EFFECTS OF LIQUIDITY-RISK MANAGEMENT PRACTICES ON THE FINANCIAL PERFORMANCE OF SAVINGS AND CREDIT CO-OPERATIVE SOCIETIES IN KISII COUNTY, KENYA

Elikanah Mochama Osoro

Masters Student, Jomo Kenyatta University of Agriculture and Technology, Kenya

Dr. Willy Muturi

Jomo Kenyatta University of Agriculture and Technology, Kenya

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ABSTRACT

Since the introduction of SASRA in 2008, a number of SACCOs have had their licenses canceled due to inadequate compliance to minimum liquidity requirements. In 2014 poor financial performance recorded by most SACCOs in Kenya led to cancellation of 44% of SACCOs operating licenses in Kisii County. The purpose of this study was to examine the effects of liquidity risk management practices on the financial performance of SACCOs in Kisii County. The objectives of the study were to determine the effects of asset quality management, capital adequacy and capital leverage practices on the financial performance of SACCOs in Kisii County. The study was directed by the theoretical concepts of capital adequacy, asset quality management and capital leveraging practices on the financial performance. A descriptive survey design was adopted. The target population was 20 respondents from five licensed SACCOs operating in Kisii County. The study sample size was 20 respondents selected from the population by census sampling technique. Primary data was collected using structured questionnaires. Secondary data was collected from the financial reports prepared by the SACCOs and SASRA. The study found out that Capital adequacy significantly affected ROA in SACCOs (p value = 0.001). Asset quality and capital leverage did not have a significant impact on saving mobilizations (p value = 0.574 and 0.338 respectively). The values for the regression equation for predicting the dependent variable from the independent variable was $Y = 0.023 + 0.029X_1 - 0.012X_2 - 0.002X_3$

Key Words: *Liquidity-risk Management Practices, SACCOs, Financial Performance*

INTRODUCTION

The role of liquidity in SACCOs has increased rapidly in recent years. After the 2008 financial crisis liquidity risk has gradually been considered among the major risks that can potentially interfere with the going concern of SACCOs. Liquidity is the ability of a SACCO to fund increases in assets and meet obligations as they come due without incurring acceptable losses (Basel committee of banking supervision report, 2008) It indicates whether the Credit Union or SACCO is administering its cash so that it can meet deposit, withdrawal requests and liquidity reserve requirements, while at the same time, minimizing the amount of idle funds that earn no economic returns. (Kwadwo, 2001)

Liquidity risk management systems involve analyzing balance sheet positions to forecast future cash flows but also how the funding requirements could be met. The latter involves identifying the funding market to which the SACCO has access, understanding the nature of those markets, evaluating the SACCO's current and future use of the market and monitoring signs of confidence erosion. To manage liquidity positions, banks should look at both the long term positions and exposure to large depositors among other things (Navdeep, 2014).

The nature of transactions done by SACCOs potentially exposes them to financial losses when underlying risks are not managed in time. The failure of a SACCO to meet its obligation due to lack of sufficient liquidity, will result in poor creditworthiness and loss of member's confidence. Avery high degree of liquidity is also bad; idle assets earn nothing. The SACCO's funds will be unnecessarily tied up in current assets. SACCOs like other financial institutions therefore require matching level resources to the short term FOSA deposits and other liabilities in order to remain liquid (SACCO supervision report, 2013).

Many SACCOs have liquidity problems because of not having withdrawable savings products and large amounts of funds invested in non earning assets (Graham, 2007). In Europe the existing dissimilarity in monetary transmission has been negatively affected by the adverse turn in the economy since 2008, which has led to increased economic uncertainty, a breakdown in money market liquidity and doubts about soundness of euro area financial institutions and their sovereigns (Ivo, 2014).

