RELATIONSHIP BETWEEN MICROECONOMIC VARIABLES AND LIQUIDITY RISK AMONG SACCOs REGULATED BY SACCO SOCIETIES REGULATORY AUTHORITY IN NAIROBI COUNTY

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A RESEARCH PROJECT SUBMITTED FOR PARTIALFULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A MASTER OF BUSINESS ADMINISTRATION DEGREE, UNIVERSITY OF NAIROBI

NOVEMBER 2017

DECLARATION

STUDENT'S DECLARATION

I proclaim that the subsequent research project is my unique work and has certainly not been submitted for a degree in any other university or college for examination/academic purposes.

Signature: …………………………………..Date:…………………………………

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SUPERVISOR

This research project has been submitted for examination with my approval as the University Supervisor.

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ACKNOWLEDGEMENT

I owe my deepest gratitude to them that made it possible for me to complete this research project.

First and fore most is God Almighty in whom I live, move and have my being. His strength, guidance and provision made it possible for me to complete this project. I give you all the glory for this amazing work.

To my supervisor Mr. Martin Odipo whose encouragement, guidance and support from the initial to the final level enabled me to develop an understanding of the subject. Thank you for the time you availed to hear me out and help me in this project.

To my amazing husband, Jay Paul Ngugi who has encouraged me all the way and made sure that I gave it all it takes to finish this project. Thank you for your moral and financial support as I pursued my MBA.

To my parents Mr. Harun Kamweru and Mrs. Naomi Kamweru, you gave your all so I could get an education, you always told me that I could do everything I set my mind on and be anything I wanted to, because I had God on my side. The thought of you when times were tough as I did the project reminded me that I should not give up on myself since you did not give up on me. I hope I made you proud.

To my siblings Grace Mugambi and Daniel Kamweru, thank you for your encouragement through the frequent phone calls to check on how I was doing as I did this project.

To the directors and senior management of Meridian Health Group, thank you for allowing me to pursue my MBA despite the busy work schedules.

Thank you. My love for you all can never be quantified. God bless you.

DEDICATION

I dedicate this research project to my son Jaysen Baraka Ngugi who gave me the zeal and will to complete it. The thought of you as I did this project made me even more confident that my hard work was not in vain, someone was looking up to me. I love you son.

ABSTRACT

Liquidity management practice is a function of internal controls put in place. Micro Finance Institutions internal controls system significantly affects its liquidity risk management practices. Basel I framework outlines on importance of internal controls in managing banks liquidity. The research aimed at establishing the relationship between microeconomic variables and liquidity risks among SACCOs registered by SASRA in Nairobi County. The study was anchored on liquidity preference theory, the trade-off theory of liquidity as well as the agency theory. The research made use of a descriptive study design. The population of the study was 35 SACCOS in Nairobi County registered by SASRA and that have been in operation during the period 2012 to 2016. The research used secondary information that was obtained from the published financial reports of the SACCOs for the five-year period commencing 2012 up to 2016. The secondary information was gathered by the use of data collection guide. Data was collected on absolute values of current assets, current liability, total assets, equity, total debt, total capital and non-interest expense. The collected data was therefore sorted, coded and analytically prearranged in a way that can facilitate the analysis through the use of the Statistical Package for Social Sciences (SPSS). Quantitative analysis was used through the descriptive statistics like measure of the central tendency so as to produce the appropriate mean, percentages, and median, mode and frequency counts where possible. A regression analysis was applied so as to determine the connection between microeconomic variables and liquidity risks. The coefficient of determination (R^2) was utilized to calculate the degree to which the variation in interest rate spread is explained by the micro economic variables. F-statistic was calculated at 95% confidence level to test whether there is any significant relationship between micro economic variables and liquidity risks among SACCOs registered by SASRA in Nairobi County. The study established that leverage is positively and significantly related to liquidity risk in among Saccos regulated by Sacco society's regulatory authority in Nairobi County. The study established that managerial efficiency is positively and significantly related to liquidity risk in among Saccos regulated by Sacco society's regulatory authority in Nairobi County. The study also established inflation and GDP as control variables are significantly related to liquidity risks. The study concluded that leverage had the greatest effect on liquidity risk followed by firm size then capitalization then managerial Efficiency then inflation while GDP had the least effect on liquidity risk. The study recommends that commercial banks focus on maintaining high level of liquidity and management efficiency to enhance their performance by cushioning themselves against operational risk and that Sacco's management should ensure the availability of sufficient funds to meet future demands of providers and borrowers, at reasonable costs and that Saccos need to consider all pertinent issues before issuing dividends.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ABBREVIATIONS AND ACRONYMS

ANOVA   Analysis of variance

BOD   Board of Directors

CBK   Central Bank of Kenya

GLS   General Logistics Systems

KUSCCO   Kenya Union of Savings and Credit Cooperative Societies

MFIs   Micro Finance Institutions

NSE   Nairobi Securities Exchange

SACCOs   Savings and Credit Co-Operative Societies

SASRA   Sacco Societies Regulatory Authority

SPSS   Software Package for Statistical Analysis

CHAPTER ONE

INTRODUCTION

1.1 Background of the Research

Risk acts as a fundamental component of financial intermediation. Therefore, risk management ought to be at the centre of finance. On the other hand, it is alarming to note that methodical risk management is not as extensive as it ought to be in the Micro finance sector. Except for a few SACCOs, which constitute the core of the industry, most SACCOS do not pay adequate attention to risk management (Ivo, 2014).

The role played by liquidity in SACCOs has improved swiftly in latest years. Following the financial catastrophe that took place in 2008, liquidity risk has slowly been taken as one of the main risks that can obstruct the going processes of SACCOs. Liquidity is defined as the SACCO's ability to finance increases in assets as well as meet responsibilities as they fall due exclusive of incurring tolerable losses (Basel 1 committee of banking supervision report, 2008). Liquidity risk management involves analysing the positions of the balance sheet so as to predict potential cash flows but also the manner in which to meet the funding requirements. To deal with the liquidity positions, SACCOs ought to consider the long-term positions as well as the revelation to the large investors amongst the other aspects (Navdeep, 2014).

1.1.1 Micro Economic Variables

SACCOs as part of the corporate world have been affected by both micro and macro factors in their operations efficiency and performance. The micro economic variables include the institutional factors that affect the liquidity of the firm. These factors are mostly influenced by the policy objective and the management decisions of a firm

(Joachim, 2014). Thus, the management efficiency is one of the main factors. Management efficiency can be measured as a ratio of operational expenses and revenue generated. Liquidity risk is also a micro economic factor that may occur from the possible firm's inability to put up with a decrease in liabilities. This implies that Liquidity risk is a severe factor affects the liquidity of many organizations. It needs further investigation in country specific situations (Ilhomovich, 2009).

Empirical study of Hoffmann (2014) indicated a positive effect of capital on company liquidity. The challenging empirical facts propose that higher capital ratio leads to lower liquidity. The proposition of the re-examined researches is that coming up high regulatory capital could have negative consequences on liquidity as well as the ultimately performance of the firm. Consequently, capital structure is one of the key determinants of company liquidity. The impact of growing company size on productivity may tend to be constructive up to a given limit; past which the effect turns out to be negative on profitability. Diversification through non-interest income enhances company profitability. However, study by Shahchera(2012) pointed out that greater diversification of the firm activities does not transform into improved liquidity of the company, but may reduce profits; thus the company must set the optimum level of non-interest income activities.

