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LIQUIDITY RISK AND FINANCIAL PERFORMANCE OF DEPOSIT TAKING SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN KENYA

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LIQUIDITY RISK AND FINANCIAL PERFORMANCE OF DEPOSIT TAKING SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN KENYA

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Abstract

Purpose: To investigate the effect of liquidity risk on financial performance of DT-SACCOs in Kenya

Materials and Methods: The study will adopt descriptive research design with data comprising of secondary, panel data which will be collected from the 175 DT-SACCOs for the period of five years between the years 2016-2020. Census sampling will be adopted where all the 175 DT-SACCOs will be considered in the analysis. Data will be collected from audited financial statements and other relevant reports submitted by the DT-SACCOs to SASRA.

Results: Financial performance of DT-SACCOs has been unstable and fluctuating over the years as measured by ROA. In 2016, ROA was 2.45 percent which rose to 2.69 percent in 2017. In 2018, it dropped to 2.40 percent before rising to 2.60 percent in 2019 and again rising to 2.65 percent in 2020. One the other hand, liquid assets to total assets ratio has been reducing. In 2016 it was 12.49 percent, 11.85 percent in 2017, 11.77 percent in 2018, and 11.62 in 2019 only to rise to 14.43 in 2020 (SASRA Report, 2020). This reflects the oscillation in liquidity thereby posing liquidity risk. As reflected by the existing empirical literature, there is an inconsistency and consensus on the research findings on whether liquidity risk affects financial performance of DT-SACCOs in Kenya.

Unique contribution to theory, Practice and Policy: Scholars and other researchers interested in the SACCO sub-sector will benefit from the findings of this study. The findings will add to the body of knowledge existing in this field and provide opportunities for further research in this area. Results from the study will be useful to SASRA and other policy-makers in the SACCO sub-sector to strengthen their regulatory framework as well as in development of a more robust liquidity monitoring policy and enhancement of liquidity management practices. The results will be beneficial to SACCO managers and the board members as it will highlight how profitability is affected by liquidity risk thereby developing more robust liquidity monitoring policy as well as enhancement of oversight on liquidity management practices. SACCO members may get an impetus to continuously hold the management accountable on the level of the profitability. This is so because the members stand to benefit most if liquidity risk is low. In addition, it may lead to members' satisfaction and trust in the societies and hence increased share contribution.

Key words: *Liquidity risk, Financial performance, Deposit Taking Savings and Credit Cooperative societies.*



1.0 INTRODUCTION

Apart from the commercial banking sector, the SACCO sub-sector remains the single largest formal financial credit service provider to household economies in Kenya. In the year 2020, there were over 4.097 million persons who had active accounts with DT-SACCOs (SASRA Report, 2020). This is a clear testament of the critical role DT-SACCOs play in provision of credit facilities to household economies in the country and a pointer to the continued level of trust by members of the public to invest their savings in DT-SACCOs (SASRA Report, 2018). The importance of the SACCO sub-sector to the economy is evidenced by their inclusion in the Kenya Vision 2030 economic blueprint as drivers of economic growth (Republic of Kenya, 2007). Anchored on simplicity of their lending procedures which are premised on availability of guarantors backed by sufficient back office savings deposits as the main collateral, it is not difficult to see why SACCOs continue to be one of the most preferred formal financial service institutions in Kenya (SASRA Report, 2018).

DT-SACCOs pool financial resources from members and issue loans to them at favourable rate of interest. SACCOs must maintain optimum liquidity for both operations and members' loan demand. Majority of DT-SACCOs are reeling under weight of financial mismanagement, failure by employers to remit deductions, fraud and bad loans. Perennial failure by various employer-institutions to remit deductions made from employees' emoluments has adversely affected liquidity of SACCOs. Employers in public and private sector in Kenya owed DT-SACCOs Kshs 4.31 Billion in unremitted deductions (SASRA Report, 2020). Inability to service members loan application as and when they fall due and failure to take advantage of good investment opportunities exposes the DT-SACCOs to liquidity risk. Liquidity problems lead to financial distress making SACCOs unable to meet their immediate cash requirements. This makes them to resort to external borrowing at unfavourable rate of interest eventually experience resulting to decrease in membership and decline in profitability (Maaka and Ondigo, 2013).

