

**THE EFFECT OF LIQUIDITY MANAGEMENT ON THE FINANCIAL
PERFORMANCE OF DEPOSIT TAKING SACCOS IN NAIROBI
COUNTY**

**BY
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DECLARATION

I declare that this research project is my original work and that it has not been previously submitted for a degree at the University of Nairobi or any other university.

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Supervisor's Declaration

This research project has been submitted for examination with my approval as the university supervisor.

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DEDICATION

I dedicate this work to my family members Mom, My siblings, My Wife, My children and My friends for the sacrifice they have made for providing good environment to complete this study successfully.

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LIST OF ACRONYMS/ABBREVIATION

BOLR:	Bank of Last Resort
CBK :	Central Bank of Kenya
ICA:	International Cooperative alliance
KUSCCO:	Kenya Union of Saving and Credit Cooperatives
SACCO:	Saving and Credit Cooperative
SASRA:	Sacco Society Regulation Authority
WOCCU:	World Council of Credit Unions

ABSTRACT

The purpose of the study was to determine the effect of liquidity management on the financial performance of Deposit taking Saccos in Nairobi County. A large body of research theoretically asserts positive association between good liquidity management and financial performance of financial institutions. Little attention has been paid to the liquidity management of Saccos which are contributing direct to the welfare of the citizen and economy growth. This research addresses some conceptual and measurement issues related to the study of liquidity management and its effects on financial performance of Deposit taking Saccos in a Nairobi county context. A sample of the 27 Deposit taking Saccos that are licensed under Sacco Society Regulatory Authority was carried out where secondary data was collected from their published financial statement between years 2010 to 2014. Sasra which is an institution mandated to regulate the operation of Deposit taking Saccos was the source of data and hence the reliability of the data. The researcher used descriptive statistics, regression analysis and correlation efficient method. In order to test this relationship regression analysis was run with total profit before tax to total assets as the dependent variable and the liquidity, funding liquidity risk, operational efficiency, and quick ratio log of total assets as the independent variables. The findings were that financial performance as measured by profit before tax over total assets is positively related to Liquidity, funding liquidity risk, operational efficiency, quick ratio and log of total assets. The study therefore recommends that the deposit taking Saccos should put in place the best liquidity management practices to increase their financial performance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Liquid assets to all institutions be they for profit making or not for profit have become scarce and liquidity risk has grown. Companies have adopted complex and very rigorous liquidity management programs to manage their affairs since profitability is significantly influenced by liquidity (Adebayo et al., 2011). There is a lot of literature that has shown the financial crisis of 2007 was brought about by liquidity crunch. The crisis and its aftermath have changed the treatment of the liquidity management strategies hence becoming one of the key operations of every enterprise. Liquidity management has therefore been moved from tactical and business level to corporate level hence it is the board mandate to control, plan, and organize it because of the counterparty risks it creates. A large body of literature has shown that the liquidity position of a financial institution can affect the financial performance of the institution and the whole economy at large (Mehta, 2012). Liquidity position is therefore a paramount aspect of institution performance since it impacts on profitability and self-sustainability.

Poor liquidity management has been blamed on the inability of financial institution to meet the short term demands of their customers in timely manner. The customers of the financial institutions include the depositors and the investors. Banks will create liabilities through savings from depositors and assets through giving loans to investors. It's imperative that depositors will make small savings in short terms and the banks will lend to investors in long term hence exposing the institution in liquidity risks. Management of financial institution has been exacerbating this liability/ asset mismatch by being subjective in loan appraisals and disbursement. This has been seen where the institution management gives loans to the relatives, friends and celebrities who don't qualify hence denying the eligible customers. It's is in this

light that financial institutions have been unable to do their business of intermediation and hence exposure to liquidity risk. It's from the backdrop of this poor liquidity management that we witnessed the financial crises of 2007 (The Basle Committee, 2008).

Liquidity management has therefore been embraced by financial institutions (commercial banks and investment banks) given volatility of economic climate, complexity of business environment and backdrop of increasing regulatory changes. It has seen banks embracing permanent up-to-date liquidity contingent plans which define action policies and responsibilities under stress scenarios. This has been done through use of liquidity management platforms and regulation and supervision by government through apex banks.

1.1.1 Liquidity

Though no universal accepted definition has been advanced on liquidity, some researchers have defined it as the ability of an organization to ensure the availability of funds to meet its short term obligations. In the business of financial institutions, it can also be said to be its capacity to fund increase in assets and meet both expected and unexpected cash and collateral obligations at reasonable cost and without incurring unacceptable losses. The flip-side of liquidity is liquidity risk which from the financial institution is its inability to meet its obligations when they fall due (George, 1999).

Liquidity risk can be viewed in two perspectives as some researchers have asserted. Matz (2001, 11) quotes the following definition of these two terms: funding liquidity risk – the potential that an institution will be unable to meet its obligations as they come due because of an inability to liquidate assets or obtain adequate funding. Market liquidity risk the potential that an institution cannot easily unwind or offset specific exposures without significantly lowering market prices

because of inadequate market depth or market disruptions. In this regard, liquidity risk can be expressed as the probability of incurring losses through insufficient liquid resources to comply with the institutional payment obligations within a certain time horizon, and having considered the possibility of the entity managing to liquidate its liquid assets in reasonable time without losing its value. Prudent risk management is therefore paramount for every enterprise for its operations. Financial institutions may also face Liquidity risk through fire sales of its liquid assets.

Liquidity can also be defined as the ability of financial institution to honor all cash payment obligations as they fall due (The Basle Committee, 2008). Its goals can either be met by either drawing from cash holding, by using current cash inflows, by borrowing cash or by converting liquidity assets into cash with little or no loss in value (Joachim, 2007). Hence Liquidity management is a vital aspect of every organization that means to pay current obligations of the business. This obligation include operation and financial expenses that are short term but with maturing long term debt. Liquidity management therefore involves the strategic supply or withdrawal from the market or circulation the amount of liquidity consistent with a desired level of short-term reserve money without distorting the profit making ability and operations of the bank (Agbada and Osuji, 2013).

A key element of any theory of central bank aggregate and individual banks' emergency liquidity supply is related to the fact that banks may be illiquid in the short term, but solvent in the long term. As Goodhart (2008) remarks, "in fact, liquidity and solvency are linked in several ways. Liquidity and solvency are the heavenly twins of banking, frequently indistinguishable". An illiquid bank can rapidly become insolvent, and an insolvent bank illiquid. Consequently, banks

and financial institutions are reinforcing their information and Technological infrastructure model for managing liquidity risk: this includes developing databases, calculation engines for ratios and other liquidity metrics, and control panels encompassing both regulatory and management reports

1.1.2 Financial Performance

The importance of financial performance as it affects corporate sustainability in today's business can't be over emphasized. Financial performance refers to the degree to which financial objectives of an organization are accomplished. Financial performance will measure the results of a firm in monetary terms. Institutions will put in place best financial and non financial structures in place to have competitive advantage over their competitors. It's from this competitive edge that an institution will enhance its financial performance through which an institution is able to meet its short term and long term obligation such as wealth creation to its shareholders .Poor financial performance of an institution will affect the attraction of institution to would be investors which may lead it to insolvency and eventual collapse (Amalendu and Sri, 2011).