1.1.2 Liquidity Risks

Liquidity is delineated as the level to which an organization's security or assets can be purchased or traded in the marketplace devoid of influencing the price of the asset. It is categorized by an extensive level of the business activity. It indicates the amount of cash a firm has as well as the capability of the company to pay back its debt. The firm's assets are also categorized into different categorizes. Cash, marketable

securities as well as the cash equivalents make up liquid assets. These assets make up an important part of the total asset of a firm (Shahchera, 2012).

The asset's liquidity implies how swiftly the assets can be changed into cash. In corporate context, liquidity means the company's ability to meet its current liabilities when due (Puneet&Parmil, 2012).on the other hand, liquidity risk is defined as the likelihood of unenthusiastic effects on the interests of the customers, owners as well as the other stakeholders of the financial institution ensuing from the incapability to meet present cash responsibilities in a cost-efficient and timely way. Liquidity risk arises from the inability of the management to effectively foresee and plan for modifications in cash needs and funding sources. Proficient liquidity management entails maintaining adequate cash reserves on hand while putting in more funds so as to maximize the income.

A lender should have the ability to honour all cash compensations commitments as they fall due and to meet the requests from the customer for the saving withdrawals as well as the new loans. These obligations can be met through drawing from the cash holdings, through the current cash flows, through the cash borrowing, or through converting the liquid assets into cash .Tirole (2009) distinguishes the two categories of liquidity risk. This includes the asset and the liability side of balance. Liquidity risk on the liability side occurs when the liability holders in the financial institutions look for ready money in their financial claims. In case the financial organizations possess less money than what their liability holders wish to take out, the institution has to pay a debt their assets as a way of covering the difference. On the other hand, liquidity risk on the asset side occurs when a particular asset or security cannot be traded swiftly enough or at the required price in the market so as to avert a loss or put together the necessary profit. Most of the firm's assets can be changed into cash, but

if some the assets ought to be liquidated instantly, there is a likelihood that this may be done either at very high cost or at much lower price than the financial organization would be able to get in some near future (Delcoure, 2008).

1.1.3 Microeconomic Variables and liquidity risks

Firm's liquidity may be influenced by factors that are within firms control as well as by factors beyond the control of such firms. Controllable factors include everything related to management of inputs and outputs or transforming inputs into outputs (Karki, 2015). Size of the firm is usually brought into account for the economies of scale at the marketplace structure. The connection amid the liquidity and the size is an imperative element of the organization's hypothesis. This is because larger firms are able to take in economies of scale and to decrease the cost of finances. In addition, large firms are able to access capital markets easily and also mobilize internal funds. The size of the firm ought to be absolutely associated with the firm's liquidity. However, very large organizations may show a negative connection linking both the liquidity and the size. This is as a result of the agency costs, the operating cost of the bureaucratic processes as well as other the costs associated with the external funds (Pasiouras&Kosmidou, 2007).

Capital ratio is taken to be a key tool for calculating capital sufficiency and ought to capture the common soundness and safety of the companies. As a result, highly capitalized firms may decrease their cost of funding, which influence their liquidity level positively hence reducing liquidity risks. On the other hand, those firms which are highly capitalized have an abridged need to external cash, leading to a positive effect on their liquidity. However, considering the hypothesis on the conventional risk-return, it is possible for organizations with lesser capital ratios to encompass better liquidity as compared to those organizations which are better capitalized.

4

Bourke (2009) indicate an important as well as a positive relationship between liquidity and capital adequacy .Bourke came up with a conclusion which stated that the higher the ratio on capital the lower the firm's liquidity risk.

According to Polk and Sapienza (2009), liquidity is higher in a situation whereby the company's shares are overestimated; through the use of the optional accruals as an alternative for mispricing hence an increase on liquidity results to a superior level of organizational possession through transient as well as quasi-indexers thus reducing Innovation. Munoz (2013) in his article named 'liquidity and investment of company' used financial leverage, Q-tobin and cash flow as control variables to control other variables which are somehow effective on analysis of research issues established that in companies with high level of trading volume in one period and industry-based adjusted trading volume, the level of investment is high as well. So, liquidity of stock market has a direct relationship with companies' investment, and high liquidity can result in more investments.

1.1.4 Savings and Credit Co-operative Societies Registered by SASRA

SACCOs are made up of solid bases of little saving accounts making up a steady as well as a reasonably low-cost supply of financial support as well as low managerial expenditures. They are, moreover, capable to give loans at the rates of interest which is lower than those given by the other financial institutions (Bourke, 2009). Further, SACCOs possess opportunity as well as the ability to reach customers in places which are unappealing to major financial intermediaries like commercial banks. Effectively, therefore, this has helped in ensuring that the SACCOs more appealing to the clients, thus ingraining themselves in the financial parts of many nations. The major objective

of SACCOs is to make sure the member empowerment via the mobilization of savings as well as disbursement of credit (Ofei, 2011).

Subsequent to the independent, the Kenyan Government recognized the co-operatives as appropriate vehicles with suitable structure to realize citizen objectives and wider participation in economic growth. Consequently, steps are put in place by the Government which witnessed the fast growth of the SACCOs progress in the nation. By 2012, Kenya had more than five thousand registered SACCOs with a total membership of more than seven million individuals and mobilized savings of over Ksh.200 billion. The largely growing financial subsector is regulated through the societies act for the SACCOs which were established in the year 2008. The Act was enacted so as to grant for the promotion, supervision and licensing, supervision of the savings and credit co-operatives through the instrument of SACCO Societies Regulatory Authority (SASRA) (Ndung'u, 2010). Among other Counties in Kenya, Kisumu stands out as one of the SACCO high-concentration areas with a registered population of 183 spread widely both in informal and formal sectors (SASRA, 2014). Notably, however, the number of active SACCOs, defined by formal affiliation to Kenya Union of Savings and Credit Cooperative Societies (KUSCCO), slims down to 62. This active bracket caters for an aggregate membership of 158,720 (SASRA, 2014).

1.2 Research Problem

Liquidity management practice is a function of internal controls put in place (Kimathi, Mugo, Njeje& Otieno, 2015). Micro Finance Institutions internal controls system significantly affects its liquidity risk management practices. Basel I framework outlines on importance of internal controls in managing banks liquidity. The framework clearly outlines that banks ought to have sufficient internal controls to

ensure the reliability of the management process of the liquidity risk. The internal controls must be an essential part of the bank's overall system of financial management. Similarly, liquidity management plans verify the structure of recognizing, reporting, examining, as well as reviewing the liquidity conditions of the bank. The policies lay down the boundary of liquidity risk and also set up an emergency policy to deal with and to alleviate the liquidity forces. The policies determine the responsibilities as well as the roles of the bodies involved in the process of managing liquidity, including the liability and asset committees as well as the connection with the other financial regulators and institutions (Tirole, 2009). As a result properly articulated and inclusive liquidity risk management policies enhance performance in liquidity management. Furthermore, research has shown that, liquidity risk management practice is a function of board/management support. Institutions Board/ management oversight role significantly affects its liquidity risk management practices.

According to Sambasivam (2013), the loan portfolio and deposit in SACCOs adds up to about thirty-four percent of the country's savings and about twenty-four percent of the exceptional domestic credit (CBK Report, 2008). It is a reality that the demand for loan from the members higher and unsuited as compared to the availability of funds. This shows that SACCOs experience risks occurring from the liquidity deficiency and this acts as a key cause of disappointment in most of the financial institutions (Sambasivam, 2013). SACCOs change instantly the accessible savings deposits to loans with longer maturities. Most Saccos in Kenya attempt to maintain enough finances to meet the unanticipated demands from the depositors but keeping the money is very expensive (Aboso, 2011). Despite efforts to keep sufficient liquidity and to maintain business, liquidity insufficiency remains an issue among the Saccos in

7

the Kenya's banking sector. The main cause of the liquidity risk is the maturity disparity between the liabilities and the assets.