1.1.1 Liquidity Risk

Liquidity risk is the risk to a SACCO's earnings or capital due to its inability to meet its obligations as they fall due. Liquidity risk may have a shattering impact on a bank that may also cause a bank run (Diamond and Rajan, 2005). Liquidity problem leads to insufficiency of funds for operational and members' demands. This makes SACCOs to borrow from the repo market at a higher rate thereby pushing up the cost of SACCOs hence declining the level of profitability (Maaka and Ondigo, 2013). Liquidity problems lead to failure of SACCOs to take advantage of good investment opportunities and in extreme circumstances may result in collapse and insolvency of SACCOs. Liquidity problems also means that a SACCO has been unable to repay loans obtained from external sources which has led to loss of members as their credit needs are left unmet (SASRA, 2016). Despite the impressive liquidity measurement, most DT-SACCOs are often unable to meet their short term obligations to their members, particularly the disbursement of loan (Maina and Otwoko, 2021). As at December 2020, non- repayment of loans from employers amounted to Kshs 4.31 Billion which denied liquidity of the same sums to SACCOs (SASRA Report, 2020).



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Persistent illiquidity or liquidity stress can lead to financial distress or even insolvency of a SACCO. Liquidity crisis, if not properly managed, can instantly destroy those good customer relationships built over the years. Liquidity risk can adversely affect DT-SACCOs earnings since a SACCO with low liquidity faces high liquidity risk associated with higher borrowing costs. (Ochanda, 2018). Section 30 of the SSA requires that every SACCO shall maintain such minimum holding of liquid assets of its members' deposits and borrowings as may be prescribed by the Authority (SASRA). Every DT-SACCO is required to maintain a statutory minimum of fifteen per cent (15%) of all its deposit liabilities, matured and short term liabilities in liquid assets though a SACCO can however have a higher minimum liquidity ratio. Liquidity risk in SACCOs in this study will be measured by loans to deposits ratio, total members' deposits to total assets ratio, cash position indicator and capacity ratio.

1.1.1.1 Portfolio at Risk

A loan portfolio at risk higher three per cent as recommended by SASRA points at liquidity risk High level of non-performing loans exposes SACCOs contribute to high portfolio at risk hence high liquidity risks. Portfolio at Risk is calculated by dividing NPLs by gross loans. DT-SACCOs are diversifying their sources of income from the loan portfolio, which is rather unstable (SASRA Report, 2020). According to Zeng (2012), NPLs are unwanted by-product of performing loans and are considered as "financial pollution" because of their adverse effect. Various factors may affect a borrower's ability to repay loans as they fall due causing delay in making repayment. This may cause cash flow and liquidity problem for the banks (Hieu, 2021). When a bank has many non-performing loans, the bank's profitability can decrease (Aulia & Antyo, 2018). Mureithi (2014) conducted a study on the effect of NPLs on liquidity risk of commercial banks in Kenya. The study concluded that NPLs have the most significant influence on liquidity risk. The study recommended that banks should establish the required level of nonperforming loans, which will help in reducing the liquidity risk.

1.1.1.2 Liquidity reserve

Liquidity Reserves measures compliance with regulator on liquidity reserve vs deposit requirements. The liquidity reserve must have a minimum of 10%. According to Mureithi (2014) capital adequacy affects liquidity of commercial banks as banks with large capital had little exposure to negative liquidity risk. The study recommended that banks should establish the required level of capital adequacy which will help in reducing the liquidity risk. Liquidity reserves will be measured by [Earning Asset + Non-earning Asset]/ Total Savings Deposits.

1.1.1.3 Liquidity adequacy

Liquidity adequacy measures the adequacy of the liquid cash reserves to satisfy deposit withdrawal requests, after paying all immediate obligations. SASRA guidelines are that SACCOs should at all times maintain a minimum of fifteen (15%) percent of its savings deposits and short-term liabilities in liquid assets to avoid liquidity risk as set by SASRA in Section 30 of the Sacco Societies Act. Liquid adequacy in the study will be measured by liquid investments (+) liquid assets (-) short-term payables / savings deposits. According to Gweyi (2018), depositors could at any time and under unexpected reasons, withdraw their deposits to seek investment



elsewhere with higher returns. Moreover, a majority of members of DT-SACCOs are still net borrowers rather than net savers (SASRA Report, 2020).

