

**EFFECTS OF CREDIT POLICY ON THE LIQUIDITY OF DEPOSIT TAKING
SACCOS IN NAIROBI COUNTY**

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**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF
BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF
NAIROBI**

NOVEMBER, 2016

DECLARATION

I, declare that this is my original work and has not been submitted for presentation and examination for any award of Degree in this university or any other university.

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D61/70977/2014

This research project has been submitted for examination with my approval as the University of Nairobi supervisor.

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ACKNOWLEDGEMENT

I take this opportunity to thank God for the gift of life, and the strength to carry out this study and also to give thanks to all the support and encouragement I got from School of Business, moderation team, classmates all the parties I came across while undertaking this course.

I sincerely thank my Supervisor, Dr. Mirie Mwangi, for all the constructive critiques and support and above all for making and enabling me to do my research well and in accordance with the required guidelines.

For the SASRA management and team for the support during data collection period

DEDICATION

I dedicate this Project to my Parents Mr. And Mrs. Peter Nyakado, to my Husband Ken, my sons Wesley, Heffy & Jeremmy, and my siblings, Celia, George, Mase and Erastus.

Thank you all for your endless support.

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LIST OF ABBREVIATIONS

ATM:-	Automated Teller Machines
DTS:-	Deposit Taking Sacco's
FOSA:-	Front Office Services Activity
GDP:-	Gross Domestic Product
MFI:-	Micro Finance Institution
SACCOS:-	Savings and credits cooperative Societies
SASRA:-	Sacco Society Regulatory Authority

ABSTRACT

Liquidity is the ability of a financial institution or the ability of an organization to meet its financial obligation as they fall due. Liquidity is an important aspect in a company when achieving overall short and long terms financial objective while also maximizing the owner's wealth and protecting them against the dynamics in the market. In SACCOs liquidity is important as lack of liquidity or liquid assets leads to bankruptcy as the institution will not be able cover for its cash demands as they fall due. Therefore managing liquidity is a top priority of deposit taking SACCOs. To manage liquidity effectively a good understanding of the factors affecting liquidity is critical. The current study wanted to find out the effect of credit policy on the liquidity alongside other factors such as the size, capital, collection policy and the duration of loans. To facilitate this, a research was done on deposit taking SACCOs operating within Nairobi. The data on the liquidity, size and policies was collected from 38 SACCOs for the period between 2011 and 2015 and analyzed using descriptive statistics and inferential statistics such as correlation and multiple linear regressions. The study found that credit policy, capital adequacy and the size (assets) significantly affect the liquidity of the SACCOs while duration of the loan and the collection policies had neither significant relationship nor effect on liquidity. To effectively maintain favorable levels of liquidity, it was recommended that financial institutions capitalize on review of credit policies and growth of their firms to increase their Capital and assets to efficiently maintain an appropriate level of liquidity. This would ensure that both short and long term financial obligations are adequately met and operations of the SACCOs run smoothly.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Financial institutions are very important in any economy; these institutions are established to provide services such as deposit taking, loan disbursements, and exchange of currencies. Financial institutions play major roles in developing the economies as they help in distribution of financial resources from individuals and corporates that have excess funds to individuals and corporates that are in deficit of such funds. Well developed and functioning financial system accelerates economic growth while less developed financial institutions can impede economic growth and lead to poverty (Barth, Caprio & Levine, 2004).

Cooperatives are economic units that constitute members who willingly and voluntarily come together to pull their resources together to meet their economic, social, cultural needs and aspirations through an institution that is jointly and democratically owned by the members. According to SACCO supervision annual report 2013, it is estimated that the sector controls 30% of Gross Domestic Product (GDP) in Kenya and it also account for 80% of accumulated savings. Cooperatives societies create employment opportunities, they help in income generation and act as a source of livelihood for many individuals (Adu, 2014).

According to Basel (2010), financial institutions should have an effective system to deal with risk that is associated with credit; the system should include a sound procedure of granting credit, and also have adequate measures over risk that is associated with credit.

Top management in organizations should support the credit management process in the organization and for it to succeed, everybody in the organization should understand the same.

1.1.1 Credit Policy

Ingham (2002) describes credit as an arrangement where one party provides resources in form of goods or a loan to another party and the second party arranges to pay for the goods or such loans at a later date hence creating a debt, the second party hence makes arrangement to repay the resources of equivalent amount or value at a later date as agreed by the first party. According to Ingram (2002) Credit policy is a set of guidelines, actions designed to minimize the loss and costs associated with granting and also the loss that arises due to nonpayment.

Credit policy assists organizations in resolving outstanding debts (Kakuru, 2001). The objective of credit policy is to have a maximum recovery from debtors and a firm may follow a lenient or stringent credit policy depending on the stated guidelines. According to Ojeka (2005), a firm's credit policy refers to the actions undertaken by the organization before granting credit policy outlines the procedure of monitoring and collecting the cash for outstanding accounts receivable. He further expounds that a good credit policy of any organization should contain the cash collection policy which covers the approach that the organization will adopt when collecting outstanding debts, cash discounts allowable for early payment, allowable credit period and the screening criteria employed before advancing the credit facility. Every components of the credit policy is critical as it can be used as a tool to measure, monitor and control receivables or

outstanding debts which arose out of the credit sales; it also covers from the type of customers to whom credit are granted, to when actual collections would be made from such customers (Laeven, 2006).

Credit policy is an important document in financial institutions and should be emphasized for efficient management and control of accounts receivables and outstanding debts balances. A well designed policy will enable an organization to achieve profitability and liquidity. A poorly structured policy can affect liquidity by posing a risk of lending out money and being unable to recover in good time (James, Kenneth, Anthony & Geoffrey 2014). Many financial institutions have liquidity and inadequate working capital challenges because of weak credit standards and inappropriate credit policies. Scheufler (2002), pointed out that institutions with effective credit policy, tend to enhance common goals and objectives for the organization and also gives recognition to credit and collection department as functional units that a major role in the organization's success.

1.1.2 Liquidity of Deposit Taking SACCOs

Beaty (2003), refers to liquidity as the ability of a financial institution to meet its demand for funds. For an institution to be in a better liquidity position it must ensure that it maintains adequate cash and liquid assets that can easily be used to satisfy the demands for loans, savings and withdrawals and also to pay for the daily expenses of the institutions. The SACCO Supervision report (2013), indicates that liquidity of a financial institutions is its capability to fund increase in assets and meet obligations as and when they fall due. In SACCO's liquidity is important as lack of liquidity or liquid assets leads to bankruptcy as the institution will not be able cover for its cash demands as they fall

due. Deposits taking SACCOs require equivalent level of liquid assets to meet the short-term Front Office Savings Activities (FOSA), (Joachim 2007).

Eljelly (2004) posited that, a firm's liquidity management involves eradication of any chances of defaulting on payment of financial obligations whenever they fall due. Institutions can manage their liquidity by ensuring that they manage their current assets and current liabilities in a manner that helps to lower the adverse effects that comes with their inability to meet their financial obligations. Highly liquid institutions are those that hold assets that are easily convertible to cash and as Ojeka (2005) found out institutions which hold government securities can be considered more liquid to the ones that hold receivables and goods as their liquidity will depend on the willingness of the debtors to pay and the rate at which the stocks can be turned over respectively. Ratios that are used to measure liquidity include current ratio, quick ratio and acid test ratio that greatly affect performance of an organization. Liquidity ratios used by financial institutions measure their ability to meet the financial obligations by comparing the cash and near-cash assets with the payment obligations (Pandey, 2004).

Managing liquidity is a top priority of Deposit Taking SACCO's as lack of liquidity means being bankrupt. Liquidity is an important aspect in SACCO's because the nature of their operations requires them to make unexpected and immediate payment demands. To remain in business operations effectively a SACCO should be able to make withdrawals to members instantly and also be able to offer loans or credit to members upon receipt of such applications (Joachim, 2007). Since there exists a relationship between liquidity and solvency, efficient management of liquidity helps SACCO's to

reduce the probability of becoming insolvent, hence reducing the possibility of bankruptcies and disruptive runs. Prudent liquidity management is a way of controlling and managing risks in financial institutions' and this can help SACCO's to remain healthy and stable financially (Ng'ombe & Mikwamba, 2004). In addition, Bhunia, Khan and Mukhuti (2012) emphasized on the importance of SACCOS in managing their liquidity in achieving their overall short and long terms financial objective as a financial institutions while also maximizing the owner's wealth and protecting them against the dynamics in the market.

1.1.3 Effect of Credit Policy on Liquidity of Deposit Taking SACCO's

Credit policy is a set of procedures, guidelines, regulations that act as a guide in an institution in assisting in regulating credit, which can arise in form of credit sales or advancement of loans. Credit policy is important in deposit taking SACCOs as it outlines the procedure and standards to be followed before granting loans to members and it also helps in managing cost associated with debt. Effective credit policy reduces the risk associated with bad debts and increases profitability, liquidity and financial position of a financial institution. For Credit policies to remain effective, it should be regularly be reviewed to take into consideration the changes in the market situation, company strategy, competition and financial requirements, (Eljelly 2004).

According to Patricia and Martin (2013), a properly designed credit policy helps in management of outstanding debts and accounts receivable. Many financial institutions that are faced with working capital and liquidity problems usually lack well designed credit standards and credit policies that are properly designed.

Pike and Neale (1999) noted that for a credit policy to be sound, it should give a guideline that a financial institution should follow when granting credit, monitoring and also regulating their most valuable assets- its customers. Credit policy influences the cash flow in an organization and also sets guidelines of dealing with delinquent accounts.

Liquidity management in an organization has influence on the economic development, profitability and survival. Organizations should manage their liquidity at level where the institutions does not hold excessive cash and also not to have shortage of cash that can make an institution not to meet their obligations (Raymond, Adigwe and John 2015). Credit policy formulated by any organization has the objective of achieving high profitability and flow of cash (liquidity) which form the main contributors to sustain business operations in the normal business activities and also acts to determine its financial direction in the long run (Ojeka, 2005). Weaknesses in credit management have led to failures in financial and liquidity problems in lending institutions. Ayodele, Thomas and Raphael (2014), noted that financial institutions credit policy will affect the amount of capital, quality of asset, quality of management, earnings and liquidity position of the financial institutions either positively or negatively depending on how the management implement the policies.

