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EFFECT OF LIQUIDITY ON FINANCIAL PERFORMANCE OF SAVINGS AND CREDIT SOCIETIES IN KENYA

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Abstract

Purpose: The purpose of this study was to determine the effect of liquidity on financial performance of savings and credit societies in Kenya.

Methodology: The study employed an explanatory research design. The target population was 83 registered deposit taking SACCO's in Kenya that have been in operation for the last five years. The sample size for the study was all 83 SACCOs that have remained in existence since 2011-2015. Census methodology was used in the study. Both primary and secondary sources of data were employed. Multiple linear regression models were used to analyze the data using statistical package for the social sciences (SPSS) and STATA. A pilot study was conducted to measure the research instruments reliability and validity. Descriptive and inferential analysis was conducted to analyze the data. The data was presented using tables and graphs.

Results: Based on the findings the study concluded that liquidity influenced the financial performance of savings and credit societies in Kenya. This can be explained by the regression results which showed that the influence was positive and also showed the magnitude by which liquidity influenced the financial performance of savings and credit societies. The regression results showed that liquidity influenced the financial performance of savings and credit societies. The regression results showed that liquidity influenced the financial performance of savings and credit societies.

Unique contribution to theory, practice and policy: The study recommended for the deployment of efficient systems to strengthen liquidity risk control fundamentals. SACCO's should also consider seeking professional guidance towards adopting policies on asset and liability management.

Keywords: *liquidity, financial performance, savings and credit societies*



1.0 INTRODUCTION

1.1 Background of the Study

The SACCO industry in Kenya plays a very important role as the financial intermediary between savers and investors. The first ever SACCO was established in 1844 by Robert Owen (John, 2002). SACCO's belong to a group of cooperatives that are commonly called Raiffeisen cooperatives due to the German originator of this movement in the 1800s (Tache, 2006). SACCO's are guided by seven principles as stipulated by the International Cooperative Alliance (ICA); Open and voluntary membership, member economic participation, independence and autonomy, democratic member control, education, training and information, Concern for Community and Cooperation among Cooperatives. SACCO's are expected to give better and cheaper services to its members as compared to the main stream banks because SACCO's understands the needs of the members given that they are the owners (Wanyama, Develtere & Pollet, 2008). Services offered by SACCO's include normal loans, emergency loans, school fees loans and front office services for example; payment of salaries, salary advances, bank cheques, safe keeping of documents, and ATMs (Ngaira, 2011).

According to ICA (2009) Rochdale Pioneers was the founder of the contemporary Cooperative Movement in Lancashire, England, to deliver cheap alternative to poor-quality and adulterated food and provisions food, by the use of surplus so as to benefit the community. Subsequently, the co-operative movement has succeeded spreading throughout the world and incorporating all parts of the economy. The principles that supported cooperatives ways of doing trade is still recognized today as the basis upon which all co-operatives operate. However, the principles has been looked over and updated.

Globally, the sector has 1 billion memberships. It is estimated that co-operatives have employed 250 million people all over the world, co-operatives has an estimated global turnover of 2.2 trillion US Dollars, Co-operative generate 2.2 trillion US\$ in turnover while providing infrastructure and services that the society needs to flourish. Global statistical report for 2014, recorded a total of 57,000 Credit Unions (SACCO's), spread across 105 countries and 6 continents. The world Credit Union system has a combined savings of 1.5 trillion US\$, and an asset base of 1.8 trillion US\$ out of which 1.2 trillion US\$ constitutes the loan portfolio. The average worldwide penetration rate of the Credit Union system stood at 8.2 percent World Co-operative Monitor (2014).

Globally, efficiency of community banks was analyzed in the United States (US) using data from year-end 2006-2008. Multivariate discriminant model was used based on the CAMEL(S) model, to differentiate between low efficiency and high efficiency community banks by using the efficiency ratio as the independent variable. The results on the significance of the individual CAMEL components provide mixed results for different periods apart from the sensitivity to market risk, which is found to be statistically insignificant (Hays, Stephen& Arthur, 2009).