1.1.1.4 Size

DT-SACCOs are divided into three categories; large tiered, mid tiered and small tiered. Large tiered SACCOs have total asset base above Kshs 5 Billion or total deposits above Kshs 5 Billion; mid-tiered have total asset base of between Kshs 1 Billion and Kshs 5 Billion or total deposits of between Kshs 1 Billion and Kshs 5 Billion; while small tiered have total asset base of below Kshs 1 Billion or total deposits of below Kshs 1 Billion. The study will measure size by total assets. SASRA report (2020) shows that large tiered SACCOs registered a faster growth rate than the rest of the pack from 2017 to 2020. At the same time, the average growth rates of the small tiered DT-SACCOs continued to shrink with 8.69% in 2017/2018; 7.64% in 2018/2019 and resting at a low of 7.51% in 2019/2020. If the trend continues, then the market share of the small tiered DT-SACCOs is likely to be greatly reduced which is likely to impair their competitiveness and sustainability.

1.1.2 Financial Performance

Financial performance will be the dependent variable. Financial performance measurement is key to successful management of any business (Franco-Santos, Lucianetti & Bourne, 2012). Financial performance shows the extent to which an institution's financial targets have been achieved (Harrison, 2015). According to Nkuru (2015) SACCOs' management should strive to enhance financial performance in order to maximize the members' benefits. Sustained growth in profitability and performance of DT-SACCOs ensure continued reward for investors which encourages increased investment that spurs economic growth. The total income among the 175 DT-SACCOs in operation in 2020 grew from Kshs 79.88 Billion recorded in 2019 to Kshs 86.04 Billion representing a 7.71% increase (SASRA Report, 2020). This represented a marginal increase on the rate of returns on total assets (ROA) from 2.60% in 2019 to 2.65% in 2020 though this was dimmed by the increase in the NPL ratio which increased from 6.15% in 2019 to 8.39% in 2020.

Financial performance of DT-SACCOs in Kenya has been showing varying average trend of ROA of 2.45%, 2.69%, 2.40%, 2.60% and 2.65% in 2016, 2017, 2018, 2019 and 2020 respectively. The ratio of income from loans to total income has been oscillating between a low of 83.51% recorded in 2017 to a high of 86.64% recorded in 2018 which was the highest in the four-year period, and representing an average of 85.31% over the four-year period. Income from investments as a proportion to total income have been on a steady rise during the four-year period between 2017 and 2020 rising from 3.42% in 2017, 4.12% in 2018, 4.50% in 2019 and finally 4.98% in 2020. This shows an attempt by DT-SACCOs to diversify their sources of income from the loan portfolio, which is rather unstable (SASRA Report, 2020).

1.1.3 Financial Performance and Liquidity risk

According to Khan and Syed (2013), banks' profitability is significantly and negatively affected by liquidity risk. The study considered NPLs and liquidity gap to measure liquidity risk. To mitigate liquidity risk the study suggests that banks should have adequate cash assets to minimise



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the liquidity gap thus decreasing the dependence on repo market. Maaka and Ondigo (2013) found that profitability of the commercial bank in Kenya is negatively affected by liquidity risk due to increase in the liquidity gap and leverage. With a significant liquidity gap, banks may have to borrow from the repo market even at a higher rate thereby pushing up the cost of banks. The study encourages customers to increase their deposit as it positively affects the bank's profitability. Muriithi and Waweru (2017) assert that bank financial profitability is negatively affected by liquidity risk and advise banks management to pay the required attention to the liquidity management. Song'e (2015) found that financial performance is positively related to liquidity and recommend that DT-SACCOs should put in place the best liquidity management practices to increase their financial performance. The study is supported by Otieno, Nyagol and Onditi (2016) who found that liquidity risk management impacts positively on performance of Micro-Finance Banks. The study recommend SACCOs to establish a funding strategy that provides effective diversification in the sources and tenor of funding and to regularly gauge its capacity to raise funds quickly from each source.

