



EFFECT OF FINANCIAL MANAGEMENT PRACTICES ON FINANCIAL PERFORMANCE OF SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN KISUMU COUNTY, KENYA

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Accepted: March 26, 2019

ABSTRACT

This study endeavored to investigate the influence of liquidity management, capital adequacy, leverage and capitalization on performance of SACCOs in Kisumu County, Kenya. The study adopted descriptive survey and targeted 151 senior and middle level management staff from 19 SACCOs located in Kisumu County. The study used structured questionnaire to collect primary data and a data collection sheet to collect secondary data on the dependent variable. Statistical Package for Social Sciences (SPSS) version 24 was used in data analysis. A total of 110 questionnaires were sent out for data collection in the field. Both descriptive and inferential statistics showed that all conceptualized independent variables significantly influence performance of SACCOs in Vihiga County. That is; from the values of unstandardized regression coefficients with standard errors in parenthesis, all the independent variables; liquidity management, capital adequacy, capitalization and leverage were significant predictors of SACCO performance (dependent variable). The study concludes that one; liquidity management is a significant predictor of financial performance of SACCOs, thus liquidity position of a SACCO in terms of cash position, capacity ratio and total deposits really influence financial performance of a SACCO; two; capital adequacy significantly influences financial performance of SACCOs, thus, improvement in effective capital adequacy requirements by SACCOs can have a positive impact on the performance of SACCOs. The study recommended that one; SACCOs should adopt resilient liquidity management practices to enable them boost their performance in both good and bad economic times; two; SACCOs should adhere to SASRA's minimum capital adequacy requirements so as to cushion themselves against insolvency risks and three; SACCOs should prudently embrace the new capitalization policy as a savings mobilization and customer retention strategy so as to boost their capital and membership base.

Key Words: *Liquidity Management, Capital Adequacy, Leverage, Capitalization, SACCOs in Kisumu County*

CITATION: Tonui, C. K., & Otinga, H. N. (2019). Effect of financial management practices on financial performance of savings and credit cooperative societies in Kisumu County, Kenya. *The Strategic Journal of Business & Change Management*, 6 (1), 699 – 718.

INTRODUCTION

Bald (2007) explains that risk taking is at the heart of banking and microfinance and is the conscious engagement in risks that constitutes the economic value of financial intermediation. In this regard, SACCOs convert immediately available savings deposits into loans with longer maturities (maturity transformation). Individual savings deposits are also typically much smaller than an average loan, requiring multiple deposits to fund a single loan (size transformation) and SACCOs convert savings deposits with an absolute expectation of safety and repayment into credit risky loans to members (credit risk transformation). The loans a SACCO makes typically carry a fixed interest rate for their entire term, while the interest on savings deposits and - more importantly - on any additional borrowings from banks or microfinance support programs is variable and can be adjusted at any time according to changes in market interest rates (interest rate risk transformation). All of these financial transformations are risky; thus, the key to successful treasury management is not to entirely avoid the risks, but to properly balance the risks against the rewards from potential profits (Bald, 2007).

That is, Savings and Credit Cooperatives (SACCOs) and other group savings and loans organizations are an important means of providing financial services to populations that are, for whatever reason, outside the reach of banks and other conventional financial institutions. Credit unions have become increasingly prominent in policy circles in the last decade due to their capacity to provide affordable credit to people who are financially excluded. This has largely been driven by an expanding financial inclusion agenda that promote savings to those excluded from the mainstream. Consequently, interest in the potential role that credit unions play is likely to remain high (Hope, 2010).

Across the globe, savings and credit cooperatives are user-owned financial intermediaries. They are either referred to as credit unions or Savings and

Credit Cooperatives (SACCOs). Members typically share a “common bond” based on a geographic area, employer, community or other affiliations. Members have equal voting rights, regardless of how many shares they own. Savings and credit are their principal services, although some offer money transfers, payment services and insurance as well. Savings and credit cooperatives could also join together to form second-tier associations for the purposes of building capacity, liquidity management and refinancing. Second-tier associations play a useful monitoring role (Branch, 2005).

The SACCO industry in Kenya plays a very important role as the financial intermediary between savers and investors. Kenya has the largest SACCO movement in Africa with a total membership of 8 million followed by Senegal at 5 million (Njeru, 2015). SACCO plays an important part in the financial sector in Kenya by providing savings and credit services to a large portion of the population. 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).

Further, SACCO comprises over 50% of all cooperatives, and as financial institutions they play a critical role of financial intermediation in the financial landscape focusing mostly on personal development (SACCOs Review, 2012). Generally, the SACCO sub-sector is on the growth regime. For instance, in December 2012, the total assets for the SACCO sub-sector stood at Ksh.216 billion, representing a growth of 11% from the Ksh.194 billion recorded in 2009. During this period, the growth in assets was funded mainly by member deposits and share capital at Ksh.164 billion comparing favourably with loans and advances which accounted for 73% (or Ksh.158 billion) of the total assets. The balance of the funds is financed by retained earnings and loans from commercial banks and other financial institutions (Muchemi, 2005).

The SACCOs are found in almost all sectors of the economy and about 80% of the Kenyan population derives their income either directly or indirectly through SACCO initiatives. In practice, SACCOs in Kenya face stiff competition from other players in the financial services sector like commercial banks, micro-finance institutions, shylocks, and investment groups. Out of the approximate population of 41 million, a significant 24.6million people (63%) participate either directly or indirectly in SACCO enterprises (SACCO annual report, 2013). However, despite the significant government initiative to support cooperative movements through legislation, a significant 3457 (51%) of the SACCOs were not operational. This high failure rate of SACCOs continues to frustrate Millennium Development Goals (MDGs) and Vision 2030 objectives of increasing financial inclusion Pollet (2013).