1.1.4 Deposit Taking Saccos in Nairobi County

SACCOs are business enterprises whose features of ownership, control and service use is distinct from other forms of business. SACCOs are associations of people who have come together to mobilize resources and to create wealth for its members and to help its members in meeting their social and economic needs. SACCOS offer loans at lower

interest rates compared to other financial institutions, (Clement, Ambrore and Martin 2013). They are user owned and user benefited organizations, their businesses are diversified in different areas such as agriculture, juakali, transport, housing, customer services, banking and finance, (Ngombe and Mwikamba, 2004). SACCOS in both developing and developed countries have contributed to economic development and empowerment and have greatly reduced issues of unemployment and poverty.

SACCOS in Kenya are the leading financial institutions which provide credit for social and economic development at reduced interest rates. SACCOS generate capital from the member's deposits and grant loans to members depending on the individuals share contribution. SACCO's as reported by Melania and Justin (2015), have provided access to credit to a class of disadvantaged people with low income who have no access to loans from institutions like banks. Deposit taking SACCOS apart from the usual operations of SACCO's offers its member banking, payments, withdrawals and Automated Teller Machines Services (ATM). The SACCO Society Regulatory Authority (SASRA) is the legal body that is entrusted with regulating the conduct, growth and development of SACCO's in Kenya. Most SACCO's start their operations as non-deposit taking and as time goes by grow into Deposit Taking to offer more services to its members. According to SASRA (2014) report, the number of registered cooperatives is almost 17,000 with over 200 being deposit taking. The widespread of SACCOs in Kenya is indeed a confirmation that majority of Kenyans household derive their livelihoods directly or indirectly from the SACCOs (Joachim, 2007).

1.2 Research Problem

Credit policy of any organization act as a cornerstone and provide guidelines that need to be followed when granting credit to customers. Effective credit policy helps an institution to reduce cases of non-performing loans and default or nonpayment of outstanding debts. Although there is no universal credit policy as stated by Ojeka (2005), he points out that a credit policy should be formulated to fit the different business needs, industry requirement and should always be adjusted to meet the needs of the different institutions. Miller (2008), concluded that credit policies enhance efficient management of receivables and helps in reduction of bad debts.

Credit policy of organizations is a tool that helps in liquidity management. Liquidity is important to Deposit Taking SACCO's since they require it for their survival and prosperity as observed by Ang (2009), an efficient credit policy management tend to positively influence the liquidity of organizations. Management of working capital is one important issue that most managers has to deal with by creating or holding liquid assets that will enable them to meet their cash requirement as they fall due. (Harrison, 2015). McMahon and Stanger (2005) further argued that there exists a difference in liquidity position and requirements between large and small firms and this the notion that shortage in working capital is a common problem for small firms where most SACCOs fall in, and that this difference could be as result of lack of access of funds from capital markets and in appropriate management of their working capital. Liquidity management should be a factor of concern for SACCOs as it enables them to meet their financial obligations and reduction in the finance costs that come with borrowing (Michna, 2007).

Studies that have been carried out on credit policy and their effect on liquidity includes Ojeka (2005) who considered the effect of credit policy on liquidity of manufacturing companies in Nigeria. This study was done on four manufacturing companies where he analyzed the impact credit policy variables such as credit standards, credit period and non-monitoring and review of credit policy and its impact on liquidity. Data was drawn from the financial statement of the selected companies as well as questionnaires. Data was statistically analyzed using regressions models. The study revealed that favorable credit policy affect liquidity favorably and also that companies should regularly review their credit policy to maintain liquidity at favorable levels.

Carole and Nick (1998) did a study on late payment in small firm in UK. They found out that firms that had effective credit management procedures managed issues of late payment well while the ones which did not have a proper system of credit management faced liquidity challenges.

Locally, David (2014) researched on the effects of credit policy on profitability of Small Medium Enterprises in Nairobi and his findings showed that there existed a positive relationship between the two variables i.e. credit policy and profitability of SME's.

Peresia (2014), conducted a study on liquidity risk mitigation measures and financial performance of SACCOs in Kisumu county. The researcher found out that liquidity risk mitigation approaches adopted by different SACCOs had a significant effect on their financial performances. David, Willy and Mboya (2015), carried out a research to find out the impact of credit management and liquidity of financial performance of deposit

taking SACCOs, their study revealed that liquidity and credit management had a great impact of financial performance of the SACCOS.

Gatuhu (2013), did a study to determine the effect of credit management on financial performance of micro finance institutions in Kenya through, through a census study, she considered all the MFI and he established that there existed a strong relationship between microfinance institutions performance and credit risk control and the collection policy. He also pointed out that stringent credit policy helped in bad debts recovery compared to lenient credit policies.

The studies above have focused on the effect of credit policy on financial performance of SACCOs while some have looked at the credit risk mitigation on financial performance while others have also determined the effect of credit policy on liquidity in manufacturing firms. From the above studies, there are no studies that have delved into the relationship between credit policy and liquidity position of deposit taking SACCOs. This therefore leads to the following question: What is the relationship between credit policy and liquidity position of deposit taking SACCOs in Nairobi?

1.3 Research Objective

To establish the effects of credit policy on the liquidity of deposit taking SACCO's in Nairobi.

1.4 Value of the Study

This research will benefit various parties. For SASRA regulated SACCOs, they will be able to know the importance of their credit policies and the effect it has on their liquidity

and how well they can use their credit policy to their benefit. SACCOs should formulate a credit policy that can govern their credit management procedures. To Credit policy makers, the study will enable them gain insight on the effect of credit policy on liquidity of SACCOs and they will be able to use the study to enhance formulation of credit policy that will improve liquidity levels in SACCOs in Kenya.

The SACCOs in Kenya will be able to evaluate whether the use of credit policy models will benefit them in the long run and also it will assist effectively in managing the default rate and non-payment of loans. This study will encourage members to maintain good banking and repayment records so that they may have better access to credit in the future. To academicians and researchers, the current study will be an addition to the existing body of knowledge on the areas of credit policy, liquidity and financial performance of deposit taking SACCOS and therefore giving foundation on areas for further research work.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter has reviewed different published journals that related to credit policy and liquidity, taking into consideration various theories and concepts that were related to the research topic. It discussed theories and empirical literature, reviews literature and concludes with a summary.

2.2 Theoretical Review

Trade credit and credit policy has been in discussion for a long time and many studies that have been conducted have tried to determine what constitute an optimal credit policy that can assist in alleviating liquidity problems in an institution. Most researchers have cited trade credit as one of the old forms of financing and it has assisted firms and individuals who have not been able to raise funds using the traditional ways (Wei & Zee, 1997). Trade credit though being an important source of financing for various forms of financial institutions, there exist no proper explanation reaches at yet, as was noted by Long, Malitz and Ravid (1993). The theories below will act as the guide to the study. These theories include:

2.2.1. Asymmetric Information Theory

The asymmetric information theory was first introduced by Akerlof's in 1970. It shows that two parties who are in a transaction could have different information regarding the transaction to be under taken. One party to a transaction could be having a superior knowledge or information than the other hence this can affect their behavior. This theory

describes a situation where relevant information is not known to all parties involved in an undertaking (Petersen & Rajan 1994). Eppy (2005) describes it as a condition in which two parties in a transaction involved in an undertaking are missing relevant information. When two people to a transaction have different information about a transaction problems such as moral hazard, adverse selection occur and this affects economic institutions and causes errors even in lending institutions like Deposit taking SACCOs.

The theory was relevant to the current study in that when deposit taking SACCOs have sufficient information about their borrowers they can assess their credit worthiness and be able to only grant credit to individual whose capability of repaying the loans are known hence reducing the errors of lending to highly risky individual hence reducing default rates. According to Denis (2010) by eliminating or reducing information asymmetry between lenders and borrowers, credit registries like Kenya Bureaus allow loans to be extended to borrowers whose credit worthiness is known resulting to safe and higher lending thereby reducing the loan default rates.

2.2.2. Transactions Cost Theory

This theory was first developed by Schwartz in 1974. According to this theory, Schwartz proposed that suppliers of goods have a higher advantage over financial institutions as they have the ability of monitoring the borrowers and forcing them to repay their outstanding debts. According to this theory, a seller has advantages such ability to get information from suppliers in the ordinary course of doing business at a cheaper cost. The number and frequency of orders a customer makes gives the seller the notion of their ability to pay and seller usually make visits to customer premises than lenders in financial

institutions do. Another source of advantage arises where the seller have the advantage of not supplying goods to customers if they have outstanding amounts especially if they are the only suppliers of the specific goods. The other source of advantage to the seller is the fact that they can repossess the goods that are in the custody of the buyer and resell them to other buyers, (Petersen and Rajan 1997). Compared with other financial institutions like banks and other lenders they do not have the same threatening to loan defaulters. In 1987, Smith concluded that in situations where a supplier has given a discount to a buyer and buyer do not take advantage of it, it reflect on the financial difficulty on the part of the buyer and this acted as a pointer of defaulting in payment.

This theory helped this study in knowing how to assess the credit worthiness of the borrowers by including the credit terms, credit periods, and procedures to be followed before granting loans to member hence reducing the chances of non-payment.

2.2.3. Liquidity Theory

This theory was first proposed by Emery in 1984. It suggests that companies that have cash flow challenges use more credit than those with normal access to credit through the financial institutions. It continues to suggest that when there are restricted monetary policies in the economy, the offer of credit can account for the reduction of credit being offered by financial institutions. And according to his view, large firms which do not have liquidity challenges and have a wide access of funds from Capital markets can actually fund the firms which are affected by the monetary policy. The idea behind this theory is that firms with better liquidity position and have access to capital markets can

advance credit more easily than firms that are constrained in accessing the financial markets.

