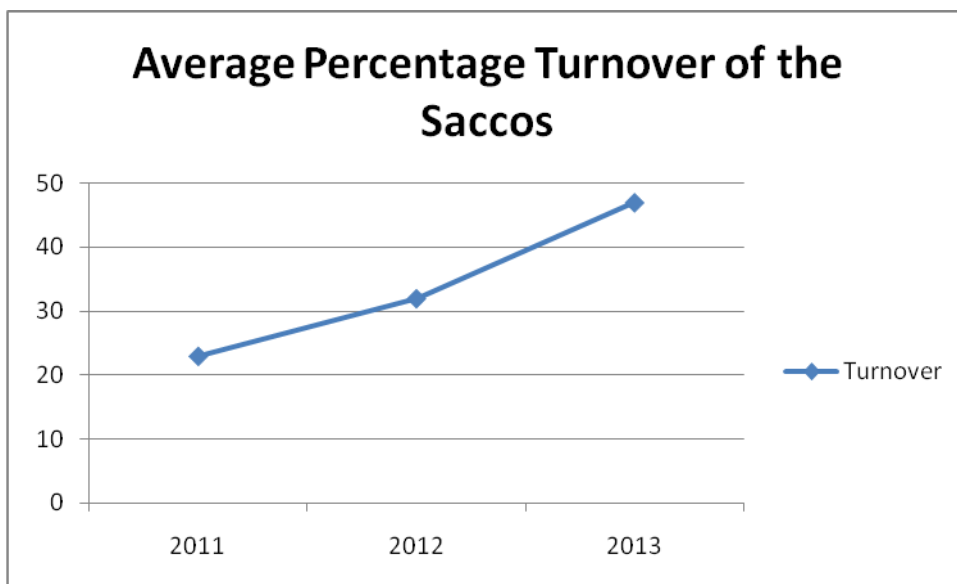
Figure 4.5: Average Turnover

Figure 4.5 shows the average percentage turnover of the SACCOs, from the findings, the average turnover of the SACCOs had increased significantly from 23% in 2011 to 32% in 2012 and 46% in 2013. The findings imply a significant growth among the SACCOs.

4.2.10 Credit Policy and Implementation
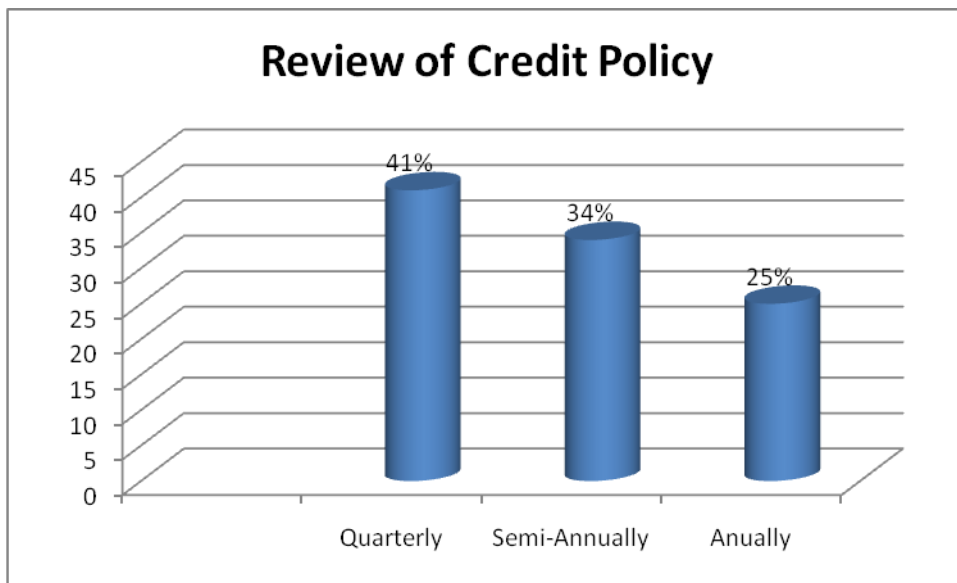
Figure 4.6: Review of Credit Policy

The researcher sought to establish the frequency with which the SACCOs reviewed their credit policies, based on the data presented on figure 4.6, the 41% of the SACCOs reviewed their policies quarterly, 34% reviewed their salaries semi-annually while 25% reviewed their salaries annually. The findings show that the SACCOs are keen on regularly reviewing polices to reduce the levels of default.

Figure 4.7: Average Amount of Loans Disbursed
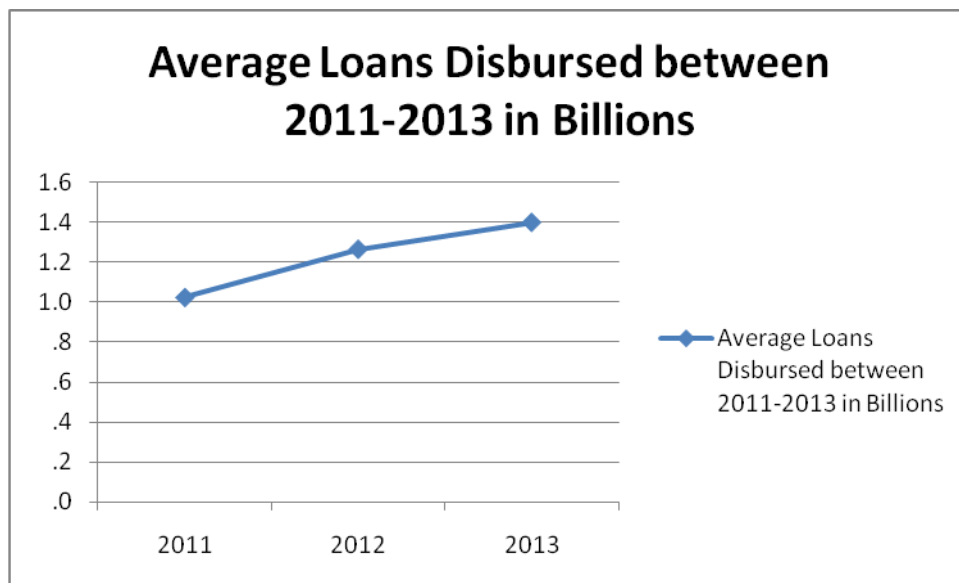
Figure 4.7: Loans Disbursed

The data on figure 4.7 shows the average loans disbursed to members between 2011-2013, based on the data, the average loan disbursed to members increased significantly from Kshs. 1 Billion in 2011 to Kshs. 1.28 in 2012 and finally to Kshs. 1.4 Billion in 2013 This implies that there has been a significant growth in the SACCOs.

