



LIQUIDITY MANAGEMENT AND FINANCIAL SUSTAINABILITY OF DEPOSIT TAKING SACCOS IN MOUNT KENYA REGION

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ABSTRACT

The purpose of this research was to examine liquidity management effect on the financial sustainability of DTS in Mount Kenya Region. The study was guided by four objectives; cash management, risk management, asset liability management and management competency on the financial sustainability of SACCOS in Kenya. A census survey of all the 52 SACCOS was carried out. SACCOS within the Mount Kenya region were chosen because it was the home of 61% of the total number of SACCOS in Kenya (according to the Ministry of Industrialization and Enterprise Development, 2012. The respondents consisted of one accountant in every SACCOS as they had information about liquidity of the SACCOS. Descriptive survey design was adopted as it provided a way to interpret and comprehend liquidity management and financial sustainability of DTS. Primary and secondary data were used in the analysis. Primary data on liquidity management was gathered through structured questionnaires while secondary data was gathered from financial statements. The study achieved a response rate of 88%. In order to generate descriptive and inferential statistics, data analysis was conducted using Statistical Package for Social Sciences (SPSS). The study findings revealed that management competency has a positive and significant effect on financial sustainability of DTS. The study revealed the management had enough training to review the quality and level of information it received in order to make informed decisions and to ensure that a governance audit was conducted. Cash management, risk management and asset liability management had positive but insignificant effect on financial sustainability of DTS. In addition, member's contributions were considered crucial to the successful implementation of effective cash management. Finally, without a guiding policy on asset-liability it would be hard for SACCOS to obtain optimal balance in asset liability and financial sustainability. SASRA role needs to be enhanced through introduction of better policy and increase the monitoring role since the sector played a critical role in achieving the country's vision 2030 and improving the country's economic growth.

Key Words: Cash Management, Risk Management, Asset-Liability Management, Management Competency and DTS Financial Sustainability.

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INTRODUCTION

SACCOs are organizations that belong to members for: savings, giving credit and giving other monetary administrations to its individuals (Waweru, 2011). The effect of cooperatives on the economy is amazing with a membership of more than 800 million individuals all inclusive, and 100 million being workers. Europe has 58,000 co-operatives, with an enrollment of 13.8 million and in the US there are 72,000 co-operatives with more than 140 million individuals (Kobia, 2009).

WOCCU is the worldwide trade affiliation and development association of the international credit association systems. WOCCU reinforces credit associations' administration and outreach. It is additionally a promoter in the interest of the worldwide credit association framework before universal associations and works with governments to develop enactment, guideline and regulation, SASRA Report 2015. SACCO Societies are the abbreviation portrayal of "Savings and Credit Cooperative", which are enlisted under the Cooperative Societies Act. The principle objective for their existence is for savings mobilization and advancement of credit thus the abbreviation "SACCO" basically means "Saving and Credit Cooperatives".

Different jurisdictions refer SACCOs as financial administrations cooperatives, while in others they are explicitly alluded to as Credit Unions. This extension of financial services prompted the rise of the DTS along these lines offering ascend to two groups of SACCOs the DTS and non-DTS. All Credit Unions in Brazil, US, Latin America and Ireland, are permitted by law to take deposits from their individuals; thus it is with the Cooperative Banks in India, Europe and South Africa, SASRA REPORT 2015.

In Africa Jipara, a town in Ghana, Father John McNulty started the idea of cooperative movement. He helped the town to form a cooperative and trained 60 teachers. The outcome was growing of the

cooperative movement in Africa (Alila & Obado, 1990). SACCOs are run uniquely in compared to other monetary foundations a larger part of whom are banks in that, the individuals who have accounts are simultaneously the owners, and they elect directors based on one individual one vote regardless of the share deposits. This implies just the individuals from these establishments can deposit and get credit (CBK, 2011). Research indicates that around seven percent of the African populace is associated to cooperatives (Pollet, 2009). The exploration shows that while SACCOs are many in numbers, the movement faces challenges that are as a result of absence of effective representation. Pollet, (2009) likewise found that cooperatives do not enjoy protection mechanisms. SACCOs in Africa grew by 31.9 percent; advances grew by 8 percent (WOCCU, 2009).