The researchers that have explained this assumption include (Nielson, 2002) which used small firms to act as credit rationed firms. He noted that small firms responds by accepting credit but reduces on the amount that they advance to their customers hence they adopt a tight and stringent credit policy to reduce on the default rates and bad debts. On the other hand as discovered by (Petersen and Rajan, 1997), firms which do not face liquidity constraints are less likely to demand for credit but instead offer more credit to its customers. This theory informed this study in that when Deposit Taking SACCOs have favourable liquidity positions, they will find ease in processing loans and granting credit to credit worthy borrowers and be able to pay out legitimate withdrawals.

2.2.4. The 5cs Model of Client Appraisal

SACCOs use the 5cs model of credit to determine individuals capability as a potential borrower (Abedi, 2000). The 5Cs help SACCOs to increase loan repayment and reduce on the default rates, as they get to know their customers better. These 5Cs are character, capacity, collateral, capital and condition. Character is the expression of a borrower to the lender. Character can provide weighting values for various characteristics of a loan applicant and the total weighted score of the applicant can be used to assess his credit worthiness (Myer and Forgy, 2005). Capacity is the capability of the borrower to repay the loan. The borrowers' ability to pay can be judged by assessing the borrower's cash flow which can be done by looking at or by comparing the income and expenses. Collateral are the security provided as an alternative for loan repayment (Haron, Justo,

Nebat and Mary, 2012) for the loan like in SACCOs the security are individual shares and guarantors. Capital is generally represented by the borrower's financial position which can be determined by financial ratios, while laying emphasis on the tangible net worth of the borrower. Condition refers to the prevailing economic situations in the market and other conditions which may affect the borrowers' ability to pay (Pandey, 2004).

2.3 Determinants of Liquidity of Deposit Taking SACCOS

Liquidity level indicates an institutions ability to meet its financial obligations as they fall due and fund increase in assets. Deposits taking SACCOs like other financial institutions require an equivalent level of liquid resources to meet the short term demands for cash as they provide Front Office Services Activities (FOSA). To enhance sound liquidity management, deposit-taking SACCOs can only borrow to the extent of 25% as compared to its total assets (SACCOs Supervision Report, 2013)

Deposit taking SACCOs requires liquid assets or cash for two main reasons: to meet the demands of the deposit withdrawals and to meet the unexpected needs of the depositors. The deposits are convertible on requests (on or specified notice) into cash. Demands for conversion which include withdrawal or cheque drawn, are usually offset by new customer deposits that helps satisfy the demand for loans from their customers. Deposit taking SACCOs builds their liquidity mainly through pooling new deposits. Efficient and effective liquidity management is very crucial for the survival of smaller businesses since they operate with fewer resources for both their short and long run operations unlike

bigger companies (Sardakis and Cliff 2007). Liquidity can be measured using the current ratio and quick ratio which in the case of SACCOs is measured using current ratio.

2.3.1 Loan Loss Provision

Loan loss provision is defined as the amount of money financial institutions sets aside to cover potential losses on loans. It is an amount set aside in the event that the loan defaults. According to the Central Bank of Kenya (CBK, 2015) report on business daily, it recommended that banks and financial institutions actually need to increase the bad debt loan provision to cover the depositors from experiencing huge losses. Loan-loss provisioning policy is critical in determining financial system stability, in that it is the main factor contributing to fluctuations in financial institutions' profitability, liquidity and capital positions, this has influence on financial institution's ability to supply of credit to the economy (Beatty and Liao, 2009). In principle, loan loss provisions allow financial institutions to classify loans as either watch, standard and doubtful in their portfolio and this helps them to determine with accuracy the amount that they should recognise as estimated loss in the profit and loss statements as the events of non-payment unfold and the actual write offs as they occur, Laeven and Levine (2006).

Fund for depositors are protected against unforeseen loss due to bad loans through adequate capital reserve and protected against anticipated loss through the provision created by loan loss reserve (Gleeson, 2006). Loan to members form the main business of the SACCOs and it is of importance to note that loans should be paid promptly to ensure normal business operations. The effect of not collecting monthly loan repayment from the members has a direct impact on the liquidity and profitability of the SACCOs. Loan loss

provision should be deducted from the profit and loss account to reflect the true profit of the SACCOs hence reducing the error on reported profits (David, Willy & Mboya 2015). Financial institution with fewer provisions on loans has higher asset quality, profitability and favourable liquidity positions.

2.3.2 Credit Terms

Credit terms refer to the standard negotiated and accepted terms under which an institution allows credit to its customers. A credit term will usually outlines the monthly credit amount to be repaid, the time allowed for repayment or credit period, discount granted on upfront payment and the penalty related to late payments. The credit period that most borrowers are allowed are influence by the value attached to their collateral, the risk associated with the borrower and the prevailing market conditions at the time of granting the loan. (Ross, Westerfield, & Jordan, 2008). Credit terms act as contractual guide under which a firm grants credit to customers (Pandey, 2004), Financial institutions should make credit terms attractive to potential customers to act as an incentive to take the credit facility but also taking caution to ensure that they are not incurring high cost that are associated with bad debts which increases risk in the organization.

Credit terms usually outlines the credit period, rate of interest, formula for calculating such interest and frequency of loan installments. Anthony, Robert, Doreen & Kennedy (2015) observed that credit terms often looked at as the period credit is granted, discount given, amount allowed for credit and choice of instrument like credit application forms used as proof of credit granted. Credit terms may include; time duration to have the loan approved, which is the time taken from receipt of the loan application form to the loan

receipt of funds by the applicant. It is determined by the financial position of the client as indicated by the different ratio analysis, the cash flow and also looking at capital position. Maturity of a loan is the time taken for the loan to mature with the interest there on. SACCOs charge interest differently basing on their industry and also on what other competitor in the market are charging.

2.3.3 Capital Adequacy

According to Sacco Supervision report 2013, Capital adequacy is the amount of capital a bank or other financial institutions is required to hold by its financial regulator. Capital adequacy help in reduction of the negative external effects that arise which is depicted by withdrawal by depositors funds from the financial institutions hence causing panic in the financial systems. As justified by David, Willy and Mboya (2015), adequate capital can help cushion depositors and act as a protection of the depositors funds hence improving the liquidity of the financial institutions. Joachim (2007) emphasized that the primary role of a financial institution is to absorb risk using its equity capital. Capital adequacy is about determining whether an institution has enough equity in relation to the risks that it is exposed to.

Capital adequacy is usually expressed as a capital adequacy ratio of equity that must be held as a percentage of risk – weighted assets. It helps to ensure that each SACCO society maintains a level of capital which is enough to protect or cushion member deposits and creditors against losses resulting from the risk that the Sacco as financial institution faces. Thus it is a measure of financial institutions safety and soundness.

Adequate capital promotes public confidence in financial institutions and provides adequate financial security for the depositors. (Ogboi & Unuafe,2013).

2.3.4 Collection Policy

Various policies have been put in place by financial institutions to ensure effective credit management. One of such policies is the credit collection policy, this is required because not all customers and borrowers pay their bills and outstanding loan instalments on time. The collection policy therefore should act to accelerate the collections from the individuals who are slow payers hence reducing bad debts losses (Kariuki, 2010).

The collection process can be rather expensive in terms of resources required to follow up on the non-payers as it also leads to lost good will between the parties Tandelilin, Kaaro, & Supriyatna, 2007). Collection efforts adopted by the SACCOs may include attaching individual's savings, forcing guarantors to pay, attaching borrower's assets that were provided as collateral during loan application and courts processes. Methods used by regulated SACCOs could include, demand letters, regular telephone calls, official visits to the clients office or premises for face to face reminders to pay and legal enforcements. Sharma and Kumar (2011) asserted that collection policy is important as a guide that ensures payments are done on a timely basis and collections made regularly. Collection procedure is necessary as some clients take long to repay their loans hence collection efforts accelerate the process and helps in avoiding bad debts. Dawkin (2010), noted that prompt payments are aimed at increasing turnover of loans and keeping bad debts low. Collection efforts are geared towards improving the recovery of loans from slow payers

and decreases bad debt losses and increases profitability and liquidity of lending institution.

2.3.5 Size of the Firm

The other determinant of liquidity levels is the size of the firm. A firm liquidity levels is usually affected by the size and nature of their operations. Small firms like trading and financial institutions generally have low investments in fixed assets but require huge investments in their working capital. Most large firms manage their cash flow and liquidity levels better than small firms. Most of the big firms enjoy economies of scale and thereby minimising their cost and improving their liquidity levels (Kumar, 1995). Financial management in small firms is a problematic and a critical issue and it is more than what has been indicated in management literature.

Large firms can finance capital expenditure from internal resources through issuance of equity, or debt (Pandey, 2004). Smaller firms on the other hand are limited in the extent of their internal earnings and their ability of issuing equity. Fazzari, Hubbard and Petersen (1988) found out that smaller enterprises faces challenges of obtaining capital in capital during times of economic downturns. That is, the likelihood of a firm experiencing a liquidity challenges decreases as the firm size increase. According to Stiglitz and Weiss (1981), small firms tend to finance their operations by internal finance or external borrowings from banks as compared to their larger counter parts.

2.4 Empirical Review

Liquidity and profitability are issues that are of much importance in profit making organisations. Though all are important to organisations, liquidity is most preferred as noted by Kirit (2013). There are several studies that have been conducted in the areas of credit policy and their relationship with liquidity of different organisation as summarised in the sections that follows:

Sanna and Sandra (2009) did a study on impact of liquidity management on profitability in Humburg and Umea. Their study primarily aimed at assessing the use and extent of liquidity practices in two time points. This study investigated if changing liquidity strategy had an effect on the profitability. Profitability was measured using return on asset and the companies sampled for the study consisted of the listed ones in Stockholm stock exchange. A quantitative research design was adopted for this study and both primary and secondary data was used. Questionnaires were used to collect primary data while secondary data was collected from the financial statements. Statistical analysis was done using the regression analysis to find the relationship. The findings showed that adapting different liquidity strategies do not have an impact on return on assets and that only liquidity forecasting and short term financing had a positive effect on return on assets. The researcher also noted that the key ratios for monitoring liquidity had not changed between the periods the study was conducted.