4.2.11 Loan Uptake

Figure 4.8: Average Number of Sacco members with Loans between 2011-2013
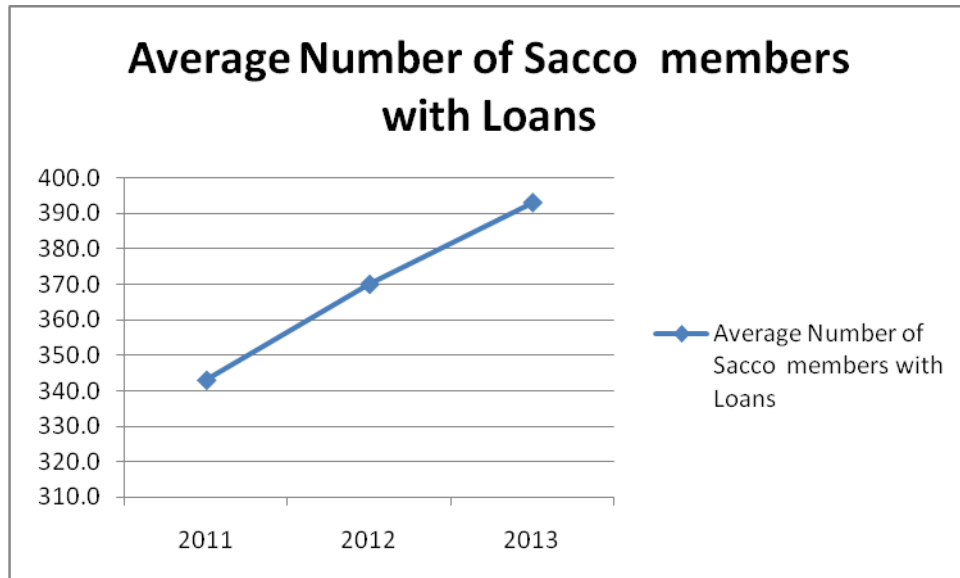
Figure 4.8: Membership with Loans

The data on figure 4.8 shows the avarage number of Sacco members with loans, based on the findings lthe number of members taking loans increased significantly from 342 members in 2011 t0 393 members on average in 2013. The findings imply that there was increasingly high uptake of loans by Sacco members.

4.2.12 Sacco Membership

Figure 4.9: Average Sacco membership Between 2011-2013
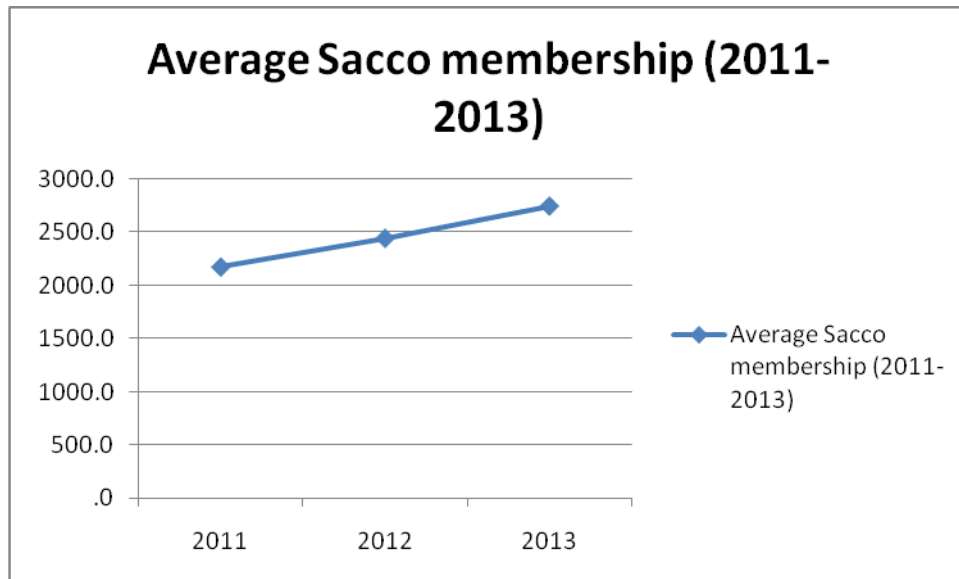
Figure 4.9: Sacco Membership

The researcher sought to establish the average membership of the SACCOs between 2011 and 2013, based on the findings presented on figure 4.9, the average membership of the SACCOs increased tremendously from 2123 members in 2011 to 2560 in 2013. The findings imply that there has been an increasing trend in Sacco membership in Kenya.

4.2.13 Rating Policies

Table 4.7: Credit Evaluation

Characteristics	Mean	Standard Deviation	N
Character of the borrower	4.560	0.892	19
Capacity to pay	4.744	0.878	19
Economic conditions	4.670	0.895	19
Collateral/Security available	4.542	0.953	19
Capital	4.784	0.784	19

Source: Research Data 2014

The researcher sought to establish the characteristics that are highly considered by the SACCOs while evaluating the applicant, based on the data presented on table 4.9, the following characteristics were highly considered: Character of the borrower (Mean=4.560; SD=0.892) Capacity to pay (Mean=4.744; SD=0.878)Economic conditions (Mean=4.670;SD=0.895); Collateral/Security available (Mean 4.542; SD=0.953).