SASRA has been given the mandate to license, supervise and regulate DTS. With the development and growth of SACCOs, prudential guidelines have been implemented through a new framework (Barrales, 2012). DTS are authorized and controlled by SASRA while non-DTS are monitored by the Commissioner for Cooperatives. SASRA licenses SACCOs that have been properly enrolled under the Cooperative Societies Act CAP 490 (SASRA, 2012). The nation's vision 2030 perceives SACCOs as critical players in giving access to credit. The sector has more than 16,000 societies, 14 million individuals, making it the largest in Africa. Cooperatives in Kenya represent about 65 percent of the continent savings, advance and assets. Cooperative control 30 percent of the GDP and accounts for 80 percent of the total savings which 63 percent of the populace rely on (MIED, 2014). The existence of SACCOs has been made it possible for members to get affordable loans, therefore empowering their social stand though education and improvement of their lives (Mirie, 2014).

Financial sustainability alludes to the capacity to continue in existing and running for a period of time

(Bowman, 2011). Financial sustainability is accomplished when a business that is selling an item at a value that covers their costs and furthermore makes profit. Financial results of most SACCOs do not appear to be alarming; however, the quality of loan portfolio may place their financial sustainability at risk in the future due to the enormous demand of the financial products.

Meyer (2002) evaluated the presentation of microfinance organizations and suggested that financial sustainability is an area that should be looked. In Kenya low capital funding, loan delinquency, poor governance, poor investment decisions, assessment and management of risks are the challenges faced in promoting quality financial management. Poor management liquidity by SACCOs has prompted lack of insufficient money to lend (Allen & Maghimbi, 2009) as well as low earnings (Kiwalabye, 2008). SACCOs have been forced to borrow externally in order for them to meet their customer needs. Be that as it may if outside borrowings are not all around overseen, it might bring about a high introduction to credit and operational dangers. This obviously shows the significance of liquidity to SACCOs since if not checked may prompt breakdown of SACCOs. This may result to high exposure to credit risk and eventually lead to the collapse of the SACCOs.

DTS are required by their regulatory framework to watch minimum liquidity consistently. Liquidity level shows an establishments capacity to meet commitments as and when they fall due. In order to remain liquid Deposits taking SACCOs require to coordinate the level of liquid resources to the short-term FOSA deposits and liabilities. The minimum regulatory ratio is 15%. Deposit-taking SACCOs are required to maintain a minimum regulatory ratio of 15% and acquire external borrowings not more than 25% relative to deposits. As at December 2017 SACCOs maintained a positive liquidity position at 54% compared to 50% in 2016.

Loan demands continue to press liquidity with the ratio of loans to deposits exceeding 100 percent. Liquidity management in the sector especially for FOSAs is of significance and therefore the need for more effective measures to be put in place in monitoring liquidity in all SACCOs. Due to the lack of a solution to address short-term liquidity the authority has proposed to change the existing legislation to create a central liquidity facility for SACCOs.

Liquidity is the capacity of financial institution to meet its financial related responsibilities as they fall due (Kimathi, 2014). Liquidity is a significant pointer of financial sustainability in a Sacco society as it shows the SACCOs capacity to meet commitments as they fall due. Liquidity risk management helps a SACCOs meet income commitments, which are unpredictable as they are influenced by the external environment (Song'e, 2015). To financial institutions such as banks and Savings and Credit Co-operative societies (SACCO), where in relation to financial institutions, liquidity is defined as ability to meet cash and collateral obligations without incurring substantial costs (Deutsche Bank, 2011)

Liquidity is a significant marker of financial sustainability in SACCOs as it shows their capacity to meet money related commitments as they fall due (Kimathi, 2014). SACCOs should manage demand and supply of liquidity in a suitable way all together for well running f their business, keep up great relations with the partners (Njeri, 2014).

As per the 2017 SACCOs supervision report discharged by SASRA, the industry's non-performing credit proportion rose to 6.14 percent up from 5.23 in 2016 and 5.12 percent in 2015. The loan portfolio risk of 6.14 percent was higher than five percent greatest by the WOCCU and three percent prescribed by SASRA. In 2017 the gross advance portfolio expanded by 11.3 percent to Kshs 331.21 billion from Kshs 297.6 billion reported in 2016. However, the report further shows that the quantity of advance

proportion to deposits stayed unaltered at 108 percent for the third year straight over the 70-80 percent suggested by WOCCU, a sign that individuals are getting more than their deposits. This has led to SACCOs acquiring loans from banks to satisfy individuals' loan appetite, applying more weight on their statement of financial position. The research sought to determine liquidity management effect on the financial sustainability of DTS in Mount Kenya region. Mount. Kenya region comprises both rural and urban SACCOs and moreover has more SACCOs compared to the other regions.