In a study done by Matanda (2010) in Kenya on the effect of 7Cs credit appraisal model on the level of non-performing loans of commercial banks in Kenya, his study sought to ascertain the following objectives: whether, banks use the 7Cs credit appraisal model and

effect of the use of the 7cs on the level of non-performing loans of commercial banks of Kenya. The study was conducted through a survey on the 43 commercial banks registered in Kenya. All the banks were covered in this study hence no sampling was done. Primary data was collected using semi-structured questionnaires that were administered to bank managers. Data analysis was done through ratio, inferential and quantitative statistics. Statistical package for the Social Science was used for capturing and building the data which was analysed through factor analysis. He reported that commercial banks in Kenya use the 7cs appraisal model in assessing credit risk in doing client appraisal and evaluation and adoption of the 7cs enable commercial banks in Kenya in reducing non-performing loans.

In determining the effectiveness of credit management systems on loan performance in Meru county, Haron, Justo, Nebat and Mary (2012) sought to establish the effect of credit terms, credit appraisal and collection policies on loan performance. They used a descriptive survey design and data was collected by administering questionnaires to 70 credit officers in the 14 micro finance institutions in Meru. Out of the independent variable that was tested, credit policy was found to have the highest impact on the loan repayment followed by the rest of the variables.

Andrew and Osuji (2013) investigated the efficacy of liquidity management and banks performance in Nigeria. The aim of this study was to find out the effect of efficient liquidity management on bank performance after the banking reforms that were done by the central bank of Nigeria. The study adopted a survey research design where return on capital employed was adopted to represent the bank performance. Random sampling

method was used to pick the population of interest and 300 questionnaires were administered to the bank employees. The information obtained was analyzed using the Pearson product – moment correlation co- efficient. The study finding showed that there was a significant relationship between liquidity management and bank performance in Nigeria.

In a study conducted by Gatuhu (2013) to assess the effect of credit management on the financial performance of Microfinance institutions in Kenya (MFI), the researcher sought to find out if there was an effect of credit management on the financial performance of Microfinance Institutions in Kenya. Descriptive survey design was adopted for this study. The population of the study consisted of 59 MFIs in Kenya at that time. All the MFI were considered when carry out the research and questionnaires were used for data collections which were analyzed to find out the relationship. The study findings showed that client appraisal; credit risk control and collection policy had an effect on financial performance of MFIs in Kenya. The study finding also reflected that collection policy have a higher effect on financial performance and that a when a tight or stringent policy is employed, there was a significant reduction in bad debts as compared to lenient credit policy.

Kirit (2013) did a study on the tradeoff between liquidity and profitability of selected manufacturing firms in India. The population of the study consisted on 31 manufacturing firms that were listed in India. Data for this study was extracted from the balance sheet and income statement of the sampled firms listed in Bombay stock exchange data base. Quantitative research was adopted in this study and Pearson correlation analysis was used to determine the tradeoff between liquidity and profitability. The study findings showed

that there was negative relationship between return on capital employed and the liquidity variable, but contrary to this a positive relationship was found to exist between quick ratio and net profit and also between quick ratio and return on equity. In conclusion there was no significant relationship between liquidity and profitability of manufacturing companies in India.

Ogbada and Osuji (2013) did a research on the efficacy of Liquidity management and banking performance in Nigeria. The study used a survey design research methodology where structured questionnaires were distributed to the bank employees for data collection. The data was analyzed using pearson product – moment correlation coefficient where the dependent variable were measured using profitability and return on capital employed ratio. The outcome of this study showed that there was a significant relationship between liquidity management and banking performance and the outcome also reflected that liquidity management has important impact on policy for developing and emerging economies.

Nicolette (2013) carried out a study on the effects of credit policy on the financial performance of six deposit taking Micro Finance Institutions in Kenya. Her objective was to find out the effects of credit policy on financial performance of deposit taking micro finance organizations. Financial performance in her study was measured by return on assets. The researcher used a census survey approach for the six deposits taking micro finance organizations in Kenya. Secondary data used for the study was obtained from the central bank of Kenya and the individual MFI's. The study finding showed that there exists a positive significant relationship implying that credit policies affect the financial

performance of deposit taking Micro Finance Organisation. The study regression results indicated that the dependent variables that were used in this study are both individually and jointly significant and have a positive effect on the financial performance.

Addo (2014) did a study to assess credit risk management in financial institutions in Ghana. The objective of the study was to determine the impact of credit risk management on banks performance. The study adopted a quantitative and explanatory research design where both primary and secondary data was collected. Primary data was collected by assigning questionnaires to bank employees while secondary data was obtained from the published work of commercial banks. The performance of the bank was measured using return on asset while credit risk was measured using non-performing loans. Data collected for a ten year period was analysed using simple regression analysis. The study findings showed that banks that reported higher profitability or higher performance had less non-performing loans implying that credit risk management leads to higher performance in Ghana financial institutions.

David (2014) researched on the effect of credit policy on profitability of manufacturing small and medium size enterprises. Descriptive research design was used on the 50 SME's which were sampled in Nairobi county. Data for his study was obtained from the SME'S financial statement and the significance of the results was tested using the t- test. The study found out that the credit policy is positively related to the profitability of the SME's with a probability of co efficient of correlation being 0.83 while co efficient of determination being 0.61.

In a study conducted by Fan Li and Yijun in 2014, they sought to establish the impact of risk management on profitability in Europe. Data used for this research was collected from the statement of account of 47 largest banks between the periods of 2007 to 2012. Return on equity and return on capital were used as proxies for profitability while non-performing loan ratio and capital adequacy were used to represent credit risk management. A series of regression analysis was done to establish the relationship between the variables. The findings of this researcher first showed that the relationship that existed between capital adequacy ratio and return on equity was insignificant. The study also showed that there was a negative relationship between non-performing loan ratio and return on equity and non-performing loans and return on assets. They also reported that there was a fluctuating relationship on the four variables which was attributed to the effect financial crisis which makes profitability to be affected by other economic factors. In overall they reported that by combining the capital adequacy ratio and non-performing loan ratio for credit management the relationship between credit risk management and profitability was positive.

Raymond, Adigwe and John (2015) conducted a study on the credit management on liquidity and profitability of two manufacturing company in Nigeria. The study adopted descriptive research design. Data was collected from the financial accounts of the companies that were under study. Data was analysed using financial ratios while the hypothesis formulated were tested using analysis of variance. The result of the study showed that credit policy can affect the profitability management in manufacturing companies in Nigeria the study also reported that there was a significant correlation between liquidity position and turnover of debtors of the company in Nigeria.

2.5 Conceptual Framework

The dependent variable Liquidity in the study depends on credit policy which will be measured by the variables such as Loan loss, credit terms policy, capital adequacy, collection policy and firm size.

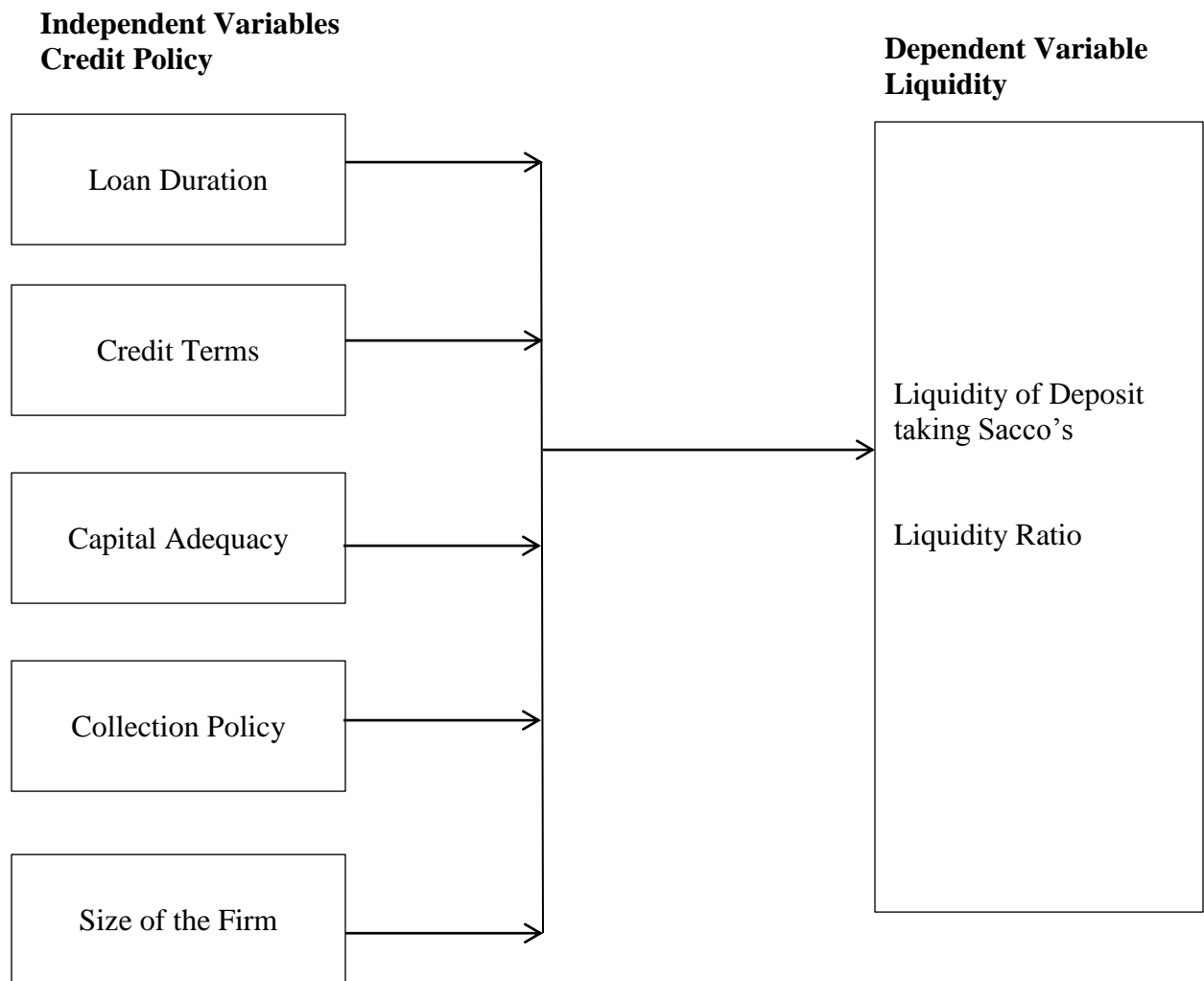


Figure 2.1 Conceptual Framework

The variables the study adopted were Loan duration; credit terms, capital adequacy, collection policy, and size of the firm deposit taking Saccos.