In India, the soundness of Indian Banking through its effect on the asset value was analyzed. The study recognized the key players such as the risk management, Non-Performing Assets (NPA) levels, effective cost management and financial inclusion. Moreover, In India performance of different Indian private and public sectors banks over the period 2000-2011 were analyzed using the CAMEL approach and established out that the private sector banks



were at the top, with their performance being the best in terms of soundness (Chaudhry & Singh, 2012).

In Africa growth of SACCO's has been experienced to the extent that in 1965, Africa Federation of Cooperative Societies Savings and Credit Association (ACCOSSCA) was formed with the principle objective of offering SACCO insurance, education to members and promoting SACCO principles(Ng'ombe & Mikwamba, 2004). There are 28 countries in the continent of Africa with established SACCO's (saving plus, 2010). Africa has membership of 16 million which is 8 percent of the whole world membership, with savings of 62% and loans of 65% being 3rd after Asia and North America which has 36 million and 102 million respectively. Africa mobilize 0.4 percent of the worldwide savings of US\$ 1.1 trillion and 0.4 percent of international loans given to members standing at US\$ 912 billion (WOCCU, 2009).In Africa, performance of the South African Banking Sector was analyzed from 1994 and found out that all bank-specific variables were statistically significant at conventional level for both Return on Assets (ROA) and Return on Equity (ROE) equations. The study had shown that Asset Quality (measured by assets to capital employed ratio), Management Efficiency (measured by operating profits per employee ratio), and Liquidity Management (measured by quick ratio) has positive relationship with both measures of bank performance, which is consistent with a priori theoretical expectations. However, the Leverage Ratio, which is a measure of Capital Adequacy, shows a surprising significant negative relationship with ROA, whereas its relationship with ROE is significant and positive as expected, (Ifeacho & Ngalawa, 2014). In Ghana CAMEL Rating System was used to assess the Performance of Local and Foreign Banks results from the study indicated that not all the CAMEL variables affect Banks performance in Ghana in terms of ROA and ROE (Ansah, 2015).

In East Africa the East African Legislative Assembly (EALA) passed the East African Community (EAC) Cooperative Societies Bill, 2014. The Bill is currently awaiting assent by the East African Community Heads of States in line with Article 63 of the EAC Treaty. The objective of the EAC Cooperative Societies Bill, 2014 is to provide a legal framework for the operations of Co-operative Societies within the Community, which is in line with Article 128 of the EAC Treaty on the strengthening of the role of private sector as an effective force for developing economies, by virtue of EAC Treaty and Article 2(6) of Kenyan Constitution 2010 which recognizes that treaties ratified by Kenya are part of the laws of Kenya, the Kenyan National Legislations on Co-operatives will be required to be aligned to EAC Cooperative Societies Bill, 2014 once it becomes law. The Bill is based on the understanding that each Partner State shall undertake to encourage the efficient use of resources and to promote the development of private sector organizations which are engaged in all types of economic activities, such as the chambers of commerce and industry, confederations and associations of industry, agriculture among others. It also recognized the responsibility of state parties to enact national legislations to govern the operations of co-operative societies within the party states. In Ethiopia Zerfeshewa, 2010 investigated the determinants of SACCO performance; the study established that the educational level of members and officials as well as the regulations posed the greatest impediment to the performance of SACCO's.



1.2 Problem Statement

The SACCO's subsector remains a significant player in the provision of financial services to the Kenya household and small business segment. Its membership as per 2013 increased to 3.3million from 2.97 million in 2012. SACCO's plays a vital role of pooling resources for investment and wealth creation (Kinyua, 2013). They spur economic growth through the mobilization of domestic savings. According to SASRA report (2010), SACCO activities contribute 43% of the gross domestic product (GDP).