Through mobilization of savings and credit the SACCOs industry plays a crucial role in the Kenyan economy. However, of all the SACCOs in Kenya only 120 Sacco out of the 169 have complied with the capital requirement have raised questions into their financial health.

Challenges such as deposit non-remittance, limited capital funding sources, non-performing loans, and liquidity management face SACCOs. SACCOs in Kenya are shutting down due to high default rate, high loan appetite, and low members deposits. The aforementioned challenges have limited the SACCOs capacity to offer savings withdrawals, credit, external repayments, and cover day to day operation expenses.

The SACCO supervision report 2016 released by the SASRA, the sector loan portfolio risk grew from 5.12 in 2015 to 5.23 percent which above the five percent set by WOCCU and three percent by SASRA. Defaulted loans grew from Sh13.21 billion to Sh15.57 billion which in turn led SACCOs to borrow from banks in order to provide members access to credit thus pushing their balance sheets to the limit. DTS have continued to advance more than the deposits from members; this has in turn hampered their liquidity, as many DTS are borrowing externally in order to meet the shortfall. The research aimed to fill a research gap by investigating management of

liquidity and financial sustainability of SACCOs in Mount Kenya region.

The purpose of the study was to evaluate Liquidity Management effect on the Financial Sustainability of DTS in Mount Kenya region. Specific objectives were;

- To assess the effect of cash management on DTS financial sustainability in Mount Kenya.
- To analyze the effect of risk management on DTS financial sustainability in Mount Kenya.
- To evaluate Asset-Liability Management effect on the financial sustainability of DTS in Mount Kenya.
- To determine the effect of management competency on DTS financial sustainability in Mount Kenya.

LITERATURE REVIEW

Cash Management Theory

Different models have been suggested on cash balance by (Archer, 1966; Baumol, 1952; Beranek, 1963; Gibbs, 1976; Lockyer, 1973; Miller and Orr, 1966 and Pigou, 1970). The Baumol model seeks a right parity by consolidating holding and exchange costs, to lower the cost of holding money. It is only when carrying cost and transaction costs are minimum that optimum level of cash is achieved. Baumol (1952) was the first person to give a proper cash management model which states that the costs holding money is shaped by economic order quantity (EOQ) to cash, forgone interests and cash out expenses while ordering costs are formed by broker charges and administrative work. Baumol's model was the least difficult and reasonable model for deciding the ideal money position Ross (1990).

Mill and Orr model (1966) accept that the income of the firm is thought to be stochastic, for example various cash payments are made in different times and in amounts. It is expected that the developments in real money balance happen arbitrarily. Miller and Orr suggested a control limited model, which sets control points between an Investment Account and

Cash Account for the duration and size of the transfer. The management sets the lower limit. This is determined by financial soundness of a business, acceptable risk and anticipated needs in cash. Zero can be set as the lower limit if the business has adequate investments in securities or financial soundness and can raise short-term debt. Baumol model assumes that the size and timing of cash flows are known with certainty. However, according to Miller -Orr model in reality size and time of cash flows are uncertain.

SACCOs operations revolve around advancement of cash therefore how SACCOs manages cash will definitely have impact on the liquidity. The theory is of significance on the basis that policy may have on cash management to avoid illiquidity.

Agency Theory

The agency theory clarifies the connection between the principals and agents to help address interests of the two parties. Agents make decisions that affect the shareholders interest and the agency theory steps in to harmonize the interests of the principal and the agent (Jensen & Meekling, 1976; Donaldson & Davis 2012).

This theory applies to this study in that SACCOs managers are agents while principles are the directors. SACCOs may collapse if agents engage in opportunistic behavior. A firm will succeed if the management has the ability and the willingness to utilize the firm resources such as finance to benefit the firm.

