

# **EFFECT OF LIQUIDITY RISK MANAGEMENT ON FINANCIAL PERFORMANCE OF DEPOSIT TAKING SACCOS IN UASIN GISHU COUNTY, KENYA**

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## **ABSTRACT**

Liquidity management has a significant positive effect on financial performance. Companies trying to have their financial performance goals achieved have to consider adopting liquidity management practices. This study sought to determine the effect of liquidity risk management on financial performance of deposit taking SACCOs in Uasin Gishu County, Kenya. This research was based on liquidity risk theory. Cross-sectional survey research design was used. The target population was all the licensed deposit taking SACCOs in Kenya. The Accessible population was therefore the top level management and middle level cadre employees working in all registered deposit taking SACCOs in Uasin Gishu County. A two stage sampling technique was used. The study employed purposive sampling to select 3 top level managers and 1 operation manager in each of the 10 sampled DTSs and simple random sampling in selecting the credit officers and the accountants. The researcher obtained sample size using Slovin's formula. Therefore a total of 63 respondents were identified for the study. The study collected

primary data using questionnaires and secondary data from journal articles. To determine the validity of the questionnaire items, research experts were used to examine them and their suggestions and comments were used as a basis to modify the research items. Cronbach alpha coefficient was used as a reliability test. A value of above 0.7 confirmed the reliability of the research instruments. The data was analyzed using both inferential statistics where multiple regression and correlation was used. Descriptive statistics included use of frequencies, percentages, mean and standard deviation. Data was presented by use of tables and charts. The study findings indicated that Liquidity risk management ( $t=8.037$ ;  $sig=0.000$ ), was a significant factor that enhance financial performance of SACCOs in Uasin Gishu County, Kenya. The study recommended that liquidity management practices are significantly relevant hence its process must be supported by strong and effective governance.

**Key Words:** *liquidity management practices, liquidity risk management and financial performance*

## **INTRODUCTION**

The SACCO industry comprises an autonomous association of persons united voluntarily to meet their common economic and social needs, they jointly form and control enterprises in a democratic way thereby achieving their objectives. These are formed and operated under the principles of cooperatives (ICA, 2005). SACCOs are embodied in certain values; self-help, honesty, openness, social-responsibility, quality, democracy, mutual caring, solidarity, self-responsibility, accountability and transparency (Darek, 2012). The traditional savings and credit cooperative societies (SACCOs), described in law as Non-Deposit taking SACCOs provide a limited range of savings and credit products and are registered and supervised under the cooperative services Act, Cap 490. The Deposit Taking SACCOs (DTS) besides the basic

savings and credit products, also provide basic 'banking' services (demand deposits, payment services and channels such as quasi banking services (ATMs), FOSA and are licensed and supervised under the SACCO Societies Act of 2008. The general trend is that SACCOs start as Non-deposit taking business and grow to Deposit taking to expand the range of financial services to Members (Government of Kenya, 2010).

Robust liquidity management practices are associated with good financial performance of SACCOs. The board being the overall governing authority of a SACCO consists of elected officials who oversee the running of the cooperative (Odhiambo, 2012). SACCOs are facing stiff competition from banks in terms of liquidity position. Efforts by the board to improve financial performance must be matched with adoption of liquidity management practices that provide SACCOs with superior competitive advantage over their rivals (Odhiambo, 2012).

Financial statement is the yardstick to monitor and evaluate performance. Business executives use financial statements to draft a comprehensive financial plan that will maximize shareholders wealth and minimize possible risks that may preexist. Financial statements are used in evaluation of financial performance and financial position of a firm. They are prepared for external stakeholders such as lenders, shareholders and government agencies (Rahaman, 2010). The liquidity of an asset means how quickly it can be transformed into cash. When referring to SACCO liquidity, one usually means its ability to meet its current obligations to its members. Liquidity level is used in assessing financial performance/health of an enterprise (Arif & Nauman, 2012).