Table 4.8: Policies Roles

Rating Policies	Mean	Standard Deviation	N
Historical background of each member	4.560	0.849	19
Capacity to pay	4.722	0.930	19
Credit reference report for each member	4.634	0.850	19
Security to the loan	4.525	1.045	19

Liquidity of the firm	3.442	1.053	19
Credit rationing	4.384	0.564	19
Management efficiency	3.450	0.894	19

The researcher sought to establish the credit rating policies applied by the SACCOs, the responses were rated on a Likert scale of 1 to 5. Based on the data presented on table 4.10, the rating policies applied highly by the SACCOs while processing loan requests included: Historical background of each member (Mean=4.560:SD=0.849); Capacity to pay (Mean=4.772;SD=0.930); Credit reference report for each member (Mean=4.634;SD=0.850); and Security to the loan (Mean=4.525;SD=1.045). The findings imply that the SACCOs had strong credit rating polices in place to reduce chances of loan default by members.

Table 4.9: Credit Policies Formulation

Involvement in credit policy formulation	Mean	Standard Deviation	N
Senior Management	4.320	0.845	19
Board of directors	4.302	0.945	19
Credit Managers	4.673	0.924	19
Credit Analyst	4.752	1.082	19
Credit Committee	4.842	1.120	19
Branch Manager	3.890	0.974	19

Source: Research Data 2014

The researcher sought to establish the level of involvement in credit policy formulation by the staff, the responses were rated on a Likert scale of 1 to 5. Based on the data presented on table 4.11, the following were mostly involved in credit policy formulation in the SACCOs: Credit managers (Mean=4.673; SD=0.924); Credit Analysts (Mean=4.752; SD=1.082);

Credit Committee (Mean=4.842; SD=1.1200). The following were least involved in the credit policy formulation: Branch manager (Mean=3.890; SD=0.974) and board of directors (Mean=4.302; SD=0.945).

Table 4.10 Approvals Decision

Credit Decision making for members' Loans	Mean	Standard Deviation	N
Senior Management	4.365	0.943	19
Board of directors	4.104	0.831	19
Credit Managers	4.830	0.954	19
Credit Analyst	4.925	1.945	19
Credit Committee	4.843	1.053	19
Branch Manager	3.781	0.564	19
Loan Officer	4.762	0.984	19

Regarding credit decision making for members loans, the researcher sought to determine the level to which individuals within the SACCOs were responsible for making the decisions. The responses were rated on a Likert scale of 1 to 5. Based on the findings on table 4.12, the following individual were most involve in the decision making: credit managers (Mean=4.830;SD=0.954); Credit Analyst (Mean=4.925;SD=1.945); Credit Committee (Mean=4.843;SD=1.053); Loan Officer (Mean = 4.762; SD=0.984). The senior management, board of directors and credit managers were least involved in making decision for members' loans.

4.3 Data Validity

The data collected corresponded well with the set objective and it is expected to give the right results. The data collected covered most of the areas in the industry and it has taken into consideration all the varying situations of the Sacco industry. For instance the public sector, private sector and manufacturing are all covered.

4.4. Descriptive Statistics

Table 4.11: Descriptive Statistics

Variables in Kshs	Mean	Std. Deviation	Maximum	Median	Minimum
Y=Loan Uptake	4.563	0.894	4.645	2.123	2.109
X_1=Historical Background	4.218	0.368	4.699	1.766	2.833
X_2= Capacity to pay	3.028	0.740	3.906	1.576	1.645
X_3= CRB Reports	3.045	0.780	4.450	1.865	0.456
X_4= Security to Loans	4.634	0.546	1.000	0.782	0.564
X_5= Liquidity of the	4.629	0.712	7.849	0.544	1.954

firm					
$X_{6=}$ **Credit Rationing**	4.144	0.940	3.906	0.981	1.645
$X_{7=}$**Management Efficiency**	4.545	4.082	4.374	2.314	0.254

Source: Research Data (2014)

 The data presented on table 4.2 provides a summary of the descriptive statistics of the dependent and explanatory variables. The mean for X_1 (Historical Background) for the sampled SACCOs was 4.281, the median was 1.762. The mean for X_4 (Liquidity) is 4.634. This means that on average more than 46.34% of the level of liquidity for the SACCOs sampled was adequate in   facilitating loan uptake by the members. Credit rationing (X_6) had a mean of 4.545 implying that the level of management efficiency in the SACCOs was at 45.45%, this implies that the management strategies within the SACCOs were not being implemented effectively. The dependent variable measured by the historical background of each member in a Sacco, Capacity to pay members in a Sacco, Credit reference report for each member, Security to the loan, Liquidity of the firm, Credit Rationing and Management Efficiency had a mean of 4.563 and a standard Deviation of 0.894 implying that the independent variable had a generally high influence on the loan uptake.

4.5 Correlations Analysis

Table 4.12: Correlations Analysis

Correlations	Y	X_1	X_2	X_3	X_4	X_5	X_6	X_7
Y	1							
X_1	-.094**	1.000*						
X_2	.051*	.753**	1.000*					
X_3	-.013**	.776**	.363**	1.000**				
X_4	.410*	.695**	.639**	.267*	1.000**			
X_5	.323**	.704**	.051**	.806**	-.394**	1.000*		
X_6	-.452**	.639**	.704**	.695**	.267*	.639**	1.000**	
X_7	.013**	.702**	.427**	.051**	.416**	.726*	.908*	1.000**

** Significance at $p < 0.001$ level (2 tailed)

*Significance at $p < 0.05$ level (2 tailed)

Source: Research Data (2014)

4.5.1 Dependent Variable: Uptake of Loans

The correlation analysis produced on table 4.3 shows that historical background was positively correlated with ability to pay as shown by 0.776 implying that an increase in the follow up of the historical background of members seeking loans contributes to an increase in the number of members who are able to repay back the loans given by the SACCOs. Capacity to pay and liquidity were positively correlated as shown with 0.639 implying that if the SACCOs give loans to members who have the ability to pay, the liquidity of the SACCOs improves positively. The findings also indicate positive correlation between liquidity and management efficiency with a correlation coefficient value of 0.695 implying that the liquidity positively influences the management efficiency of the SACCOs. The dependent variable Y, (Loan Uptake) was negatively correlated with historical background (-0.094), credit rationing (-0.452) and security (-0.013). This implies that when the SACCOs formulate and implement strict measures on historical background, credit rationing and security, the loan uptake by remembers reduces.