Empirical Review

Moses (2016) researched on the impact of cash management on financial performance of 37 insurance firms between 2013 and 2015 in Kenya. Uwalomwa, (2013) investigated cash management effect on financial performance of insurance firms in Nigeria from 2006 to 2011 in which 27 firms were studied. Financial statements were used for analysis.

The impact of Cash management on financial performance was positive.

Wanjala (2015) investigated cash management impact on the 169 Matatu SACCOs growth in Kimilili Bungoma County. Variables in examination were; Cash plan, control and budget. Cash management and SACCOs growth had a positive and significant relationship. This indicates that efficient cash management improves SACCOs financial performance.

Njeru and Ondabu, (2015) did an investigation on cash management in comparison to financial performance of DTS in Mount Kenya Region. The objective populace was 30 authorized DTS. Descriptive design was adopted in collecting data on impact of liquidity on financial performance. It was recommended that there is need to have cash controls, policy on credit management in the SACCOs, increase oversight by SASRA for the realization of vision 2030 and improved credit advancement to members.

According to Nara (2012) in his research findings on risk management in SACCOs, is that SACCOs lack procedures and quantitative techniques to identify, analyse, evaluate, treat, monitor and review due to lack of a comprehensive framework. There were cases of huge losses in certain SACCOs as a result of ignoring risk management by internal audit and audit committee which had been done through review council and interior review framework. Furthermore, there are situations where SACCOs had experienced genuine risk emergence because of poor management.

A study done by Murugu (2012) of Nairobi based SACCOs on credit risk management practices on performance of SACCOs in Kenya revealed that credit risk techniques by SACCOs are not sufficient to mitigate against loan losses in an aggressive and evolving environment. Additionally, there are no satisfactory credit risk checking and control

instruments in majority of SACCOs which brings about late recognition and determination of defaulted and non-performing loans. Finally, there is no strict follow up on laid down credit risk policies.

Kimari (2013) researched on credit risk management on DTS financial performance. The target populations were managers of in the credit and risk department. A total of 215 DTS regulated by SASRA were considered. In accordance with the findings and discussions of the following was recommended; credit risk management on performance of SACCOs should carefully consider Earnings, Management Efficiency, Liquidity, Asset Quality, Capital Adequacy, as they all positively correlate with the Return on Equity of the SACCOs.

According to Mwangi (2012), financial institutions solvency becomes in danger when their assets are impaired, therefore it is essential to that quality of assets exposure, credit worthiness of borrows, and non-performing loans indicators are monitored. Credit risk emerges when a borrower defaults on the loan agreement therefore, leading to cash flow problems when the liquidity position is affected, it might result to negative effects on the capital and profitability through provisioning of bad debts.

According to SASRA (2012) during the year, the Authority embraced an institutionalized procedure for assessing and evaluating financial soundness of SACCOs business through the CAEL rating structure. The assessment device focuses on all zones that uncover critical hazard for the SACCOs from a "going-concern" point of view: insufficient capital funds to confront any potential or unforeseen losses emerging from loan advances or risk investments; negative change of the loan portfolio as the principle income; inaccessibility of liquid funds to support portfolio development and to react to investor's and lender's desires.

Anjili (2014) researched on the impact of ALM on 43 commercial banks financial performance (2004-2013)

basing on the CAMEL approach which includes capital adequacy, management efficiency, asset quality, liquidity and operational efficiency. All the CAMEL factors had an impact on financial performance that was statistically significant. The recommendations were; minimize operational costs and credit risk and revenue diversification.

Martha (2014) carried out a research to determine ALM impact on banks financial performance. A descriptive research design was used to determine the relationship between ALM and banks financial performance. Data on assets and liabilities all commercial banks supervised by CBK for the period between 2010 and 2014 was collected. The study findings were; proportion of NPL to total loans had a negative impact on financial performance, level of liquidity had a significant relationship with performance, increase in liabilities to assets negatively affected the banks financial performance of banks. There was a significant relationship between operational efficiency and banks financial performance. Findings shows that ALM such as loans, liability levels, levels of efficiency had a positive effect on the performance of bank.

Odhambo (2012), stresses that good management can improve the performance of a SACCOs and help its foreseeable future. Corporate governance has become of interest to SACCOs as it is viewed as perhaps the weakest area in the business (CSFI, 2008). Branch and Baker (1998) exhaustively explored governance issues in SACCOs and found that as SACCOs become bigger and increasingly, they require special skills to manage and make decisions. Individual owners do not have the necessary skills and may necessitate that managers be recruited to make critical decisions (Fama & Jensen, 1983).