The significance of SACCO's to the Kenyan economy is further evidenced by inclusion in the Vision 2030 economic blue print (Kioko, 2014). Given their significance in the financial sector and poverty alleviation, it is important to investigate the moderating effect of sensitivity to market risk on determinants of performance in order to provide accurate and consistent assessment of savings and credit financial conditions and operations in the area of performance. Zerfeshewa (2010) investigated the determinants of SACCO performance in Ethiopia; Sonja (2010) analyzed SACCO's in Uganda to determine effect of automation on the growth of SACCO's.

Based on these studies and the varying gaps in literature, there is need to conduct similar studies in Africa and more so in Kenya. Therefore, the research attempted to determine the effect of liquidity on the financial performance of savings and credit societies in Kenya.

1.3 Research Objective

To determine the effect of liquidity on financial performance of savings and credit societies in Kenya

2.0 LITERATURE REVIEW

2.1 Theoretical Framework

2.1.1 Liquidity Theory

Keynes (1936) developed the liquidity preference theory in his famous book, the general theory of Employment, Interest, and Money this was due to the great depression with persistent unemployment for which the quantity theory of money has no answer to economic problems in the society, Jhingan (2004). His theory is based on the preposition that money is financial asset in portfolio that consists of ether money or bond; he further researched on both transaction and asset theories of money demand. Keynes distinguished three motives of holding money as: transaction motive, a precautionary motive and speculative motive. Baumol and Tobin (1958), refined the liquidity preference theory and their propositions which were based on Keynesian model economy that emphasized on investing in risky assets, instead of transaction balances. William Baumol considered transaction balances to meet the working capital needs of the investors while Tobin emphasized on investment balances that premised on liquidity preference theory that seeks to explain the level of interest rate with regards to the interaction of money supply and desire of savers to hold their savings in cash or near cash.

The theory of bank liquidity theory developed by Calomiris, Heider & Hoerova (2014) argues that banks should hold cash to guard against liquidity risk and as a prudential regulatory measure. Borrowing from the Black-Scholes model, the theory argues that cash as opposed to capital is riskless. Cash is observable and verifiable. By holding cash, financial institutions mitigate against two risks simultaneously: default risk and liquidity risk.



There are several liquidity theories. The liquid asset theory focuses on the asset side of the balance sheet and argues that banks must hold large amount of liquid assets against possible demand or payment cushion of readily marketable short term liquid assets against unforeseen circumstances. This approach is however very expensive in a current world of dynamic money market (Ngwu, 2006). The shift ability theory posits that bank liquidity is maintained as long as holds assets that could be shifted or sold to other lenders or investors for cash. The theory includes marketable securities as part of liquidity. Anticipated income theory argues that banks liquidity can be estimated. According to the theory, banks 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 (Taye, 2014). The commercial loan theory on the other hand argues that commercial bank liquidity would be assured as long as the assets were held in short term loan that would be liquidated in the normal course of business. That by extending working capital loans, bank liquidity is assured as such inventory would eventually be sold for cash. In this study this theory will help analyses SACCO's abilities the liabilities from its assets. The liquidity theory is relevant to this study as it guides SACCO's by highlighting how much they are getting in to debt, whether there debt burden is heavy or light and finally whether their financial situation is improving or not.