4.6 Regression Analysis and Hypotheses Testing

4.6.1 Strength of the model

Analysis in table 4.13 and 4.14 shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R^2 equals 0.843, that is, Historical background of each member in a Sacco, Capacity to pay members in a Sacco, Credit reference report for each member, Security to the loan, Liquidity of the firm, Credit Rationing and Management Efficiency leaving only 15.7 percent unexplained. The P- value of 0.001 (Less than 0.05) implies that the model of uptake of loans in SACCOs is significant at the 5 percent significance.

Table 13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.635[a]	.843	.798	.801

a. Predictors: Historical background of each member in a Sacco, Capacity

to pay members in a Sacco, Credit reference report for each member,

Security to the loan, Liquidity of the firm, Credit Rationing, Management

Efficiency

b. Dependent Variable: Loan Uptake

(Source: Research Data 2014)

Table 4.14: ANOVAb

Table 4.14: ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	93.144	2	23.286	79.730	.000[a]
	Residual	53.739	16	.292		
	Total	146.883	18			

a. Predictors: (Constant), Historical background of each member in a Sacco, Capacity to pay members in a Sacco, Credit reference report for each member, Security to the loan, Liquidity of the firm, Credit Rationing, Management Efficiency

b. Dependent Variable: Uptake of loans

(Source: Research Data 2014)

ANOVA findings (P- value of 0.001) in table 4.14 show that there is correlation between the predictor's variables (Historical background of each member in a Sacco, Capacity to pay members in a Sacco, Credit reference report for each member, Security to the loan, Liquidity of the firm, Credit Rationing, Management Efficiency) and response variable (Uptake of loans). An F ratio is calculated which represents the variance between the groups, divided by the variance within the groups. A large F ratio indicates that there is more variability between the groups (caused by the independent variable) than there is within each group, referred to as the error term.

Table 4.15: Coefficients of Regression Equation

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	β	Std. Error	Beta		
1 (Constant)	.690	.258		.930	.354
Historical Background	-.094	.077	.297	3.798	.000
Capacity to pay	.430	.070	.188	3.290	.001
Security	-.013	.062	.013	.215	.001
Liquidity	.421	.077	.406	5.445	.010
Credit Reference report		.056	.453	5.003	.013
	-.323	.231	.056	5.210	.124
Credit Rationing	-.128	.012	.523	3.003	.000
Management Efficiency	.129	.032	.023	3.023	.037

a.   Dependent Variable: Uptake of Loans

Significance level: $p < 0.001$; N =19
Overall model: F = 79.730; $p < 0.001$; R^2 = 0. 843; Adjusted R^2 = 0.798
Source: Research Data (2014)

The established multiple linear regression equation becomes:

$$Y = 0.690 - 0.094X_1 + 0.430X_2 - 0.013X_3 + 0.421X_4 - 0.323X_5 - 0.128X_6 + 0129X_7$$

4.7 Discussion of the Research Findings

The regression model generated has a constant of 0.690, which implies that if the credit policies i.e. Historical background of each member in a Sacco, Capacity to pay members in a Sacco, Credit reference report for each member, Security to the loan, Liquidity of the firm, Credit Rationing, Management Efficiency are all rated zero, the loan uptake will be at a rate of 69% of the independent variable X_1 (Historical Background) had a coefficient of -0.094, shows that one unit change in checking the historical background of borrowers then the loan uptake will reduce by 9.4%. Capacity to pay (X_2) had a coefficient of 0.430, which implies that that one unit change in capacity to pay loan results to an increase in the uptake of loans by 43%.

The coefficient of the third independent variable X_3 (Security) was -0.013, implying that one unit change in the requirement of security by the SACCOs results to a decrease in loan uptake by 1.3%. The analysis generated 0.421 as the coefficient of X_4 (Liquidity) implying that one unit change in the liquidity of the SACCOs contributes to an increase in the uptake of loans by 42.1%. Credit reference (X_5) on the other hand had a coefficient of -0.323 implying that one unit change in the use of credit reference reports by the SACCOs contribute to a reduction in the uptake of loan by 32.3% while X_6 (Credit Rationing) had a coefficient of -0.128 implying that a unit change in credit rationing by SACCOs results to a decrease in loan uptake by 12.8% Finally, Management Efficiency (X_7) had a coefficient of 0.129 in the model implying that a unit change in management efficiency increases the loan uptake by 12.9% in the SACCOs.

Berger and Udell (2005) expressed risk as a factor of a "unique combination of primary information source, screening and underwriting policies/procedures, loan contract structure and monitoring strategies/mechanisms". They noted that the appraisal of repayment capacity or the ability-to-pay model of financing and asset-backed lending or equity model of financing are two basic types of examining the probability of credit default. Credit risk management also includes credit pricing as an important prevention technique for undertaking excess credit risk. Accordingly it represents a potential loss that may occur for creditors as a result of borrowers' non-payment for matured liabilities. The appraisers use the above parameters to determine the loan uptake without exposing the organization.