Locally, Mhomei and Wanjau (2012) conducted a qualitative study on the achievement as well as the failure aspects of the farming co-operatives in the central region of Kenya. They evaluated the responsibility of the SACCOs in the growth of the youth private enterprise in Kenya. The study was conducted in Nairobi County .Impact of the activities of the SACCO's front office activity on the performance of SACCO in Kenya while Gicheru, Migwi and M'lmanyara (2011) did a study of the social economic effect of the newly incorporated policy on national transportation: The situation of the fourteen seater transport SACCOs in Kenya. Additionally, Kiaritha (2009) carried out a study on the consequences of unsecured individual loans given by the commercial institutions on the performance of SACCOs in Kenya. Auka and Mhomei(2013) analyzed issues Influencing the SACCO affiliates to look for Services from the Other Financial Service givers in the country and Makori, Munene and Muturi (2013) conducted a research on the problems that face the deposit-taking savings as well as the regulatory compliance of credit cooperative societies in Kenya. In light of the reviewed literature, none of the researchers has considered the microeconomic factors affecting liquidity risk among Saccos in Kenya. This research therefore sought to fill this gap through providing an answer to the question: what relationship exists between micro economic variables and liquidity among saccos registered by SASRA in Nairobi County?

1.3 Research Objective

The research aimed at establishing the relationship between microeconomic variables and liquidity risks among SACCOs registered by SASRA in Nairobi County.

1.4 Value of the Study

The research findings will be highly appreciated by the management of SACCOs in Kenya, as it will give insights to the management of the SACCOs on the relationship between microeconomic variables and liquidity risks, which may affect the ultimate goal of ensuring growth and sustainable income and maximum benefit to the members.

Investors would like to observe how fit a specific firm is doing prior to investing in it. A high price for the stock only is not enough to determine; investors must observe how fit an organization is also performing. Thus, for any organization to succeed and to survive, managers must study the position of their liquidity as well as how the firm is compared to the other firms in same nation or other nations. Therefore, to find out the appropriate financial decisions that achieve enhanced allocated financial assets in a more effective and efficient way, it is vital to consider company liquidity at the national and/or cross the national level.

The government will have perfect information in understanding the nature of liquidity risk in SACCOS and this will help the government formulate positive national policies based on the framework that is relevant and sensitive to the liquidity risk management practices. These policies are important in helping uplift the public confidence in SACCOS

The study will be of great importance to future scholars and academicians by adding to the body of knowledge the relationship between microeconomic variables and liquidity risks in the field of SACCO's especially in the developing countries. This study will form the basis for future researches as it will provide literature basis.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The subsequent literature reviews the correct literature information that is consistent and related to the objectives of this research. Practical problems as well as important matters are revealed and significantly inspected to verify the recent information. The literature is very essential as it verifies the facts that connect the present research with past researches as well as what the potential researches will require in exploring advancing understanding.

2.2 Theoretical Review

The study was anchored on liquidity preference theory, the trade-off theory of liquidity as well as the agency theory.

2.2.1 Liquidity Preference Theory

The liquidity preference hypothesis was developed by Panico and Gauti (2001) who intimated the suggestion that the depositors claim a payment for their securities that have longer maturities, which involve bigger risk, since they would wish to hold money, which involves fewer risk. The more liquid an venture is, the easier it is to trade swiftly for its total worth (Shanken, 2005). Since the rates of interest are more unstable in the short term, the payment on short as opposed to the medium-term securities tends to be greater than the payment on medium- versus long term securities. Using this relationship, we can use the primeval difference between the use of cash for the operation of current trade and the utilization of cash as a way of storing riches. With regard to the first of the two uses of money, it is clear that up to a given point it is worthwhile to forgo a given amount of interest for the ease of liquidity.

However, given that the interest rate is certainly not negative, why should an individual desire to hold his capital in a way that is likely to yield little or no interest to holding it in a way that gives in interest (Shanken, 2005). The cash demand is an asset was hypothesized so as to depend on the foregone concern through avoiding to hold bonds. Shanken claims that the rates of interest cannot be a return for saving since, if an individual stores all his savings as cash, he will get no interest, even though he has yet abstained from using all the present proceeds. As an alternative of a payment for the interest saving, in the Keynesian analysis, is an incentive for parting with liquidity. As stated by the Keynes, the liquidity demand is characterized by 3 drives which include the business drive: individuals wish to have liquidity to guarantee basic dealings, for their revenue is not continually available (Ross, 1998).

The level of the demanded liquidity is dictated by the level of income: the higher the proceeds, the more cash are demanded for conducting the increased expenditure. The precautionary drive: individuals wish to have liquidity in a situation of social unanticipated problems that require strange costs. The sum of cash required for this reason increases as the revenue increases. The third motive is the speculative motive; this motive indicates that individuals maintain liquidity to hypothesize that bond values will fall. When the rate of interest decreases persons demand more cash to keep until the rate of interest increases, which would force down the value of an existing bond to keep its yield in line with the rate of interest (Rosenberg, Reid &Lanstein, 2005).The theory is relevant to this study as it guides on how the liquidity of the Sacco is taken in measuring performance.

2.2.2 The Trade-off Theory of Liquidity

According to Jensen and Meckling (1976) who developed the Trade-off hypothesis of Liquidity, in an ideal capital market hypothesises holding money neither generates nor devastates the worth. The organization can collect money from capital markets when cash are required, there are no business costs in collecting these cash, and the cash can be increased at a reasonable price since the capital markets are said to be completely knowledgeable on the prediction of the company. The trade-off hypothesis proposes that organizations target the best level of liquidity to balance the benefit as well as cost of holding money.

The cost of holding money takes in low return rate of the assets due to the liquidity premium as well as the tax drawback. The profit of holding money is in dual: First the organizations save the business costs to raise money and do not require liquidating assets so as to make payments. Secondly the organization can make use of the liquid assets so as to finance its investment and activities if other sources of financial support are not accessible or are extremely dear. As hypothesis, the application of trade off model cannot be mistreated, since it clarifies that, organizations with better leverage draws high cost of servicing the liability thus affecting its profitability and it tends to be hard for these firms to raise money through the other sources (Kaloi, 2014).In this study this theory will help analyses SACCO's abilities the liabilities from its assets. The theory is relevant to this study as it guides SACCO's by highlighting how much they are getting in to debt, whether there debt burden is heavy or light and finally whether their financial situation is improving or not.

2.2.3 Financial Intermediation Theory

As stated in the hypothesis of financial intermediation, a significant responsibility of the commercial banks in the financial system is to give liquidity through funding long term, illiquid assets with the short term, liquid liabilities (Horne, 2003). Through this role of liquidity suppliers, commercial banks generate liquidity since they hold illiquid assets and give money and demand for deposits to the entire economy. This stresses the inclination for liquidity under ambiguity of the economic agents to rationalize the survival of the commercial banks: banks subsist since they offer enhanced liquidity indemnity than the financial markets. Nevertheless, as the commercial banks are liquidity insurers, they experience the transformation risk and are also exposed to the possibility of running on deposits. Generally, the higher is liquidity creation to the external public, the higher is the risk for banks to experience losses from having to dispose of illiquid assets to meet the liquidity demands of clients (Horne, 2003).

An ordinary validation for the survival of the deposit-taking organizations, thereby providing also an account for the economically significant function of banks in offering liquidity, was originally modelled by (Tache, 2006). They indicated that by spending in illiquid loans as well as financing them with demandable deposits, commercial banks can be expressed as pools of liquidity so as to offer households with indemnity against the peculiar consumption shocks.The theory is relevant to this study as it guides in savings mobilization, which will enable SACCOs to create credit out of excess deposits (credit creation) hence SACCO will earn interest.