Risk is the exposure to uncertainty, where uncertainty is defined as the possibility of occurrence of one or several events (Musoke, 2017). Ismal, (2010), argue that risk is not only uncertain, but that the consequences this uncertainty could have, should also be taken into account. Liquidity risk management is important in identifying events that could have adverse financial consequences in SACCOs and thus taking action to minimize /prevent the damage the risk could cause. Analysts do consider liquidity ratios and profitability ratios when analyzing financial health of a business (Arif & Nauman, 2012)

## **STATEMENT OF THE PROBLEM**

SACCOs in Kenya have contributed immensely to the financial industry and economy at large (SASRA, 2013). Ministry of cooperative development and marketing reported that the sector contributed to forty five percent of the nation's GDP (Kinyua, 2016). With Kenya's GDP estimated at \$70 billion; it implies that the sub-sector controls around \$31 billion of the country's GDP. It is estimated that 63% of the Kenyan population depends on the Co-operative related activities, directly and /or indirectly, for their livelihoods (MOCDM). However, there are notable liquidity risks affecting operations of SACCOs which consequently tainted its image towards robust financial performance (WOCCU, 2011). Among the major problems hindering good financial performance of SACCOs include: liquidity challenges that lead to short term

external borrowing, high level of non-performing loans, lack of comprehensive loan policy, poor finance management policies, delayed cash flows from the employers and governance issues (Sammy, Philemon & Juma., 2013). The licensing of DTS has increased the operation risks. DTS have become more or less like commercial banks. These SACCOs offer several other services like banks do. The demand for loans has increased with increasing membership. This necessitates more transparency through good liquidity risk management practices, good corporate governance and strategic management of key stakeholders to increase confidence and trust in the sector (Osoro et.al., 2015). Some empirical studies that looked at the nexus of liquidity risk management and profitability suggest that there is a correlation between the two. Donkor and Tweneboa-Kodua, (2013) did a study on profitability, liquidity and efficiency of Rural Banks. Darek, (2012) examined the liquidity gaps in financing the SME Sector in an Emerging Market: Evidence from Poland. From these studies, it is clear that, there has been scanty studies which have looked at the relationship between liquidity risk management practices in relation to financial performance of DTS. In addition, the studies have been conducted on financial performance within the SACCO movement using various variables namely; competition from commercial banks, members and legislative support and liquidity management and regulation. It is against this background that a study seeks to assess the effect of liquidity risk management practices on financial performance of DTS in Uasin Gishu County, Kenya.

## **OBJECTIVE OF THE STUDY**

To investigate the effect of liquidity risk management on financial performance of SACCOs in Uasin Gishu County, Kenya.

## **RESEARCH HYPOTHESIS**

H<sub>0</sub>: Liquidity risk management has no significant effect on financial performance of SACCOs in Uasin Gishu County, Kenya.

## **THEORETICAL REVIEW**

The study was based on liquidity risk theory which was developed by Acerbi and Scandolo in 2007. It explains that a SACCO should define and identify the liquidity risk to which it is exposed for all legal entities, branches and its subsidiaries in the jurisdictions in which it is active. Savings and credit cooperatives should consider interactions between exposures to market liquidity risk and funding liquidity risk. Deposits taking SACCOs are exposed to more funding liquidity risk which is more volatile compared to retail deposits. Under stress condition, SACCO members may demand more compensation for risk, shorter maturities period, or decline to extend financing (Akhtar, 2011).

Deposit taking SACCOs should recognize and consider the strong interactions between liquidity risk and the other types of risk to which it is exposed (Guglielmo, 2010). Various types of financial and operating risks, which include interest rate, operational, credit, legal and

reputational risks may influence SACCO's liquidity position. The liquidity risk can arise from weaknesses or failures in the management of other types of risks. Deposit taking SACCOs need to identify situations that can influence on public perceptions of its soundness (Akhtar, 2011). This theory addresses the variable of liquidity management practices as a determinant of financial performance of a Deposit taking SACCO. SACCOs need to identify better ways to invest their resources with the view of how easy it can be to convert them into cash whenever there is a financial need. A SACCO which puts its money in hard to convert resources is likely to face liquidity risk issues in case of need.

Liquidity risk theory is relevant to the study as it provides a basis of conceptualized relationship between liquidity management practices and financial performance. The implication of this theory is that financial performance of SACCOs will improve when liquidity level is adequately maintained. A deposit taking SACCO should ensure prudent valuation of its assets as per the set financial reporting standards. A Deposit taking SACCO needs to fully factor in to liquidity management as valuations may decline under market stress. This should be taken into account in assessment of feasibility of asset sales during stress time on liquidity position (Hoyt, 2012). This theory has been criticized that it is against proper financial management practices to invest so much in easily convertible assets since this is likely to pose problem to financial manager to liquefy assets even when that can be avoided (Hoyt, 2012).