2.1.2 Expense-Preference Behavior theory

Expense-Preference behavior theory is one of the most employed in the research. This theory was developed by Williamson (1963) and later refined by (Rees, 1974), this theory posits individual preferences of managers of a firm as utility maximizing, as opposed to profit maximizing. It predicts that under certain conducive circumstances such as the separation of ownership and control, costly monitoring of managerial behavior, a lack of effective competition in input and output markets, or effective regulation in those same markets, managers spend more on other prerequisites than is consistent with profit maximization behavior, Gropper & Oswald (1996). The first empirical work for the Expense Preference Theoretical Framework on financial institutions was carried out by Edwards (1977). Using aggregated bank data for 44 banks in 1962, 1964, 1986 and total wages and salaries; total employees as the dependent variables, he finds the coefficient on the three bank concentration ratios to be positive and significantly correlated with both the bank's total labor force and the bank's total wage bill Thus, he concludes that expense preference behavior is a significant force that detracts from profit maximization in many banks. Other works consistent with this view include the empirical works of (Hannan, 1979 and Arnould, 1985) who found evidence of the expense preference theory in the banking firms. The theory is relevant to this study as it guides on how the profitability of the bank is taken in measuring performance though there are other alternative theories, in which factors other than profitability are taken as a measure of performance.

2.1.3 Economic Efficiency Theory

Economic efficiency theory states that companies should achieve their output at the lowest possible cost per unit produced. According to this theory, economies of scale should be exploited to achieve optimal production. The theory focuses on two kinds of efficiency; allocative and productive efficiency. Allocative efficiency is achieved by ensuring that all firms in the industry charge optimal prices. In the banking sector, this will result in a reduction of lending rates.



The economic efficiency theory is relevant to this study as it guides in savings mobilization, which will enable SACCO's to create credit out of excess deposits (credit creation) hence SACCO will earn interest. Allocative efficiency in the determination of lending rates among SACCO's will ensure unhealthy competition does not ensue between them. High competition in banking is associated with instability (De Nicoló, Jalal & Boyd, 2006). Productive efficiency is achieved when banks employ all their resources efficiently, producing the most output from the least input (Said, 2011). Productive efficiency guides both the lending and investment decisions of financial institutions. It would involve investing in low risk assets such as government bonds.

2.2 Empirical Review

Marozva (2015) examined the relationship between liquidity and performance of commercial banks. The study used net interest margin as the proxy for performance. The study found a negative significant deterministic relationship between net interest margin and funding liquidity risk. However, an insignificant co-integrating relationship was found between net interest margin and measures of liquidity.

Abang-anoh C.A. (2012) undertook a study on the effect of liquidity on performance of commercial banks. The study found a positive relationship between liquidity management and the existence of any banks. According to the study adequate liquidity enable banks to mandate it risk and thereby helping to sustain public confidence in the operation of the banking institution which in turn leads to more patronage and consequently more profit.

Omino (2014) analyzed the liquidity mitigation measures and performance of SACCO's in Kisumu County. The study found that liquidity risk mitigation approaches adopted by different SACCO's had a significant effect on their financial performances. The study revealed that SACCO's adopted a more cautious position in their current liabilities to ensure that operating cash flows were sufficient to cover the short terms obligations entered by the firms. Further, the study revealed that debtor collection periods were longer to encourage voluntary membership and consequently the SACCO's were either unjustifiably constraining their creditor payment periods or were conditioned to do so. The study recommended the deployment of efficient systems to strengthen liquidity risk control fundamentals. SACCO's should also consider seeking professional guidance towards adopting policies on asset and liability management.

2.3 Conceptual Framework

Independent variable



Figure 1: Conceptual Framework

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3.0 RESEARCH METHODOLOGY

The study employed an explanatory research design. The target population was all the 83 registered deposits taking SACCO's licensed by SASRA as at 31st December 2011 to 2015 and has been in operation for the last five years. Therefore, the study used the inclusion criteria to select a total of 83 SACCO's registered by SASRA as at 31st December 2011. The sampling frame for the study consisted of all licensed deposit taking SACCO's in operation in Kenya as at 31stDecember, 2011and still in operation as at 31st December 2015 as they appear in the SASRA database. Census methodology was used in the study in order to enable researcher gather sufficient information. The study also used purposive sampling procedure to identify the sample units. The sample size for the study was all 83 SACCO's that have remained in existence since 2011-2015. The questionnaire in this study was divided into three parts. The data collected was keyed into Statistical Package for Social Sciences (SPSS) computer software for analysis. SPSS and STATA software was used to produce frequencies, descriptive and inferential statistics which was used to derive a conclusions and generalizations regarding the population.