Accordingly, this research has established that the SACCOs do use a combination of various variables in the management of risk and the anticipated default rate, this can be explained by the correlation analysis table 4.3 where historical background is positively correlated with ability to pay as shown by 0.776 implying that an increase in the follow up of the historical background of members seeking loans contributes to an increase in the number of members who are able to repay back the loans given by the SACCOs. Capacity to pay and liquidity were positively correlated as shown with 0.639 implying that if the SACCOs give loans to members who have the ability to pay, the liquidity of the SACCOs improves positively. The findings also indicate positive correlation between liquidity and management efficiency with a correlation coefficient value of 0.695 implying that the liquidity positively influences the management efficiency of the SACCOs. The dependent variable Y, (Loan Uptake) was negatively correlated with historical background (-0.094), credit rationing (-0.452) and security (-0.013). This implies that when the SACCOs formulate and implement strict

measures on historical background, credit rationing and security, the loan uptake by remembers reduces.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the findings and makes conclusions based on the aim of the study which was to establish the role of credit rating policies on the uptake of loans in SACCOs. This chapter also contains a summary and makes recommendations for improvements arising from the study limitations and proposes areas for further study.

5.2 Summary of the findings

The study found that credit reference provide a number of benefits to the creditor and the applicant and this include; expanding access to credit by allowing creditors to differentiate good and bad debtors. Secondly, reducing the cost of borrowing to good debtors by increasing competition and creating a credit culture as borrowers become aware that the market rewards and sanctions them based on their repayment history. Credit references are particularly useful for the household segment, which forms a large proportion of the loan market in Kenyan SACCOs and this may help in deepening credit access and lowering risks.

The findings revealed that the rating policies applied highly by the SACCOs while processing loan requests included: Historical background of each member (Mean=4.560:SD=0.849); Capacity to pay (Mean=4.772;SD=0.930); Credit reference report for each member (Mean=4.634;SD=0.850); and Security to the loan (Mean=4.525;SD=1.045). The findings imply that the SACCOs had strong credit rating polices in place to reduce chances of loan

default by members. On the level of involvement in credit policy formulation by the staff, the following were mostly involved in credit policy formulation in the SACCOs: Credit managers (Mean=4.673; SD=0.924); Credit Analysts (Mean=4.752; SD=1.082); Credit Committee (Mean=4.842; SD=1.1200). The following were least involved in the credit policy formulation: Branch manager (Mean=3.890; SD=0.974) and board of directors (Mean=4.302; SD=0.945). Regarding credit decision making for members loans, the following individuals were most involve in the decision making: credit managers (Mean=4.830; SD=0.954); Credit Analyst (Mean=4.925; SD=1.945); Credit Committee (Mean=4.843; SD=1.053); Loan Officer (Mean = 4.762; SD=0.984). The senior management, board of directors and credit managers were least involved in making decision for members' loans.

Finally the regression model revealed a significant relationship between the predictor's variables (Historical background of each member in a Sacco, Capacity to pay members in a Sacco, Credit reference report for each member, Security to the loan, Liquidity of the firm, Credit Rationing, Management Efficiency) and response variable (Uptake of loans) implying that the credit policies put in place by SACCOs influenced the uptake of loans.

5.3 Conclusions

Checking the historical background of borrowers through credit information systems help to build an efficient financial system for SACCOs in Kenya by promoting transparency in lending. The credit information systems with the credit references systems in Kenya are effective tools towards mitigation of adverse selection and moral hazard in credit markets, and have been found to lower overall default and interest rates and improve the pool of borrowers in formal credit markets. SACCOs operating in Kenya are quickly realizing the importance and usefulness of information sharing through credit reference bureaus to reduce lending risks. The growth of SACCOs in Kenya has contributed to this need. It can be argued that the beneficial effects of credit information systems are to be found when bureaus are utilized in the Sacco sector. It is believed that the increased competition in many regions among SACCOs has made credit bureaus a necessary step towards financial sector stability.

High collateral-to-loan value ratios are often more apparent than real because they reflect SACCOs taking into account the fact that borrowers will more likely default under poor economic circumstances when the value of their collateral is lower. Moreover, legal and practical problems of monitoring the collateral and gaining control of it at the time of default can be quite significant and costly. Even with the collateral, less credit-worthy borrowers tend to cause SACCOs to sustain more losses than their more credit-worthy counterparts who are able to borrow unsecured loans. Without collateral to satisfy a Sacco, Sacco members would be excluded from receiving credit and would have to seek credit elsewhere and they are likely to pay significantly higher rates to these credit sources. Credit guarantee programs have had mixed success in improving the availability of bank credit to small businesses in developing countries. Often, they have not been successful in reducing collateral

requirements or increasing access to small business borrowers. The reasons for the lack of success include: distrust of the guarantor; excessive delays in receiving reimbursement from the guarantor; excessive pare; work and other transaction costs necessary to receive the guarantee.

5.4 Recommendations

The management of SACCOs in Kenya should develop credit rating policies to reduce the risks associated with giving loans to members. The SACCOs should also be made more competitive with other financial service providers to ensure high levels of turnover. The findings highlight the relative significance of historical background of each member in a Sacco, Capacity to pay members in a Sacco, Credit reference report for each member, Security to the loan, Liquidity of the firm, Credit Rationing and Management Efficiency on loan uptake by members and therefore the SACCOs need to adequately address these factors while developing their credit rating policies

In spite of the reforms made in the financial sector, SACCOs still have an important role to play in the mobilization and rising of funds for a wide segment of the population as a way of realizing social economic development. The study brought to light the concern that reforms in the Financial Sector have put SACCOs in a vulnerable position with a growing concern of Sacco members increasingly seeking loans from other financial institutions. There is therefore the need for speedy measures in terms of strategy formulation, product innovation and customer care to strengthen and protect the gains made in the Cooperative sub sector.