## **EMPIRICAL REVIEW**

Ismael (2010) conducted a study on the management of liquidity in Islamic financial institutions in Indonesia. Using a triangulation method together with a combination of quantitative and qualitative research approaches, Industry performance analysis and econometric time series analysis were conducted to analyse liquidity risk management for Islamic banking. Furthermore, primary data collection was done through questionnaire surveys. The findings indicated that conventional Islamic financial institutions are exposed to several risks which affect its operations and performance. Paramount among these risks was liquidity risk, which indicated that there is need for a comprehensive liquidity risk management program, especially one based on Sharia guidelines and international banking practices. However this study only dealt with liquidity management on Islamic banks leaving out other banks.

Asongu (2013) conducted a study on post-crisis bank liquidity risk management disclosure in European financial institutions. The research was aimed at investigating the post-crisis measures SACCO's had taken after the recent global financial crisis, in order to manage their liquidity risk. The study indicated that, liquidity risk management disclosure became critical for sustaining the confidence of the stakeholders of the economy at that time. Specifically, the study sought to examine the extent to which the Basel 11 pillar 3 disclosure on liquidity risk management was being applied by 20 of the top 33 World Financial institutions. Sampling of the financial institutions was based on the availability of information, ease with which the information provided could be understood as well as ensuring balance geographically. The outcome of the

study revealed that only 25% of the sampled financial institutions provided information on liquidity risk management to the public, signaling that majority of the top ranking Financial institutions were still not fully complying with the Basel disclosure. This study was conducted among European financial institutions limiting the generalization of its results to Kenyan firms.

Kabamba (2012) conducted a research on liquidity management and growth of SACCO's and microfinance institutions in Uganda. This study adopted a descriptive research design using both primary and secondary data; the study revealed that a proper management of liquidity leads to a reduction in associated costs such as loss of public confidence and high operational and administrative costs. Thus, the research concluded that liquidity management and growth of SACCOs had a positive relationship. This study was directed to the growth of Sacco's but current study deals with financial performance of deposit taking Sacco's.

Kimathi et al., (2015), conducted a survey of 96 employees drawn from 6 financial institutions in Kenya, in order to access the factors affecting liquidity risk management practices in these financial institutions. The study concluded that internal controls, institutional policies, board oversight and risk monitoring significantly affect the liquidity risk management practices of these financial institutions. The study also recommended that there was the need for established financial institutions to document their local strategies used in managing their liquidity risk, as well as introduce computerized financial management systems in order to make their internal control systems more effective, as these have a positive impact on their liquidity risk management practices. This study was done in general financial institutions in Kenya but the current study is specific to savings and credit cooperative societies.

## **RESEARCH METHODOLOGY**

### **Research Design**

The study adopted cross-sectional survey research design. It is one of the most widely used non-experimental research designs across disciplines to collect large amounts of survey data from a representative sample of individuals sampled from the target population (Cooper & Schindler, 2011). Crewell (2003) observe that cross-sectional survey research design is used when data are collected to describe persons, organizations setting or phenomena. A cross-sectional study design is used when the purpose of the study is descriptive, often in the form of a survey (Crewell, 2003).

### **Population of the Study**

The study targeted 10 licensed SACCOs in Uasin Gishu County. In the study the target population was 75 respondents from the licensed SACCOs. Accessible population is a sub-set of the target population which the research can access to be involved in the study. Accessible population for this study was therefore the top level management ( who included Chief Finance Officers, Internal Auditors & Branch Managers) and middle level cadre employees (Who

included Credit officers, accountants & Operation officers) working in all the registered Deposit Taking SACCOs in Uasin Gishu County. The top level managers and middle level cadre employees are the ones who are involved in formulating and implementing a firm's strategies.