2.6 Summary of Literature Review

The current study sought to find out if there exists a relationship between credit policy and liquidity of deposit taking SACCOs. Deposits taking SACCOs are required to maintain a capital level which will help cushion the depositors against any potential risk associated with non-performing loans. Most of the studies done on this area have delved on the effect of credit policy on financial performance where the results have shown that there exist a positive relationship between credit policy and financial performance. While some studies have assessed credit risk management adopted by different companies and their impact on financial performance, again this has yielded mixed results which were dependent on the study context. Most of the studies used return on capital and return on equity as a measure of the dependent variable which was financial performance in most of the studies.

Few studies in Kenya have been done to establish the effect credit policy on liquidity especially in the Deposit Taking SACCO's in Nairobi. This study was geared towards establishing whether there is a relationship between credit policy and liquidity of deposit taking SACCOs where liquidity will be the dependent variable that will be measured against the independent variable of credit policy to find out the association between the two hence adding to the existing body of knowledge in this area.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter represent the research methods and procedures that were used by the researcher to carry out the study. It sets to explain the research design, the population of interest, the sampling criteria, the methods for collecting data, covering data analysis technique, the conceptual and analytical model.

3.2 Research Design

Research design is a plan, a guide that specifies the methods and procedures for collecting and analyzing data to obtain the information required. A research design provides an outline or plan of action for the research (Joseph, Robert & David, 2002). Research design is a general plan of how a researcher will go about getting relevant information to assist in answering the research questions, i.e. the importance of clearly defining the research question (Mark & Adrian 2009).

This study employed a descriptive research design to discover the association between credit policy and liquidity. Descriptive research is a research technique concerned with describing a population with respect to important variables with the major emphasis being on determining the frequency with which something occurs or the extent to which two variables co-vary (Kothari, 2005). This method was appropriate in showing the relationship between credit policy components and liquidity of Deposit Taking SACCOs in Nairobi.

3.3 Population of the Study

Target population in statistics represent the specific population about which information and data is derived from. A population is a well-defined or set of people, services, elements, events, group of things or households that are being investigated (Kothari, 2005). A study population is representative when every element has an equal chance to be included in the final sample that is to be drawn (Mugenda & Mugenda, 2003). The study population consisted of all the 40 SASRA regulated deposit SACCOs registered under the societies Act in Nairobi, Kenya (SASRA Report, 2015). Though data for the study was obtained for 38 SACCOs as one was no longer in operation while one was in Machakos county hence eliminated from the study. The list of the SACCOs was obtained from the schedule of licensed deposit taking SACCO's. The study targeted the 40 Deposit taking SACCOs operating under SASRA. This was a census study hence no sampling was done.

3.4 Data Collection

The study used secondary data. Secondary data is the data and information obtained from articles, books, newspapers, internet and magazines. The data was collected from regulated SACCO'S financial books and financial report as filed by SASRA. Data was collected from the period between 2011-2015 using data collection form designed by the researcher. This enabled the researcher to get quantified data that helped in drawing conclusions and giving recommendations on the effect of credit policy on liquidity of deposit taking SACCO's in Nairobi between the specified periods.

3.5 Data Analysis

The researcher used a multiple regression analysis. Multiple regression attempts to determine whether a group of variables together predict a given dependent variable. Mugenda & Mugenda (2003). Multiple regressions was applied to the data using statistical package for social sciences (SPSS) to examine the effect of the various aspects of credit policy and its components on the liquidity level of the Deposit Taking SACCOS.

3.6 Analytical Model

The study used the following model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon_i$$

Y = Liquidity level measured by Current ratio

$$\text{Liquidity Ratio} = \frac{\text{loans and advances (current assets)}}{\text{Member's deposits (current liabilities)}}$$

X_1 = Credit Terms Policy (Loan Ratio) = Loans & advances / Total Assets

X_2 = Capital Adequacy (Capital Regulation) = Equity / Total Assets

X_3 = Collection Policy (Default Rate) = Non Performing Loans / Total Assets

X_4 = Size of the Firm = Log of Total Assets

X_5 = Loan Duration = (Loan @beg + Loan@end/2) / Repayment during the Yr

β_0 = Represents the factor affecting liquidity when credit policy is zero.

ϵ_i = Random error term

$\beta_{1,2,3,4,5}$ = Coefficients of the variables

3.6.1 Test of Significance

The F- test was used to determine the significance of the regression while the coefficient of determination, R^2 , was used to determine how much variation in the dependent variable was explained by independent variables. This was done at 5% significance level and correlation analysis was carried out to find the direction of the relationship between liquidity and the independent variables. The Statistical Package for Social Sciences (SPSS) was used to analyse the data.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results of data analysis and an interpretation of the same. The chapter is divided into several sections such as the background information which introduces the trends of the SACCO deposits, equity, assets and performance of the loans. There is also a section on the relationship of the variables which used correlation and regression tests to establish the relationship and effects of the variables on the liquidity of the SACCOs and then a section on discussion of the study.

4.1.1 Response Rate

The targeted number of SACCOs was 40 but the researcher managed to collect data from 38 of the SACCOs targeted. This translates into 95% percent of the targeted number. Therefore the study achieved a response rate of 95%. According to the Mugenda and Mugenda (2003) a response rate of 70% and above is excellent for a study. Thus a response rate of 95% was considered highly reliable and acceptable for analysis.

Table 4. 1 Response rate

Questionnaires	Frequency	Percentage
Collected	38	95%
Uncollected	2	5%
Targeted	40	100%

4.2 Background Information of the SACCOS Financial Performance

This section presents the background information on the SACCOS financial, loan and assets and liabilities for the period between 2011 and 2015 for deposit taking SACCOS in Nairobi County.

4.2.1 Descriptive Statistics

This section discusses the descriptive statistics of some financial performances of the SACCOS. The results are given in millions. The statistics include mean and standard deviation.

Table 4. 2 Descriptive statistics (Millions Kenya Shillings)

	N	Mean	Std. Dev	Min	Max
Cash and cash equivalent(Mn)	38	335.18	653.34	1.65	3,614.50
Members deposits(Mn)	38	2,702.69	3,695.34	33.32	17,361.60
Bank loans (Mn)	28	212.66	250.23	2.67	945.03
Loan & advances to members(Mn)	38	2,843.03	4,090.65	36.47	18,568.27
Capital/equity (Mn)	38	540.65	887.79	10.87	3,893.67
Total assets (Mn)	38	3,985.91	5,753.64	61.73	25,496.15

Among the statistics given, average members deposits had a mean of 2.7 Billion and average loans and advances to members Mean of 2.84 Billion and average total assets Mean of 3.985Billion were on average compared to the rest of the financial indicators. More importantly to note is that the average value of total assets was higher than for any other financial measure given. This shows some financial strength of the SACCOS. The

average value of cash and cash equivalents was relatively low with a mean of 335.18 Million. However, this was welcomed as the average value of bank loans was slightly lower a mean of 212.66 Million. This means that SACCOs could meet their bank loans with some ease.

4.2.2 Average Assets for SACCOs

Figure 4.1 shows the average assets for the SACCOS operating in Nairobi for the period between 2011 and 2015. The figure shows that the total assets for the SACCOS have been increasing over the years from 2011 at Kshs. 2.769 Billion to Kshs. 4.554 Billion in 2015. However, the trends shows there was a sharp increase in the assets from year 2012 to year 2013 probably due to the anticipation of the elections and uncertainties which comes with general elections in Kenya.

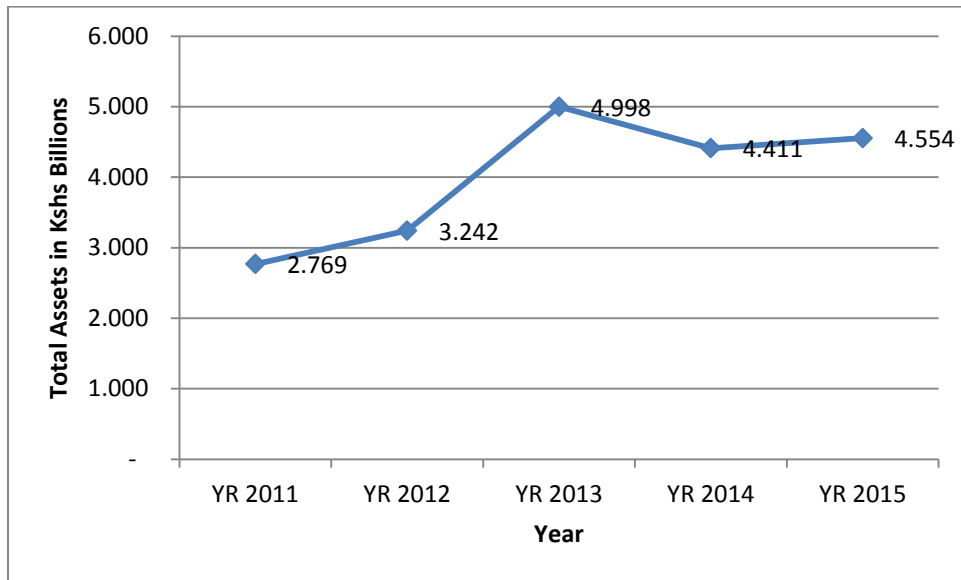


Figure 4. 1 Average Assets for SACCOs 2011-2025

4.2.3 Average Members deposits versus loan and advances to members

The results on the SACCO deposits (liabilities) and the SACCO loans (Assets) show that both have been increasing since 2011 to 2015. The value of member deposits was Kshs. 1.943 billion in 2011 rising to Kshs, 3.606 in 2015. The value of the loan advances has also been increasing from year 2011 at Kshs. 2.041 in 2011 to Kshs. 3.434 in year 2015. The value of loans and advances extended to members has been slightly higher than that of the member deposits in all the year except in 2015. This could be due to change in member financial behavior from investment or consumption to saving behavior.