Statement of the Problem

The capacity of a SACCO to provide its members with financial services is closely connected to its capacity to manage its liquidity and capital in an efficient and prudent manner, thus, proper management of a SACCO's liquidity and capital base enables its members to access their savings, get loans and overdrafts as well as any other financial services a SACCO member may require from their SACCO in a timely manner (Song'e, 2015). In as far as studies on performance of SACCOs is concerned, there is conflicting information from literature review on which valid financial management practices influence performance of SACCOs. That is; Conflicting study results show both positive and negative influence of liquidity on firm performance. For instance, some stream of researchers have found that there is a positive relationship between liquidity and financial performances; Song'e (2015); Mwangi (2014); while some have found a negative relationship between liquidity and firm performance; Khan & Syed (2013); Marozva (2015); Muriithi & Waweru (2017).

Further, Kivuvo and Olweny (2014); Adalakun and Olufemi (2015); Odunga *et al.* (2013); found that capital adequacy had positive relationship with performance of SACCOs while Saona (2010) study revealed a negative relationship between capital ratio and firm profitability. But in spite of these studies showing conflicting results on effect of capital adequacy on firm performance, the results had statistical censure since regression model assumptions were not considered while running inferential analysis, thus fell short of valid and reliable statistical inference.

More so, Kivuvo and Olweny (2014), Abbu-Rub and Abbad (2012); Gull and Rasheed (2013); found a positive relationship between leverage parameters and financial performance of financial lending institutions, SACCOs included while Amidu (2007) and Titman and Wessels (2008) found a negative relationship between debt equity ratio and profitability.

Therefore, while there are conflicting results on the effect of capital adequacy, liquidity and leverage on firm performance, there is little empirical evidence on the influence of capitalization on performance of SACCOs, a gap that was filled by this study that endeavored to investigate the influence of liquidity management, capital adequacy, leverage and capitalization on financial performance of SACCOs in Kisumu County, Kenya.

Objectives of the Study

The general objective of this study was to investigate the influence of financial management practices on financial performance of SACCOs in Kisumu County, Kenya. The specific objectives were:-

- To assess the influence of liquidity management practices on financial performance of SACCOs in Kisumu County, Kenya.
- To examine the effect of capital adequacy practices on financial performance of SACCOs in Kisumu County, Kenya.

- To evaluate the influence of capitalization practices on financial performance of SACCOs in Kisumu County, Kenya.
 - To determine the effect of leverage practices on financial performance of SACCOs in Kisumu County, Kenya.
- **Research Hypotheses**
- **Ho₁:** There is no significant relationship between liquidity management practices and financial performance of SACCOs in Kisumu County, Kenya.
 - **Ho₂:** There is no significant relationship between capital adequacy practices and financial performance of SACCOs in Kisumu County, Kenya.
 - **Ho₃:** There is no significant relationship between capitalization practices and financial performance of SACCOs in Kisumu County, Kenya.
 - **Ho₄:** There is no significant relationship between leverage practices and financial performance of SACCOs in Kisumu County, Kenya.

LITERATURE REVIEW

Theoretical Framework

Liquidity Theory

Liquidity theory was crafted by Emery (2013) and the theory proposes that credit rationed companies use more trade credit than those with normal access to financial intermediaries. That is, the central point of this liquidity theory is that when there is a restricted monetary policy, the offer of trade credit can make up for the reduction of the credit offer from financial intermediaries. In accordance with this theory, large firms, presenting good liquidity or better access to capital markets can finance those constrained by the policy. Many approaches have tried to obtain empirical evidence to support this theory; for instance, Nielsen (2012)

using small financial lending firms as a proxy for credit rationed companies found that in monetary contraction they react by borrowing more from their suppliers. As a result, trade credit tends to be less used in countries where companies have good relations with banks. Liquid firms are less likely to demand trade credit and more likely to offer it, a negative relation between buyers' access to other sources of financing and trade credit use is expected (Petersen & Rajan, 2009).

Liquidity theory is therefore relevant to this study in that it will assess how SACCOs manage their credit based on monetary and lending policies and how their controlling of liquidity risks impacts on the financial and non-financial performance of the SACCOs.

Agency Theory

Agency theory addresses the relationship where in a contract 'one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent' (Jensen & Meckling, 2009). This happens because of the separation of ownership and control, when the owner of the company or the board of directors (the 'principals') have to employ managers ('agents') to run the business and need to monitor their performance to ensure they act in the owner's interest (Lan & Heracleous, 2010).

More so, the agency theory is based on the assumption that the interests of the agent and principal diverge. However, the principal may limit the divergence from his interests by establishing appropriate interests for the agents. An agent must be motivated and monitored to create wealth; this arrangement portrays agents as potentially fraudulent and principals as policemen enforcing the law (Arthurs & Busenitz, 2013). The managers are rewarded financially for maximizing shareholder interests. Such schemes typically include plans whereby senior executives obtain shares, perhaps at a reduced price, thus aligning financial interests of executives with those of shareholders. Other similar schemes tie executive compensation and

levels of benefits to shareholders returns and have part of executive compensation deferred to the future to reward long run value maximization of the corporation and deter short-run executive action which harms corporate value (Jensen & Meckling, 2009). Therefore, the agency theory connects to this study in the sense that managers of SACCOs as agents of shareholders (SACCO members shares) should foster shareholders' interests by effective liquidity management or coming with up with viable financial management practices like capitalization, financial leveraging, so as to boost financial performance of SACCOs that they manage.

Market Power Theory

Modigliani and Miller (1950) approach to capital advocates capital states that the market value of a firm is affected by its future capital growth prospect apart from the risk involved in the investment. Its propositions were: financial leverage is in direct proportion to the cost of equity and no taxes based on the following assumptions: there is no taxes, transaction cost for buying and selling securities as well as bankruptcy cost is nil, There is symmetry of information, the cost of borrowing is the same for investors as well as companies and debt financing does not affect companies EBIT.