Studies on moderating effect of size on the relationship between liquidity risk and financial performance of DT-SACCOs in Kenya are scarce. Mwaniki, Ndambiri and Oluoch (2018) conducted a study on the effect of financial structure on the financial performance of deposit taking SACCOs in Kenya using size of the DT-SACCOs as a moderation variable of the relationship between financial structure and financial performance. The findings showed a positive and significant relationship existed between equity financing, long term debt financing, short term debt financing, member deposits and financial performance of DT-SACCOs in Kenya. Additionally, the study revealed that the size of the DT-Sacco had a significant moderating effect on the relationship between financial structure and performance of DT-SACCOs.

Otwoko and Kwasira (2021) analyzed the moderating effect of size on the relationship between interest rate drivers and the financial performance of DT-SACCOs in Kenya. The study established that the size of a SACCO had a positive and significant moderation effect between the interest rate drivers' and its financial performance. The findings were consistent with those of Mwaniki, Ndambiri and Oluoch (2018) who established that the size of the DT SACCO had a significant moderating effect on the relationship between financial structure and performance of DT SACCOs. The size of a DT SACCO influences performance particularly because a large asset base of a firm enables it to obtain funds in the market on competitive terms. Therefore, the higher the amount of the total assets held by the DT SACCO, the more likely will there be an increase in returns on assets. Thus there exists a conceptual gap on whether liquidity risk positively or negatively affects financial performance of DT-SACCOs in Kenya with size as a moderating variable.

1.2 Statement of the Problem

Not all borrowers honor the repayment agreement between them and the SACCOs on loan repayment resulting in non-performing loans. If not well managed, NPLs lead to liquidity problems, hence liquidity risk pronounced by insufficient funds for both operational and members' demands. Insufficient funds force SACCOs borrow from the repo market at a higher rate thereby pushing up the cost of SACCOs resulting in decline of profitability. SACCOs



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borrowing to meet their operational and members' demands place their capital at stake besides failure to take advantage of existing profitable investment opportunities. Liquidity problems further render SACCOs inability to repay loans obtained from external sources which subsequently lead to loss of members as their credit needs remain unmet. Such SACCOs cannot access more external credit and at extreme circumstances they are faced with the risk of collapse and being rendered insolvent. Such SACCOs facing liquidity risk have had their licenses revoked by SASRA due to their non sustainability. Previous studies show that liquidity risk significantly and negatively affects financial performance of DT-SACCOs. Financial performance of DT-SACCOs in Kenya has been showing varying trend of fluctuation over the years as measured by ROA.

Financial performance of DT-SACCOs has been unstable and fluctuating over the years as measured by ROA. In 2016, ROA was 2.45 percent which rose to 2.69 percent in 2017. In 2018, it dropped to 2.40 percent before rising to 2.60 percent in 2019 and again rising to 2.65 percent in 2020. One the other hand, liquid assets to total assets ratio has been reducing. In 2016 it was 12.49 percent, 11.85 percent in 2017, 11.77 percent in 2018, and 11.62 in 2019 only to rise to 14.43 in 2020 (SASRA Report, 2020). This reflects the oscillation in liquidity thereby posing liquidity risk. Though large tiered SACCOs registered a faster growth rate than the rest of the pack from 2017 to 2020, the small tiered DT-SACCOs growth shrinked over the comparative period with 8.69% in 2017/2018; 7.64% in 2018/2019 and resting at a low of 7.51% in 2019/2020 (SASRA report (2020). According to SASRA, if the trend continues, then the market share of the small tiered DT-SACCOs is likely to be greatly reduced which is likely to impair their competitiveness and sustainability. Thus, there is need to be investigated if liquidity risk contributes to the instability and fluctuating of ROA and difference in performance amongst small tiered, mid-tiered and large tiered DT-SACCOs (SASRA report, 2020). The study therefore intends to fill the gap of inadequate information and understanding that exists in relation to liquidity risk and financial performance of DT-SACCOs in Kenya.