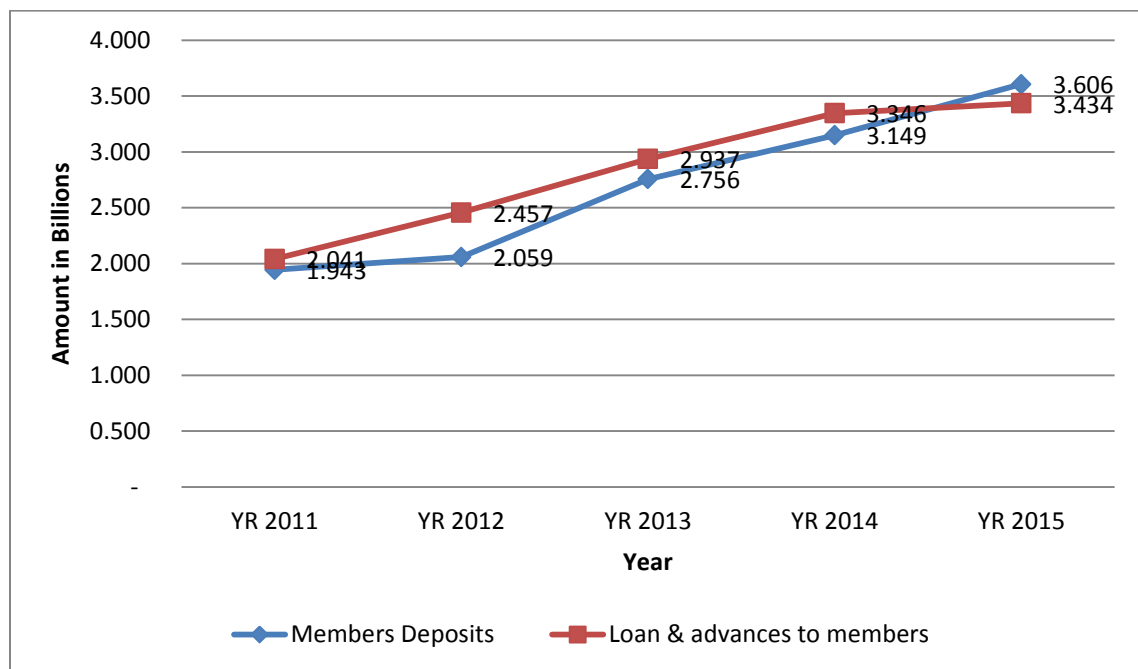


Figure 4. 2 Average Members deposits and loan advances to members 2011-2015

4.2.4 Average SACCO Equity

The value of equity or capital is a key element in financial institutions. From the results shown in figure 4.3, the value of the equity or capital has been increasing from the year 2011 to the year 2015.

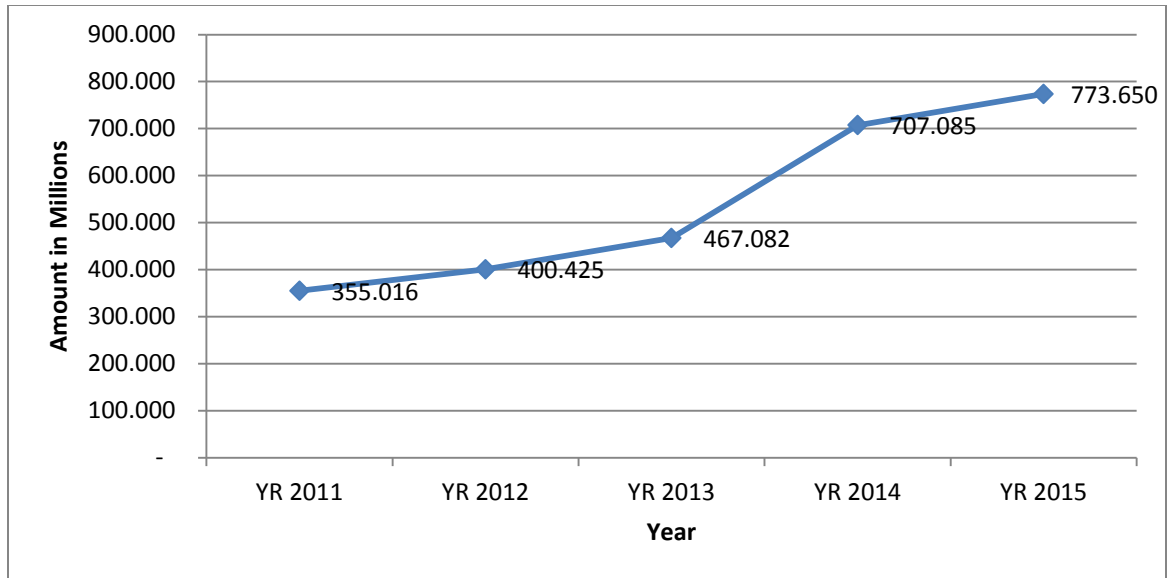


Figure 4. 3 Average Equity for the SACCOS

4.2.5 Average Value of Non-Performing Loans

The value of the non-performing loans is another critical component of the financial institutions. A high value of non-performing loans may indicate high likelihood of default which may implies increased probability for loss. A low level of non-performing loans is good for the lenders since it increases the returns for the SACCOs. In this study, the average value of non-performing loans reduced from Kshs. 254.15 in 2011 to Kshs.34.03 in 2015. This shows a significant drop in riskiness of the loan and probably an improvement of the SACCOs liquidity level.

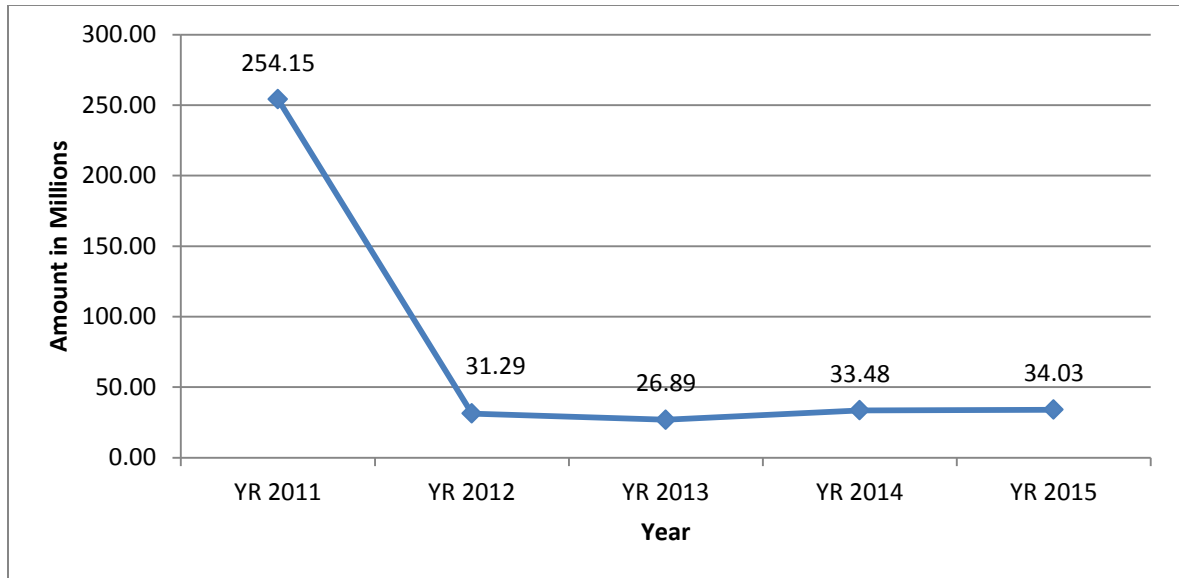


Figure 4. 4 Average value of Non-Performing Loans

4.3 Exploratory Tests

This section presents information about the variables used in the study. The section provides information on how the missing values were treated, outliers, and also on how the variables were calculated from the original deposit taking SACCOs information collected from the field. It also has information on the test on multicollinearity.

4.3.1 Variable Determination

The data collected from the deposit taking SACCOs was in raw form and thus further manipulation of the data was needed to get the variables needed in this study. Table 4.3 shows how the variables for this study were calculated from the original data as explained in chapter three. The researcher calculated liquidity of the SACCOs by using current assets and current liabilities. Similarly capital adequacy and collection policy were calculated through use equity to assets and non-performing loans to assets ratios respectively. The size of the firm was determined through the value of the assets. In this

study, a logarithmic transformation was applied to have a lower value of the assets. Lastly, the duration of the loan was determined by dividing the average amount of loan with the amount paid within one year as shown in table 4.3.

Table 4. 3 Variable Determination

Variables	Formula
Liquidity	$\frac{\text{loans and advances (current assets)}}{\text{Member's deposits (current liabilities)}}$
Capital adequacy	$\frac{\text{Equity}}{\text{Total assets}}$
Collection Policy	$\frac{\text{Non-performing loans}}{\text{Total assets}}$
Size of the firm	Log of Total Assets
Loan duration	$\frac{[(\text{Loan at the start} + \text{Loan at the end})/2]}{\text{Repayment during the year}}$

4.3.2 Testing for Randomness of Missing Values and Treatment for Outliers

A Little's MCAR (Missing completely at Random) test was used to test for randomness of the missing values. According to the test, data is assumed to be MCAR when the value of p is not significant. In such a case, the missing values is not a major concern and list wise deletion of observations with missing values is adopted if the number of missing values is not significantly large.

Table 4. 4 Randomness of the missing values

EM Means					
Credit Terms. Policy	Capital Adequacy	Collection Policy	size	Loan Duration	Liquidity
.7647	1.1826	.0700	9.2514	1.5276	.1009
a. Little's MCAR test: Chi-Square = 6.289, DF = 5, Sig. = .279					

In this study, the value of Little's MCAR test was found to be insignificant ($p > 0.05$). Thus the missingness of the variables was random and not systematic. Thus missing values treated using a list wise deletion. Outliers were treated like missing values and thus were eliminated through list wise deletion method.