Owino (2015) carried out a study to determine the three factors (competence, competitiveness and environment) impact on performance of SACCOs in Nairobi County with the main objective determining

the relationship between the variables. The targeted population of 63 PSV SACCOs registered and operating in Nairobi County of which a survey was done to help draw a generalized conclusion on the PSV SACCOs performance in Nairobi County with the study considering five years between 2010-2014. From the data collected and analyzed, the study found direct relationship between management skills and performance SACCOs such that it rises, SACCOs performance fluctuated directly or indirectly when management competence changes. The recommendation were that SACCOs member elect people with skills to operate their SACCOs and that SACCOs directors recruit professional staff for the running their SACCOs because competence had direct impact on performance.

METHODOLOGY

This study applied descriptive research design which included the assortment of longitudinal information for a time of five years from 2012-2017. The population of study comprised of all the 52 DTS in Mount Kenya Region. A census survey of all the 52 SACCOs was carried out. The respondents consisted of one accountant in every SACCOs as they had information about liquidity of the SACCOs. Mount

Kenya region consisted of the following counties: Kirinyaga, Muranga, Nyandarua, Nyeri, Embu, Meru and Laikipia. Mt Kenya had been known as a commercial region with many companies having their branches in this region. The study obtained secondary data in published financial statements and also used questionnaires. Data was also collected on SACCOs financial reports for the period 2012-2017. Primary quantitative information was gathered using questionnaires and every parameter is created utilizing explicit objective. Quantitative and qualitative methodologies were utilized for data analysis. Essential information from the poll was entered into the SPSS for investigation. The information was introduced in tables, diagrams and pie graphs for simplicity of translation. Inferential measurements were utilized in order to discover the signature and nature of relationship.

FINDINGS

Cash management and Financial Sustainability

The research sought to determine the extent to which cash management influences financial sustainability in DTS in Mount Kenya region.

Table 1: Cash Management

	N	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Member Deposits Contribution	46	3	5	4.1087	0.08916	0.60473	0.366
Cash Budget Preparation	46	2	5	3.9565	0.15836	1.07407	1.154
Investment of Excess Cash	46	2	5	3.8913	0.14321	0.97133	0.943
Efficient Cash Management	46	2	5	3.8043	0.15423	1.04604	1.094
Efficient Loans Approval	46	2	5	3.6522	0.14651	0.9937	0.987
Buffer Cash Balance Maintenance	46	1	5	3.4783	0.17234	1.16884	1.366
Valid N (listwise)	46						

The outcomes demonstrated that financial sustainability of SACCOs is profoundly subject to part deposit contribution (mean score=4.1087) and cash budget preparation (mean score=3.9565). This was explained by the fact that SACCOs cash budgets are estimates of the expected sources of funds and the projected expenditure. If the SACCOs are unable to raise sufficient deposits, it means that cash budgets will only remain on paper and hence fail in the implementation stage.

The findings further indicated that buffer cash balance maintenance (mean score=3.4783) and

efficient loans approval (mean score=3.6522) have the lowest influence on the financial sustainability in DTS. This is a clear indication that in the Kenyan context and specifically in the DTS, buffer cash balance maintenance and efficient loans approvals have a minimal effect on the sustainability in SACCOs.

Risk management and Financial Sustainability

The research sought to determine the extent to which risk management influences financial sustainability in DTS in Mount Kenya region.

Table 2: Risk management

	Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Error	Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
Adherence to laws	46	2	5	4.087	0.10227	0.69366	0.481
Compliance to Regulatory Environment	46	1	5	4.0652	0.15972	1.08325	1.173
Adherence its By-Laws	46	2	5	4	0.12816	0.86923	0.756
Internal Controls	46	2	5	3.9348	0.12967	0.87945	0.773
Conducting Internal Audit	46	2	5	3.8478	0.1389	0.94204	0.887
Adherence to policies and procedures	46	1	5	3.7609	0.13615	0.92339	0.853
Valid N (listwise)	46						

The outcomes showed that sustainability of SACCOs is profoundly subject to adherence to laws (mean score=4.087) and consistence to regulatory environment (mean score=4.0652). This was clarified by the fact that DTS are profoundly controlled by different government establishments and their survival is attached to consistence to the significant laws and legitimate structure. Regulation of DTS ensure they are well run therefore leading to sustainability. The study supported prior discoveries by Mwadau (2014) that decisions and non-compliance are contributors to risk.