Different stakeholders of a company will evaluate the company performance from different perspective. We have shareholders, managers, creditors, tax authorities and other users who have interest in performance of a company. Shareholders will invest in an institution to generate value for their investment. Efficiency use of resources by institution is key aspect by the management to attain good financial performance. To evaluate financial performance of an institution, financial statements are used where different ratios are performed as per requirement of the user. Some of the commonly used financial performance measures are profit after tax, Return on Assets (ROA), Return on Equity (ROE) and earnings per share.

SACCOs operate in complex and competitive business environment where conventional banks and other financial institution are players. For SACCOs to survive in the market, performance is paramount so as to attract members who are core financiers. It's by having efficient management that SACCOs will meet there operational obligations translating to satisfied stakeholders consequently good performance (Adebayo et al., 2011). Good performance is therefore lifeblood of successful organization since it can pay the operational costs and have residue which is distributed to its shareholders from its profit. Analyst will measure the financial performance and other indicators that show the financial soundness of the business by use of financial records and reports.

1.1.3 Liquidity Management and Financial Institutions

Liquidity management is integral function of financial institutions. Liquidity management entails intermediation between fund lenders and fund seekers by the financial institutions. To attain these goals, Financial institutions undertakes two major functions, namely deposit mobilization and credit extension in there intermediation roles. Profitability by financial institutions takes purposeful attention by bank management to balance between profitability and liquidity which are two conflicting goals.

Liquidity management has twin dimensions that of credit creation and liquidity risk management. In creation of liquidity, financial institutions will use idle funds to invest in different classes of portfolios. Financial institutions also play a very vital role of financing business in the economy. Companies will establish credit lines with lenders who will assist in times of unfavorable working capital. Without defined credit lines, financial institutions may

overstretch its liquidity requirement by over lending to these companies. Thus it's the responsibility of financial institution to invest its idle or excess funds in high quality liquid assets as defined in the societies act (Sacco Society Act, 2008) to have a buffer in times of distress.

The business model of financial institution operates on very fragile capital structure which makes it susceptible to financial risks such as credit risk, liquidity risk and exchange rate risk. Much of the operating cash inflow comes from the depositors who can decide to withdraw their funds without notice. This state of operation requires financial institution to put in place sound management systems .Good liquidity management platform will monitor cash inflow viz-a viz cash outflow. In severe scenarios, financial institution will dispose HQLA it holds to address the miss- match of inflows and outflows. Its other banks who buy these assets hence if sold in times of distress will result to fire sales. Fire sales results to lose of value .This mismatch of banks own liquidity and customers liquidity expectation results to financial institution liquidity risk. Hence it's the duty of finance institution to properly manage its liquidity in the state of complex aspects of balancing assets and liabilities management (Elyse, 2008).

Liquidity management is also an important aspect of monetary policy of a country .To manage the flow of liquidity and to extension the stability of economy of a country, Central bank should monitor the liquidity management of commercial banks. Macro-economy management which includes interest rate, exchange rate and inflation rate management by the apex bank also impacts liquidity. To attain this goal central bank will impose KBBR, cash reserve ratio and capital structure to commercial banks. These regulations have seen smooth operation of financial institutions hence stable economies (CBK, 2011).

1.1.4 SACCO's in Nairobi County

ICA (2005) defined Cooperatives as jointly owned and democratically controlled enterprises where members come together voluntarily to meet their common economic, social and cultural needs through the principal of cooperative. The fundamental goal of cooperatives was to alleviate poverty through financial inclusion. The cooperative movement has evolved over time to SACCOs which now covers broader society and has more financial services to offer to members. The business model of SACCOs is different from that of conventional profit driven enterprises. Here the members of the society who are excluded from the mainstream banking will come together voluntary to mobilize saving from which they will borrow loans to lift themselves economically, socially and cultural. It's from this concept that the SACCOs are in the business of creating liquidity.

From the effect of liberalization, the competition has been steep in the financial market where SACCOs have not been spared. To cope with this dynamic market environment, SACCOs through creativity and innovation has introduced more organized and customer oriented products. This products includes saving and credit, Deposits, Insurance and investments. It's from the backdrop of this that has seen demand of liquidity in Deposit Taking SACCO's Increase.

In Kenya Cooperative movement can be traced back in 1908 when European farmers near Lumbwa in Kericho established cooperative for the production and marketing of their firm produces (Kuscco, 2006).At their nascent stages SACCOs used to operate on planned rather than market driven environment .They were controlled by the government (Kuscco, 2006) before

liberalization in 1997(Oyoo, 2002) which was sphere headed by world bank. Later in 2004 government through legislation reversed its role in supervision and surveillance of the affairs of SACCO's societies to safeguard the members fund and to extension the entire economy. Savings and credit cooperative societies (SACCO) are registered and regulated under the Co-operative Societies Act, Cap 490 of the laws of Kenya - as amended in 1997.

In Kenya we have over 17,000 registered cooperatives with over 200 deposit taking SACCOs (Sasra, 2014).The movement is estimated to have over sh500 billion in savings and over sh. 650 million in capital while employing about 500,000 directly and another 1 million indirectly. SACCO's contribute about 4% to GDP with 1 out of 2 deriving their livelihood from SACCO movement. Liquidity management of SACCOs in Kenya is regulated by Sacco Society Act; 2008.It requires Sacco Societies to maintain fifteen per cent of its savings deposits and short term liabilities in liquid assets so that they can have smooth running of their affairs.

1.2 Research Problem

Sustaining profitability and institutional growth has become paramount aspect for every institution .To have an edge in the competitive economic environment, good performance is not optional but a key pointer of meeting its goals and day to day operational obligations for SACCOs. Poor banking performance has been cited as major cause of banking failure and crisis which have negative repercussion on economic growth (Ongore et al., 2011) .A financial institution needs to hold liquid assets to meet the cash requirements of its customers. Inability to meet its customers' demands leaves financial institutions exposed to a run and more importantly a systemic lack of confidence (Moore, 2009).Some researchers Alfred (2011), Allen & Maghimbi (2009) have observed that there are challenges in managing liquidity in SACCOs thus

many are unable to meet customers' needs. Liquidity challenges and other management issues have hindered the growth of SACCO's where 2 out of 3 formed are not operational as Alfred (2011) found in his research.

In Kenya, Vision 2030 strategy required, among others, financial services sector to play a critical role in mobilizing savings and investments for development by providing better intermediation between savings and investments. The sub-sector was further expected to assist the mobilization of investment funds required to implement the projects of Vision 2030. SACCOs were among the financial services strategies to be implemented in improving the reach and access of financial services which were a reserve for a paltry 19% of Kenyans (Ndung'u, 2010) served by mainstream banks. In the global perspective, it's one of the UN millennium development goals (MDL) to alleviate poverty through financial inclusion of the unbanked who are the poor in most societies. The same has been highlighted in current reviewed goals by the UN (sustainable development goals). However, there are a number of notable challenges in promoting quality financial management in Kenyan SACCOs, which will obstruct the commitment to attain these goals.