### **Sample Size and Sampling Techniques**

Sample size refers to the number of observations or replicates to include in a statistical sample, Orodho (2009). The study employed purposive sampling technique and simple random sampling in selecting the respondents. The researcher obtained sample size using Slovin's formula:

$$n = N / (1 + Ne^2) \dots\dots\dots \text{Equation 1}$$

Where: n = Number of samples; N= Total population; e = Error tolerance 0.05

Therefore;  $n = 75 / (1 + 75 * 0.05^2) = 63$

### **Data Collection Instruments**

The study used questionnaires in order to collect data. Questionnaires give respondent adequate time to give well thought out answers. Bias from the respondents and researcher is also eliminated (Orodho, 2009). This method collects a lot of information over a short period of time. The method is suitable when the information needed can be easily described in writing and there is limited time. A pilot test was done before embarking on actual data collection activity. Kombo and Tromp (2009) describe a pilot test as a replica and rehearsal of the main survey. Cooper and Schilder (2011) agree that the respondents used in pilot test should constitute 10 percent of the sample used in data collection. Therefore 6 questionnaires were administered in pilot testing to test the degree of accuracy of the instrument used. The pilot study was done in registered SACCOs within Nandi County. The study used content validity to test the accuracy of data collecting instruments. A statistical coefficient - Cronbach's alpha ( $\alpha$ ) was used as a measure of internal reliability. The recommended value of 0.7 was used as a cut-off of reliability.

### **Data Processing and Analysis**

The data collected were edited, coded and classified for completeness and accuracy before being analyzed. Both descriptive and inferential statistics were used for data analysis. Descriptive statistics include, mean, frequency, variance and standard deviation (Mugenda, 2011). Inferential statistics included Pearson Product Moment Correlation and multiple regression analysis. The following regression model was used to show the strength and direction of the relationship between independent variable and dependent variable.

$$Y = \alpha + \beta_1 X_1 + \varepsilon \dots\dots\dots \text{Equation 2}$$

Where:  $Y$  represents the dependent variable,  $\alpha$  represents the constant,  $\beta_1$  represents the coefficients of the independent variable,  $X_1$  represents the independent variable, and  $\varepsilon$  represents the error term.

## **RESEARCH FINDINGS**

The respondents were asked on how they agree with the statements in relation to liquidity risk management practices in the SACCOs. From the findings, the respondents agreed that their SACCOs uses contingency fund plans while making decisions to improve organizational profitability (mean= 3.88; std dev= 1.201) and that the SACCO has adequately adopted prudential supervision to improve the productivity (mean= 4.21; std dev= 0.913). Further, the respondents agreed that SACCO has effective lending policies that ensures effective credit management when giving loans to clients (mean= 4.16; std dev= 1.105). Lastly, the respondents agreed that their SACCO uses loan securities that provides chances for loan recovery in case of loan defaults (mean= 4.19; std dev= 0.907).

These findings concur with the study carried out by Asongu (2013) who noted that, liquidity risk management disclosure became critical for sustaining the confidence of the stakeholders of the economy at that time. Ismal (2010) stated that Islamic financial institutions are exposed to several risks which affect its operations and performance. Macaulay (2008) stated that effective credit risk management policy must aim at maximizing an institution's rate of return. This implies that majority of the respondents agreed that liquidity risk management affects financial performance of Deposit Taking SACCOs in Uasin Gishu County, Kenya..

## **INFERENCE STATISTICS**

### **Relationship between Liquidity Risk Management and Financial Performance**

The correlation analysis results of the relationship between liquidity risk management on financial performance of Deposit Taking SACCOs in Uasin Gishu County, Kenya were presented in Table 1. The study findings indicated that the relationship between liquidity risk management and financial performance was positive and statistically significant ( $r = .732$ ;  $p < 0.05$ ). This implied that liquidity risk management positively and significantly influenced financial performance of Deposit Taking SACCOs in Uasin Gishu County, Kenya. These findings can be corroborated to those done by Asongu (2013) who indicated that, liquidity risk management disclosure was critical for sustaining the confidence of the stakeholders of the economy at that time.

**Table 1: Relationship between Liquidity Risk Management and Financial Performance**

		<b>Financial performance</b>
Liquidity management	Risk Pearson Correlation	.732**
	Sig. (2-tailed)	.000



## Regression Analysis

The study sought to establish the effect of liquidity risk management on financial performance of Deposit Taking SACCOs in Uasin Gishu County, Kenya. The findings indicate that the relationship between liquidity management practices focused on this study and financial performance was positive ( $R^2=0.536$ ). Findings indicate that 53.6% of the variation in financial performance is accounted for by the independent variables in the study. The 46.4% of the financial performance of Deposit Taking SACCOs resulted from other factors not investigated by the study. The results of regression analysis are shown in Table 2.