The discoveries further demonstrated that internal audit (mean score=3.8478) and adherence to laws (mean score=3.7609) have the lowest influence on financial sustainability of DTS in Mount Kenya Region. However, DTS can't disregard the impact of internal audit and adherence to policies and procedures since a mean score of 3.8478 and 3.7609 are substantial and henceforth a sign that the financial sustainability of the SACCOs is affected by these components. Nari (2012) discoveries in his paper of risk management in SACCOs is that SACCOs lack procedures and framework to recognize, survey, screen and control

risk. Moreover, it was observed that external audit had a minimum effect on risk management.

The research sought to determine the extent of asset liability influences financial sustainability in DTS in Mount Kenya region.

Asset Liability and Financial Sustainability

Table 3: Asset Liability

	N	Descriptive Statistics					
		Minimum	Maximum	Mean	Std. Deviation	Variance	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Asset Liability Management Policy	46	2	5	3.8696	0.13043	0.88465	0.783
Management of External Borrowing	46	1	5	3.6522	0.14651	0.9937	0.987
Manage Maturity of Credit	46	2	5	3.6087	0.14406	0.97703	0.955
Adjustment of Interest Rates	46	2	5	3.6087	0.12995	0.88137	0.777
Minimization of Loan Default	46	1	5	3.3261	0.14597	0.99005	0.98
Manage Maturity of Investments	46	1	5	2.087	0.19616	1.33043	1.77
Valid N (listwise)	46						

The results indicated that financial sustainability of SACCOs is highly dependent on Asset liability policy (mean score=3.8696) and management of internal borrowing (mean score=3.6522). Without a guiding policy on asset liability, it would be hard for SACCOs to attain an optimal balance in asset liability and hence achieve financial sustainability. Management of internal borrowing is also key to the financial sustainability of SACCOs in that the SACCOs must strike a balance between members long and short term priorities. Some members may be interested in dividends pay-out while others may be interested in long term savings and hence SACCOs managers must strike this balance.

The findings further indicated that minimization of loan default (mean score=3.3261) and management of maturity investments (mean score=2.087) have the lowest influence on the asset liability in financial

sustainability of DTS in Mount Kenya Region. Loan default in SACCOs is expected to be minimal since stringent legal framework in the Kenyan SACCOs has resulted in reduced instances of loan default. Loans are approved after co – guarantee by SACCOs members hence instilling discipline on borrowers and also safeguarding SACCOs against losses. Maturity of investments in the Kenyan context is seen to have low influence on sustainability of SACCOs. This may also be due to the adherence of laws put in place by various regulatory bodies such as SASRA.

Management Competency and Financial Sustainability

The research aimed to determine the extent management competency influences financial sustainability in deposit- taking SACCOs in Mount Kenya region.

Table 4: Management Competency

	Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Variance	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Management Quality Review	46	2	5	4	0.09829	0.66667	0.444
Regular Governance Audit	46	2	5	3.9783	0.13366	0.9065	0.822
Management Education Level	46	2	5	3.9783	0.12233	0.8297	0.688
Training Of the Management	46	2	5	3.913	0.13124	0.8901	0.792
Managerial Internal Control	46	2	5	3.6739	0.16168	1.09655	1.202
Control In Compliance to Legal Framework	46	1	5	2.0217	0.19779	1.34146	1.8
Valid N (listwise)	46						

The outcomes showed that financial sustainability of SACCOs exceptionally reliant on Management Quality Review (mean score=4) and Regular Governance Audits (mean score=3.9783). Quality survey and administration reviews are key in the board of SACCOs. Quality survey demonstrates zones of progress that the SACCOs would need to concentrate on. Reviews are key in distinguishing where SACCOs chiefs needs to control and take remedial activities to guarantee that the general objectives and targets of the SACCOs are achieved. Inability to take restorative activities in time may prompt misfortunes that could have generally be kept away from henceforth guaranteeing the supportability of the SACCOs.