Through the financial deepening in the country, In Kenya SACCOs mobilize over Ksh.200 billion making 34 % of the national savings and about 24% of outstanding domestic credit (Sambasivam, 2013). The country has the largest SACCO movement in Africa with a total membership of over 8 million followed by Senegal at 5 million. This status justifies the undertaking of this study since there is scanty literature on the subject of Liquidity in relation to the operations of these institutions. The 2007 financial crisis has also pushed Governments to ensure that they supervise and regulate their financial institution through various authorities to

ensure their economies are stable. Also financial institutions according to their nature of their products need to embrace efficient liquidity management for their survival in this competitive and innovative industry.

Deposit taking SACCOs use the same business model banks use. They create liquidity through Deposits and savings, Borrowed Debt, and capital. It's from this liquidity funds that they give loans and pay operational expenses. Multiple challenges including weak corporate governance, gross management abuses, poor asset quality, unqualified staff and persistent illiquidity have impeded SACCOs to meet this goal of liquidity creation hence susceptible to liquidity risk. Empirical studies have demonstrated that there is a link between liquidity and financial performance on banks but there are scanty studies on the effect of liquidity to the performance of SACCOs. This study therefore seeks to find out the effect of liquidity position to financial performance of SACCOs in Nairobi County considering Return on Asset (R.O.A) as measure of performance.

1.3 Research Objectives

To establish the effect of liquidity management on financial performance of deposit taking SACCOs in Nairobi County.

1.4 Value of the Study

Empirical evidence clearly shows that there are several studies focusing on liquidity position of financial institution and financial performance in effect to banks but there is scanty and few studies carried out in effect to SACCO's and hence the need for further investigation of the effect of the same on deposit taking SACCOs. Therefore this study will be

important to various stakeholders including the government, S A C C O s .

To the Government, the findings are expected to be meaningful to policy-makers both in the concerned government agencies such as SASRA, Vision 2030 secretariat, and SACCOs, especially in strengthening policy considerations in the subsector. Such policy improvement would be handy in enhancing the guidelines on how to improve the performance and effects of SACCOs in an effort to enhance their efficiency in liquidity regulation for the benefit of the members and economic growth in general.

To academic and researchers, the study will add to the existing body of knowledge on liquidity and financial performance of deposit taking SACCOs and therefore form a basis for further research.

To SACCO Managements, the study is expected to be a springboard to efficiency in Sacco's management through adoption of its recommendations. Further, the findings would empower managers on existing liquidity risk mitigation opportunities in quest of enriching the SACCO movement in Kenya or any other field related to risk mitigation. To the economy, SACCOs are among the major contributors hence the application of this research finding will boost further their contribution to the economy.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature relating to the study's thematic areas. It has been organized in sub-sections which include the theoretical framework underlying the study; Liquidity theories, and Determinants of financial performance of SACCOs. Empirical literature will also be reviewed with the emphasis on the objective of the study, methodology and the results. Lastly a summary of the literature review is given.

2.2 Theoretical Foundation

2.2.1 Liability Management Theory

Diamond and Dybvig (1983) in the research understanding financial crises emphasized the importance of liquidity in financial institution. The research found out that, It is not the borrowing or leverage of the financial sector that is salient, But rather the proportion of debt that is comprised of short term demandable deposits .More broadly, the banking literature concludes that when financial sector holds illiquid assets financed by short term debt, The possibility of bank run behavior emerges and in turn can cause systematic crises as cited in Gorton (2004).

2.2.2 Trade off Theory

The assumption of the theory is that a firm does not operate in a perfect market where holding cash neither creates nor destroys value. It further observes that the firm will always raise funds from capital market when funds are needed and there are no transaction costs in raising these funds and they will be raised at a fair price because the capital market is assumed to be fully

informed about the prospects of the firm. The theory further suggests that firms target an optimal level of liquidity where they will balance benefit and cost of holding cash (Jensen, 1986).

2.2.3 Liquidity Preference Theory

This theory states that short term bonds are more favorable than long term bonds since investors prefer short term bonds to long term securities for the liquidity aspect for they can be converted to cash with little danger of losing of the principle. Keynes (1936) argued money is demanded for transaction, speculative, and precaution purposes.

2.2.4 Anticipated Income Theory

This theory of Liquidity holds that liquidity can be estimated and met if scheduled payments are based on the income of the borrowers. It emphasizes on relating loan repayment to income rather than relying heavily on collaterals. It also holds that, liquidity can be influenced by the maturity pattern of the loans and investment portfolios, short-term business and customer installment loans which would have more liquidity than those secured by real estate (Ngwu, 2006).

According to Crowe (2009), the doctrine of anticipated income embodies the ideas and equates intrinsic soundness of term loans with appropriate repayment schedules adapted to the anticipated income or cash flow of the borrower. As a result, the credit demands of business are well accommodated under this system of banking policy, and the use of loan commitments is freely pursued. Changing economic conditions, however, have placed extra demands on the banking system and probably resulted in a new approach to balance sheet. Under this emerging state of affairs, credit commitment policies would come to play a more important part in the credit process (Crowe, 2009).

2.3 Determinants of Financial Performance of SACCO's

Financial performance is the firm's performance measured in monetary terms against set standard or prescribed indicators of effectiveness, efficient and environmental responsibility (Betru, 2010). In many years financial performance of SACCOs has been measured through non-conventional models such as social/cultural changes on members and extent of financial outreach. Through government intervention by legislation, SACCOs have become more structured and hence adoption of more conventional ways of measuring their performance such as profitability, Return on Assets and Return on Equity. It's from this development that SACCO's have attracted more members and lenders who invest with expectation of good return on their investments.

2.3.1 Liquidity Management

Liquidity refers to the ability of the SACCO to fulfill its day to day obligation. Saccos make money by mobilizing short-term deposits at a lower interest rate and lending or investing these funds in long term at higher rates hence the need for good management of this assets/liability creation (Mutua, 2012). Poor liquidity management will expose financial institution to liquidity risk which will have impact on its performance. In their research on factors affecting liquidity risk management practices in microfinance institutions in Kenya (Kimathi et al., 2015) found out that liquidity risk management has accelerated growth of MFI's in Kenya.

2.3.2 Credit Management

In the past, Savings and Credit Cooperative Societies (SACCO) have been disbursing loans without regard to the quality of loans portfolios (Kahuthu et al., 2015). Sacco members have been getting their loans with social collateral as the security .Guarantors and savings have been sole securities to loans granted without determination of capability of the members to service the

loans granted. This deficiency in loans appraisal has seen the defaulters' increase hence affecting the performance of Sacco's .Obligation of members to service their loans has been cited as a paramount for SACCOs to have enough cash to meet their obligation (Mugambi et al., 2015). These findings have seen SACCOs increase their investment on credit risk management.