2.3 Empirical Review

A number of researches have been carried out in relation to macroeconomic variables and liquidity risks. This section reviews both international and local literature on the variables.

2.3.1 International Empirical Review

Koziol and Lawrenz (2008) presented a research in whereby they considered the risk associated with the failures of a bank. The key risks that were experienced by these banks were among them the liquidity risk. A linear regression model was applied so as to elaborate the outcomes which indicated that risk analysis, identification as well as evaluation are the most manipulating variables and the Islamic banks of Brunei needed to offer more concern to those variables in the process of coming up with the bank's Risk Management Practices.

Toby (2008) studied the practices of liquidity management in some banks in Nigeria by evaluating, the significance of the treasury objectives in the portfolio management of the bank, reasons for the asset-liability disparity in banks, reasons for liquidity predicament, occurrence of the treasury risk, sufficiency or suitability of the liquidity risk management methods, practices for liquidity planning in the Nigerian banks as well as level of liquidity exposure in banks. The widespread reported instances of liquidity predicament and financial anguish in the Nigerian banking sector have demanded a research on how to deal with the liquidity exposure of the banks.

Sensarma and Jayadev (2009) examined the management of risk of both the public and the domestic banks in India between 1998 and 2006. Their investigation revealed an improvement on the risk management ability of the banks. This instituted enhanced performance in aspects of return and assets which acknowledged that the conservative

banks had enhanced liquidity risk management than the Islamic banks located in Pakistan. In addition, Hassan (2009) did a research on the practices of Risk management on the Islamic banks of Brunei Darussalam in order to weigh up the level at which the Islamic banks in Brunei Darussalam applied the practices of risk management and utilized them thoroughly through the use of the various methods to deal with the different types of risks. The results indicated that there was an outstanding understanding of risk as well as risk management by the employees working in the Islamic Banks of Brunei Darussalam. This indicated their capacity to pave their way to thriving risk management.

Horne (2003) in his study on the issues of microfinance as well as the sustainability of microfinance institutions (MFI) in financial crisis found that MFIs are usually taken to be among the most flexible and successful strategies in the process of fighting against international poverty.

Pellegrina (2012) investigated the comparative effects of capitalization on risk-taking effectiveness in Islamic as well as conventional banks. The research carried a practical study using information for the period between 2001 and 2011 through the means of both the standard regression methods and the stochastic cost frontier methods. The results give facts that more the capitalized Islamic banks are linked to the less uncertain positions with reference to their asset structure. Particularly, the latter show higher liquidity principles as well as a lower occurrence of the non-performing loans as compared to the other banks. This has delayed positive effects on profitability and no substantial impact on efficiency. However, highly capitalized conformist banks may shift from the traditional lending activities to investment in the profit generating assets.

Azimi, Arbabian and Khanmohammad (2015) carried out a research on the effects of the liquidity of a company on sensitivity of the investment -cash flow on the stock exchange based on industry. This research was conducted so as to collect evidence on the consequence of liquidity on the sensitivity of the cash investment of organizations listed in Tehran Stock Exchange from 2006 to 2013. This research employed descriptive correlation and the research methodology used was a post-event methodology. Combined data model (panel) and GLS regression were also used to estimate data. The results show that the liquidity has a positive effect on sensitivity of investment in the automotive and parts manufacturing.

2.3.2 Local Empirical Review

Mbui (2010) conducted a study on the business prospects for Stima Sacco Society Limited in a novel regulatory setting. The study was carried out through a case study design where the researcher used structured interview to guide as primary data collection instrument. Data collected was qualitative and was analyzed by content analysis, to establish the challenges. The study concludes that the new regulatory environment provided more structured and clear guidelines on the operations of Stima SACCO.

Muriuki (2010) did a research on the aspects affecting the performance of Sacco in Meru South district focusing on TharakaNithi Teachers Sacco. A descriptive study plan was applied in this research. Because the research population was not consistent, the researcher made use of the stratified random sampling design as a method for drawing a sample from the sampling frame. Questionnaires were also used as instruments for data collection and the collected data was examined through the use of the SPSS. The research results show that governance has vast effects on the SACCO's

performance. Additionally, the research results also indicate that the factors of training and education play a key role on influencing the structures of governance.

Ngaira (2011) did a study on the impact of SACCO regulatory authority procedure on the operations of the SACCOs in Kenya. The aim of this research was to look at the impact SASRA has had on Sacco performance since its inception. The study was conducted on the 50 deposit taking SACCOs in Nairobi. Using primary source on structured questionnaires as well as secondary sources and self-administered questionnaire, according to the study, SASRA regulations has deeply influenced the performance of the Sacco with reference to sustainability and outreach.

Ogol (2011) focused on the management practices of liquidity risk in the Kenyan microfinance institutions. Primary data was collected through questionnaires distributed to MFIs operating in Nairobi City. The collected data was analyzed through the use of both the descriptive statistics and the SPSS was used for the purpose of the analysis. Results indicated that MFIs have in place liquidity risk management practices. This is the case when it involves understanding the liquidity risk, identification, analysis/assessment and monitoring.

Wasike (2012) conducted study on corporate governance practices and performance at Elimu Sacco in Kenya. The research employed both the primary and the secondary data. The primary data was gathered through the use of an interview guide so as to gather qualitative information. The research showed that the major responsibilities of company governance involved pledging corporate competence as well as mitigating the arising divergences, providing for the legitimacy as well as the transparency of the activity of the corporate, minimizing the risk for investments and offering high returns for investors and delivering framework for the managerial accountability.

Kiragu (2014) studied the effect of SACCO societies regulatory authority's regulations on financial performance of SACCOs in Nairobi County .The study adopted descriptive research design in which the information was collected once over the period between year 2008 and year 2013 for thirty-five SACCOs in Nairobi County registered by SASRA. The research was made easy through use of secondary information. Multiple regression analysis was employed to the gathered information so as to examine the effects of SASRA regulations on investment performance of SACCO's in Nairobi County. The study revealed that SASRA regulations had positive effects on the financial performance of SACCOs' in Nairobi County. The research showed that there was a strong relationship between the SACCOs' financial performance in Nairobi County and changes in size, liquidity, non-performing loans, CAR compliance, managerial quality and cost of income as shown by strong correlation coefficients.

Homei(2014) conducted a study on the effect of liquidity risk management on the financial performance of the banks in the republic of Kenya. The research made us of a descriptive research design. The research population was made up of the 43 Commercial Banks in Kenya analyzed for a time between year 2010 and year 2013. The study concludes that the management of liquidity risk has a major negative relationship with the commercial banks' financial performance. Borrowings from banks by commercial banks to meet shorter liquidity needs do have the greatest impact on liquidity. The study also concludes that holding more liquid assets as compared to total assets will lead to lower returns to commercial banks in Kenya. Holding more liquid assets as compared to total deposits will lead to lower returns to commercial banks in Kenya.

Mugenyah (2015) also examined the determinants of liquidity risk of commercial banks in Kenya. The study employed a descriptive research design. A census targeting the 43 commercial banks licensed in Kenya between 2010 and 2014 was conducted. The study used secondary data obtained from the Central Bank of Kenya website and the respective banks website. Multiple regression analysis was employed so as to evaluate the determinants of liquidity risk. The study concluded that leverage, the type of ownership, capital adequacy ratio, size and liquid asset ratio were important determinants of liquidity risk.

2.4 Determinants of Company Efficiency

2.4.1 Firm Size

The responsibility of the company size is taken as a significant theme in the literature of firm liquidity. Recent facts on the assets behaviour of both the large and the small companies propose the likelihood that the informational issues weigh heavily on the small companies. Particularly, there are facts that liquidity for smaller companies is more responsive to aspects that, in a globe of ideal capital markets, are not expected to affect investment (Pandy, 2010).