Ilhomovich (2009) in his research on factors affecting the performance of foreign banks in Malaysia used cash to deposit ratio to measure the liquidity level of banks. However, Said and Tumin (2011) conducted a study in China and Malaysia and found that liquidity level of banks has no relationship with the performances of banks. In South Africa, Ifeacho (2014) studied the performance of the South African Banking Sector Since 1994 and found out that all bank-specific variables are statistically significant at conventional levels for both return on assets (ROA) and return on equity (ROE) equations. Specifically, the study had shown that asset quality (measured by assets to capital employed ratio), management quality (measured by operating profits per employee ratio), and liquidity (measured by quick ratio) have a 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.

In Ghana Credit Unions are required to maintain an amount ranging from 10% of savings deposits to 20% in liquid accounts and also to reduce the percentage of idle liquidity to as close to zero as possible in order to comply to the world council of credit unions. (Kwadwo, 2001). In Tanzania, sources of external credit have now been guaranteed for the cooperative movement. However, this situation highlights the problem of dependency on external sources of credit for the liquidity needs of marketing cooperatives. The excess liquidity of SACCOs could be more effectively used to serve the credit needs of cooperative members and subsequently decrease dependency on external finance sources. Moreover, this liquidity could be used to provide storage facilities that give farmers more power over the selling price of their crop (Emma et-al, 2009).

In the Kenyan context, Olweny and Shipo (2011) analyzed the determinants of bank failures in Kenya using the CAMEL model and concluded that Asset quality and liquidity are the determinants of Kenyan bank failures.

Ongore and Kusa (2013) found out that the financial performance of commercial banks in Kenya is driven primarily by board and management decisions. Macroeconomic factors have insignificant contribution. In addition, Fredrick (2014) in his research on the effect of liquidity risk management on financial performance of banks in Kenya found that liquidity risk management has a significant negative relationship with financial performance of commercial banks. Borrowings from banks by commercial banks to meet shorter liquidity needs do have the greatest impact on liquidity at 14.2%. Managing liquidity and capital levels, while meeting the needs of members for finance, has been one of the major ongoing challenges for cooperative financial institutions in Africa (Emma et-al, 2009).

As part of liquidity risk compliance practice all SACCO Societies in Kenya are required to maintain 15% of its savings deposit and short term liabilities in liquid assets; SACCO society shall not acquire external borrowings in excess of twenty five percent of its total assets unless the limit is waived by the authority (SACCO societies Regulations, 2010).

PROBLEM STATEMENT

SACCOs are important economic players as they serve millions of members; the industry is part of the cooperative sector that has positively impacted on the lives of many Kenyans over the years. SACCOs mobilize both domestic and international financial resources. They are challenged by issues like management of financial performance and capital levels as they struggle to serve their members financial needs. In 2009 SASRA issued regulations on deposit taking SACCOs which centered on Capital adequacy ratio of 10% on core capital to total assets, 8% on core capital to total deposits and 8% on institutional capital to total assets. SACCO societies that didn't meet this requirement were denied license of deposit taking business in the year 2014. In Kisii county 56% of the SACCOs were issued with license certificates of operation while 44% were denied license certificates due to inadequate observation of SASRA minimum requirement in compliance to issues of liquidity risk management. It is not clear the extent to which liquidity-risk management relate to financial performance of these SACCOs which have been in operation for some time but later had their licenses canceled. This study seeks to assess effects of liquidity risk management practices on the financial performance of SACCOs in Kisii County, Kenya.

GENERAL OBJECTIVE

The main objective of this study is to assess the effects of liquidity risk management practices on the financial performance of SACCOs in Kisii County.

SPECIFIC OBJECTIVES

1. To examine the effects of asset quality on the financial performance of SACCOs in Kisii County.
2. To determine the effects of capital adequacy on the financial performance of SACCOs in Kisii County.
3. To establish the effects of capital leverage on the financial performance of SACCOs in Kisii County.