2.3.3 Operational Efficiency

Right organizational structure integrated with right strategies increases the overall performance of SACCOs (WOCCU, 2007). This can be achieved by putting in place qualified and skilled personnel, enough funds and putting good controls in place. Default rate which is a key indicator of operational inefficiency can be mitigated by having good controls and skilled personnel in place. Poor strategies and bad governance of Sacco's has affected their performance and hence the need for skilled management to increase their operational efficient. To grow and sustain their performance, governance and operational structures of SACCOs have been defined by Sasra.

2.3.4 Macro Economic Variables

Sacco's financial performance can also be affected by change of macroeconomic factors. This includes changes in Technology, political, social/cultural and economic environment. From the economic perspective, changes of factors such as Gross domestic product, inflation rate and interest rate will have impact on the financial performance of SACCO's (Mbaabu, 2004).Hence it's the duty of the Sacco management to monitor and synchronize their operations with the change of macroeconomic factors for good performance.

2.4 Empirical literature

Matz (2001, 2) notes that: "Considering the size and inevitability of liquidity risk, you would think that there is already an extensive body of literature that encompasses standard practices for

measuring and managing liquidity. That is not the case at the contrary there is a dearth of literature, and few standard practices have been developed. Furthermore, interest in bank liquidity tends to ebb and flow in predictable patterns. From time to time, our attention is grabbed by the well-publicized failure of a bank or two, a disruption in the financial markets, or a credit crunch. During and immediately after each one of these events, bankers, bank regulators and the general public focus on liquidity. Between those periods of excitement, however liquidity risk sparks dim interest and gets little attention.”

Aftermath of 2007 financial crisis, Governments and global financial institutions have delved on the subject of liquidity management. This has seen the regulation and legislation of liquidity in financial institution taking center stage to avert the recurrence of the same .Locally and globally researchers have done their bit on the relationship between liquidity and performance to financial institutions. In the study of relationship between liquidity and profit of trading companies in Sri Lanka, Ajanthan (2013) used descriptive statistics, correlation and regression analysis to test 108 listed trading companies in Sri Lanka over a period of 5 years spanning from 2008 to 2012. Findings of the study suggested that there exists significant relationship between liquidity and profitability among the listed trading companies.

Effective cash management has been overemphasized by some researchers. Abioro (2013) studied cash management on the performance of manufacturing companies in Nigeria. The objective of the study was accomplished by use of descriptive statistics and correlation coefficient techniques respectively. The study used analysis on the performance of Cadbury Nigeria Plc as the dependent variable and cash management as independent variable. The period of the study used was 2002 to 2011. In conclusion the study found out that although there may be

no significant relationship between liquidity and performance, the concept of efficient cash management will lead to success of a business.

In their study of liquidity management and corporate profit, Owolabi and Obida (2012) found out managers can increase profit by putting in place good credit policy, short cash conversion cycle and effective cash flow management procedures. The study through the use of descriptive analysis where analyzed data from 12 selected manufacturing companies quoted on the floor of Nigeria stock exchange. The conclusion of the study was that effective cash optimization is critical to all organization profit maximization.

Further some studies have shown that there exists relation between liquidity and financial performance of banks. Ogbada and Osuji (2013) researched on the efficacy of liquidity management and banking performance in Nigeria. Survey design through structured questionnaires was used to collect data .The sample of the study was made up of twenty randomly selected banks in Nigeria where 300 bank employees derived by randomly distributed questionnaires to each. From their empirical analysis they found out that there is significant relationship between efficient liquidity management and banking performance. Majid (2003) also stressed prudence practice of liquidity management where in their research on risk management, regulation and supervision of Islamic banks in Jakarta-Indonesia .They alluded that failure to address liquidity management has led to banking collapse and to extension instability in financial systems.

Contrary to the finding of positive relationship between liquidity and financial performance of financial institution, some researchers have found negative relationship between liquidity and

performance. In the research on liquidity –profitability trade off in emerging markets, Eljelly (2004) measured liquidity using current ratios and cash conversion cycle. By the use of correlation and regression analysis, the study found out that there exists negative relationship between the firms profit and its liquidity level as measured by current ratios and longer cash conversion cycle. The cash conversion cycle or the cash gap was found to be more important as a measure of liquidity in industry level than current ratio.

In Kenyan market, the relationship between liquidity and bank performance has been researched. Tobias & Themba (2011) researched on effects of banking sectoral factors on the profitability of commercial banks in Kenya .The study used exploratory approach with panel research design. Out of 43 commercial banks in Kenya they used 38 to make inferential statistics with a period between 2002 to 2008. In the conclusion the research found out that there is positive correlation between profitability and liquidity of banks. Njeri (2013) performed research on the effect of liquidity on financial performance of deposit taking micro finance institutions. Descriptive research design was used to analyze secondary data of 5 years from 2009-2013 using multiple regression model. From the analysis it's evidently that financial performance of the MFIs in Kenya is highly depended on the level of institutional liquidity. Hence MFIs should enhance their liquidity position to realize increased and sustainable financial performance. Weak financial stewardship, inappropriate capital structure and imprudent funds allocation has been cited as some of the factors impeding growth of SACCOs. These factors have threatened the profitability and sustainability of growth of SACCOs.

Vadovà (2011) finds that bigger banks present a lower liquidity; that in line with the “too big to fail” theory, where it would seem that bigger banks are less motivated to hold liquidity since they

rely on government intervention in case of shortages in liquid assets. Coefficient and regression analysis and descriptive statistics were used in the analysis and findings suggest that a significant relationship exists between liquidity and profitability among the listed trading companies. Olando et al. (2012) analyzed the performance of 44 SACCOs in Meru region using descriptive design in soliciting information on the determinants of growth of SACCO's wealth. In their conclusion Olando et al. (2012) observed that for sustainable growth of SACCOs sound financial management, appropriate capital structure and good financial allocation should be embraced. Olando, Mbewa and Jogongo further recommended continuously review of credit policies, establishing of irrecoverable loan provisions policies, develop sound staff recruitment policies and use of appropriate financing mix.

In the recent past, the effect of cash management on financial institution has been performed. Mugambi et al. (2015) researched on effect of cash management on financial performance of deposit taking SACCOs in Mount Kenya region. The study used descriptive survey in soliciting the information. By use of data of 30 SACCOs through the use of correlation coefficient they concluded that cash management is critical as a liquidity management tool in deposit taking SACCO's. Hence cash management policy should be put in place to attain optimal financial performance of deposit taking SACCOs.

Brunnermeier (2008) in his research *Deciphering the Liquidity and Credit Crunch 2007–2008* concluded that an increase in mortgage delinquencies due to a nationwide decline in housing prices was the trigger for a full-blown liquidity crisis that emerged in 2008. In their research on *The Measurement of Liquidity and Optimal Monetary Policy Response in a Financial Market in Development: The Case of Paraguay* (Bejarano et al., 2012) Results suggest that liquidity in the

Paraguayan economy is intimately linked with how loose or tight monetary policy is relative to a Taylor Rule benchmark.