The size of the firm has engrossed the consideration of different scholars in other industries too. With reference to the monetary economics, the complicated representations are still not capable to clarify the returns on stock, which are remarkably high for the small companies, and this has remained as a sustainable confusion. Evaluating small organizations has shown to be an extremely hard job. The survival of the restrictions in the investment doings as a result of the obstructions to the availability of the outside capital markets occurs as a political aspect, particularly if the restrictions are more essential for the small organizations. Thus, the effect of the

company size on the firm liquidity remains as an issue of unusual consideration. The costs of the agency may tend to be higher for the small organizations. The above aspects increase the costs associated with the use of the outside sources on the small organizations. Additionally, the size of the organization also plays a major responsibility in other sectors (Owolabi, Obiakor & Okwu, 2011).

Temu and Ishengoma (2010) considered the size of the SACCO as a major determinant of SACCO liquidity risk. They suggest that SACCO size measured by the SACCO's total assets adds to its liquidity heights because it has an influence on its capability to mobilize cash from diverse sources and the cost connected with it. As SACCOs increase in size, they obtain the intrinsic capability to mobilize many investments with less complexity and for this issue they are able to give more loans all times. Further, they noted that the vast financial obligations connected with numerous branches increases susceptibility to liquidity risk. Ahmad (2008) incorporated the SACCO's size as one of the determinants of liquidity risk from the up-and-coming economies. Their result indicated that a SACCO's size had a constructive influence on liquidity risk.

2.4.2 Capitalization

Costs can be expensed as they are earned or can be capitalized. A business is capable to profit from the cost of obtaining resources if the resources offer the business with a substantial advantage for more than a single operating cycle (Nagy, 2009). Given by global prudential regulation, capital ratio was taken as a vital tool in the process of assessing capital sufficiency and ought to capture the common safety as well as the soundness of a company. Highly capitalized firms possess an abridged necessitate to external money, which has again a positive influence on their liquidity. Nevertheless, if we take into consideration the usual risk-return theory, we have to anticipate firms

with lower capital ratios to have higher liquidity as compared to better-capitalized firms. Bourke (2009) details a positive as well as significant connection between capital sufficiency and liquidity. He came up with a conclusion that the higher the capital ratio, the more the liquidity of the firm.

According to Myers (2001), debt gives a company a tax protection hence companies attempt to maximize their value. This benefit also has drawbacks and one of the drawbacks is that higher level of debt increases the bankruptcy cost. Financial anguish is also another drawback offered by. Another disadvantage of debt is agency expenditure (Home, 1976). According to Pandey (2010), leverage results in the variability of the return offered to the shareholders therefore it adds risk. It measured the factors affecting firm's efficiency. The research concludes that there some factors such as the net profit margin, sales, debt-to equity ratio and current ratio.

2.4.3 Leverage

Leverage is an idea that has been extensively researched. Many authors have studied leverage and its effects on firm liquidity in various nations using different methods. This has results to diverse outcomes. Recent study has focused on the empirical evidence of determinants of leverage and investigates different settings and conditions in which leverage decisions occur. Aivazian, Ge and Qiu (2005) for Canada and Mauritius found that leverage is negatively related to investment. However, Oditand the results of the study by Bothwell, Cooley and Hall (2014) point out that firms which are highly leveraged (with comparatively high liabilities) are more cost-effective. The more broadly companies make use of debts as the basis of financing the better is its profits. An account can be that the more cost-effective organizations have had better access to debt financing and do not require to depend entirely on the equity capital. On the other hand, it can be disputed that higher leveraged organizations

tolerate greater bankruptcy risks and require recompensing the stakeholders with higher proceeds.

Van Horne (2002) argues that the benefit of debt in a globe of corporate taxes is that the payments of the interest are deductible as expenditure. He added that this is not the case with the dividends or the retained earnings linked to the stocks which cannot be deducted by the company for the purposes of tax. Bernoth, Colavecchio and Sass (2010) argue that debt increases the income accessible to shareholders. Nevertheless, this declaration is applicable if ROA is greater than the cost associated with the debt. In such a situation, the more the debt, the more ROE. This implies that the Earnings Per Share as well as the Net Assets Per Share will go down in case the firm gets debt at a cost which is higher than the rate of return on the assets of the company

Previous studies revealed that the executive cannot continue to increase the amount of debt and that debt can serve as a defence mechanism not to invest heavily as cash must be paid to the holders of the bond limiting the likelihood of carrying out uneconomical activities and the holders of the bond have a chance to assess the management (Pawlina, 2010). As a result, a negative relationship exists between the investment and the leverage since the management is unwilling to disburse the necessary principal and interest thus increasing default. Underinvestment is also likely to take place in the presence of high growth prospects as managers can only under invest when there are growth opportunities (Bernoth, Colavecchio & Sass, 2010).
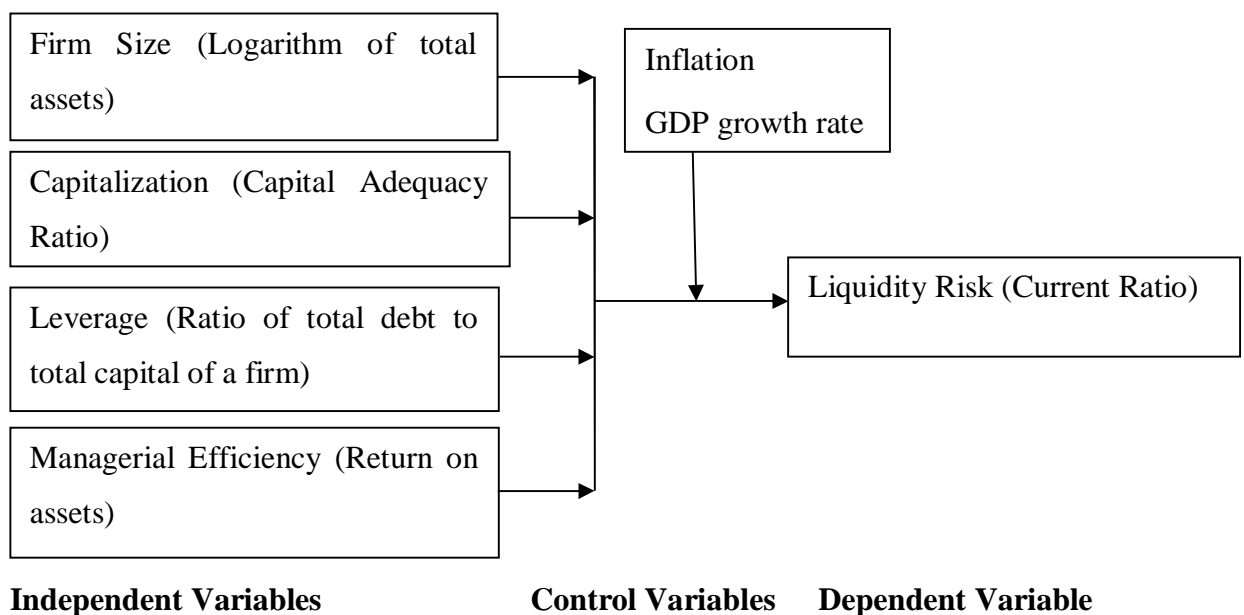
2.4.4 Managerial Efficiency

The choice to exploit or to expense some of the company's assets depends on executive. This is because the choice tends to have an impact on the efficiency ratios, balance sheet, and income statement with the company's cash flow statement. Auka

22

and Mhomei (2013) evaluated the aspects that influence the firm's profitability. It was clear that productivity is absolutely influenced by the firm's as well as managerial competence but it is negatively influenced by leverage, while growth on the sales induces more profits for small firms but is insignificant for large ones. Delcoure (2008) revealed that the aspects affecting the firm efficiency. They revealed that leverage, size, liquidity and management capability has a important impact on the firm's liquidity whereas age has no impact on the firm's liquidity.