The discoveries further demonstrated that Managerial Internal Control (mean score=3.6739) and

Control in Compliance to Legal Framework (mean score=2.0217) have the least effect on the money related supportability on DTS in Mount Kenya. This shows in the Kenyan setting, the board control in consistence to the legitimate system impacts the supportability of SACCOs in Kenya. This infers the administration should concentrate more on different variables that greatly affect the SACCOs manageability, for example, Quality survey and administration reviews which as the discoveries demonstrate have the most noteworthy mean score.

Regression Analysis

Multiple regression analysis established the joint effect of the four predictor variables i.e. cash management, risk management, asset-Liability, management competency.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df 2	Sig. F Change	
1	.713 ^a	0.508	0.46	0.48523	0.508	10.601	4	41	0	1.802
a. Predictors: (Constant), Management Competency, Cash Management, Asset Liability, Risk Management										
b. Dependent Variable: Financial Sustainability										

The R squared was 50.1% which signifies that independent variables used in the model are able to explain 50.1% of the financial sustainability of DTS in Mount Kenya Region. The remaining 49.9% is by

other factors not considered in this research. Additionally, from output, the model is significant at a p-value of 0.000^b which is < 0.05. This indicated that the model has a best fit to the collected data.

Table 6: Analysis of Variance

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	9.984	4	2.496	10.601	.000 ^b
	Residual	9.654	41	0.235		
	Total	19.638	45			
a. Dependent Variable: Financial Sustainability						
b. Predictors: (Constant), Management Competency, Cash Management, Asset Liability, Risk Management						

Table 7: Coefficients of the model

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.638	0.569		1.121	.269
Cash Management	0.263	0.156	0.28	1.69	.099
Risk Management	-0.18	0.22	-0.147	-0.81	.423
Asset Liability	0.17	0.152	0.153	1.114	.272
Management Competency	0.629	0.159	0.552	3.945	.000
a. Dependent Variable: Financial Sustainability					

Following regression analysis of the four predictor variables, various interpretations were drawn. T-test was utilized to verify the importance of individual regression coefficients in the linear regression models. Addition of an important variable to a model of regression makes the model extra efficient, whilst addition of a less important variable might make the model inferior. The statements of hypothesis to test the importance of a given regression coefficient β_j are:

$$H_0 : \beta_j = 0 \text{ versus}$$

$$H_1 : \beta_j \neq 0, \text{ where } j=1, 2, 3, 4, 5, 6.$$

We reject the null hypothesis if the p-value < 0.05.

In Table 7, it was established that the P – value of ‘cash management = 0.09’, implied that this variable is insignificant at a 95% confidence level. We

therefore accepted the null hypothesis that cash management is not statistically significant in influencing financial sustainability in DTS in the Mount Kenya Region.

Andy and Johnson, (2010) assessed cash management impact in the United States on financial performance of 356 firms. Determination of cash conversion cycle and return of assets were used as measures of financial performance and cash management. The was found insignificant effect between cash management and financial performance.

Bosra, (2013) assessed cash management relationship to financial performance and of insurance companies in India between 2005 and 2010. The studied concluded that that there is an insignificant relation of financial performance and cash management. The empirical research presents mixed results.

The P – value of ‘Risk management = 0.42’, indicated that the variable is insignificant at a 95% confidence level. We therefore accept the null hypothesis that Risk management is insignificant influencing financial sustainability in DTS in the Mt. Kenya Region. The P – value of ‘Asset Liability = 0.27’, indicates that the variable is insignificant at a 95% confidence level. We therefore accept the null hypothesis that Asset management is insignificant in influencing financial sustainability in DTS in the Mount Kenya Region.

The P – value of ‘management competency and policy = 0.00’, implies that this predictor variable is significant at a 95 % confidence level. We therefore reject the null hypothesis and conclude that management competency is statistically significant in influencing financial sustainability in DTS in the Mount Kenya Region.

Odhiambo (2012), stresses that good management can improve the performance of a SACCOs and help its foreseeable future. Corporate governance has become of interest to SACCOs as it is viewed as perhaps the weakest area in the business (CSFI, 2008). Branch and Baker (1998) exhaustively explored governance issues in SACCOs and found that as SACCOs become bigger and increasingly, they require special skills to manage and make decisions. Individual owners do not have the necessary skills and may necessitate that managers be recruited to make critical decisions (Fama & Jensen, 1983).