LITERATURE REVIEW

Theoretical Literature on Liquidity risk

Liquidity risk can be defined as the potential exposure to losses on the interest of stakeholders of a financial institution as a result of inability to meet effectively their obligations as they fall due. Treasury report on management for SACCOs defines liquidity as the ability to honor cash payment obligations as they fall due by financial institutions. These commitments can be settled off by the available cash balances, use of cash flows, borrowings or by conversion of liquid assets into money (Joachim, 2007). Liquidity risk is influenced by the management of current liabilities and current assets. In Saccos the main current assets are cash and short-term loans while current liabilities are member savings. Liquidity risk happens when the depositors collectively decide to withdraw more funds than the SACCO has immediately on hand hence, liquidity risk applies symmetrically to the borrowers in their relationship with the SACCO and vice versa, SACCOs regularly find imbalances gap between asset and liability sides that need to be equalized because, by nature, SACCOs issue liquid liabilities but invest in illiquid assets. If a SACCO fails to balance such gap, liquidity risk might occur followed by the other exposures such as insolvency risk, government's bail out on the default SACCOs and, reputation risk (Anas and Mounira, 2008).

The quantifiable probability of loss or less than the anticipated returns include the risk of inflation, currency, principal, income counter party, country, counter party, economic, interest rate, credit, call, prepayment, purchasing power, prepayment and event risk (Ogol, 2011)

Liquidity Preference theory

Liquidity and risk transformation are the two central roles performed by SACCOs in the economy according to modern theory of financial intermediation. Analysis of banks role in creating liquidity and thereby spurring economic growth have a long tradition dating back to Adam smith (1776), (Allen et-al, 2008). The theory argues that SACCOs create liquidity on the balance sheet by financing relatively illiquid assets with relatively liquid liabilities. Keynes presents liquidity preference theory there as a liquidity preference theory of interest, a theory that is supposed to fill the vacuum left by what he regarded as a flawed classical savings theory of interest. In the early post General Theory literature, the notion of liquidity preference quickly

became a synonym for the demand for money. Together with a constant stock of money liquidity preference was the factor that determined the rate of interest in the money market of Hicks' (1937) seminal investment Saving to liquidity preference Money supply model, (Jorg, 2005). Working capital management practice contradicts with the theory. It involves managing the relationship between a firm's short-term assets and its short-term liabilities. The goal of working capital management is to ensure that the firm is able to continue its operations and that it has sufficient cash flow to satisfy both maturing short-term debt and upcoming operational expenses. For sufficient funds to satisfy both maturing short-term debt and upcoming operational expenses positive working capital is desirable (Afza and Nazir, 2009). Compliance to solvency issues need be given another consideration. Solvency ratios are financial indicators that show the SACCO's ability and capacity to meet its liabilities from its assets. Solvency indicators are concerned with how much the SACCOs owe in relation to their asset values, whether they are getting into heavier debt or improving their situation and whether their debt burden seems heavy or light. The Sharpe ratio characterizes how well the return of an asset compensates the SACCO for the risk taken. Tobin's q is the ratio between a physical asset's market value and its replacement value. These ratios are important at managing liquidity risk.

The Loanable Funds Theory

The classical theory of interest was developed at the time of classical economists like Adam Smith, David Ricardo and Thomas Malthus, who held the view that economic activities were guided by some kind of invisible hand through the self interest motive and the price mechanism and Government interference was unnecessary and should be kept at minimum. Loanable funds theorists believe that higher saving through lower consumption and lower deficits would lead to a higher credit supply, lower interest rates, more investment and thus a higher capital stock and higher future income (Lindner, 2013). They explained the rate of interest in terms of the demand for money and supply of loanable funds. The demand comes from firms wishing to invest. As the rate of interest gets low the number of profitable projects increase. Thus, the demand curve for funds will slope downwards from left to right. The supply of loanable funds comes from savings. If people are to save they will require a reward interest to compensate them for forgoing present consumption. If the interest rate is high, people will be encouraged to save and lend. If the interest rate is low, people will be discouraged from saving and lending. Hence, the supply curve of loanable funds slopes upwards. The demand for SACCO loans represents the willingness to borrow, and the supply curve for SACCO loans represents the willingness to lend or save. The demanders of loans are households and firms. The quantity borrowed is inversely related to the interest rate, and the quantity lent is directly related to the interest rate (Mishkin, 2004).