The market power theory thus postulates that the existence of entry barriers is the major determinant of firm profits and thus high costs of entry makes it easier for existing firms to maintain monopoly profits. Entry barriers can be in the form of strict regulations. In the SACCO industry in Kenya, this is portrayed by capital adequacy requirements that prevent easy entry into the industry. New entrants will diminish the level of those profits. Capital requirements often lock out new entrants resulting in monopoly tendencies. The rate of entry is relatively low in the SACCO industry in Kenya. However, this is not to say that capital requirements are main barriers of entry to the SACCO industry. Entry barriers can also be designed to increase efficiency. Such barriers are referred to as structural barriers (OECD, 2007). They reflect the

basic industry conditions. With regard to capital adequacy requirement, SASRA seeks to protect investors and member's interests (SASRA, 2017). The market power theory therefore applies to this study because the SACCOs with a strong position in the market (market value and share) are likely to achieve higher performance in both financial and non-financial terms.

Empirical Review of Literature Relevant to the Study

Liquidity management and financial performance of SACCOs

Liquidity is the degree to which an asset or security can be quickly bought or sold in the market without changing the asset's price. It is therefore evident that inadequate liquidity arising from liquidity mismanagement may be harmful to the smooth operations of financial lending institution (Janglani & Sandhar, 2013).

Empirically, Nyabate (2015) conducted a study on effect of liquidity on the financial performance of financial institutions listed in the Nairobi securities exchange. The research sought to establish the effect of liquidity on the financial performance of financial institutions listed in the Nairobi Securities Exchange. The study adopted descriptive research design where secondary data was retrieved from the balance sheets, income statements and notes of 19 financial institutions in the NSE for period covering 2010-2014. The results indicated that liquidity was a significant predictor of financial performance; liquidity management should be a key factor to be considered in boosting financial performance of financial lending institutions.

More so, Shafana (2015) examined the link between liquidity and financial performance of financial institutions in Sri Lanka. The study adopted panel research design covering 2009 to 2013. The study collected secondary data from annual financial statements of 16 listed commercial banks. Liquidity position was measured by cash position indicator, capacity ratio and total deposits. Both

correlation and regression analysis were used to analyze the data. Results of the study revealed a positive and significant relationship between cash position indicator, total deposit and firm performance while capacity ratio had negative and significant influence on firm performance. However, multiple regression assumptions were not considered in the study which could cause statistical analysis errors posing a threat to validity of study conclusions.

In contrast some studies have also found a negative relationship between liquidity and firm performance. For instance, Khan and Syed (2013) conducted a study on liquidity risk and performance of the banking system in Pakistan. Data was collected from the income statements and balance sheet of 15 Pakistani banks during 2006-2011. Non-performing loans and liquidity gap were the two independent variables which exacerbate the liquidity risk i.e., creating a negative association with profitability. Further, Marozva (2015) carried a study on Liquidity and bank performance in South Africa for the period between 1998 and 2014. The study employed the Autoregressive Distributed Lag bound testing approach and the Ordinary Least Squares to examine the nexus between net interest margin and liquidity. The study findings showed that there is a negative significant deterministic relationship between net interest margin and funding liquidity risk.

Capital adequacy and financial performance of SACCOs

Kivuvo and Olweny (2014) examined the performance of SACCO's in Kenya using the Altman Z Score Model of Corporate Bankruptcy. The study focused on predictor variables of bankruptcy and the financial stability of SACCO's. The study found that liquidity and leverage had significant impact of SACCO performance. According to the study, financial stability enhances economic performance. The study concluded that SASRA was right in advocating for additional capital base for SACCO's. They recommended that SACCO's improve their liquidity, profitability, operating efficiency and total

assets turnover if they must remain in business and meet the capitalization threshold of SASRA.

In reference to banking institutions, Adelakun and Olufemi (2015) examined the relationship between capital adequacy and bank profitability through linearity approach. The study adopted panel research design, collected five secondary data from selected commercial banks financial statements. Results of the study revealed a positive and significant relationship between capital adequacy and bank profitability. The results revealed that the higher the equity levels the better the prospects for superior performance. It was concluded to maintain investor confidence there is need to continuously ensure that commercial banks adhere to minimum capital requirement ratios and consequently increase the level of credit creation and safeguard customers' deposit. Although, the study used panel secondary data regression model assumptions were not considered and their violation could challenge validity of the study conclusions.

In a study with insignificant results, Odunga *et al.* (2013) studied the effect of credit risk and capital adequacy on the performance of commercial banks in Kenya and found that capital adequacy had no significant impact on bank performance. In another study with negative results, Saona (2010) investigated the relationship between the capital structure of commercial banks in the United States and performance and study revealed that a negative relationship existed between the capital ratio and the profitability for the banking industry. However, a study by Berger and Bowman (2012) indicated that capital helps small banks to increase their probability of survival and market share at all times (during banking crises, market crises, and normal times) and further argued that capital enhances the performance of medium and large banks primarily during banking crises

In Kenya, Barus, Muturi and Kibati (2017) examined the relationship between capital adequacy and performance of savings and credit cooperative societies in Kenya. The study adopted exploratory

research design. The study adopted census sampling of all SACCOs which had been in operation from 2011 to 2015. Primary data was used in the study. Results of the study revealed a positive and significant relationship between capital adequacy and firm performance. The study recommended that SASRA ought to examine the adherence with capital adequacy requirements among Saccos in Kenya. Since the data was cross sectional it was not appropriate to analyze the data using regression analysis. Moreover, the measurement of capital adequacy using Likert scale was not appropriate and it would have been appropriate to use secondary data which has been adopted in this study.

Leverage and financial performance of SACCOs

Firms finance their assets and operations through debt, short term or long term and through issue of equity and also through reserves such as retained earnings. An unlevered firm is one which does not have debt in its capital structure whereas a levered firm has debt component in its capital structure (Song, 2005). Song, (2005) goes on to define two leverage terms; operational leverage and financial leverage. Operational leverage is related to company fixed operating cost while financial leverage relate to company debt also referred to as gearing. Operation leverage relates to the business risk whereas financial leverage is associated with financial risk (Song, 2005).

Kivuvo and Olweny (2014) examined the performance of SACCO's in Kenya using the Altman Z Score Model of Corporate Bankruptcy. The study focused on predictor variables of bankruptcy and the financial stability of SACCO's. The study found that liquidity and leverage had significant impact of SACCO performance. According to the study, financial stability enhances economic performance. The study concluded that SASRA was right in advocating for additional capital base for SACCO's. They recommended that SACCO's improve their liquidity, profitability, operating efficiency and total

assets turnover if they must remain in business and meet the capitalization threshold of SASRA.