Mbaabu (2004) found that poor management of SACCO's businesses, delays in approval, financing, and lending not based on security affected growth of their wealth. In their research on The Effect of Liquidity Risk on the Performance of Commercial Banks, Naser et al. (2013) examined the relationship on fifteen commercial banks in Iran using panel data of 2003 to 2010 as the period of study. Regression analysis was used with results of research showing that the variables of bank's size, bank's asset, gross domestic product and inflation will cause to improve the performance of banks while credit risk and liquidity risk will cause to weaken the performance of bank.

Giannotti et al. (2010), in a study on a sample of 675 Italian banks, also found that larger banks have lower liquidity exposure. The authors highlight that there is no significant difference in terms of liquidity risk exposure between banks specializing in real estate lending and other banks. Moreover, loan repayment and amount of money borrowed were significant variables that influenced saving patterns; and fund borrowed significantly influenced investment patterns. This led to the recommendation that saving and investment level could be enhanced if loans were adequately made available and proper supervision and monitoring of funds was put in place.

Adrian and Hynn (2010) in their research on liquidity and leverage concluded that Aggregate liquidity is positively related to how hard the financial intermediaries search for borrower (leverage). Agbada and Osuji (2013) in their research the efficacy of liquidity management and banking performance in Nigeria concluded that there exists a strong positive relationship

between efficient liquidity management and performance in terms of profitability and return on capital employed (ROCE) hence the need to remain liquid to influence returns on capital employed by bank. Godfrey (2015) in his research on liquidity and bank performance examined nexus between Net Interest Margin and liquidity on South African banks. The research used 1998 to 2014 as the period for data collection which was subjected to Autoregressive distributed lag (ARDL) and ordinary least squares. In the study three independent variables, namely the market liquidity, fund liquidity and credit risk were regressed against net interest income to assets ratio, a proxy for net interest margin. The research concluded that there is an insignificant co-integrating relationship between Net Interest Margin (NIM) and two measures of liquidity, namely market liquidity and funding liquidity.

2.5 Summary of Empirical Review and Research Gap

Liquidity position and regulation has become a serious concern and challenge for effective and efficient running of financial institutions in national and global front .Satisfaction and meeting customer's needs has been in forefront for every financial institution and hence the necessity of optimal liquidity to this institutions. Cutthroat competition for customers for deposits and savings has pushed lenders to embrace changing monetary policy that shapes the overall liquidity trends and the transactional requirements and repayment of short term borrowing.

Though there are several studies on firm value and capital structure, there were few studies looking at the liquidity management and its effect on the financial performance among SACCOs. There has also been conflicting finding where some researchers have found negative relationship while others have found positive relationship in the two variables in banking industry. From these findings, it is clear that there is a major gap in the relevant literature in SACCOs, which has

to be covered by research. Consequently, this research aim at examining liquidity and other cash management problems faced by most SACCOs in the country which has led to collapse status of some players in SACCO sector in Kenya, with a view of offering solutions that can assist in resuscitating the sector towards achieving economic development.

The focal study area for most past studies has been the commercial banking sub-sector, yet SACCOs which has significant share in financial institutions market has not been well researched. Hence there was no related study done in Nairobi County, thus making existing generalizations contextually non-comprehensive. A severe liquidity crisis would cause massive drowning in form of SACCO runs and hence leading to a drastic financial crisis. This study, thus, sought to fill in the literature gap by looking at liquidity management and financial performance from the SACCOs perspective in the context of Nairobi County.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a discussion of the research methods and procedures that will be employed in this study. The chapter covers the research design especially with respect to the choice of the design, target population and sample for the study. Data collection and data analysis will also be tackled in this chapter. It has explained why specific techniques and methods will be used in design, analysis and data collection.

3.2 Research Design

Research design is the plan to guide a research study to address the research problem. The research design of study was descriptive as it was to seek to find out the effect of liquidity position on the financial performance of SACCOs in Nairobi County. It encompasses the research design that take into consideration aspects like the size of sample in effect to the target population, the variables under the study, the approaches to the research, and the methods employed in data collection.

3.3 Population and Sample of the Study

The target population is a group of elements to which the researcher wants to make inference to make conclusion on characteristic of the whole population (Mugenda & Mugenda, 2003). The target population in the study was all the deposit taking SACCOs which were in existence for over five years after registration with Sasra by December, 2014. Although there were 41 deposit taking SACCOs in Nairobi County by December, 2014, the study focused only on 27 which meet the threshold of five years existence. This

period is considered adequate since it has been used in other studies (Ajantha, 2013). The period has been selected since the Sasra regulation which took effect in the year 2010 has structured their operation of the Saccos hence making their data reliable.

3.4 Data Collection

The study used the secondary data collection instruments. The data collection involved the documentary reviews of data available in the released financial statements, and annual reports. The apex bodies of SACCOs such as SASRA and Ministry of Industrialization and Enterprise Development was source of our secondary data. To measure Sacco's financial performance, return on assets (ROA) has been used.

3.4.1 Data Reliability

Reliability of measuring instrument focused on ensuring that the research was free from random error and therefore consistent result. The researcher improved the instrument by reviewing or deleting items from the instrument. The study used Cronbach's Alpha for testing the research tools. Internal consistency of data was determined by correlating the scores obtained in different periods in this research instrument. The Cronbach coefficient alpha is value between -1 and 1 where Alpha of 0.7 or above is considered to be reliable as found out by (Nunnally, 1978).

3.5 Data Analysis

The study used quantitative and qualitative methods to determine the relationship from the data obtained. We used simple regression analysis and examined the simultaneous

effects of the independent variables on a dependent variable. This being a descriptive study the data collected was qualitative in nature. Content analysis technique was used to analyze the cleaned data through a systematic analysis which involved grouping and interpretation of key issues being investigated to come up with findings. The content analysis technique was allowed for objective, systematic and qualitative description of the content of the collected data and generalization of the detailed information.

The findings were presented in a pie-chart and frequency distribution tables. Descriptive statistics such as the mean and the standard deviation was used to make inferential conclusions. The data was analyzed and reported both quantitatively and qualitatively. The quantitative data was analyzed using descriptive and inferential statistics. Descriptive statistics has an advantage to the researcher because it allows a researcher to organize information in an effective way and also allows information to be reduced to an understandable form. The Statistical Package for Social Sciences (SPSS) was used to analyze the data. The qualitative data was analyzed using qualitative techniques. After data was collected it was analyzed and presented in form of ratios, tables and graphs.

3.5.1 Analytical Model

The study used multiple regression analysis models to analyze the results of this study by determining the effect of liquidity on financial performance of Deposit Taking SACCO's in Kenya. The model for the study is specified as follows;

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

α = Intercept coefficient

Y= is the dependent variable, and was measured by the return on Assets (ROA) ratio. Return on Asset is the ratio of the Profit before Tax to the average total assets of a business during a financial year. It is calculated as: $ROA = (PBT / \text{Total Assets})$.

X1= Liquidity was measured using cash and cash equivalents divided by the total assets held by the Deposit taking SACCOs.

X2 = Funding liquidity risk= $(\text{Total loans} / \text{Total deposits})$.

X3= Operational Efficiency (Default Rate Ratio, DR). The default rate is calculated as DR Ratio= $(\text{Non Performing Loans} / \text{Total loans})$.