The market rate of interest is therefore determined where the demand for and supply of loanable funds are equal. Geometrically this corresponds to the point of intersection between the supply curve and the demand curve for loanable funds. Changes in demand or supply will cause shifts in

the relevant curves and changes in the equilibrium rate of interest. In order for this demand and supply to be effectively met liquidity risk management practices remain relevant also the influence of this liquidity risk management on profitability must be examined. SACCO loans are subject to significantly lesser transaction costs than retail profit seeking banks leading to high demand for credit the resultant is increased exposures of liquidity risks in cases of insufficient mobilisation of savings for on lending (Mwandia, 2014).

Shiftability theory

Shiftabilty theory argues that liquidity of a SACCO is guaranteed when it has assets which can be shifted to other banks before maturity when needed. Shiftability is this sense implies transfer of assets to the central bank and not to other banks. The central bank here is the lender of last resort (Clifford, 2008).

Shiftability involves an approach whereby a proportionate mix of liquid securities and illiquid loans is maintained by depository institutions. The liquid securities form an additional reserve for any unknown future liquidity problems. Secondary reserve is defined in this perspective to mean any security held for conversion during liquidity crisis where cash assets form the primary reserves (Roger et-al, 2004).

Private and Public supply of liquidity theory

In a model developed by bengt (1996) in his paper public and private supply of liquidity in Cambridge he found out that firms can meet future liquidity need by issuing fresh claims while paying the old ones or by holding claims of some firms while at the same time obtaining credit lines from financial institutions. These kinds of actions impose maximum leverage and liquidity constraint. Intermediaries coordinate the use of liquidity and without them it will be subject to waste.

The private sector is always scarce with liquidity; this scarcity in ideal situation is solved by the government issuing bonds to the private sector as a way of solving the paradox of tight liquidity situation. At the same time the government can tighten liquidity when it is high in the market

Sources of Liquidity Risks

Product and Transaction driven sources

According to Salman (2004) in his research on Islamic modes of finance and associated liquidity risks, the nature of banking business by itself exposes banking institutions to liquidity risk as well as the macro factors that are exogenous to the financial institutions and also from the operational procedures and financing. Maturity mismatch can be a potential source of liquidity risks among other factors like the degree of inability to convert assets into liquid cash on demand without incurring losses and unanticipated call for deposits in the side of liabilities.

Secondly liquidity risks can arise from certain business lines or organisational products. This implies that an overall liquidity management framework is required for maintaining optimal liquidity levels. Contingent commitments can also be potential sources of liquidity risks in cases whereby reputational costs of not settling them are severe (Kevin, 2008).

Market trends

Thirdly, the unanticipated variations in the realized and assumed availability of funding can result to liquidity problems in the financial institutions. Also the assumed availability of the market for a firms assets or their commitment as collateral in raising funds can result to liquidity squeeze (Salman, 2004).

Ogol in his research of liquidity risk management in MFI allude that market trends involving movement of more volatile sources of finance may increase liquidity risk. Volatile funding in this case refers to whole sale funds, internet banking and brokered certificate of deposit. The presence of an effective electronic banking system has facilitated switching of funds by depositors leading to a more complicated liquidity management platform (Ogol, 2011)

Lack of Liquidity management contingency plan

Unpreparedness by financial institutions for liquidity shocks is a potential cause of liquidity problems. Salman (2004) found out that the larger the number of scenarios and also range of assumptions for which a financial institution has stress tested the effectiveness of its tactics in liquidity management the greater the chances of success in management of risk.

Event driven sources

Among the SACCOs' specific sources of liquidity risk which has led to loss of market share is negative publicity. Such negative information can attract large withdrawals by customers that will lead to drastic drop in savings and tight liquidity positions. Since savings and shares are the primary sources of funding for on-lending, negative news can financially cripple them (Ogol, 2011).