Capitalization and financial performance of SACCOs

Many studies have shown that savings is one of the most crucial financial needs of SACCOs since it provides seed capital which is an indication of their usual lack of access to formal institutional credit. Thus with an improved financial system, SACCOs savings is boosted which is vital for their expansion and growth. In Kenya especially, SACCOs are important agents of job creation and official policy that provides impetus for savings cannot be overemphasized. Some SACCOs compel their members to save and then lock-in their savings until it is their turn in the rotation to be paid or when they leave the organizations (Mutebi, 2002).

In Kenya withholding tax is charged on the interest on savings leads to high operational costs to the SACCOs due to the extra volume of records that must be maintained. This it is not economical to operate a large number of small accounts. Proximity to of SACCO services greatly increases the willingness to save an expanded network of SACCO branches will encourage savings with formal institutions due to the reduction in the transactional costs of acquiring deposits. However the SACCOs must take the local conditions into account so as to maximize on deposit mobilization (Wright, 2000).

While proximity to SACCO facilities is of the essence in savings mobilization, confidence in the SACCOs' financial system is also crucial. Recently, SACCOs have collapsed with the savings of Kenyans which fails to promote the saving culture since. The argument however is that, these financial collapses, affect only the locally owned financial institutions and not the foreign owned financial institutions (Economist Intelligence Unit, 2004).

Conceptual Framework

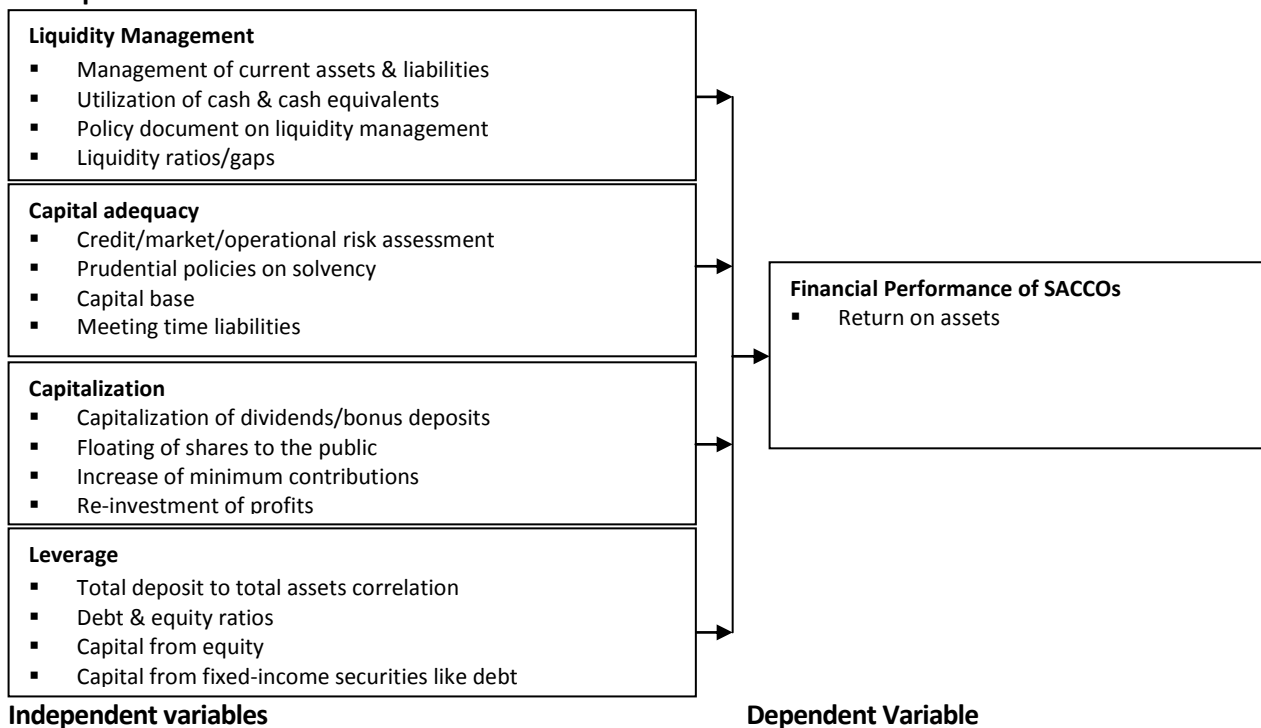


Figure 1: Conceptual Framework

Source: Author (2019)

METHODOLOGY

This study utilized descriptive survey design defined by Mugenda and Mugenda (2003) as a design that helps the researcher to collect information that describe, explore and help the investigator understand social life.

The target population of the study was 151 employees of all the 19 SACCOs in Kisumu County. A sample size of 110 senior and middle level management staff of SACCOs in Kisumu County was selected using stratified random sampling technique. The study used structured (close ended) questionnaire to get uniform responses from respondents. The multiple regression model equation was; $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$; where;

Y is the dependent variable (Performance of SACCOs in Kisumu County), α is the constant

β_1, \dots, β_4 are beta coefficients

X_1, \dots, X_4 are independent variables (liquidity management, capital adequacy, capitalization, leverage) and ϵ is the error term.

FINDINGS

Liquidity management and Financial Performance of SACCOs

This assessed objective one of the study; that is, the influence of liquidity management on performance of SACCOs in Kisumu County. Respondents were asked to respond to 6 statements presented as follows; (i) the SACCO had enough cash to meet its obligations effectively; (ii) all SACCO's debts were dully collected in time; (iii) there was efficient management of assets and liabilities; (iv) there was efficient utilization of cash and cash equivalents; (v) there was a well-defined policy document on liquidity management and (vi) generally, liquidity management influences SACCO performance. The results were presented in the table 1.