X4=Quick Ratio= $(\text{Cash \& cash equivalent} + \text{Short term investment} + \text{Accounts receivable}) / \text{Current liabilities}$

X5= Size (Log of Total Assets)

ε = Error term within a confidence level of 95% will be used.

$\beta_1, \beta_2, \beta_3$ and β_4 = are the regression co-efficient or change introduced in Y by each independent variable

3.5.2 Test of Significance

The model significance was tested using the analysis of the variance (ANOVA), t-tests, z-tests and F-tests at 90%,95% and 99% confidence. The coefficient of determination showed the extent to which the model explains the changes independent variable. The results are said to be statistically significant within the 0.05 level, which means that the significance value must be smaller than 0.05. The significance was determined by the t-value, which indicates how many standard error means the sample diverges from the tested value.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the information processed from the data collected during the study on the effect of liquidity on performance of deposit taking Saccos in Nairobi County. The sample composed of 27 SACCOs from Nairobi County registered as at 31st December, 2014.

4.2 Descriptive statistics

The study first found it necessary to determine the effects of various variables relating to liquidity management in accounting for financial performance of SACCOs for the year 2010-2014. This was done to determine the effects of liquidity management on the financial performance of SACCOs.

By determining the overall performance of the liquidity management variables under the study from 2010-2014 i.e. liquidity, funding liquidity risks, operational efficiency, Quick ratio and the size of the SACCOs and the financial performance measure Return on Assets (ROA). Their mean, median, maximum, minimum, skewness and kurtosis were taken in to account. The findings were as indicated in Table 4.1.

Table 4.1: Descriptive Statistics

	Liquidity	Funding liquidity risk	Operational efficiency	Quick ratio	Size
observations	27.000	28.000	15.000	22.000	28.000
Range	23.090	0.140	0.093	0.154	0.056
Minimum	-12.690	0.001	0.001	0.000	0.003
Maximum	10.400	0.140	0.093	0.154	0.059
Mean	2.164	0.034	0.027	0.031	0.037
Std. Deviation	2.601	0.032	0.020	0.030	0.005
Skewness	-1.475	1.033	1.095	1.117	2.576
Kurtosis	6.465	-0.042	0.762	0.865	1.095

4.3 Correlation

The study used a correlation matrix to establish if linear relationship exists between liquidity management and the financial performance of SACCOs. From Table 4.2, there were very good, positive and significant linear association between Liquidity and financial performance in: Kenya Police Staff Sacco Ltd (.887; $p = .045$); Kingdom Sacco Ltd (.911; $p = .032$); Naku Sacco Ltd (.986; $p = 0.002$). Negative and significant relationship was established in: Mwito Sacco ltd (-.806; $p = .006$); Stima Sacco Ltd (-.906; $p = .034$); Nacico Sacco Ltd (-.854; $p = .006$); Orthodox Sacco Ltd (.652; $p = .034$); Kenya bankers Sacco (-.702 = $p = .006$); Kingdom Sacco (-.911; $p = .032$).

The study established a very good and significant relationship between financial performance and funding liquidity risks as displayed in Table 4.2: Afya Sacco Ltd (.864; $p = .009$); Hazina Sacco Ltd (.444; $p = .008$); and Jamii Sacco Ltd, (.265; $p = .006$). Very good and significant linear

relationships were established between funding liquidity risks and financial performance in: Kenpipe Sacco Ltd (.568; $p=.050$); and, Wanandeg Sacco Ltd (.883; $p=.017$).

From Table 4.2 the study further established a very good, positive and significant relationship between financial performance and operational efficiency in: Chai Sacco Ltd (.935; $p=.020$); Jamii Sacco Ltd (.856; $p<.005$); Kenya Bankers Sacco (.603; $p=.04$); and Airports Sacco Ltd (.794; $p=.08$). Very good, positive and significant relationship between financial performance and Quick ratio in Airports Sacco Ltd (.794; $p=.02$). Kingdom Sacco Ltd (.829; $p=.020$); Jamii Sacco Ltd (.856; $p<.005$); Mwalimu National Sacco Ltd (.884; $p=.04$); and Kenya Police Staff Sacco Ltd (.385; $p=.014$). Also noted from the analysis of the findings was that there was a significantly positive relationship between financial performance and the size of the SACCOs as measured by the log of the total assets: Afya Sacco Ltd (.799; $p=.009$), Jamii Sacco Ltd (.966; $p=.04$); and Nation Staff Sacco Ltd (.901; $p=.003$). The study thus noted that each of the variables; liquidity, funding liquidity risks, operational efficiency, quick ratio, Size had a significant positive correlation with the dependent variable which was financial performance.

Table 4.2: Correlation Matrix

	Liquidity	Funding liquidity risks	Operational efficiency	Quick ratio	Size
Afya Sacco Ltd	-.578	.864*	.316	.006	.799
	.307	.009	.605	.992	.009
Airports Sacco Ltd	-.696	.339	.104	.794**	.202
	.192	.577	.867	.041	.745
Asili Sacco Ltd	-.669	-.924**	.642	.444	.202
	.217	.025	.243	.454	.745
Chai Sacco Ltd	-.044	-.642	.935**	.265	.500
	.943	.243	.020	.666	.391
Chuna Sacco Ltd	-.366	-.486	.666	.383	.603
	.545	.406	.220	.525	.282
Comoco Sacco Ltd	.570	-.006	.799	.272	.005
	.316	.992	.105	.658	.994
Harambee Sacco Ltd	-.012	-.094	.202	.003	.341
	.985	.881	.745	.996	.574
Hazina Sacco Ltd	-.791	.444	.202	.568	.745
	.111	.008	.745	.318	.149
Jamii Sacco Ltd	-.052	.265	.856**	.091	.897**
	.934	.006	.021	.884	.039
Kenya Bankers Sacco	-.702	.383	.603	.651	.167

	.006	.525	.040	.234	.788
Kenya Police Staff Sacco Ltd	.887**	.272	.385	.966***	.277
	.045	.658	.014	.008	.652
Kingdom Sacco Ltd	.911**	.003	.341	.829*	.290
	.032	.996	.574	.083	.635
Kenpipe Sacco Ltd	.374	.568	-.745	-.331	.691
	.050	.318	.149	.587	.196
Mwalimu National Sacco Ltd	-.908**	.091	-.897**	.884	.540
	.033	.884	.039	.549	.347
Mwito Sacco ltd	-.806	.651	.167	.552	.654
	.006	.234	.788	.335	.231
Naku Sacco Ltd	.986***	.966***	.277	.562	.075
	.002	.008	.652	.324	.904
Nacico Sacco Ltd	-.854	.829*	.290	.439	.555
	.005	.003	.004	.039	.331
Nation Staff Sacco Ltd	.499	.331	-.691	.418	-.901***
	.007	.004	.009	.001	.003
Orthodox Sacco Ltd	.652	.363	-.540	.878**	.736
	.034	.549	.347	.050	.156
Safaricom Sacco Ltd	.496	.552	.654	.534	.415
	.395	.335	.231	.354	.487

Stima Sacco Ltd	-.086	.562	.075	.883	-.682
	.890	.324	.904	.117	.205
Sheria Sacco Ltd	-.367	.439	.555	.641	-.269
	.544	.459	.331	.006	-.799
Ukulima Sacco Ltd	-.636	.418	.901***	.992	.105
	.249	.484	.000	.094	-.202
UN Sacco Ltd	.930**	.878**	.736	.881	.745
	.022	.050	.156	.444	-.202
Wana-Anga Sacco Ltd	.545	.534	.415	.454	.745
	.342	.354	.487	.265	-.500
Wanandegge Sacco Ltd	.115	.883	.682	.666	.391
	.885	.017	.205	.383	-.603
Waumini Sacco Ltd	-.041	.641	.269	.525	.282

*. Correlation is significant at the 0.1 level (2-tailed).