Managing liquidity risk

Asset Quality Management

Loans are the major SACCO assets. They form a major variable affecting a SACCO's profitability hence their quality is very critical for gauging performance. Asset quality trend in addition to current practices and changes in economic conditions gauge the present and future performance. In SACCOs asset quality is measured in terms of the value of non- performing loans less provisioning as a percentage of loans. Outstanding loans for a period of more than two installments are classified as non-performing loans. In the loan book, non performing loans are further classified into substandard, doubtful and loss according to the length of default. In Kenya

the regulator requires all SACCOs to maintain a maximum of 5% ratio on non performing loans to total loan portfolio (SACCO societies act, 2010). Increasing amount of non-performing loans to total loan portfolio is an indication of declining asset quality.

SACCO loans are financed by shares, deposits and external borrowing. Adequate protection must be given to all assets against losses as a safeguard to deposits. Adequate provisioning should be considered as a primary source of loans protection (Rehema, 2013). Rehema further alludes that poor asset quality leads to high levels of non-performing loans leading to liquidity shortages. I addition, it will lead to inflated asset values and overstated earnings. Since member deposits aren't protected severe liquidity shortage is bound to occur because of lack of enough funds to meet the daily withdrawal demand.

Practices like adequate loan provisioning, implementation of sound loan appraisal procedures, and effective recovery mechanisms can be employed to manage the loan asset and restore an optimal balance in liquidity.

Capital Adequacy Management

The SACCO capital structure consists of institutional capital and non institutional capital. Institutional capital is further classified into member's permanent and non withdrawable shares, statutory reserves, general reserves, retained earnings/ accumulated losses, current year profit and capital donations. The non institutional capital is divided into revaluation reserves, educational reserves, social reserves, temporary reserves and un-distributable reserve (Rehema M, 2013). Banks capital creates liquidity for the bank due to the fact that deposits are most fragile and prone to bank runs. Moreover, greater bank capital reduces the chance of distress (Diamond, 2000).

Capital adequacy indicates sound SACCO capital relative to inherent risk. The aim of capital adequacy is to protect member savings. The measure of capital adequacy is absolute minimum, in Kenya the prescribed minimum core capital is Ksh ten million (SACCO societies act, 2010). The regulator further requires all deposit taking SACCOs to maintain a core capital to total deposit ratio of 8%, core capital to total assets ratio of 10% and institutional capital to total assets of 8%. . Maintaining a specified level of capital promotes member confidence and is by itself an assurance of safety to member's funds.

According to rehema (2013) Inadequate capital can be caused due to persistent loses and also non retention of earnings. Adequate capital enhances safety and soundness of a SACCO, it absorbs losses, improves earnings and also it supports member services, finances, non-earning assets and meeting future competitive pressures. Lack of sufficient reserves to absorb loses will lead to financial instability. Losses interpret to lack of dividends to customers leading to lack of customer confidence, reduced saving levels and ultimate liquidity crisis. Capital serves to support growth as a free source of funds and provides protection against insolvency. Meeting

statutory capital requirements is a key factor in determining capital adequacy. The firms operations and risk position may warrant additional capital beyond the statutory requirements. Capital is a critical element in the firms' risk management program.

Capital Leveraging

Capital structure is a financing tool that helps to determine how SACCOs choose between debt and equity as a way of financing the firm. In order to pursue the profit maximising and cost minimisation objective management must ensure an optimal level of borrowing that minimise costs at the same time maximising profit (Jacob, 2014). Various capital components have different percentage cost, it is important to determine an average cost of capital attributable to various costs of capital which minimises the finance cost. Capital leverage is the extent to which a SACCO is financed by borrowings. Highly leveraged firms are exposed to liquidity risks because of the obligation to honor repayment of interest and principal debt which leads to huge cash outflows. In Kenya SASRA requires all SACCOs to maintain a 25% ratio on external borrowing to total assets (SACCO societies act, 2010).

El-Mehdi (2014) rates financing and liquidity upon several factors like, the adequacy of liquidity sources, ability of the institution to meet demand for liquidity needs without affecting operations, availability of cash convertible assets without loss, access to funding sources, degree of reliance short term source of financing to fund long term assets and deposit stability.