Table 1: Descriptive Statistics; Liquidity Management

Statement	Frequency and Percentage (%)					Mean	Std.Dev
	5	4	3	2	1		
1.The SACCO has enough cash to meet its obligations effectively	12(12.6)	49(51.6)	4(4.2)	20(21.1)	10(10.5)	3.35	0.944
2.All SACCO's debts are dully collected in time	13(13.7)	51(53.7)	5(5.3)	14(14.7)	12(12.6)	3.41	0.759
3.There is efficient management of assets and liabilities	15(15.8)	52(54.7)	9(9.5)	10(10.5)	9(9.5)	3.57	0.964
4.There is efficient utilization of cash and cash equivalents	13(13.7)	50(52.6)	4(4.2)	20(21.1)	8(8.4)	3.42	0.708
5.There is a well-defined policy document on liquidity management	12(12.6)	48(50.5)	7(7.4)	22(23.2)	6(6.3)	3.40	0.861
6.Generally liquidity management influences SACCO performance	14(14.7)	54(56.9)	4(4.2)	13(13.7)	10(10.5)	3.52	0.810
Valid N (listwise)	95						
Grand mean =	3.445						

From table 1, most respondents agreed (51.6%) and strongly agreed (12.6%) that the SACCO had enough cash to meet its obligations effectively. This implied the 21.1% and 10.5% who disagreed and strongly disagreed could be coming from SACCO that are either young in operation or possibly those with liquidity problems hence were having financial issues with meeting their SACCO obligations. Secondly, most respondents agreed (53.7%) that all SACCO's debts were dully collected in time, thus implying that most SACCOs in Kisumu County had affective debt collection measures while still a sizeable number of respondents disagreed (14.7%) and strongly disagreed (12.6%) that to the statement; meaning that some SACCOs having debt collection hitches.

Further, most respondents agreed (54.7%) and strongly agreed (15.8%) that there was efficient management of assets and liabilities; while a further 52.6% and 13.7% agreed and strongly agreed respectively that there was efficient utilization of cash and cash equivalents; this means that most SACCOs in Kisumu County had effective management of both financial and non-financial

assets which boots their liquidity management levels. This was further affirmed by 50.5% and 12.6% of respondents who agreed and strongly agreed respectively that there was a well-defined policy document on liquidity management. That is, a SACCO's well defined liquidity management policy guides the SACCO in effective utilization of cash and cash equivalents.

Lastly most respondents agreed (56.9%) and strongly agreed (14.7%) that generally, liquidity management influences SACCO performance, implying that most SACCOs in Kisumu County operate strictly within basic liquidity requirements as per SASRA liquidity regulations which prevents them from falling victim of liquidation risks. This is supported by Janglani & Sandhar, (2013) who insisted that inadequate liquidity arising from liquidity mismanagement may be harmful to the smooth financial operations of SACCOs.

Capital adequacy and Financial Performance of SACCOs

This assessed objective two of the study; that was, the influence of capital adequacy on performance of SACCOs in Kisumu County. Respondents were

asked to respond to 6 statements presented as follows; (i) The SACCO has prudential policies on solvency; (ii) The SACCO adheres to minimum capital requirements (iii) The SACCO adequately meets its liabilities on timely basis; (iv) The SACCO

has efficient credit risk management mechanisms; (v) The SACCO has effective market/operational risk assessments and (vi) Generally, capital adequacy influences SACCO performance. The results are presented in the table 2.

Table 2: Descriptive Statistics; Capital Adequacy (CA)

Statement	Frequency and Percentage (%)					Mean	Std.Dev
	5	4	3	2	1		
1.The SACCO has prudential policies on solvency	9(9.5)	47(49.5)	4(4.2)	24(25.2)	11(11.6)	3.20	0.851
2.The SACCO adheres to minimum capital requirements	10(10.5)	54(56.9)	2(2.1)	25(26.3)	4(4.2)	3.43	0.917
3.The SACCO adequately meets its liabilities on timely basis		55(57.9)	7(7.4)	18(18.9)	5(5.3)	3.49	0.881
4.The SACCO has efficient credit risk management mechanisms	11(11.6)	51(53.6)	3(3.2)	21(22.1)	9(9.5)	3.36	0.820
5.The SACCO has effective market/operational risk assessments	9(9.5)	50(52.6)	17(17.9)	16(16.8)	3(3.2)	3.48	0.988
6.Generally, capital adequacy influences SACCO performance	10(10.5)	58(61.1)	7(7.4)	12(12.6)	8(8.4)	3.53	0.909
Valid N (listwise) 95							
Grand mean = 3.415							

From table 2, only 49.5% and 9.5% agreed and strongly agreed respectively that the SACCO had prudential policies on solvency; while 25.2% and 11.6% disagreed and strongly disagreed to the statement. This implied that some SACCOs in Kisumu County had not embraced prudential policies on solvency thus, may fall into indebtedness risk. Secondly, while 56.9% agreed that the SACCO adhered to minimum capital requirements, a sizeable percentage (26.3%) disagreed to this statement implying that there could SACCO in Kisumu county not adhering to SASRA's regulations on minimum capital requirements or were not licensed by SASRA thus could jeopardize members' savings when they face bankruptcy risks.

Further, most respondents agreed (57.9%) that the SACCO adequately meets its liabilities on timely basis; while an additional 53.6% agreed that SACCO has efficient credit risk management mechanisms. This implied most SACCOs in Kisumu County had efficient credit risk management mechanisms and were thus timely meets their liabilities; thus

affirming their strong capital base to meet their financial needs.

More so, 52.6% and 9.5% of respondents agreed and strongly agreed respectively that the SACCO had effective market and or operational risk assessments while only 16.8% disagreed to the statement. This means that most SACCOs in Kisumu County engage in market valuation of their products and assess their operation risks so as to avoid eminent financial operation threats.

Lastly, a good percentage of respondents agreed (61.1%) and strongly agreed (10.5%) that generally, capital adequacy influences SACCO performance. These results are consistent with Kahuthu, Muturi and Kiweu (2015) examined the joint significant contribution of core capital and membership growth on financial performance on deposit taking credit and cooperative societies in Kenya. The study adopted descriptive research design and targeted 124 Saccos which were registered as at 31/12/2012. Primary data was collected through use of closed ended questionnaires. Data was analyzed using

descriptive statistics, correlation and regression analysis. Results of the study revealed that there was a positive and significant relationship between capital adequacy and firm performance. The study concluded that there was need to sensitize on Sacco members on the need to adhere to acceptable requisite ratio so as to boost shareholders' confidence.