2.5 Conceptual Framework

The framework indicates the connection between the independent and the dependent variables. Microeconomic independent variables and liquidity risk among SACCOS dependent variable.

```
┌─────────────────────────────┐         ┌──────────────────────┐
│ Firm  Size  (Logarithm  of  │         │ Inflation            │
│ total assets)               │─────┐   │ GDP growth rate      │
└─────────────────────────────┘     │   └──────────────────────┘
┌─────────────────────────────┐     │              │
│ Capitalization  (Capital    │─────┤              ▼
│ Adequacy Ratio)             │     │   ┌──────────────────────────────┐
└─────────────────────────────┘     ├──▶│ Liquidity Risk (Current Ratio)│
┌─────────────────────────────┐     │   └──────────────────────────────┘
│ Leverage (Ratio of total    │─────┤
│ debt to total capital of a  │     │
│ firm)                       │     │
└─────────────────────────────┘     │
┌─────────────────────────────┐     │
│ Managerial Efficiency       │─────┘
│ (Return on assets)          │
└─────────────────────────────┘
```

Independent Variables   **Control Variables**   **Dependent Variable**

The Firm Size was measured using logarithm of total assets and it is expected to have a negative effect on liquidity. Capitalization was measured using book value of assets and it is also envisaged to have a negative effect on liquidity. Further, managerial efficiency measured using return on assets and it is expected to have a negative effect on liquidity. However, leverage was measured using ratio of total debt to total capital

of a firm and it is also envisaged to have a positive effect on liquidity. The liquidity risk was measured using current ratio which is Current assets divided with the Current liability.

2.6 Summary of the Literature Review

The liquidity preference theory postulates that investors prefer short term maturity assets to long-term maturity assets and they therefore demand a payment for securities with longer maturities, which involve greater risk, since they would wish to hold money, which involves less risk. The more liquid an investment, the easier it is to sell quickly for its full value. The size of the firm is taken as a significant idea in the literature of firm liquidity SACCO size as one of the major determinants of SACCO liquidity risk. A business is capable to capitalize the outlay of obtaining a resource only if the resource offered the company with a concrete benefit for more than one operating cycle .Highly capitalized firms possess a reduced want for the external money thus gaining a positive impact on the bank's efficiency. Nevertheless, if the conventional risk-return theory is put into consideration, we must anticipate firms with lower capital ratios to have higher efficiency as compared to firms with to better capitalization. Many authors have studied leverage and its effects on firm liquidity in diverse nations using diverse methods. This has resulted into diverse outcomes. Recent study has focused on the practical facts of the leverage determinants and examines diverse surroundings and circumstances in which the leverage decisions take place. It is disputed that higher leveraged companies bear greater risks of bankruptcy and need to compensate stakeholders with higher profits. Finally, it has been observed that, liquidity, size, leverage and management competence has a significant impact on the firm's liquidity whereas age of management has no impact on the firm's efficiency.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The following section includes the various stages that were followed to complete the research. The section therefore comprised of the following subsections: research design, target population, data collection and data analysis and presentation.

3.2 Research Design

The research made use of a descriptive study design. The selection of the explanatory survey study design has been made based on the information that in the research, the researcher is concerned with the state of interaction existing in the industry and the variables were not influenced. A descriptive research tries to explain or characterize a topic through generating an outline for a group of issues, individuals, or events, through the process of gathering information and tabulating the frequencies on the study variables or their relations as stated by Cooper and Schindler (2003). Descriptive study depicts a precise outline of individuals, proceedings, or circumstances (Kothari, 2004). Descriptive design permits the gathering of large amount of information from a population that is sizeable in a way that is highly economical

3.3 Population

The population of the study was 35 SACCOs in Nairobi County registered by SASRA and that have been in operation during the period 2012 to 2016. This period is used because it covers a period where a majority of organizations were faced with high liquidity problems following the world financial crises in 2008 (Ivo, 2014). Census method was used in this study.

3.4 Data Collection

The research used secondary information that was obtained from the published financial reports of the SACCOs for the five-year period commencing 2012 up to 2016. The secondary information was gathered by the use of data collection guide. Data was collected on absolute values of current assets, current liability, total assets, equity, total debt, total capital and non-interest expense.

3.5 Data Analysis

Obtained data from the field is in raw form hence hard to understand except it is sorted, coded and analyzed (Mugenda & Mugenda, 2003). The collected data was therefore sorted, coded and analytically prearranged in a way that can facilitate the analysis through the use of the Statistical Package for Social Sciences (SPSS). Quantitative analysis was used through the descriptive statistics like measure of the central tendency so as to produce the appropriate mean, percentages, and median, mode and frequency counts where possible. To ensure that the data is more attractive and friendly to the user, graphic as well as interactive tables was created through the use of the computer spread sheet to present the data. A regression analysis was applied so as to determine the connection between microeconomic variables and liquidity risks.

3.5.1 Analytical Model

The following regression model was applied to establish the connection that exists between the variables.

The regression equation took the following form;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon$$

Whereby Y = Liquidity risks (Current ratio)

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liability}}$$

α = Constant

X_1 = Firm size (Logarithm of total assets)

X_2 = Capitalization (Capital Adequacy Ratio)

X_3 = Leverage (ratio of total debt to total capital of a firm)

X_4 = Managerial Efficiency (return on asset)

X_5 = Inflation rate (Consumer Price index (CPI) = $\dfrac{CPI_t - CPI_{t-1}}{CPI_{t-1}}$

X_6 = Gross Domestic Product (GDP) Growth Rate =

$$\frac{\text{Current year GDP-last year GDP}}{\text{Current year GDP}} \times 100$$

βi (i= 1, 2, 3, 4) = Regression Coefficients

ε = Error Term

3.5.2 Test of Significance

The coefficient of determination (R^2) was utilized to calculate the degree to which the variation in interest rate spread is explained by the micro economic variables. F-statistic was calculated at 95% confidence level to test whether there is any significant relationship between micro economic variables and liquidity risks among SACCOs registered by SASRA in Nairobi County. This analysis was done using SPSS software and the findings presented in form of a research report.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter illustrates sections that give the analysis of the data collected concerning the relationship between microeconomic variables and liquidity risk, its presentation (in tables) and the subsequent interpretation of the findings that were drawn.

4.2 Descriptive Statistics

This presents the general description of the study variables characteristics including the Mean, standard deviation (Std. Dev), Skewness and Kurtosis.

Table 4. 1: Descriptive Statistics

	Mean		Std. Deviation	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Statistic	Std. Error	Statistic	Std. Error
Liquidity Risks (Current Ratio)	1.2846	.14344	.84858	1.787	.398	3.895	.778
Firm size	9.6291	.06975	.41263	-.629	.398	2.784	.778
Capitalization	.7426	.48133	2.84756	4.485	.398	20.550	.778
Leverage	.1376	.04333	.25633	1.994	.398	2.939	.778
Managerial Efficiency	.0475	.01671	.09886	4.293	.398	20.273	.778
Inflation	7.0238	.21980	.76142	.711	.637	-.336	1.232
GDP	5.1500	.16968	.58778	-.272	.637	-1.812	1.232

From the findings, the study revealed that Liquidity risks had a mean score of 1.2846, firm size had a mean score of 9.6291, and capitalization had a mean if 0.7426. The study further showed that leverage had an average of 0.1376, managerial Efficiency had a mean score of 0.0475 and inflation had a mean of 7.0238 while GDP had a mean of 5.1500. On skewness the results showed that Liquidity risks, firm size, capitalization managerial efficiency and inflation are asymmetrical to the right around their mean. On the kurtosis, all the variables exhibited positive kurtosis except inflation and GDP.