Through the decade the SACCO subsector has continued to expand, this has led to increased demand for funds from shareholders and investors. Deposit to asset ratios are used to measure the relationship between deposits and other balance sheet items. When measured against assets the lower it becomes interprets to an increasing ability of the SACCO to finance its assets from the deposits leading to low cost of financing the higher the ratio the lower the SACCOs ability to fund itself from deposits. This calls for alternative external financing like borrowings to bridge the gap. Increasing costs of borrowings will lead to low profits and liquidity crisis due to the outflow of cash (Jacob, 2014).

CONCEPTUAL FRAMEWORK

According to Yosef Jabareen a conceptual framework is defined as products of qualitative processes of theorization. It can also be defined as a network of interlinked concepts that provide a detailed understanding of a phenomena or phenomenon when put together. The concepts in the conceptual framework support each other, articulate their respective phenomena and form a framework specific philosophy (Yosef, 2009). The conceptual framework in this study is analysing the existing relationship between liquidity risk management practices namely asset quality management, capital leveraging and capital adequacy practice and the SACCO financial performance as measured by profits. Given that cost minimization and profit maximisation

objectives are relevant for SACCOs, they are bound to benefit in effectively employing these liquidity risk management practices for their financial success.

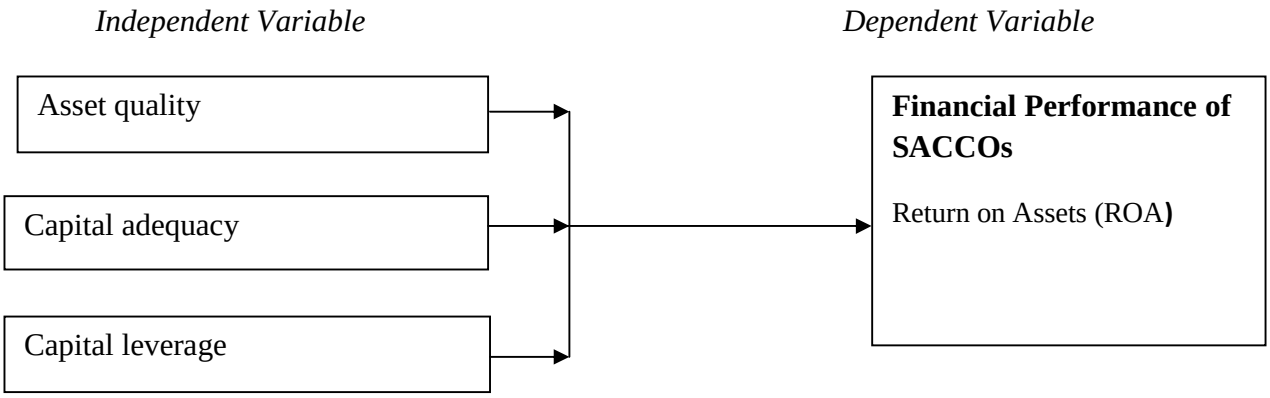

Figure 1: Conceptual framework

Variable Interconnectivity

Asset quality is measured in terms of the value of non- performing loans less provisioning as a percentage of loans. SACCOs are expected to recover all outstanding loans timely in order to maintain a good asset quality ratio and to have sufficient liquidity for on-lending. Increasing amount of non-performing loans to total loan portfolio leads to increased provisioning for bad loans, this therefore will affect the financial performance of SACCOs since increase in provisioning expense decreases profitability and vice versa. The SACCO capital structure creates liquidity for the bank due to the fact that deposits are most fragile and prone to bank runs. Capital adequacy is measured in terms of core capital to total deposit ratio, core capital to total assets ratio and institutional capital to total assets. Adequate capital enhances safety and soundness of a SACCO it absorbs losses and improves earnings. Capital serves to support growth as a free source of funds and provides protection against insolvency. Lack of sufficient reserves to absorb loses will lead to financial instability. Capital leverage is the extent to which a SACCO is financed by borrowings. Highly leveraged firms are exposed to liquidity risks because of the obligation to honor repayment of interest and principal debt which leads to huge cash outflows. Various capital components have different percentage cost, it is important to determine an average cost of capital attributable to various costs of capital which minimises the finance cost. Costs of borrowings therefore affect the financial performance of SACCOs by determining the profitability level.