Capitalization and Financial Performance of SACCOs

This assessed objective three of the study; that is, the influence of capitalization on performance of

SACCOs in Kisumu County. Respondents were asked to respond to 6 statements presented as follows; (i) The SACCO had a policy on capitalization of dividends; (ii) The SACCO encouraged members to engage in bonus deposits; (iii) The SACCO normally floated shares to members of the public; (iv) The SACCO encouraged members to raise minimum contributions (v) The SACCO engaged in re-investment of profits and (vi) generally, capitalization policies influenced SACCO performance. The results were presented in the table 3.

Table 3 : Descriptive Statistics; Capitalization

Statement	Frequency and Percentage (%)					Mean	Std.Dev
	5	4	3	2	1		
1.The SACCO has a policy on capitalization of dividends	5(5.3)	56(58.9)	6(6.3)	19(20.0)	9(9.5)	3.31	0.940
2.The SACCO encourages members to engage in bonus deposits	13(13.7)	52(54.7)	4(4.2)	16(16.8)	10(10.5)	3.44	0.927
3.The SACCO normally floats shares to members of the public	14(14.7)	40(42.1)	5(5.3)	26(27.4)	10(10.5)	3.23	0.892
4.The SACCO encourages members to raise minimum contributions	9(9.5)	47(49.5)	6(6.3)	23(24.2)	10(10.5)	3.23	0.824
5.The SACCO engages in re-investment of profits	5(5.3)	40(42.1)	10(10.5)	31(32.6)	9(9.5)	3.01	0.962
6. Generally, capitalization policies influence SACCO performance	10(10.5)	49(51.6)	8(8.4)	17(17.9)	11(11.6)	3.32	0.823
Valid N (listwise)	95						
Grand mean =	3.257						

From table 3, most respondents agreed (58.9%) and strongly agreed (5.3%) that the SACCO had a policy on capitalization of dividends. This implied that though capitalization of dividends was a new strategy to attract saving from members, most SACCOs in Kisumu County had embraced this strategy though some respondents disagreed to the statements implying that some SACCO were either not aware of this strategy or had not yet crafted the capitalization policy.

Secondly, 54.7% and 13.7% of respondents agreed and strongly agreed respectively that the SACCO encouraged members to engage in bonus deposits. This meant that SACCOs which had already rolled out the capitalization strategy were already wooing their members to boost their SACCO shares on varied percentage bonus deposits if one capitalizes their dividends. This encouraged members with high dividend payouts to reinvest their dividends at an attractive percentage to gain bonus deposits.

Thirdly, only 42.1% agreed while a sizeable percentage (27.4%) disagreed that SACCO normally floats shares to members of the public. This meant that only few SACCO that had implemented the capitalization policy that allows floating shares to members of the public as a SACCO's savings mobilization strategy. More so, 49.5% and 9.5% agreed and strongly agreed respectively that the SACCO encourages members to raise minimum contributions; implying that a good number of SACCOs in Kisumu County were geared toward raising their capital base by encouraging members to raise minimum share contributions; which also improves members' share growth and eventually attracting high loanable funds.

Similarly 42.1% and 5.3% agreed and strongly agreed respectively that SACCO engaged in re-investment of profits; implying that a fairly good number of SACCOs in Kisumu County had embraced this capitalization strategy; and on overall response about capitalization, most respondents agreed

(51.6%) and strongly agreed (10.5%) that capitalization policies influenced SACCO performance. This meant SACCOs that had engaged in capitalization attracts and retains members, improves in shares, membership and savings growth; thus boosting their capital base. This was supported by the Center for Financial Training (2010) argues that inefficiencies or frustrations by some SACCOs can lead to a disincentive to save among the citizens or members, thereby affecting their levels of investments adversely and impacting on their financial performance negatively.

Leverage and Financial Performance of SACCOs

This assessed objective four of the study; that is, the influence of leverage on performance of SACCOs in Kisumu County. Respondents were asked to respond to 6 statements and the results are presented in the table 4.

Table 4: Descriptive Statistics; Leverage

Statement	Frequency and Percentage (%)					Mean	Std.Dev
	5	4	3	2	1		
1.The SACCO has viable financial leverage strategies	8(8.4)	50(52.6)	3(3.2)	23(24.2)	11(11.6)	3.22	1.239
2.Debt & equity ratios influence SACCO performance	8(8.4)	43(45.3)	10(10.5)	28(29.5)	6(6.3)	3.20	1.145
3.Capital from equity affects SACCO performances	11(11.6)	46(48.4)	13(13.7)	21(22.1)	4(4.2)	3.41	1.087
4. The SACCO raises good capital from fixed-income securities	8(8.4)	48(50.6)	4(4.2)	25(26.3)	10(10.5)	3.20	1.226
5.The SACCO has effective debt management mechanisms	9(9.5)	46(48.3)	7(7.4)	20(21.1)	13(13.7)	3.19	1.266
6.Generally, financial leverage influence SACCO performance	13(13.7)	55(57.9)	6(6.3)	15(15.8)	6(6.3)	3.57	1.108
Valid N (listwise) 95							
Grand mean = 3.298							

From table 4 most respondents agreed (52.6%) and strongly agreed (8.4%) that the SACCO had viable financial leverage strategies, meaning that most SACCOs had implemented leverage strategies as a viable financial management practice. Similarly,

most respondents agreed (45.3%) and strongly agreed (8.4%) that debt and equity ratios influence SACCO performance. This implied that most SACCOs in Kisumu County had embraced effective debt management practices and equity ratios as efficient

SACCO financial management practice. This was also affirmed by 48.3% and 8.4% of respondents who agreed and strongly agreed respectively that the SACCO had effective debt management mechanisms.