4.0 RESULTS AND DISCUSSIONS

4.1 Response Rate

The number of questionnaires that were administered was 83. A total of 71 questionnaires were properly filled and returned. This represented an overall successful response rate of 86% as shown on Table 1. This agrees with Babbie (2004) who asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good. Based on this assertion 86% response rate is adequate for the study.

Response	Frequency	Percent	
Returned	71	86	
Unreturned	12	14	
Total	83	100	

Table 1: Response Rate

4.2 Demographic Characteristics

This section analyzes the demographic characteristics of the respondents. This section presents the descriptions of the respondents in terms of type of shareholders and period of existence.

4.2.1 Type of Shareholder

The respondents were asked to indicate their shareholders. Results in table 2 reveal that 47% of the respondents indicated business men and women, 42% of the respondents indicated the general public while 11% of the respondents indicated government employees. This implies that majority of the SACCOs members and customers are business people and the general public. This implies that most business people rely on SACCOs for finances. This is likely to have a positive influence on Sacco's financial performance.



Table 2: Type of Shareholder

Response	Frequency	Р	ercent
Government employees		8	11.3
General public		30	42.3
Business Men and Women		33	46.5
Total		71	100

The respondents were asked to indicate the number of years their organizations have been in existence. Results in table 3 reveal that majority (68%) of the respondents indicated more than 20 years, 16% indicated 5-10 years, 10% indicated 16-20 years while 7% of the respondents indicated 11-15 years. This implies that majority of the SACCOs have been in the market long enough to gain the prerequisite experience and relevance. This implies that the SACCO's have the potential to be competitive and thus performance well.

Table 3: Period of Existence

Response	Frequency	Percer	nt
5-10 years		11	15.5
11-15 years		5	7
16-20 years		7	9.9
More than 20 years		48	67.6
Total		71	100

4.3 Descriptive Statistics

The objective of the study was to determine the influence of liquidity management on financial performance of savings and credit societies in Kenya. The respondents were asked to respond to statements on liquidity management. The responses were rated on a five likert scale as presented in Table 4. Majority of 55% (39.4%+16.3%) of the respondents agreed with the statement that capping external debt at 25% improves the financial performance of the Sacco,60% agreed with the statement that observing liquidity at minimum statutory ratio of 15% improves the financial performance of the Sacco, 81% agreed with the statement that liquidity is measured in terms of the ratio of liquid assets to deposits and short term liabilities while 72% of the respondents agreed that external borrowing is used as an indicator of the liquidity status.

On a five point scale, the average mean of the responses was 3.65 which means that majority of the respondents were agreeing with most of the statements; however the answers were varied as shown by a standard deviation of 0.74.

These findings agree with that *of Abang*-anoh (2012) who undertook a study on the effect of liquidity on performance of commercial banks. The study found a positive relationship between liquidity management and the existence of any banks. According to the study adequate liquidity enable banks to mandate it risk and thereby helping to sustain public confidence in the operation of the banking institution which in turn leads to more patronage and consequently more profit.



	Strongly	Disagre			Strongl		Std.
Statement	disagree	e	Neutral	Agree	y agree	Mean	Dev
Capping external debt at 25% improves the financial performance of the Sacco Observing liquidity at minimum statutory ratio of 15%	0.00%	22.50%	26.80%	39.40%	16.30%	3.39	0.96
improves the financial performance of the Sacco Liquidity is measured in terms of the ratio of liquid assets to	0.00%	5.60%	33.80%	42.30%	18.30%	3.73	0.83
deposits and short term liabilities External borrowing is used as an indicator	0.00%	5.60%	14.10%	77.50%	2.80%	3.77	0.59
of the liquidity status Average	0.00%	4.20%	23.90%	70.40%	1.40%	3.69 3.65	0.58 0.74

Table 4: Liquidity Management

The respondents were asked to indicate whether their organizations possess adequate liquidity to meet their obligations as and when they fall due. Results in table 5 reveal that majority of 55% of the respondents indicated no while 45% of the respondents indicated yes. This implies that majority of the SACCOs do not have adequate liquidity to meet their financial obligations. This implies that most organizations experience liquidity problems.