A study carried by Owino (2015) to establish the impact to which the three factors (competence, competition and environment) impact on performance of SACCOs in Nairobi County with the main objective being to determine the relationship between the variables. The targeted population of 63 PSV SACCOs registered and operating in Nairobi County of which a survey was done to help draw a generalized conclusion on the PSV SACCOs performance in Nairobi County with the study considering five years between 2010-2014. The study

found to exist a direct relationship between management competence and SACCOs performance. SACCOs performance fluctuated directly or indirectly when management competence falls. The recommendation were that SACCOs member select people with competence to manage their SACCOs and that SACCOs directors recruit qualified staff for the running their SACCOs because competence was seen to have a direct impact on their performance.

The coefficient of regression of the ‘cash management = 0.269’, reveals that this variable of predictor has a positive impact on the variable of response. The coefficient of regression of the ‘Risk management = -0.178. This implies that the variable of predictor has a negative impact on the variable of response that is negatively affected the variable of response.

The coefficient of regression of the ‘Asset liability = 0.17. It indicates that this variable of predictor has a positive impact on the variable of response. The coefficient of regression of the ‘Management policy = 0.629. The variable has a positive impact on the variable of response.

CONCLUSIONS AND RECOMMENDATIONS

In conclusion, most of the respondents revealed that cash, risk, asset liability management and management competency had an influence on DTS in Mount Kenya region. However, only management competency was statistically significant at significance level of 5% as revealed by the analysis of regression.

The research sought to determine the degree to which cash management influences financial sustainability in DTS in Mount Kenya region. The results indicated that cash management is highly dependent on member deposit contribution and cash budget preparation. From the output the predictor variable is not statistically significant at a confidence level of 95 %. The coefficient of regression of the cash management reveals that this variable of predictor has a positive impact on the variable of response.

From the research it can be concluded that there is need to have cash management controls to be implemented across all DTS.

The research sought to determine the extent to which risk management influences financial sustainability in DTS in Mount Kenya region. The results indicated that risk management is highly dependent on adherence to laws and compliance to regulatory environment. The P – value of risk management, implies that this predictor variable is not statistically significant at a confidence level of 95 %. The coefficient of regression of the risk management implies that the variable of predictor has a negative impact on the variable of response that is it negatively affected the variable of response. From the findings, the study concluded that as long as the organization is still interacting with the environment, a risk free environment cannot be achieved.

The research sought to determine the extent to which asset liability influences financial sustainability in DTS in Mount. Kenya region. The results indicated that asset liability is highly dependent on Asset liability policy and management of internal borrowing. The P – value of asset liability implies that the predictor variable is not statistically significant at a confidence level of 95 %. The coefficient of regression of the asset liability indicates that this variable of predictor has a positive impact on the variable of response. The findings showed that Asset Liability Management such as loans, liability levels, efficiency levels have a direct impact on a SACCOs financial sustainability.

The research sought to establish the degree to which management competency influences financial sustainability in DTS in Mount Kenya region. The results indicated that management competency is highly dependent on customer satisfaction and the number of product innovation. The P – value of management policy implies that the predictor

variable is statistically significant at a confidence level of 95 %. We therefore concluded that management competency is statistically significant in influencing financial sustainability in DTS in the Mount Kenya Region. The coefficient of regression of the management competency has a positive impact on the variable of response.

Basing of this research, the recommendations made were as follows;

Because the research revealed that many of the respondents indicated that cash management, risk management, asset liability management and management competency have a great influence on financial sustainability on DTS in Mount Kenya region. The study recommended that SACCOs should pay more attention to those factors that affect financial aspect so as to enhance sustainability.

SASRA role needs to be enhanced through introduction of better policy and increase the monitoring role since the sector plays a critical role in achieving our country's vision 2030 and improving our country's economic growth.

The research made an important contribution in our understanding of liquidity management factors influence on financial sustainability. Furthermore, it brings out specific parameters that have a significant effect on financial sustainability of SACCOs. Additional research can be conducted in the following areas:

- Comparative studies on financial sustainability covering other regions to validate whether the findings can be generalized.
- The study considered the following four factors, cash management, risk management, asset liability management and management competency. Other factors should be considered in order to establish whether they may have an effect on financial sustainability.

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