RESEARCH METHODOLOGY

The research adopted a descriptive survey design. It enabled the researcher to collect comprehensive data by interviewing or administering questionnaires to a sample of individuals and thus provided relevant and specific information. The descriptive survey design captured liquidity risk practices in existence in SACCOs and also their influence in financial performance.

Variables collected were tabulated along a continuum in numerical form quantitative research techniques was used in discovering casual relationships. The study target population was 20 respondents from the five licensed SACCOs in Kisii County consisting of 5 finance managers, 5 credit managers, 5 risk managers and 5 treasury managers. The study sample size was 20 respondents selected from the population by census sampling technique. Structured questionnaires were used to collect primary data. The questionnaire had adequate coverage of the content in the variables under this study.

Secondary data was collected from SASRA published journals containing the annual audited financial reports prepared by SACCOs for the four year period from 2010 to 2013. Data was collected and analysed using descriptive and inferential statistics. Descriptive statistics involved the use of mean, standard deviation skewness and kurtosis. Inferential statistics involved the use of correlation and regression analysis and the model below was adopted.

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + } \boldsymbol{e}$$

Where: Y = Level of financial performance of SACCOs; measured by return on assets (ROA)

X_1 = Capital adequacy practice

X_2 = Asset quality management practice

X_3 = Capital Leverage practice

e = Constant

$\beta_1, \beta_2, \beta_3$ = Beta values

e = error term

RESULTS AND DISCUSSION

The study sought to examine the effects of liquidity risk management practices on the financial performance of SACCOs in Kisii County. It was guided by three objectives first to examine the effects of asset quality management practice on the financial performance of SACCOs in Kisii County secondly to determine the effects of capital adequacy practice on the financial performance of SACCOs in Kisii County and lastly to establish the effects of capital leverage practice on the financial performance of SACCOs in Kisii County.

Descriptive and inferential statistics were used to analyse data and the following emerged from the study:

Regarding the effects of asset quality management practice the study found that the mean value was 0.171233 and the standard deviation was 0.135794 which implies low variability in asset quality values over time. Skewness index was 1.088 implying that the departure of the frequency

distribution of asset quality values is high. The degree of kurtosis was 1.922 indicating that the data for asset quality is not a normal distribution. The correlation coefficient of asset quality and ROA is negative (r= -0.112) and is not significant at 0.01 level implying that asset quality does not have any significant effect on the financial performance of SACCOs. The regression coefficient of asset quality and ROA was negative (β= -0.012) and insignificant (p value = 0.574). This means that a unit change in asset quality, results to 0.012 units decrease in ROA, this is consistent with the findings of Mwangi 2014 who found that asset quality negatively affects return on assets of commercial banks in Kenya. Li (2007) also found that banks with a higher loan loss ratio had lower returns.

In respect of capital adequacy the mean value was 0.405335 and the standard deviation of shareholders capital to total asset ratio was 0.232093 which implies low variability in its capital adequacy values. The data for capital adequacy were negatively skewed with a Skewness index of -0.021 which was small hence the conclusion that the departure of the frequency distribution of capital adequacy values from a normal distribution is small. The small degree of kurtosis of -0.807 indicate that the data for asset quality is not a normal distribution. The correlation coefficient of capital adequacy and ROA was positive (r= 0.704) and statistically significant at the 0.01. The regression coefficient of capital adequacy and ROA is positive (β=0.029) and significant (p value = 0.001). This is consistent with the findings of Ejoh 2014 who found that capital adequacy has a significant positive impact on bank profitability in Nigeria.