Co-operatives need to aggressively improve their capacity in the management of credit to improve their turnover by developing credit policies that would cushion them from the risks of credit defaults. They should also provide unique credit products for their members by becoming sensitive to the general prevailing economic conditions in order to achieve long-term sustainability since the members are   key in determining the success of the SACCOs.

The SACCOS should make sure that they abide by their credit policies regulations and training should be done to all SACCOs members where awareness on their positions and

roles in promoting their SACCOS should be created. Likewise, SACCOs should establish the training on investment analysis to both SACCOS' management and members to make the SACCOS to rely on the real projections from investment analysis before disbursement of loans. Members with overdue loans should repay their loans. Furthermore, non performing SACCOs should be revived. Additionally, the loans limit criteria should also be strongly considered. It means that SACCOS' members should be taught how large size of loan is very risky. Since majority of borrowers engage in small businesses, insurance cover should be introduced. Finally, the government should continue to monitor and supervise SACCOs to improve their efficiency in providing credit facilities to members.

5.5 Limitations of the Study

The study focused only on the SACCOs within Nairobi County, the findings therefore could not be generalized to other SACCOs especially those whose membership are mainly composed of groups living in rural areas for example SACCOs for rural farmers. Attribution of a successful outcome to a particular credit policy is a complex challenge in finance research. It is difficult to establish a clear link between the success of a Sacco and its credit policies as there are many factors at play. The organizational policies regarding the confidentiality of information that the employees could give was also a limitation during the study as some respondents were not willing to give out some information that they considered confidential. Compared to banks studies on the credit rating policies in Sacco has not been done thus making it very hard for the researcher to gather the relevant information in the due course. This study was a cross sectional study that only gave a snapshot of the current situation. The result of this study would have yielded a different result had it taken into account the differences of appraisal standards adopted by each SACCO.

5.6 Suggestions for Future Research

This paper examines the effect of credit policies on the uptake of loan by Sacco members in Kenya. It was not possible to include all the SACCOs in the sample. Therefore researcher suggests further research on the effect of credit policies on Sacco lending among all the SACCOs in Kenya.

The study also recommends that a similar study to be done on other firms in the financial sector such as banks Micro-Finance Institutions to allow for generalization of the effect of credit policies on lending in the financial sector as a whole. This is because different financial institutions have different credit policies in place.

The study also recommends that further studies should be done on the effect of other factors in the external environment such as money supply and interest rate on Sacco lending decision. A similar study should also be done whereby the data collection relies on both secondary and primary data in order to obtain very comprehensive findings.

REFERENCES

Abdou, H. & Pointon, J. (2011). Credit scoring, statistical techniques and evaluation criteria: a review of the literature, *Intelligent Systems in Accounting, Finance and Management*, 18(2/3), 59-88.

Al Amari, A. (2002). The credit evaluation process and the role of credit scoring: a case study of Qatar, PhD thesis, University College Dublin, Dublin.

Anderson, R.C. & Fraser, D.R. (2000). Corporate control, bank risk taking, and the health of the banking industry, *Journal of Banking and Finance,* 24 (8), 1383-98

Biais, B. & Weber, M. (2009). Hindsight bias, risk perception, and investment performance, *Management Science,* 55(6), 1018-29.

Beck, T., Demirguc̦-Kunt, A., Soledad, M. & Perı´a, M. (2011). Bank financing for SMEs: evidence across countries and bank ownership types, *Journal of Financial Services Research,* 39(1/2), 35-54.

Berger, A.N. & Black, L.K. (2011). Bank size, lending technologies, and small business finance, *Journal of Banking and Finance,* 35(3), 724-35.

Berger, A.N., Frame, W.S. & Miller, N.H. (2005). Credit scoring and the availability, price, and risk of small business credit, *Journal of Money, Credit, and Banking,* 37(2), 191-222

Birchall, J. (2003*). Rediscovering the cooperative advantage: Poverty reduction through self-help*. Geneva: Cooperative Branch, International Labour Office.

Bruns, V. & Fletcher, M. (2008). Banks' risk assessment of Swedish SMEs, *Venture Capital,* 10(2), 171-94.

Boot, A.W.A. (2000). Relationship Banking: what do we know?, *Journal of Financial Intermediation*, 9(1), 7-25.

Bonfirm, D. (2009). Credit risk drivers: evaluating the contribution of firm level information and of macroeconomic dynamics, *Journal of Banking and Finance*, 33(2), 281-99.

Bruns, V. & Fletcher, M. (2008). Banks' risk assessment of Swedish SMEs, *Venture Capital*, 10(2), 171-94

Catasu´ s, B. & Gro¨jer, J.E. (2003). Intangibles and credit decision: results from an experiment, *European Accounting Review*, 12(2), 327-55.

Coats, P.K. & Fant, F.L. (1993). *Recognizing Financial Distress Patterns Using a Neural Network*, Sage, and London.

Crook, J., Edelman, D. & Thomas, L. (2007). Recent developments in consumer credit risk assessment, *European Journal of Operational Research*, 183(3) 1447-1465.

Degryse, H. & Van Cayseele, P. (2000). Relationship lending within a bank-based system: evidence from European small business data, *Journal of Financial Intermediation,* 9(1), 90-109.

Emery, D. E. (1984), Principles of Economics: Macroeconomics,

Frame, W.S., Srinivasan, A. & Woosley, L. (2001). The effect of credit scoring on small-business lending, *Journal of Money, Credit, and Banking,* 33(3), 814-25.

Hand, D. J., & Jacka, S. D. (1998). Statistics in Finance, Arnold Applications of Statistics: London.

Hernandez-Canovas, G. & Martı´nez-Solano, P. (2010). Relationship lending and SME financingin the continental European bank-based system, *Small Business Economics,* 34(14), 465-82.