1.3 Objective of the study

1.3.1 General Objective of the study

To investigate the effect of liquidity risk on financial performance of DT-SACCOs in Kenya

1.3.2 Specific Objectives of the study

i. To assess the effect of portfolio at risk on financial performance of DT-SACCOs in Kenya.

ii. To examine the effect of liquidity reserve on financial performance of DT-SACCOs in Kenya. iii. To establish the effect of liquidity adequacy on financial performance of DT-SACCOs in Kenya.

iv. To identify the moderating effect of size on financial performance of DT-SACCOs in Kenya. **1.3.3 Research Hypotheses**

The study sought to test the following null hypotheses

 H_{01} : Portfolio at risk does not have a significant effect on financial performance of DT-SACCOs in Kenya

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 H_{02} : Liquidity reserve does not have a significant effect on financial performance of DT-SACCOs in Kenya

 H_{03} : Liquidity adequacy does not have a significant effect on financial performance of DT-SACCOs in Kenya

 H_{04} : Capital adequacy does not have a significant effect on financial performance of DT-SACCOs in Kenya

 H_{04} : Size does not have a significant moderating effect on financial performance of DT-SACCOs in Kenya

2.0 LITERATURE REVIEW

2.1 Theoretical Literature Review

2.2.1 Bank liquidity creation and financial fragility theory

This theory was coined by Diamond and Dybving (1983) and asserts that bank runs are a common feature of the extreme crises that have played a prominent role in the monetary history. During a bank run, depositors rush to withdraw their deposits because they expect the banks to fail. This sudden withdrawal can force the bank to liquidate many of its assets at a loss and subsequently to failure. Panic withdrawal is associated with many banks failures, due to disruption of the monetary system and a reduction in production in the economy. Prescortt (2010) concur that according to this theory it is desirable for people to pool their funds and jointly invest in productive long-term investments, while allowing individuals to withdraw their funds on demand, even before the end of the life of the long term investment.

The theory is applicable in the study since DT-SACOs should ensure that they are liquid enough in proportion of their operations capacity and size in order to cater for the members loan when approved failure to which members will rush to withdraw their deposits because they expect the banks to fail in the near future. This sudden withdrawal can force the SACCO in question to liquidate its assets at a loss and subsequently to go under. SACCOs should invest its free funds in productive investments which can be converted into cash in short notice.

2.2.2 Cash Inventory management Theory

This theory developed by Baumol (1952), who assert that a stock of cash is its holder's inventory of the medium of exchange, and like an inventory of a commodity, cash is held because it can be given up at the appropriate moment. Baumol note that this serves as its possessor's part of the bargain in an exchange. Fola (2015), note that in inventory management theory, firms identify their optimal level of cash holding by weighting the marginal costs and marginal benefits of holding cash. The study note further that the benefits related to cash holding are: reduced likelihood of financial distress, allow the pursuance of investment policy when financial constrains are met, and minimizes the cost of raising external funds or liquidating existing assets. The conclusion was firms will trade-off holding cash and investing it depending on its investment needs.



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The theory is applicable to the study since SACCOs must strike a balance and decide on the cash holding threshold. In line of its operations, a SACCO should know what its liquidity requirements are and should oscillate around that figure and therefore always hold that amount for any eventuality. When excess amount of liquidity is reached, it should be invested in investments that can easily be converted into cash and when there is a shortfall, external borrowing can be arranged.

2.2.3 Shareholder theory

Shareholder theory is credited to Friedman (1970). The theory holds that businesses are merely arrangements by which one group of people, the stockholders, and advance capital to another group, the managers, to be used to realize specified ends and for which the stockholders receive an ownership interest in the venture. Financial intermediaries such as SACCOs provide opportunities for members to build savings, earn interest on the savings, and earn dividends from shares. Arguing in favour of maximizing financial return for shareholders and considering the firm as owned by and operated for the benefit of the shareholders, Brandt and Georgiou (2016) view shareholder value as oriented towards an average diversified shareholder who wants maximum profit from his investment in shares.

The theory is relevant to the study since the goal of maximization of shareholders wealth ensures a closer interdependence between strategy and operational objectives decision making by DT-SACCOs. Afzal and Mirza (2010) found a positive association between individual ownership and determination of the level of corporate dividend payment. Rajeeva, (2006) concludes that shareholder wealth maximization as a goal ensures that strategy formation matches with the set of operational objectives for managerial decisions.