Further, most respondents agreed (48.4%) and strongly agreed (11.6%) that Capital from equity affected SACCO performances while an additional 50.6% and 8.4% agreed and strongly agreed respectively that the SACCO raised good capital from fixed-income securities. This implied that most SACCOs' in Kisumu County raise capital from equity and fixed-income securities to boost their financial

base while some SACCOs had not yet embraced this financial leveraging practice.

On overall basis, most respondents agreed (57.9%) and strongly agreed (13.7%) that, generally financial leverage influence SACCO performance; which was supported by Song (2005) assertion that firms finances their assets and operations through debt; short term or long term and through issue of equity and also through reserves such as retained earnings; thus, an unlevered firm is one which does not have debt in its capital structure whereas a levered firm has debt component in its capital structure.

Inferential Analysis

Table 5: Correlations

		Liquidity Management	Capital Adequacy	Capitalization	Leverage	Sacco Performance
Liquidity Management	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	95				
Capital Adequacy	Pearson Correlation	.655**	1			
	Sig. (2-tailed)	.000				
	N	95	95			
Capitalization	Pearson Correlation	.720**	.674**	1		
	Sig. (2-tailed)	.000	.000			
	N	95	95	95		
Leverage	Pearson Correlation	.606**	.582**	.590**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	95	95	95	95	
Sacco Performance	Pearson Correlation	.790**	.775**	.786**	.677**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	95	95	95	95	95

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

Table 6: Multiple Regression Analysis

Model Summary					
Model	R	R Square	Adjusted R	Std. Error of	Change Statistics

		Square	the	R Square	F Change	df1	df2	Sig. F Change	
			Estimate	Change					
1	.877 ^a	.768	.758	.55930	.768	74.592	4	90	.000
ANOVA ^b									
Model		Sum of Squares	df	Mean Square		F			Sig.
1	Regression	93.336	4	23.334		74.592			.000 ^a
	Residual	28.154	90	.313					
	Total	121.489	94						

b. Dependent Variable: Sacco Financial Performance

Table 6 showed the multiple regression results of the combined effects of the four independent variables (liquidity management, capital adequacy, capitalization, leverage). The results in table 6 shows that the F-statistics produced is significant ($F=74.592$, significant at $p<0.001$), thus confirming the fitness of the model. For an R square of 0.768, this indicates that the study model explains 76.8% of the variations in the financial performance of SACCOs in Kisumu County, while other factors not in this study model accounts for 23.2%, thus, it is a good model.

Further, from the values of unstandardized regression coefficients with standard errors, all the independent variables (liquidity management; $\beta = 0.292$ (0.060) at $p<0.01$; capital adequacy; $\beta = 0.286$ (0.110) at $p<0.05$; capitalization; $\beta = 0.374$ (0.125)

at $p<0.05$, leverage; $\beta = 0.300$ (0.123) at $p<0.05$; were significant predictors of the financial performance of SACCOs in Kisumu County (dependent variable). Therefore, the multiple regression equation for overall significant influence of the independent variables (liquidity management, capital adequacy, capitalization, leverage) on the financial performance of SACCOs in Kisumu County (dependent variable) is;

$$(v) Y = 0.510 + 0.292X_1 + 0.286X_2 + 0.374X_3 + 0.300X_4$$

Where;

Y= Financial performance of SACCOs in Kisumu County

X_1 = Liquidity management

X_2 = Capital adequacy

X_3 = Capitalization

X_4 = Leverage

Table 7:Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.510	.188		2.720	.008
	Liquidity Management	.292	.060	.378	4.889	.000
	Capital Adequacy	.286	.110	.275	2.591	.011
	Capitalization	.374	.125	.358	2.997	.004
	Leverage	.300	.123	.288	2.430	.017

a. Dependent Variable: Sacco Performance

Therefore, in summary, all predictor variables (liquidity management, capital adequacy, capitalization and leverage) significantly influenced performance of SACCOs in Kisumu County and from

financial statements of some sampled SACCOs; using secondary data sheet, the net operating surplus after income tax for (i) KITE Sacco Society Ltd improved from kshs.46,911,881 in the year 2016

to Kshs 51,871,591 in the year 2017; (ii) Dunga Fisheries Sacco Society improved from kshs. 883,372.00 in 2016 to kshs. 1,049,056.00 in 2017; (iii) Kihomi sacco society Ltd improved from kshs.1,958,331.00 in 2016 to kshs. 2,511.746.00 in 2017;(iv) Metropolitan Sacco Society improved from kshs. 8,539,608.00 to kshs. 9,741,991.00. These SACCOs attributed financial improvement to effective liquidity management practices, adherence to capital adequacy requirements and financial leveraging.

Hypothesis Testing

Research **Hypothesis one** stated that there is no significant relationship between liquidity management and performance of SACCOs in Kisumu County, Kenya. The study results indicate that there exists a positive and significant effect of liquidity management on the performance of SACCOs in Kisumu County ($\beta = 0.292$ (0.060), at $p < 0.01$). **Hypothesis one was thus rejected.** The results therefore implied that a single improvement in efficient liquidity management practices by SACCOs in Kisumu County led to 0.292 unit improvement in the performance of SACCOs in Kisumu County. These results were supported by Shafana (2015) who examined the link between liquidity and financial performance of financial institutions in Sri Lanka. The study adopted panel research design covering 2009 to 2013 and used secondary data. Liquidity position was measured by cash position indicator, capacity ratio and total deposits. Both correlation and regression analysis were used to analyze the data. Results of the study revealed a positive and significant relationship between cash position indicator, total deposit and firm performance while capacity ratio had negative and significant influence on firm performance.

However, Khan and Syed (2013) conducted a study on liquidity risk and performance of the financial lending institutions in Pakistan. Data was collected from the income statements and balance sheet of 15 Pakistani banks during 2006-2011. Non-performing loans and liquidity gap were the two independent variables which exacerbate the

liquidity risk that is, creating a negative association with profitability.