**. Correlation is significant at the 0.05 level (2-tailed).

***. Correlation is significant at the 0.01 level (2-tailed).

4.4 Regression Analysis

In the endeavor, the study sought to determine the goodness of fit of the regression equation using the coefficient of determination between the overall independent variables and financial performance. Coefficient of determination established the strength of the relationship.

Table 4.3 illustrates that the strength of the relationship between financial performance and independent variables. From the determination coefficients, it can be noted that there is a strong relationship between dependent and independent variables given an R^2 values of 0.829 and

adjusted to 0.811. This shows that the independent variables (liquidity, funding liquidity risks, operational efficiency, quick ratio and the size) accounts for 81.1% of the variations in the financial performance as measured by ROA.

The study also used Durbin Watson (DW) test to check that the residuals of the models were not autocorrelated since independence of the residuals is one of the basic hypotheses of regression analysis. Being that the DW statistic were close to the prescribed value of 2.0 (2.106) for residual independence, it can be concluded that there was no autocorrelation.

Table 4.3: Model Goodness of Fit

R (Correlation)	R Square (Coefficient of Determination)	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
.911 ^a	.829	.811	2.236576	2.106

a. Dependent Variable: Financial performance

b. Predictors: (Constant), liquidity, funding liquidity risks, operational efficiency, quick ratio, Size

Analysis of Variance (ANOVA) was used to make simultaneous comparisons between two or more means; thus, testing whether a significant relation exists between variables (dependent and independent variables). This helps in bringing out the significance of the regression model. The ANOVA results presented in Table 4.3 shows that the regression model has a margin of error of $p = .008$. This indicates that the model has a probability of 0.8% of giving false prediction. This points out to the significance of the model.

Table 4.4: Analysis Of Variance

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	29.895	5	5.979	8.628	.008b
Residual	14.553	21	0.693		
Total	44.448	26			

a. Dependent Variable: financial performance

b. Predictors: (Constant), liquidity, funding liquidity risks, operational efficiency, quick ratio, Size

The regression analysis established was:

$$\text{Financial performance} = 1.627 + 13.491 * \text{Liquidity} + 3.113 * \text{Funding liquidity risks} + 4.820 * \text{Operational efficiency} + 3.422 * \text{Quick ratio} + 1.675 * \text{Size}$$

From the finding in Table 4.4, the study found that holding liquidity, funding liquidity risks, operational efficiency, quick ratio and size are at zero financial performance (ROA) will be 1.627. It was established that a unit increase in liquidity, while holding other factors (funding liquidity risks, operational efficiency, quick ratio and size) constant, will lead to an increase in ROA by 13.491 ($p < .001$). Further, unit increase in funding liquidity risks, while holding other factors (liquidity, operational efficiency, quick ratio and size) constant, will lead to an increase in financial performance by 3.113 ($p = .057$). Besides, unit increase in operational efficiency, while holding other factors (liquidity, funding liquidity risks, quick ratio and size) constant, will lead to an increase in financial performance by 4.820 ($p = .095$). Further, unit increase in quick ratio, while holding other factors (liquidity, operational efficiency, quick ratio and size) constant, will lead to an increase in financial performance by 3.422 ($p = .057$). Besides, unit increase in Size,

while holding other factors (liquidity, funding liquidity risks, quick ratio and operational efficiency) constant, will lead to an increase in financial performance by 1.675 ($p = .095$).

Table 4.5: Regression Model

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Multicollinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	1.627	.404		1.024	.123		
Liquidity	13.491	8.714	12.110	11.548	.000	.983	1.017
Funding liquidity risks	3.113	5.292	3.042	3.588	.057	.992	1.008
Operational efficiency	4.820	5.656	3.060	2.852	.095	.992	1.008
Quick ratio	3.422	5.257	2.142	4.964	.027	.996	1.004
Size	1.675	5.157	.360	5.852	.015	.995	1.005

a. Dependent Variable: Financial performance

b. Predictor variables; liquidity, funding liquidity risks, operational efficiency, quick ratio and Size

The study conducted a multicollinearity tests to determine if two or more predictor (independent) variables in the multiple regression model are highly correlated. The study used tolerance and variance inflation factor (VIF) values for the predictors as a check for multicollinearity. Tolerance indicates the percent of variance in the independent variable that cannot be accounted

for by the other independent variable while VIF is the inverse of tolerance. Table 4.4 shows that tolerance values ranged between 0.983 and 0.992 while variance inflation factor ranged between 1.003 and 1.017. Since tolerance values were above 0.1 and VIF below 10, then there was no multicollinearity in the model.

4.5 Summary and Interpretation of Findings

The study first found it necessary to determine the effects of various variables relating to liquidity management in accounting for financial performance of SACCOs for the year 2010-2014. The study used correlation matrix to establish if linear relationship exists between liquidity management and the financial performance of SACCOs. The study established a very good and significant relationship between financial performance and funding liquidity risks as displayed in Table 4.2: Afya Sacco Ltd (.864; $p=.025$); Hazina Sacco Ltd (.881; $p = .008$); and, (-.829; $p=.043$). Very good and significant linear relationships were established between currency forwards and financial performance in: Kenpipe Sacco Ltd (.578; $p=.05$); and, Wanandege Sacco Ltd (.883; $p=.039$). A similar significant, positive linear correlation was established between liquidity, operational efficiency, quick ratio and size on the financial performance of SACCOs. Indicating that each of the variables taken for the study model was relevant in explaining financial performance of SACCOs

From the determination coefficients, it can be noted that there is a strong relationship between dependent and independent variables given an R^2 values of 0.829 and adjusted to 0.811. This shows that the independent variables (liquidity, funding liquidity risks, operational efficiency, quick ratio and the size) accounts for 81.1% of the variations in the financial performance as measured by ROA. The study also used Durbin Watson (DW) test to check that the residuals of the models were not autocorrelated since independence of the residuals is one of the basic

hypotheses of regression analysis. Being that the DW statistic were close to the prescribed value of 2.0 (2.106) for residual independence, it can be concluded that there was no autocorrelation. The F value in the ANOVA indicated that the model has a probability of 0.8% of giving false prediction. This point to the significance of the model

From the analysis of findings, it was established that a unit increase in liquidity, while holding other factors (funding liquidity risks, operational efficiency, quick ratio and size) constant, will lead to an increase in ROA by 13.491 ($p < .001$), a unit increase in funding liquidity risks, while holding other factors (liquidity, operational efficiency, quick ratio and size) constant, will lead to an increase in financial performance by 3.113 ($p = .057$), a unit increase in operational efficiency, will lead to an increase in financial performance by 4.820 ($p = .095$), a unit increase in quick ratio, will lead to an increase in financial performance by 3.422 ($p = .057$). And a unit increase in Size, will lead to an increase in financial performance by 1.675 ($p = .095$). Tolerance values ranged between 0.983 and 0.992 while variance inflation factor ranged between 1.003 and 1.017. Since tolerance values were above 0.1 and VIF below 10, then were was no multicollinearity in the model.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of the research findings, conclusions drawn and recommendations. The study attempted to determine the relationship between liquidity management and financial performance.