4.3.3 Multicollinearity Test

This test was done to test whether the study variables were multicollinear which could affect the appropriateness and accuracy of the inferential tests of the study. The test used Tolerance and VIF (Variance inflation Factor). Tolerance shows the percentage of a variable that cannot be explained or affected by other variables. A tolerance value of more than 0.3 is considered ideal for a study while a VIF value of less than 5 depicts lack of multicollinearity in a data set. In this study, all the variables had a tolerance values of more than 0.8 and the VIF values were less than 5 thus showing lack of multicollinearity among the variables of the study.

Table 4. 5 Multicollinearity test

	Tolerance	VIF
Credit.Terms.Policy	0.904	1.106
Capital.Adequacy	0.867	1.153
Collection.Policy	0.934	1.071
Size	0.832	1.201
Loan.Duration	0.929	1.076

4.4 Relationship and effect of credit policy on liquidity of SACCOs

This section seeks to address the objective of the study on the relationship and effect between credit policy and the liquidity of the SACCOS.

4.4.1 Relationship between Liquidity and Credit Policy and other Related Variables

This section employs Pearson Correlation to test the relationship between the liquidity and the credit policies of the deposit taking SACCOs. The results of the test are shown in table 4.6. According to the results, liquidity and credit policies of the SACCOs operating in Nairobi had a positive significant correlation ($r=0.441$, $p<0.05$). This means that better credit policies corresponded with increase in liquidity levels of the deposit taking SACCOs. Also the liquidity and capital adequacy had a strong positive and significant correlation ($r=0.445$, $p<0.05$) implying that deposit taking SACCOS with high capital adequacy were likely to have more liquidity. Lastly, liquidity and size of the SACCOs

had a positive significant correlation ($r=0.393$, $p<0.05$). This shows that big deposit taking SACCOs tend to be more liquid than small deposit taking SACCOs.

Table 4. 6 Correlation analysis

		Liquidity	Credit Policy	Capital Adequacy	Collection Policy	size	Loan Duration	
Liquidity	R	1						
	Sig.							
Credit Policy	R	.441**	1					
	Sig.	0.006						
Capital Adequacy	R	.445**	-0.078	1				
	Sig.	0.005	0.64					
Collection Policy	R	-0.231	-0.196	-0.023	1			
	Sig.	0.163	0.238	0.891				
Size	R	.393*	-0.159	0.32	-0.111	1		
	Sig.	0.015	0.341	0.05	0.506			
Loan Duration	R	0.072	-0.129	0.142	-0.037	-0.1	1	
	Sig.	0.666	0.441	0.396	0.824	0.551		
** Correlation is significant at the 0.01 level (2-tailed).								
* Correlation is significant at the 0.05 level (2-tailed).								

4.4.3 The Effect of Credit Policy and other Variables on the Liquidity of SACCOs

To test the effect of credit policy on the liquidity of the deposit taking SACCOs, a multiple linear regression was conducted. The results are discussed in the following sections.

Table 4. 7 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.748 ^a	.559	.490	.12105
a. Predictors: (Constant), Loan.Duration, Collection.Policy, Capital.Adequacy, Credit.Terms.Policy, size				

Table 4.7 shows a R value of 0.748 which shows that the correlation between the dependent variable and the combined variables was positive and strong ($r=0.748$). The value of the R square was 0.559 indicating that 55.9% of the variation in dependent variable (liquidity) was explained by the independent variables.

Table 4. 8 ANOVA

Model		Sum of Squares	do	Mean Square	F	Sig.
1	Regression	.595	5	.119	8.118	.000 ^p
	Residual	.469	32	.015		
	Total	1.064	37			
a. Dependent Variable: liquidity						
b. Predictors: (Constant), Loan.Duration, Collection.Policy, Capital.Adequacy, Credit.Terms.Policy, size						

Analysis of Variance test (ANOVA) is used to test the significance of the model and thus the goodness of fit of the model. In this case, the ANOVA test were $F(5, 32) = 8.118$, $p < 0.05$. This shows that the effect of the predictor variables on the dependent was statistically significant. This shows that the data fits the model.

Table 4. 9 Coefficients

Mode	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.691	.396		-1.744	.091
Credit.Terms.Policy	.621	.145	.529	4.282	.000
Capital.Adequacy	.090	.033	.348	2.764	.009
Collection.Policy	-.035	.057	-.074	-.606	.549
Size	.109	.038	.370	2.873	.007
Loan.Duration	.040	.039	.125	1.028	.311
a. Dependent Variable: liquidity					

Table 4.9 shows the results of the regression test coefficients. According to the results, the credit policy ($p < 0.05$), capital adequacy ($p < 0.05$) and size of the SACCO ($p < 0.05$) were all significant predictors of the liquidity of the deposit taking SACCOs. The constant, collection policy and duration of the loan were not. The resulting regression model was given by:

$$LQ = -0.691 + 0.621CTP + 0.090CA - 0.035CP + 0.109SZ + 0.040LD + \epsilon$$

Where LQ= liquidity, CTP=Credit Terms Policy, CA=Capital Adequacy, CP=collection policy, SZ=Size of the SACCO, LD=Loan Duration and lastly ϵ =error term.

From the results and considering the only significant variables, the researcher concentrates on the credit policy, capital adequacy and size of the SACCOs. Thus when all the other factors are held constant a new policy or marginal improvement of the credit policy would increase the liquidity of the SACCO by 0.621 units. An increase of the capital by one unit holding other factors constant increases the liquidity of a SACCO by

0.090 units. Lastly increasing the size of the SACCO by one Million increases the liquidity of the SACCO by 0.109 units. This shows that the liquidity of the SACCOs largely is influenced by the credit policies, the capital adequacy status and the size of a SACCO.

4.5 Discussion of the Research Findings

The background results show that the average value of assets for deposit taking SACCOs in Nairobi had been increasing from 2011 to 2015 from Kshs.2.769 Billion to Kshs. 4.554 Billions. The value of the members' deposits and the loans advanced by the SACCOs also assumed an upward trend in the same period. Similar trends are shown by the average Equity amounts. The average equity level of the deposit taking SACCOs in Nairobi rose from Kshs. 355.016 Million in year 2011 to around Kshs.773.650 in 2015.

This is largely supported by the declining values of non-performing loans in deposit taking SACCOs over the same period. This shows that there is a reduced risk of default among SACCOs which acts like an impetus for the SACCOs to continue offering credit services. The reduction of the NPLs (Non –Performing Loans) also can be explained by the introduction of credit referencing which has substantially helped financial institutions to avoid the defaulters while at the same time reducing the individuals' likelihood to default. Similar results were found by Addo (2014), who found that banks that reported higher profitability or higher performance had less non-performing loans implying that credit risk management leads to higher performance.

In a nutshell, the deposit taking SACCOs have been growing since the year 2011 in terms of either new members or increased deposits by the existing members. This perhaps could be attributable to the fact that credit services from the SACCOs were relatively cheaper compared to those from banks and thus more customers preferred SACCOs to banks as source of credit.

According to Joachim (2007) to remain in business operations effectively a SACCO should be able to make withdrawals to members instantly and also be able to offer loans or credit to members upon receipt of such applications. It is prudent that liquidity levels of SACCOs remain checked and at appropriate levels because financial goals can be sudden especially due to the unforeseen demands of customers or depositors. This study studied the factors affecting the liquidity of SACCOS. The main variable of concern for this study was the effect of credit terms and policies on the liquidity of the SACCOs. A correlation test shows that there exists significant positive correlation between liquidity and credit policy ($r=0.441$, $p<0.05$). This means that SACCOs with improved credit policies had more liquidity compared to the ones which had weak credit policies. The results were confirmed by the multiple linear regressions which tested the effects of several variables on the liquidity of the deposit taking SACCOs. From the results, the credit policy was found to significantly affect the liquidity level of a SACCOs, ($p<0.05$). Similar notion were held by James, Kenneth, Anthony and Geoffrey (2014) who argued that poorly structured policy could affect liquidity by posing a risk of lending out money and being unable to recover outstanding debt in good time. Also Ayodele, Thomas and Raphael (2014) noted that credit policy affects the amount of capital, quality of asset,

management quality, earnings and liquidity position of a financial institutions either positively or negatively depending on how the management implement the policies.

Ojeka (2005) observed that that favorable credit policy affect liquidity favorably and suggested that companies needed to regularly review their credit policy to maintain liquidity at favorable levels. The study results agree with the previous studies that credit policies affect the liquidity of firms. This shows that types of policies, how they are formulated and the strength of the credit policy affect the liquidity of companies which in turn affects the ability of such firms to meet short term financial obligations and goals.

A correlation test shows a positive and significant correlation between capital adequacy and the liquidity of the SACCOs ($r=0.445$, $p<0.05$). This implies that deposit taking SACCOs with high levels of capital were associated with high liquidity levels and vice versa. Similarly, a regression test shows that the level of capital affects the liquidity of the SACCOs ($p<0.05$). McMahon and Stanger (2005) also argued that shortage of working capital was a common problem for small firms. Similar results were justified by David, Willy and Mboya (2015) who held that adequate capital helps cushion depositors and act as a protection of the depositors' funds hence improving the liquidity of the financial institutions. Joachim (2007) emphasized that the primary role of a financial institution is to absorb risk using its equity capital. This underlines the fact that capital of the firms should be adequate enough to guard against any threats or potential loss of liquidity. Thus capital affects the liquidity level of a SACCO.

There was also a positive and significant correlation between the size of a SACCO and the level of liquidity of such a SACCO ($r=0.393$, $p<0.05$). Thus SACCOs with a lot of assets were more liquid than those whose assets were lower. This was confirmed by the regression test which found that the size of a SACCO affected significantly the liquidity of SACCOs. These results agrees with the liquidity theory by Emery (1984) that large firms may not have liquidity challenges and have a wide access of funds from capital markets.