Houge, T. & Loughran, T. (2000). Cash flow is king? Cognitive errors by investors, *Journal of Psychology and Financial Markets*, 1(3/4), 161-75

International Cooperative Alliance (2004). http://www.coop.org/ Accessed on 30 June,

   2014

International Journal of management Research and Business strategy (IJMRBS), October

   2013, 2(4)

Lewis, E. M. (1992). An Introduction to Credit Scoring. California: Fair, Isaac and Co., Inc.

Jimenez, G. & Saurina, J. (2004). Collateral, type of lender and relationship banking as

   determinants of credit risk, *Journal of Banking and Finance*, 28(9), 2191-212

Kahneman, D.& Klein, G. (2009). Conditions for intuitive expertise: a failure to disagree,

   American Psychologist, 64(6), 515-26.

Kahneman, D. & Tversky, A. (1979). Prospect theory: an analysis of decision under risk,

   Econometrica, 47(2), 263-91.

Kahneman, D., Slovic, P. & Tversky, A. (1982). *Judgment under Uncertainty: Heuristics and*

   Biases, Cambridge University Press, Cambridge, MA.

Khatri, N. & Ng, H.A. (2000). The role of intuition in strategic decision making, *Human*

   Relations, 53(57), 57-86.

Klammer, T.P. & Reed, S.A. (1990). Operating cash flow formats: does format influence

   decisions? *Journal of Accounting and Public Policy,* 9 (3), 217-35.

Klein, G. (2008). Naturalistic decision making, Human Factors: *The Journal of the Human*

   Factors and Ergonomics Society, 50(3), 456-60.

Lawson, R. (1980). Discriminant analysis – an aid to market segmentation, *European of*

   Journal Marketing, 14 (7), 422-435.

Lee, T.& Chen, I. (2005). A two-stage hybrid credit scoring model using artificial neural networks and multivariate adaptive regression splines, *Expert Systems with Applications*, 28(4), 743-752.

Lee, T., Chiu, C., Lu, C. & Chen, I. (2002). Credit scoring using the hybrid neural discriminant technique, *Expert Systems with Applications*, 23(3), 245-254.

Loffler, G. (2004). An anatomy of rating through the cycle, *Journal of Banking and Finance*, 28(3), 695-720

McDonald C. & Schumacher L. (2007). Financial Deepening in Sub-Saharan Africa: Empirical Evidence on the Role of Creditor Rights Protection and Information Sharing, IMF Working paper WP 07 203.

Micah, C. & Gibbs, J. (2013). Lessons learned from Uganda and Best Practices for future, 1-14

Mason, C. & Stark, M. (2004). What do investors look for in a business plan?, *International Small Business Journal,* 22(3), 227-48.

Moody J. & Gilbert C. F. (1984). *The Credit Union Movement: Origins and Development 1850 to 1980.* Kendall/Hunt Publishing Co., Dubuque, Iowa, 1984, 4

Stutely, R. (2003). A guide to Business Finance. London. Pearson Education Ltd.

Thomas, L.C., Edelman D.B. & Crook J.N., (2002). A survey of credit and behavioral scoring: forecasting financial risk of lending to consumers, *International Journal of Forecasting,* 16(2), 149-72.

Treacy, W.F. & Carey, M. (2000). Credit risk rating systems at large US banks, *Journal of Banking and Finance,* 24(1), 167-201.

Zhang, G., Hu, M.Y., Patuwo, B.E. & Indro, D.C. (1999). Artificial neural networks in bankruptcy prediction: general framework and cross validation analysis, *European Journal of Operational Research*, 116(1), 16-32.

Zuccaro, C. (2010). *Classification and Prediction in Customer Scoring*, University of Quebec in Montreal.

QUESTIONNAIRE

A) Background Information

1. Name of the Sacco...

2. Year of Establishment..

3. Position of the respondent..

B). Structure of the organization

1. How many department exist in the Sacco…………………………………

    Departments Names

    a) ……………………………………

    b) ……………………………………

    c) ……………………………………

    d) ……………………………………

    e) ……………………………………

    f) …………………………………….

Do you have a department dedicated loan processing and recovery?

   If yes, when did the department open?

Yes   (   )   No (   )

2. What is the name of the department

    …………………………………………………………………………………

3. How many employees are in the loan processing and recovery Departments

Below 5   (   )

Between 5 to 10   (   )

Over 10   (   )

Any other   (   )

4. On average what is the amount of loan requested by Member's?

Kshs. 6000   500,000   (   )

Kshs. 500,001   1,000,000   (   )

Kshs. 1,000,001 2,000,000   (   )

Kshs. 2,000,001 3,000,000   (   )

Kshs. 3,000,001 and above   (   )

5. Kindly provide the monthly total applications for the following years

2011……………………..

2012……………………..

2013……………………..

6. What is the average monthly loan disbursement

Below Kshs 6,000,000   (   )

Kshs. 6,000,000- 20,000,000   (   )

Kshs. 20,000,001-50,000, 000   (   )

Kshs. 50,000,001-75,000,000   (   )

Kshs 75,000, 001 -100,000,000   (   )

Above 100,000,000   (   )

7. What is the rate of rejection of loan applications?

5% of all loan applications   ( )

10% of all loan applications   ( )

20% of all loan applications   ( )

30% of all loan applications   ( )

50% of all loan applications   ( )

Other please specify..

8. How is the rate of approval for Members loans considered against Sacco's expectations?

   a) High   ( )

   b) Moderate   ( )

   c) Low   ( )

9. Among the loan applications that were rejected, what was the main reason to reject the

   loan application?

   a) Insufficient credit history   ( )

   b) Poor repayment on previous loan   ( )

   c) Lack of sufficient collateral   ( )

   d) Project not profitable investment   ( )

   e) Non Compliance with the statutory laws i.e. 2/3 rule   ( )

   f) Report of the credit reference bureaus   ( )

   g) Inconsistency in contributions   ( )

   h) Other please specify..