5.2: Summary

The research was undertaken with the aim of measuring the effect of liquidity management on the financial performance of the Deposit taking Saccos in Nairobi County. Secondary data was used in the analysis to study the variables. Five years period from 2010 to 2014 data was collected from the published accounts statements deposit taking Saccos in Nairobi County from Sacco Society Regulation Act offices and The Ministry of Industrialization and Enterprise Development. To attain its objectives, the study used inferential statistics where correlation analysis was used to study the association between the variables and regression analysis undertaken to study the relationship between the variables. A multiple regression analysis was conducted to develop the regression model relating the study variables. The significance of the results was tested at 1%, 5% and 10% level in a 2-tailed test.

From the analysis, the study found out that all the studied factors have a positive correlation with the financial performance of the Deposit Taking Saccos. Hence liquidity management of Deposit taking Saccos has a strong positive association with their financial performance as given by R^2 values of 0.829 and adjusted to 0.811. From the analysis of findings, it was established that a unit increase in liquidity, while holding other factors (funding liquidity risks, operational efficiency, quick ratio and size) constant, will lead to an increase in ROA by 13.491 ($p < .001$), a unit increase in

funding liquidity risks, while holding other factors (liquidity, operational efficiency, quick ratio and size) constant, will lead to an increase in financial performance by 3.113 ($p = .057$), a unit increase in operational efficiency, will lead to an increase in financial performance by 4.820 ($p = .095$), a unit increase in quick ratio, will lead to an increase in financial performance by 3.422 ($p = .057$). The study concludes that there is need for sound liquidity management in deposit taking Saccos to sustain the demands of its members and hence good financial performance.

5.3: Conclusion

Based on the study findings and discussion, the study concluded that liquidity, funding liquidity risks, operational efficiency, quick ratio and Size influences the financial performance of Deposit taking Saccos in Nairobi County. The study concludes that size of the SACCO positively and significantly influenced the financial performance of Deposit taking Saccos in Nairobi County as larger SACCOs are able to spread the fixed costs of providing basic financial services to more customers leading to lower average costs. The study also concludes that size of the Sacco also determines its financial performance.

The study also concludes that Operational efficiency as depicted by putting in place qualified and skilled personnel, enough funds and putting good controls in place significantly influenced financial performance of Deposit taking Saccos in Nairobi County. Thus to ensure and enhance financial performance of SACCOs it is important to take into the factors that are associated to liquidity management.

5.4 Recommendations for Policy

The study recommends that all SACCOs in Nairobi County should be subjected to the prudential

standards and guidelines set by SASRA and WOCCU in order to protect member's funds thus ensuring long term sustainability. It is also recommended that all SACCOs should embrace the concept of liquidity management. This will help them to be able to lower the risks associated with credit in the SACCOs. To improve financial performance of the SACCOs in Nairobi County, there is need to address the managerial gaps in the areas of training, organization capability, reliability, risk taking propensity and customer relationship management. Training and manpower development is a major problem affecting SACCOs management and the overall financial performance of SACCOs in the country. Government must therefore make the right policies to ensure that SACCOs management committee members can acquire first hand and necessary skills.

5.5 Limitations of the Study

In attaining its objective the study was limited to SACCOs in Nairobi County. Secondary data was collected from the SACCOs registered by SASRA in Nairobi County. The study was also limited to the degree of precision of the data obtained from the secondary source. While the data was verifiable since it came from the SACCOs publications, it nonetheless could still be prone to these shortcomings. The study was based on a five year study period from the year 2010 to 2014. A longer duration of the study will have captured periods of various economic significances. This may have probably given a longer time focus hence given a broader dimension to the problem.

There were challenges which were encountered during the study. Some officers who are concerned with safe custody of SACCO files containing audit reports were initially reluctant to release them. That reluctance delayed the completion of data collection. Further, the data was

tedious to collect and compute as it was in its very raw form. Due to lack of standardization of financial statements from various SACCOs, data computation was made even harder.

5.6 Suggestions for Further Research

The study recommends that further studies should be done on the effect of other factors in the SACCOs such as number of branches, number of customers, and level of technological adoption among others that influence financial performance. A similar study should also be done whereby the data collection relies on primary data i.e. in-depth questionnaires and interview guide so as to complement this study. This study focused on deposit taking Saccos in Nairobi County, the same study should be done in other SACCOs to find out whether it will yield the same results. The study also suggests that further studies should be done to cover all types of cooperative societies including farmer's cooperative societies in Kenya. Where the researcher will do a comparison between the regression results obtained for SACCOs and farmers cooperatives to examine the difference in terms of signaling for the different types of cooperative societies.

Since the study focused on the determinants of financial performance of deposit taking Savings and Credit Co-operative Societies in Nairobi County, further studies should be done on all Savings and Credit Co-operative Societies to allow for generalization of findings for the Kenyan Savings and Credit Co-operative Societies. This study was confined to Savings and Credit Co-operative Societies yet there are many players in the financial sector. There is therefore need to study determinants of financial performance on micro finance institutions, insurance companies, commercial banks and other financial institutions, and how these factors affects their performance in general.

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APPENDICES

Appendix I: List of Licensed Deposit Taking Sacco's (As At Dec, 2014)

1	Afya Sacco Ltd	15	Mwito Sacco ltd
2	Airports Sacco Ltd	16	Naku Sacco Ltd
3	Asili Sacco Ltd	17	Nacico Sacco Ltd
4	Chai Sacco Ltd	18	Nation Staff Sacco Ltd
5	Chuna Sacco Ltd	19	Orthodox Sacco Ltd
6	Comoco Sacco Ltd	20	Safaricom Sacco Ltd
7	Harambee Sacco Ltd	21	Stima Sacco Ltd
8	Hazina Sacco Ltd	22	Sheria Sacco Ltd
9	Jamii Sacco Ltd	23	Ukulima Sacco Ltd
10	Kenya Bankers Sacco	24	UN Sacco Ltd
11	Kenya Police Staff Sacco Ltd	25	Wana-Anga Sacco Ltd
12	Kingdom Sacco Ltd	26	Wanandege Sacco Ltd
13	Kenpipe Sacco Ltd	27	Waumini Sacco Ltd
14	Mwalimu National Sacco Ltd		