Nielson (2012) noted that small firms accepted credit but reduced on the amount they advanced to their customers hence they adopted a tight and stringent credit policy to reduce on the default rates and bad debts. This shows that the size of the firms affects the access to credit and ability to advance loans which increases liabilities relative to the assets. This in turn affects the liquidity level of the firms. This concurs with the ideas from Petersen and Rajan (1997) who argued that firm which do not face liquidity constraints were less likely to demand for credit but instead offer more credit to its customers. It is thus clear that the size of the firm or SACCO had significant impact on the liquidity level of the SACCOs which affects the access to credit from other financial institutions and the ability to advance loans to customers.

The study also showed no significance in terms of correlation or effect of the collection policy and the duration of the loan on the liquidity of SACCOs operating within Nairobi. According to Kariuki, (2010) collection policy accelerates the collections of loans from the individuals who are slow payer hence reducing bad debts losses and ensures timely payment and regular collections (Sharma & Kumar, 2011). The current study shows that

the policies did not in any way affect the liquidity level of the SACCOs. This could be perhaps due to the fact that the process is too expensive and thus the amount recovered and the cost of recovery cancels out. Tandelilin, Kaaro, and Supriyatna, (2007) warned that collection process could be rather expensive in terms of resources required to follow up on the non-payers as well as losing good will between the parties. Thus the collection policy needs to be well designed and administered to achieve the intended goal.

The study findings show that the credit policies, adequacy of the capital and the size affect the liquidity levels of deposit taking SACCOs within Nairobi. This then implies that such should be well designed and monitored and enforced to ensure that appropriate levels of liquidity is maintained which affects the operations of the SACCOs. The study further has found that duration of the loan and the policies for recovery of the loans do not guarantee or directly affect the liquidity levels of the SACCOs operating in Nairobi.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the findings in chapter four, conclusions and the recommendations of the study. Also a section on the further recommended studies is presented at the end of the chapter.

5.2 Summary of the Findings

The study sought to establish the effect of credit terms and policies on the liquidity of the SACCOs operating in Nairobi. Also the study tested the effect of capital, collection policies, size of the firms and loan duration on the liquidity of the SACCOs. This is because liquidity of deposit taking SACCOs is a critical component which determines how they operate and their ability to meet their short term and long term goals.

The study results show that liquidity was influenced by the credit policies in place, the level of capital and the size of the firms. This shows that types of credit policies, the design of payment, the amount of payment, and the stringiness of the policies affected the liquidity of the SACCOs. Also big deposit taking SACCOs which had big capital and big assets improved the liquidity levels. However, the duration of a loan and the policies put in place to recover loans were not significant predictors of the liquidity of the deposit taking SACCOs.

5.3 Conclusions of the Study

The study concludes that credit policies such as the credit period, interest rate, method of calculating interest and frequency of loan installments affect the liquidity of the SACCOs. This is because they influence how A SACCO gets revenue from interests and the period taken to get such interests, A good credit policy contributes to higher levels of liquidity which enables the SACCOs to meet their customer demands with ease.

The study notes that capital adequacy and the size of the deposit taking SACCOs affect the levels of liquidity of the SACCOs because the values of the assets help to absorb any shocks and losses on the liquidity of the SACCOs. The level of deposits also play equally critical role by affecting the cash available for lending and financial stability. This in turns facilitates a smooth flow of the SACCO operations due to favorable liquidity.

The study notes that loan duration and the policies established to recover or collect loans do not necessarily affect the liquidity of deposit taking SACCOs. This is because the policies could be good but the implementation could be ineffective. A loan collection policy may have absolutely no impact if it has no impact on the revenue collection. Also the policies could be poorly developed and end up not affecting the monies collected by the SACCOs.

5.4 Recommendations of the Study

The study found that the credit policies influence the liquidity of the deposit SACCOs operating within Nairobi which in turn affects the operational efficiency of the SACCOs. This implies that good credit policies need to be designed and enforced to ensure that liquidity of the SACCOs is sustained at appropriate levels. It is thus recommended that,

business strategists and strategic managers as well as the credit department personnel invest in market research and benchmark studies to ensure they develop good credit policies which positively influence the liquidity of their firms.

To effectively maintain the levels of liquidity of the SACCOs, it is recommended that SACCOs focus on having adequate capital and assets. This can be achieved by increasing the members and assets so as to cushion any loss or threats against their liquidity levels. This can be done through massive expansion and publicity of the SACCOs to outsiders or developing incentives to woo SACCOs to invest more or increase their monthly deposits. These incentives could be in terms of increased dividends per share at the end of the year or other benefits to the members.

Collection policies on loans and the duration of the loans need to be well designed and implemented so that it is cost effective and productive. The application of the procedures should be well tested to ensure that their costs are not too high to be recovered to avoid loss of the firm's revenue through high and unnecessary costs. A benchmarking can be done to look at the collection policy as well as level of riskiness and the default rate. This would help and shelve the SACCOs from unnecessary losses arising from defaults and risks.

5.5 Limitations of the Study

The researcher found a limitation on getting some data for some deposit taking Sacco's as some SACCOs did not renew their operating Licenses while a few were no longer in operation as was indicated by their regulator SASRA. These SACCO's were eliminated from the study. Due to the nature of the research, data was only restricted to five year

period so the results could have given a clearer picture if the data would have been for a longer period of time. Again the study results are only based on deposit taking SACCO's operating in Nairobi so by including all the SACCOs operating in other areas would affect the performance.

5.6 Suggestions for Further Areas of Research

The study collected data within deposit taking SACCOs operating in Nairobi only. Nairobi represents a highly cosmopolitan urban area with a lot of financial and economic activities as well as a lot of population. This type of market environment may only be unique in Nairobi and not in other areas especially the rural areas. Thus, the phenomenon may be different in rural areas where the income levels are low, they are less populous and have less economic and financial activities. Thus the current results are only generalizable within urban centers and not entirely in Kenya. It is thus recommended that further research be undertaken to establish whether the results are different in rural areas. Secondly, the study focused on deposit taking SACCOs only. The operations of SACCOs mostly cater for the financial needs of people in a certain institution, profession, place or same jobs. These are slightly different from micro-financial institutions and banks whose focus is much broader. The other financial institutions provide formal services to a variety of people and highly invest in financial technologies to deliver value additions to their products. This means the study is not a representative of all the financial institutions. Thus a similar study needs to be done on the other financial institutions to unearth more about on the factors affecting the liquidity.

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APPENDICES

Appendix I: List of Deposit Taking SACCOs under SASRA in Nairobi County

1. AFYA SACCO SOCIETY LIMITED
2. AIRPORTS SACCO SOCIETY LIMITED
3. ARDHI SACCO SOCIETY
4. ASILI SACCO SOCIETY LIMITED
5. CHAI SACCO SOCIETY LIMITED
6. CHUNA SACCO SOCIETY LIMITED
7. COMOCO SACCO SOCIETY LIMITED
8. ELIMU SACCO SOCIETY
9. FUNDILIMA SACCO SOCIETY
10. HARAMBEE SACCO SOCIETY LIMITED
11. HAZINA SACCO SOCIETY LIMITED
12. JAMII SACCO SOCIETY LIMITED
13. KENPIPE SACCO SOCIETY LIMITED
14. KENYA POLICE STAFF SACCO SOCIETY LIMITED
15. KINGDOM SACCO SOCIETY LIMITED
16. MWALIMU NATIONAL SACCO SOCIETY LIMITED
17. KENVERSITY SACCO SOCIETY LIMITED
18. MILIKI SACCO SOCIETY LIMITED
19. ARDHI SACCO SOCIETY LIMITED
20. MWITO SACCO SOCIETY LIMITED
21. NATION STAFF SACCO SOCIETY LIMITED
20. STIMA SACCO SOCIETY LIMITED
22. ORTHODOX DEVELOPMENT SACCO SOCIETY LIMITED
23. SAFARICOM SACCO SOCIETY LIMITED
24. SHERIA SACCO SOCIETY LIMITED

25. SHIRIKA SACCO SOCIETY LIMITED
26. TRANSACOM SACCO SOCIETY LIMITED
27. UNITED NATIONS SACCO SOCIETY LIMITED
28. MAGEREZA SACCO SOCIETY LIMITED
29. UNIVERSAL TRADERS SACCO SOCIETY LIMITED
30. KENYA BANKERS SACCO SOCIETY LIMITED
31. NACICO SACCO SOCIETY LIMITED
32. NAFKA SACCO SOCIETY LIMITED
33. NAKU SACCO SOCIETY LIMITED
34. NEST SACCO SOCIETY LIMITED
35. WANA-ANGA SACCO SOCIETY LIMITED
36. WANANDEGE SACCO SOCIETY LIMITED
37. WAUMINI SACCO SOCIETY LIMITED
38. UKULIMA SACCO SOCIETY LIMITED
39. UKRISTO WA UFANISI WA ANGLICANA SACCO SOCIETY LIMITED
40. UFUNDI SACCO SOCIETY LIMITED

Appendix II: Introductory Letter

Balbina Atieno Nyakado

University of Nairobi P.O Box 30197-00100

August, 2016

To whom it may concern

Dear Sir/Madam

RE: RESEARCH PROJECT

I am an MBA student at the University of Nairobi undertaking a research project as part of the requirements of the degree of Masters in Business Administration.

The topic of my Research is “Effect of Credit Policy on Liquidity of Deposit Taking SACCOs in Nairobi”. I would like to get assistance in getting data from your institution which was selected for the study.

Any information provided will be treated with utmost confidentiality and used solely for academic purposes. Your assistance will be highly appreciated.

Thanking you in advance.

Yours faithfully

Balbina Atieno Nyakado

MBA Student

D61/70977/2014

E-mail:balbina.nyakado@gmail.com Tel: 0728 271755

Appendix III : Data collection Form

Year/ Variables	2011	2012	2013	2014	2015
Cash & cash Equivalent					
Members Deposits					
Bank Loan					
Loan to Member					
Capital / Equity					

Saccos Assets					
Loan Repaid					
Non performing Loan					
Loan @ Start of Yr					
Loan @ end of Yr					