4.3 Inferential Statistics

The study did Pearson correlation analysis and multiple regression analysis to determine the connection between microeconomic variables and liquidity risks.

4.3.1 Correlation Analysis

This was done using Pearson's correlations analysis which was conducted at 95% confidence interval and 5% confidence level 2-tailed.

Table 4. 2: Correlation Matrix

		Liquidity risks	Firm size	Capitalization	Leverage	Managerial Efficiency	Inflation	GDP
Liquidity risks	Pearson Correlation	1						
	Sig. (2-tailed)							
Firm size	Pearson Correlation	.988	1					
	Sig. (2-tailed)	.000						
Capitalization	Pearson Correlation	.753	.673	1				
	Sig. (2-tailed)	.000	.000					
Leverage	Pearson Correlation	.848	.198	.383	1			
	Sig. (2-tailed)	.007	.041	.023				
Managerial Efficiency	Pearson Correlation	.646	.133	.176	.590	1		
	Sig. (2-tailed)	.043	.046	.012	.000			
Inflation	Pearson Correlation	.748	.143	.173	.583	.456	1	
	Sig. (2-tailed)	.021	.046	.000	.002	.000		
GDP	Pearson Correlation	.713	.233	.136	.586	.438	.223	1
	Sig. (2-tailed)	.000	.001	.011	.034	.000	.012	

From the findings the study found that firm size and Liquidity risks were significantly correlated as shown by a coefficient of 0.988 and p-value of 0.000. The results also showed that capitalization and Liquidity risks were significantly correlated as shown by a coefficient of 0.753 and p-value of 0.000. The study findings also revealed that leverage and Liquidity risks were significantly and positively correlated as shown by a coefficient of 0.848 and p-value of 0.007. Further it was revealed that managerial efficiency and Liquidity risks were significantly correlated as shown by a coefficient of 0.646 and p-value of 0.043. As shown by a coefficient of 0.748, the study found that inflation and liquidity risks were positively correlated. The study finally found that GDP and liquidity risks were also positively and significantly correlated as shown

by a coefficient of was 0.713. This infers that there was a positive and significant relationship between all four variables and that Liquidity risks.

4.3.2 Multiple Regression

Multiple regression analysis was conducted so as to determine the relationship between firm size, capitalization, leverage and managerial efficiency against the dependent variable Liquidity risks. After running the selected data through SPSS, a statistical model was generated.

Table 4. 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.853[a]	.727	.669	.518

a. Predictors: (Constant), Managerial Efficiency, Capitalization, Firm size, Leverage

From the findings as represented by the adjusted R^2, the independent variables that were studied explained 66.9% of the Liquidity risks. This therefore means the four variables contributed 66.9% of the Liquidity risks, while other factors not studied in this research contributes 33.1% of Liquidity risks.

Table 4. 4: ANOVA Analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.622	6	5.905	12.441	.000[b]
	Residual	8.861	28	.316		
	Total	**32.483**	**34**			

a. Dependent Variable: Liquidity risks

b. Predictors: (Constant), Managerial Efficiency, Capitalization, Firm size, Leverage

From the ANOVA statistics in table 4.4, the processed data had a significance level of 0.000 which shows that the data is ideal for making a conclusion on the variables. The

F calculated at 5% Level of significance was 12.441. Since F calculated is greater than the F critical (value = 2.4205), this shows that the overall model was significant i.e. there is a significant relationship between microeconomic variables and liquidity risks.

Table 4. 5: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	8.422	1.216		6.924	.000
Firm size	.991	.332	.482	2.578	.020
Capitalization	.856	.321	.712	2.667	.010
Leverage	2.175	.240	.656	9.073	.000
Managerial Efficiency	.735	.235	.397	3.128	.003
Inflation	.673	.278	.581	2.421	.021
GDP	.576	.104	.459	5.538	.000

a. Dependent Variable: Liquidity risks

The coefficient of regression in table 4.4 above was used in coming up with the model below:

$$Y = 8.422 + 0.991X_1 + 0.856X_2 + 2.175X_3 + 0.735X_4. + 0.673X_5 + 0.576X_6$$

Where X_1 = Firm size; X_2 = Capitalization; X_3= Leverage; X4 =Managerial Efficiency

From the findings, taking all factors (firm size, capitalization, leverage, managerial efficiency) constant at zero, liquidity risks was 8.422. The data findings also illustrates that taking all other independent variables at zero, a unit growth in firm size will lead to a 0.991 increase in liquidity risks; a unit increase in capitalization lead to a 0.856 increase in liquidity risks; a unit increase in leverage will translate to a 2.175

increase in liquidity risks; a unit increase in managerial efficiency will lead to 0.735 increase in liquidity risks; a unit increase in inflation will lead to 0.673 increase in liquidity risks; a unit increase in GDP will lead to 0.576 increase in liquidity risks. According to the model, all the variables were vital as their P- value was less than 0.05.

4.4 Interpretation of the Findings

From the above regression model, the study found out that, firm size, capitalization, leverage, managerial efficiency had a positive and significant relationship with liquidity risks. The study concluded that the intercept was 8.422 for all years.

The four independent variables that were studied (firm size, capitalization, leverage, managerial efficiency) explain a substantial 66.9% of liquidity risks as represented by adjusted R^2 (0.669). This consequently meant that the four variables add to 66.9% of liquidity ratio, while other factors not studied in this research contribute 33.1% of liquidity risks. This is in line with Temu and Ishengoma (2010) who considered the determinants of SACCO liquidity risk. They suggest that as SACCOs increase in size, they obtain the intrinsic capability to mobilize many investments with less complexity and for this issue they are able to give more loans all times. Further, they noted that the vast financial obligations connected with numerous branches increases susceptibility to liquidity risk.

The study found that firm size with a coefficient of 0.991 meant that it is positively and significantly related to liquidity risk in among Saccos regulated by Sacco society's regulatory authority in Nairobi County. Ahmad (2008) incorporated the SACCO's size as one of the determinants of liquidity risk from the up-and-coming economies and the result indicated that a SACCO's size had a constructive influence on liquidity risk.

36

The study established that capitalization as shown by a coefficient of 0.856 means that it is positively and significantly related to liquidity risk in among Saccos regulated by Sacco society's regulatory authority in Nairobi County. This concurs with Bourke (2009) who details a positive as well as significant connection between capital sufficiency and liquidity. He came up with a conclusion that the higher the capital ratio, the more the liquidity of the firm.

The study established that leverage with a coefficient of 2.175 meant that it is positively and significantly related to liquidity risk in among Saccos regulated by Sacco society's regulatory authority in Nairobi County. Van Horne (2002) argues that the benefit of debt in a globe of corporate taxes is that the payments of the interest are deductible as expenditure. He added that this is not the case with the dividends or the retained earnings linked to the stocks which cannot be deducted by the company for the purposes of tax.