**Table 2: Summary Model for the Linear Regression**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.732 <sup>a</sup>	.536	.527	.465

a. Predictors: (Constant), Liquidity risk management

## F-Test of the Linear Regression Model

The study used F-Test analysis to examine the linear regression model was a good fit for the data. This was achieved by running the analysis of variance (ANOVA). From the analysis, the linear regression model was statistically significant ( $F= 64.59$ ;  $p=0.000$ ). This therefore indicates that the multiple regression model was a good fit for the data. The significance value (value) was 0.000 which is less than 0.005 thus making the model statistically significant in predicting how the independent variables affect the dependent variable of the study. The ANOVA results are shown in Table 3.

**Table 3: ANOVA Analysis Results**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.994	1	13.994	64.593	.000 <sup>b</sup>
	Residual	12.132	56	.217		
	Total	26.126	57			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Liquidity risk management

## T-test of the Linear Regression Model

The study conducted the T-test analysis of individual regression coefficients to determine the relationship between liquidity management practices and financial performance of Deposit Taking SACCOs in Uasin Gishu County, Kenya. This is presented in Table 4. From the findings, the test results show that liquidity risk management is a significant predictor on financial performance of Deposit Taking SACCOs in Uasin Gishu County, Kenya ( $t=8.037$ ;  $sig=0.000$ ). Hence the research hypothesis that liquidity risk management has no significant effect on financial performance of Deposit Taking SACCOs in Uasin Gishu County, Kenya was rejected at significance level of 5%.

**Table 4 : Regression Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.135	.383		2.959	.005
	Liquidity risk management	.741	.092	.732	8.037	.000

a. Dependent Variable: Financial performance

## CONCLUSIONS AND RECCOMENDATIONS

The study established that the respondents were in agreement that Deposit Taking SACCOs' use contingency fund plans to improve organizational profitability. The respondents also agreed that the SACCO adopts adequate prudential supervision to improve productivity. Further, the respondents consented that SACCOs need effective lending policies that will lead to effective credit management of loans. The respondents also agreed that the SACCO uses loan securitization to enhance loan recovery and reduce defaults. Liquidity risk management indicated a statistically positive significant relationship with financial performance of Deposit Taking SACCOs in Uasin Gishu county, Kenya. This implied that liquidity risk management is a critical factor for financial performance of SACCOs in Uasin Gishu county, Kenya. These findings support the argument of liquidity risk theory that a firm should define and identify the liquidity risk to which it is exposed for all legal entities, branches and its subsidiaries. The study concluded that there is a statistically positive significant relationship between liquidity risk management and financial performance of Deposit Taking SACCOs in Uasin Gishu County, Kenya. The use of contingency fund plans, adequate prudential supervision, effective lending policies and use of loan securities would lead to enhanced financial performance of Deposit Taking SACCOs in Uasin Gishu County, Kenya.

The study revealed that liquidity risk management practices are paramount on outcome of financial performance of SACCOs in Uasin Gishu County, Kenya. Liquidity risk management is significantly relevant and therefore its process must be supported by strong and effective governance. Deposit Taking SACCO'S should regularly assess the liquidity of the assets held in the portfolio and ensure compliance with defined liquidity limits. They should strive to attain and exceed the minimum ratios on liquidity set out by the regulator.

Based on liquidity risk theory, SACCOs should define and identify the liquidity risk to which it is exposed for all legal entities, branches and its subsidiaries in the jurisdictions in which it is active. Savings and credit cooperatives should consider interactions between exposures to market liquidity risk and funding liquidity risk. Deposits taking SACCOs are exposed to more funding liquidity risk which is more volatile compared to retail deposits. Under stress condition, SACCO members may demand more compensation for risk, shorter maturities period, or decline to extend financing. The study also recommends a key focus on SACCO mandate. The issuance of

loans should be given priority more than investment in non-core assets. Also since SACCOs lack investment expertise, there need to strike a balance between risk management and liquidity management initiated by management of the SACCOs. The government should scrutinize all SACCO investment proposals to ensure they are in line with core mandate and also to protect members funds from unscrupulous board members. Further, SASRA should vet all interested persons before being elected to governance positions.

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