Pertaining capital leverage the mean value was 0.442987 and the standard deviation was 0.55000 which implies low variability in its values of capital leverage. In addition the data for capital leverage were positively Skewed with a Skewness index of 2.962 which was big hence the conclusion that the departure of the frequency distribution of debt to equity from a normal distribution is high. The high degree of kurtosis of 10.955 indicates that the data for capital leverage is not a normal distribution. The correlation coefficient between capital leverage and ROA was negative (r=-0.232) and insignificant at 0.01 significance level implying that capital leverage does not have any significant effect on the financial performance of SACCOs, this contradicts with the findings of Gweyi 2014 who found a significant relationship between capital leverage and ROA in his study on effect of financial leverage on the financial performance of deposit taking SACCOs in Kenya.

The regression coefficient of capital leverage and ROA was negative (β=-0.002) and insignificant (p value =0.574) This means that aunit change in capital leverage results to 0.002 units decrease in ROA this contradicts with the findings of Akhtar et al. (2012) who found that financial leverage has got a positive relationship with financial performance of Fuel & Energy Sector of Pakistan.

The overall study found a strong positive relationship between liquidity-risk management practices namely asset quality, capital leverage, capital adequacy and the financial performance of SACCOs measured by ROA. This is shown by the positive Pearson product moment of

correlation R=0.766. In addition, a combination of asset quality, capital leverage, capital adequacy have 58.7% (R square= 0.587) predictive potential for ROA. This means that 58.7% of the variance in ROA is attributed to asset quality, capital leverage and capital adequacy. The value of adjusted R Square is 0.509. This shows that, at confidence level of 95%, the liquidity-risk management practices confirmed only 50.9% of the SACCOs' financial performance in Kisii County Kenya.

Finally from the results of ANOVA test the study found out that the regression model is statistically significant, (P value = 0.002) was less than the significant level of 0.05. The durbin-watson statistic was 1.808 indicating that the residuals in the model are not serially correlated as the durbin-watson statistic is approximately 2.The Calculated value of the constant was greater than the table value T (5.849)> $t_{0.05}$ (1.734) which means that it is statistically significant and different from zero. The values for the regression equation for predicting the dependent variable from the independent variable is presented below.

$$Y = 0.023 + 0.029X_1 - 0.012X_2 - 0.002X_3$$

From the regression analysis the study deduced that the financial performance of the SACCOs is influenced by asset quality, capital leverage and capital adequacy. Given that all independent variables (asset quality, capital leverage, capital adequacy) are at zero, ROA will reduce by 2.3%

CONCLUSIONS

The study concludes that asset quality practice does not have a significant impact on ROA among SACCOs in Kisii county Kenya. The regression coefficient of asset quality and ROA is negative and insignificant. The study findings also concluded that capital leveraging practice does not significantly affect ROA. The regression coefficient of capital leverage and ROA is negative and insignificant. In addition the study concludes that capital adequacy significantly affect the ROA. The regression coefficient of capital adequacy and ROA is positive and significant. Lastly the study concluded that the regression model is statistically significant.

RECOMMENDATIONS

Based on the findings and conclusion on objective one the study recommends for SACCOs to give asset quality management practice little attention, it has minimal effect on ROA. They should ensure timely loans recovery, sound credit appraisal procedures and investment on highly liquid credit products as they positively contribute to improved quality of assets and ultimate improvement of financial performance.

Based on the findings and conclusion on objective two SACCOs should not priotise managing their capital leverage levels as a way of improving financial performance. However they should manage capital leverage to assure them of capacity to grow their asset bases without exposing the member's deposits to any undue risk with regard to eroding their asset values at the advent of

failure to meet obligations to entities which have advanced them credit. It may also assure the SACCOs of sound relations with their peers and institutions which lend to them. This may impact positively on the financial performance of SACCOs**.**

Based on the findings and conclusion on objective three the study recommends for SACCOs to aggressively mobilize member's shares and retention of earnings with an aim of growing their capital reserves to boost capital adequacy. This may assure the organizations enhanced capacities as regards availing funds for meeting credit obligations to clients and day to day running costs. It may also assure the organizations of capacity to have the requisite capital reserves requirements being fully met as per the SASRA regulations

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