The study established that managerial efficiency with a coefficient of 0.735 meant that it is positively and significantly related to liquidity risk in among Saccos regulated by Sacco society's regulatory authority in Nairobi County. The study also established that a unit increase in inflation will lead to 0.673 increases in liquidity risks and that unit increase in GDP will lead to 0.576 increases in liquidity risks. This conforms to Delcoure (2008) who revealed that the aspects affecting the firm efficiency. They revealed that leverage, size, liquidity and management capability has an important impact on the firm's liquidity whereas age has no impact on the firm's liquidity.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter covers a summary, conclusion and recommendations of the findings on relationship between microeconomic variables and liquidity risk in among Saccos regulated by Sacco society's regulatory authority in Nairobi County. This chapter presents the summary of the findings, conclusions of the study, recommendations of the study, limitation of the study and suggestions for further studies.

5.2 Summary

Risk acts as a fundamental component of financial intermediation. Liquidity risks may be related to firm size, capitalization, leverage and managerial efficiency. The study sought to establish the relationship between microeconomic variables and liquidity risks among SACCOs registered by SASRA in Nairobi County. The study employed a descriptive research design. The population of interest for this study was 35 SACCOs licensed by Sacco Societies Regulatory Authority (SASRA) and that have been in operation during the period 2012 to 2016, thus it was a census survey. The research used secondary information that was obtained from the published financial reports of the SACCOs for the five-year period commencing 2012 up to 2016. The collected data was therefore sorted, coded and analytically prearranged in a way that can facilitate the analysis through the use of the Statistical Package for Social Sciences (SPSS). So as to test the relationship between the variables the inferential tests including the regression analysis was used. The study found that the independent variables contribute to 66.9% of liquidity risks and that a unit increase in leverage leads to 2.175 increases in liquidity risks. From the findings, the study concludes that

firm size is positively and significantly related to liquidity risks. The study concluded that capitalization is positively and significantly related to liquidity risk in among Saccos regulated by Sacco society's regulatory authority in Nairobi County. The study established that leverage is positively and significantly related to liquidity risk in among Saccos regulated by Sacco society's regulatory authority in Nairobi County. The study established that managerial efficiency is positively and significantly related to liquidity risk in among Saccos regulated by Sacco society's regulatory authority in Nairobi County. The study also established inflation and GDP as control variables are significantly related to liquidity risks. It is recommended that commercial banks focus on maintaining high level of liquidity and management efficiency to enhance their performance by cushioning themselves against operational risk and that Sacco's management should ensure the availability of sufficient funds to meet future demands of providers and borrowers, at reasonable costs.

5.3 Conclusion

The study concluded that firm size is positively and significantly related to liquidity risk in among Saccos regulated by Sacco society's regulatory authority in Nairobi County.

The study concluded that capitalization is positively and significantly related to liquidity risk in among Saccos regulated by Sacco society's regulatory authority in Nairobi County.

The study concluded that leverage is positively and significantly related to liquidity risk in among Saccos regulated by Sacco society's regulatory authority in Nairobi County.

The study concluded that managerial efficiency is positively and significantly related to liquidity risk in among Saccos regulated by Sacco society's regulatory authority in Nairobi County.

The study also established inflation and GDP as control variables are significantly related to liquidity risks.

5.4 Limitations

The study used multiple regression analysis due to the nature of the study, yet it possesses assumptions which may not hold often. The study was limited to 35 Saccos in Nairobi County; the study was limited to five year period from year 2012 to year 2016.

The study was limited to secondary data, which was collected from financial annual reports of all the respective SACCOs from SASRA website. The research considered the relationship between macroeconomic variables and liquidity risks of Saccos regulated by Saccos in Nairobi County. However, there are other factors that might be significantly related to liquidity risks.

The study was also limited to the Saccos operating in Nairobi County only whereas other financial institutions whose liquidity risks are related to micro-economic variables. This makes the results of the study not generalizable to the financial sector since these institutions make part of a larger financial sector thus cannot be used a representation of the entire sector

5.5 Recommendations

It is recommended that commercial banks focus on maintaining high level of liquidity and management efficiency to enhance their performance by cushioning themselves against operational risk.

Liquidity risk arises from a Saccos' inability to meet its obligations when they come due without incurring unacceptable losses. This risk can adversely affect both Sacco's earnings and the capital. Therefore, it recommends that Sacco's management should ensure the availability of sufficient funds to meet future demands of providers and borrowers, at reasonable costs.

Sacco's should also join the credit reference bureau and educate their members the need of prompt payment. CRB allows for credit information sharing among the financial institutions, it plays a vital role in reducing the information asymmetry that exists between them and borrowers. The major benefit that the Sacco would receive from CRB is that they would be able to get credit information on prospective borrowers that will facilitate assessment of credit requests to mitigate risks of bad debts.

The study recommends the Saccos to consider all pertinent issues before issuing dividends. Since members always expect a return on investment in the form of dividend however the payment of dividend should not undermine a firm investment policy.

The study also recommends the Sacco towards on boarding more members since increase in membership size also increases the members saving and thus increasing in borrowing funds. Also the Sacco should expand their investment to increase their revenue therefore this will reduce the external borrowing.

The Saccos should reduce cash conversion cycle period so as it can lead the company liquidity higher. A careful reduction of cash conversion cycle period will improve the liquidity of a Sacco and excess cash can be reinvested in the Sacco. Additionally, Saccos should stretch the accounts payable so that they can reduce the cash conversion cycle period.

The study recommends that banks should maintain adequate liquidity levels though in the form of short term marketable securities in order to realize profits for the Saccos. A Sacco having good asset quality, strong earnings and sufficient capital may fail if it is not maintaining adequate liquidity. The study recommends that banks should be equipped to deal with the changing monetary policy that shapes the overall liquidity trends and the Saccos' own transactional requirements and repayment of short term borrowing.

Based on the findings the study recommends that a policy on diversification should be put in place to avoid relying more on traditional Sacco activities that is a policy that encourages Saccos to engage in Non-interest income activities.

With due regard to the ever increasing desire to have better return on stock markets, there is need to invest in policies regulating macroeconomic variables so as to meet these expectations. This should be done in a manner in which all the stakeholders are happy. This therefore calls for adopting proper policies which are acceptable, accessible, ethically sound, have a positive perceived impact, relevant, appropriate, innovative, efficient, sustainable and replicable.

5.6 Recommendations for Further Research

The study used secondary data. Primary data should also be used to see if the same result findings still hold. This study targeted Saccos. Further research should be done targeting to establish the relationship between the microeconomic variables and liquidity risks in commercial banks.

Finally, further research should involve a panel data that cuts across more than 10 years. The current study only focused 2012 to 2016 financial statements.

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APPENDICES

Appendix I: Secondary data Collection sheet

	2012	2013	2014	2015	2016
Human capital (Total salary and wage costs)					
Sum of interest expenses					
Net profit					
Return on Assets (ROA) = net profit/total assets					
Return on Equity (ROE) = net profit/ total equity.					
Cost to Income Ratio (C/I) = total cost /total income					
Number of patents					
Number of trademarks					
Number of innovations/ new products					
Number of customers					
Capital Employed					

Efficiency (CEE) – indicator of value added efficiency of capital employed which is defined as the book value of a firm's net assets.		51			

Appendix II: SACCOs Registered by   SASRA in Nairobi County by 2016

1. Afya
2. Airports
3. Ardhi
4. Asili cooperative
5. Chai
6. Chuna
7. Comoco
8. Elimu
9. Fundilima
10. Harambee
11. Hazina
12. Jamii
13. Kenpipe
14. Kenversity
15. Kenya bankers
16. Kenya police
17. Kingdom
18. Lengatumaini
19. Magereza
20. Maisha bora

21. Mwalimu national
22. Mwito
23. Nacico
24. Nafaka
25. Naku
26. Nassefu
27. Nation staff
28. Nest
29. Orthodox
30. Reli
31. Teleposta
32. Transcom
33. Ufanisi
34. Ufundi
35. Ukristonaufanisi

Source: SASRA (2016)