Research **Hypothesis two** stated that there is no significant relationship between capital adequacy and performance of SACCOs in Kisumu County, Kenya. The study results indicate that there exists a positive and significant effect of capital adequacy on the performance of SACCOs in Kisumu County ($\beta = 0.286$ (0.110), at $p < 0.05$). **Hypothesis two was thus rejected.** The results therefore implied that a single improvement in effective capital adequacy requirements by SACCOs in Kisumu County will lead to 0.286 unit improvement in the performance of SACCOs in Kisumu County. These results are supported by Kivuvo and Olweny (2014) who examined the performance of SACCO's in Kenya using the Altman Z Score Model of Corporate Bankruptcy. The study focused on predictor variables of bankruptcy and the financial stability of SACCO's. The study found that liquidity and leverage had significant impact of SACCO performance. According to the study, financial stability enhances economic performance. The study concluded that SASRA was right in advocating for additional capital base for SACCO's. They recommended that SACCO's improve their liquidity, profitability, operating efficiency and total assets turnover if they must remain in business and meet the capitalization threshold of SASRA.

Further, Barus, Muturi and Kibati (2017) also examined the relationship between capital adequacy and performance of savings and credit cooperative societies in Kenya. The study adopted exploratory research design. The study adopted census sampling of all SACCOs which had been in operation from 2011 to 2015. Primary data was used in the study. Results of the study revealed a positive and significant relationship between capital adequacy and firm performance. The study recommended that SASRA ought to examine the adherence with capital adequacy requirements among Saccos in Kenya.

These results were also supported by Kioko (2016) who also examined the effect of capital adequacy regulations on savings and credit cooperative in Kenya. The study adopted descriptive research design; census approach was used to select 35 Saccos which were operating in Nairobi County. Primary data was collected using both questionnaires and interview guide. Data was analyzed using both descriptive and inferential statistics. The study found a significant correlation between capital adequacy regulations and financial performance of SACCOs.

Research **Hypothesis three** stated that there is no significant relationship between capitalization and performance of SACCOs in Kisumu County, Kenya. The study results indicate that there exists a positive and significant effect of capitalization on the performance of SACCOs in Kisumu County ($\beta=0.374$ (0.125), at $p<0.05$). **Hypothesis three was thus rejected.** The results therefore implied that a single improvement in effective capitalization practices by SACCOs in Kisumu County will lead to 0.374 unit improvement in the performance of SACCOs in Kisumu County. These results are supported by Mutebi, (2002) assertion that savings is one of the most crucial financial needs of SACCOs since it provides seed capital which is an indication of their usual lack of access to formal institutional credit. Thus with an improved financial system, SACCOs savings is boosted which is vital for their expansion and growth. In Kenya especially, SACCOs are important agents of job creation and official policy that provides impetus for savings cannot be overemphasized. Some SACCOs compel their members to save and then lock-in their savings until it is their turn in the rotation to be paid or when they leave the organizations. Porteous, Collins, and Abrams (2010) also reinforced that supervision of SACCOs is ensuring that customers' savings are safeguarded especially when they are invested for income.

Lastly research **Hypothesis four** stated that there is no significant relationship between leverage and performance of SACCOs in Kisumu County, Kenya.

The study results indicate that there exists a positive and significant effect of leverage on the performance of SACCOs in Kisumu County ($\beta=0.300$ (0.123), at $p<0.05$). **Hypothesis four was thus rejected.** The results therefore implied that a single improvement in effective financial leveraging practices by SACCOs in Kisumu County will lead to 0.300 unit improvement in the performance of SACCOs in Kisumu County. These results are supported by Gweny and Karanja (2014) who examined the effect of leverage on financial performance of deposit taking SACCOs in Kenya. The research was based on 40 SACCOs which were registered by SASRA from year 2010 to year 2013. They employed correlation analysis to determine the relationship between debt equity ratio as the explanatory variable and return on equity, return on asset, profit after tax and income growth as measure of firm performance. Their results were that there was strong positive correlation between debt equity ratio and return on equity (ROE) as well as debt equity ratio and profit after tax both at 99%. On the contrary they found that there was a weak correlation between debt equity ratio and return on asset (ROA).

Kivuvo and Olweny (2014) also examined the performance of SACCO's in Kenya using the Altman Z Score Model of Corporate Bankruptcy. The study focused on predictor variables of bankruptcy and the financial stability of SACCO's. The study found that liquidity and leverage had significant impact of SACCO performance. According to the study, financial stability enhances economic performance. The study concluded that SASRA was right in advocating for additional capital base for SACCO's. They recommended that SACCO's improve their liquidity, profitability, operating efficiency and total assets turnover if they must remain in business and meet the capitalization threshold of SASRA.

CONCLUSIONS

First, the study concluded that liquidity management is a significant predictor of financial performance of SACCOs, thus liquidity position of a

SACCO in terms of cash position, capacity ratio and total deposits really influence financial performance of a SACCO.

Secondly, capital adequacy significantly influences financial performance of SACCOs, thus, improvement in effective capital adequacy requirements by SACCOs can have a positive impact on the financial performance of SACCOs.

Thirdly, capitalization has shown to be a significantly predictor of SACCOs performance, thus SACCOs that engage in effective capitalization practices can boost their capital base and subsequently an improvement in financial performance.

Lastly, financial leveraging significantly influences performance of SACCOs, thus SACCOs that adopt effective financial leveraging practices especially managing debt equity ratios will definitely experience an improvement in performance.

Recommendations

First, SACCOs should adopt resilient liquidity management practices to enable them boost their

financial performance in both good and bad economic times.

Secondly, SACCOs should adhere to SASRA's minimum capital adequacy requirements so as to cushion themselves against insolvency risks.

Thirdly, SACCOs should prudently embrace the new capitalization policy as a savings mobilization and customer retention strategy so as to boost their capital and membership base.

Lastly, SACCOs should adopt concrete financial leveraging mechanisms so as to effectively manage their debt equity ratios, thus, enable them have resilient financial performance.

Areas for Further Research

First, a similar research can be done using a panel study and time series data so as to compare results.

Secondly, a longitudinal study can be done so as to compare results with this study's cross sectional data.

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