D). Credit Risk Assessment

1. Which of the following credit assessment methods are used to evaluate Members Loans?

    a) Relationship Banking (Human Assessment)   ( )

    b) Statistical Methods (Credit Scoring)   ( )

    c) Both   ( )

2. What credit rating policies is applied to your processing process?

    a) Historical background of each member in a Sacco   ( )

    b) Capacity to pay   ( )

    c) Credit reference report for each member   ( )

    d) Security to the loan   ( )

    e) Liquidity of the firm   ( )

    f) Credit Rationing   ( )

    g) Management Efficiency   ( )

    h) All of the above   ( )

1. Which is the most prevalent UNIVERSAL Credit rating policies that is used with your SACCO?

    a. Linear Probability and Log it Model   ( )

    [This model uses past data to explain repayment experience on old loans as a basis to Forecast default probabilities on new loans.]

    b) Risk adjusted Return on Capital   ( )

    [This model measures how much the risk it is taking. It is calculated by evaluating the expected return against the value at risk]

    c) Option-Pricing Theory Models   ( )

[This method assumes that if in some future period, the value of the borrower's assets falls below the value of debt, the borrower is likely to default. The probability of default is inferred from an estimate of the firms' asset price based on the observed volatility of a firms equity prices.]

d) Neural Networks   (   )

[These are artificial intelligence algorithms that allow for learning through experience to discern the relationship between borrower characteristics and the probability of default. No assumptions are made about the functional form of relationship between Characteristics and probabilities of default]

e) Other   (   )

Please specify if other method used...

2. When did you start using any of the above universal credit rating policies?

2013   (   )

2012   (   )

2011   (   )

2010   (   )

2009   (   )

2008   (   )

2007   (   )

Before 2007-   (   )

5. In your opinion, does the use of credit rating policies improve the credit decision for Sacco member's loans?

Yes   (   )   No (   )

6. Has the Sacco used another model of loan appraisal other than the current rating policies?

Yes ( ) No ( )

a. If yes what method was used?

Linear Probability and Log it Model ( )

Risk adjusted Return on Capital ( )

Option-Pricing Theory Models ( )

Neural Networks ( )

Other ( )

Please specify if other method used...

7. Which of the following characteristics do you consider in the evaluation of an applicant before availing credit to Members?

Please list in order of Importance

	Least Important			Most Important	
	1	2	3	4	5
a) Character of the borrower	( )	( )	( )	( )	( )

(Customer willingness to pay as

Well as past performance in

Repayment)

	1	2	3	4	5
b) Capacity to pay	( )	( )	( )	( )	( )

(Cash in bank, projected cash

Flows, financial history and

Business skills)

	1	2	3	4	5
c) Economic conditions	( )	( )	( )	( )	( )

(Current economic conditions

and credit discipline)

d). Collateral/Security available   ( ) ( ) ( ) ( ) ( )

(Total assets available)

d) Capital   ( ) ( ) ( ) ( ) ( )

(Borrowers wealth condition;

Will the borrower be able to service?

The debt with changes in earnings?)

E. Financial Position of the Company

1. Provide the turnover for the last three years

   a) 2013…………………………..

   b) 2012………………………….

   c) 2011………………………….

2. What is the major contributor to the turnover

   a) investment in other securities   ( )

   b) Interest from loans to members   ( )

   c) interest income from FOSA Services   ( )

3. Provide the total deposits and savings for the last three years

   a) 2013…………………………..

   b) 2012………………………….

   c) 2011………………………….

4. What has been the rate of return on member's investments i.e. the Dividends for the

   last three years?

        a) 2013…………………………..

        b) 2012………………………….

        c) 2011………………………….

E. Credit Policy and Implementation

1. How regularly do you review your credit policy?

a) Quarterly   ( )

b) Semi-Annually   ( )

c) Annually   ( )

d) Other Please Specify...

2. Total loans disbursed

    2011……………………………………………

    2012……………………………………………

    2013……………………………………………

3. Members with loans

    2011…………………………………………….

    2012…………………………………………….

    2013…………………………………………….

4. Total membership of the Sacco

    2011…………………………………………….

    2012…………………………………………….

    2013…………………………………………….

5. What role is played by each policy?

	Least Involved			Most Involved	
	1	2	3	4	5
i) Historical background of each member in a Sacco	( )	( )	( )	( )	( )
j) Capacity to pay	( )	( )	( )	( )	( )
k) Credit reference report for each member	( )	( )	( )	( )	( )
l) Security to the loan	( )	( )	( )	( )	( )
m) Liquidity of the firm	( )	( )	( )	( )	( )
n) Credit Rationing	( )	( )	( )	( )	( )
o) Management Efficiency	( )	( )	( )	( )	( )
p) All of the above	( )	( )	( )	( )	( )

6. Who is involved in the formulation of credit Rating policies and other credit policies?

	Least Involved			Most Involved	
	1	2	3	4	5
a) Senior Management	( )	( )	( )	( )	( )
b) Board of Directors	( )	( )	( )	( )	( )
c) Credit Managers	( )	( )	( )	( )	( )
d) Credit Analyst	( )	( )	( )	( )	( )
e) Credit Committee	( )	( )	( )	( )	( )
f) Branch Manager	( )	( )	( )	( )	( )

g) Other Please Specify ....

7. Who is involved in the credit decision making for Members loans?

	Least Involved			Most Involved	
	1	2	3	4	5
a) Senior Management	( )	( )	( )	( )	( )
b) Board of Directors	( )	( )	( )	( )	( )
c) Credit Managers	( )	( )	( )	( )	( )
d) Credit Analyst	( )	( )	( )	( )	( )
e) Credit Committee	( )	( )	( )	( )	( )
f) Branch Manager	( )	( )	( )	( )	( )
g) Loan Officer	( )	( )	( )	( )	( )
h) Other Please Specify	( )	( )	( )	( )	( )

....

THANK YOU FOR YOUR TIME