Table 5: Liquidity Management

Response	Frequency	Percent	
No	39	54.9	
Yes	32	45.1	
Total	71	100	

The respondents were further asked to indicate whether the level of liquidity influences their organization's performance. Results in table 6 reveal that majority of 58% of the respondents indicated no while 42% of the respondents indicated yes. This implies that most of the respondents do not think that their level of liquidity has a significant impact on their organizations' performance.

Table 6: liquidity Management

Response	Frequency	Percent	
No	41	57.7	
Yes	30	42.3	
Total	71	100	



4.4 Inferential Statistics

The results presented in table 7 present the regression model used in explaining the study phenomena. Liquidity explained 66% of the financial performance of SACCOs in Kenya. This is supported by coefficient of determination also known as the R square of 66%. This means that liquidity management explains 66% of the financial performance SACCOs in Kenya. Further, results indicate that the overall model was statistically significant as supported by a p value of 0.000. This implies that liquidity is a good predictor of financial performance. This was supported by an F statistic of 194.36 and the reported p value (0.000) which was less than the conventional probability of 0.05 significance level.

These findings agree with that of Omino (2014) who analyzed the liquidity mitigation measures and performance of SACCO's in Kisumu County. The study found that liquidity risk mitigation approaches adopted by different SACCO's had a significant effect on their financial performances. The study revealed that SACCO's adopted a more cautious position in their current liabilities to ensure that operating cash flows were sufficient to cover the short terms obligations entered by the firms. Further, the study revealed that debtor collection periods were longer to encourage voluntary membership and consequently the SACCO's were either unjustifiably constraining their creditor payment periods or were conditioned to do so.

ROA	Coef.	Std.Err	Ζ	P> z	[95%	Conf.Interval
Liquidity	0.01889	0.0013549	13.94	0.000	0.0162335	0.0215446
cons	0.027942	0.1258084	2.22	0.026	0.0328406	0.5260006
\mathbf{R}^2	0.6613					
F -statistics	194.36					
P value	0.000					

Table 7: Regression model

The specific model was;

Firm Financial Performance = 0.027942+0.01889 Liquidity Management

5.0 DISCUSSION CONCLUSIONS AND RECOMMENDATIONS

5.1 Discussion

The objective of the study was to determine the effect of liquidity on financial performance of savings and credit societies in Kenya. The univariate regression results showed that there is a positive and significant relationship between liquidity and financial performance of savings and credit societies as supported by a p value of 0.000 and a beta coefficient of 0.019. This implies that improvement in liquidity would increase the financial performance of savings and credit societies by 0.019 units.

5.2 Conclusions

Based on the findings the study concluded that liquidity influenced the financial performance of savings and credit societies in Kenya. This can be explained by the regression results which showed that the influence was positive and also showed the magnitude by which liquidity influenced the financial performance of savings and credit societies.



The regression results showed that liquidity influenced the financial performance of savings and credit societies by 0.019 units.

5.3 Recommendations

The study recommended for the deployment of efficient systems to strengthen liquidity risk control fundamentals. SACCO's should also consider seeking professional guidance towards adopting policies on asset and liability management.

5.4 Areas for Further Studies

The study recommends that a similar study should be conducted in other financial sectors such as banking sector for comparison purposes. The study also recommends that a study seeking to examine the effects of other financial factors on financial performance of savings and credit cooperatives should be conducted. This would help to give insight to the SACCO's and other organizations on what other financial factors to consider in order to enhance their performance.

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