2.3 Empirical Literature Review

Gweyi, Olweny and Oloko (2018) determined the influence of liquidity risk on financial performance of deposit taking SACCOs in Kenya using descriptive research design. The study targeted 164 deposit taking SACCOs licensed to undertake DT-SACCO business in Kenya. The census study was done and secondary data collected from 135 deposit taking SACCOs' audited financial statements. The data was analyzed using both descriptive and inferential statistics. The results of the study indicated that liquidity risk had negative and significant influence on financial performance. The study recommended that DT-SACCOs should manage liquidity risk by reinforcing their own resources since depositors could at any time and under unexpected reasons, withdraw their deposits to seek investment elsewhere with higher returns.

Song'e (2015) conducted a study on the effect of liquidity management on the financial performance of DT-SACCOs in Nairobi County. The study applied descriptive research design focused on 27 sampled from existing 41 DT-SACCOs. Secondary data was collected from published financial statements for period between 2010 and 2014. Financial performance, measured by ROA was found to be positively related to liquidity risk management, operational efficiency, quick ratio and log of total assets.



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Muriithi and Waweru (2017) used quantitative research design to examine the effect of liquidity risk on financial performance of 43 registered commercial banks in Kenya for the period 2005 and 2014. The secondary data was collected from commercial banks' financial statements filed with the Central Bank of Kenya. The liquidity risk was measured by liquidity coverage ratio and net stable funding ratio while financial performance was evaluated by return on equity. Panel data techniques of random effects estimation and generalized method of moments were used to purge time-invariant unobserved firm specific effects and to mitigate potential endogeneity problems. Pair wise correlations between the variables were carried out. The study found that liquidity risk had a negative effect on financial performance.

Uddin, Syed and Saurav (2016) conducted a study on liquidity risk and bank performance in Bangladesh. This study was based on secondary data collected from the annual reports of selected banks and adopted causal study design where dependent variable was bank performance which was the combination of ROA and ROE and the independent variables were current ratio, loan to deposit ratio and liquid asset to total asset ratio. Multiple regression analysis was applied to actualize research objectives. The study showed that there is no significant relationship between current ratio and bank performance, on the other hand effect of loan to deposit ratio and liquid asset to total asset relations with bank performance. The study identified negative relationship between bank performance and loan to deposit ratio; bank performance and liquid asset to total asset ratio

Oluoch, (2021) studied on the determinant of the liquidity of deposit taking saccos in laikipia county and concluded that size has a negative relationship with the liquidity risk. Correlation and multiple regression were employed as the analytical tools. The results from the regression model revealed that the factor's that influenced liquidity were also statistically significant. Non-performing loans was found to be the most influential, capital adequacy was the second most influential and finally bank size was the least influential variable on the liquidity of commercial banks in Kenya.

2.4 Literature and Research Gaps

Existing studies show there is an inconsistency and no consensus on the research findings on whether liquidity risk affects financial performance of DT-SACCOs in Kenya. Some studies point at negative associations while others reported positive relationship. Studies by (Song'e, 2015; Mwangi, 2014; Otieno, Nyagol & Onditi, 2016) establish a positive relationship between liquidity risk and financial performance. However, studies by Gweyi, Olweny & Oloko (2018), King (2013), Otwoko & Maina (2021), Khan & Syed (2013), Hakimi & Zaghdoudi (2017), Marozva (2015), Kamau & Njeru (2016), Muriithi & Waweru (2017), Uddin, Syed & Saurav (2016) and Maaka & Ondigo (2013) on Liquidity risk and financial performance revealed that liquidity risk has a negative and significant statistical impact on financial performance.

Muriithi and Waweru (2017) examined the effect of liquidity risk on financial performance registered commercial banks in Kenya. The study was done on commercial banks and not on SACCOs; moreover, no moderating variable was studied. Uddin, Syed and Saurav (2016), studied on liquidity risk and bank performance in Bangladesh. Bangladesh has different



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operating environment from Kenya and the study was done on banks rather than SACCOs hence a contextual gap. Oluoch, (2021) studied on the determinants of the liquidity of DT-SACCOs in Laikipia county. The study was done on a limited geographical area which cannot be used to generalise the association between liquidity risk and financial performance of SACCOs in Kenya. Song'e (2015) studied on the effect of liquidity management on the financial performance of DT-SACCOs in Nairobi County. The study was based on limited geographical area and focused on liquidity management rather than liquidity risk. Muheebwa (2018) studied on the relationship between liquidity and financial performance of savings and credit cooperatives in Fort Portal in Uganda. A contextual gap exists since study was not done in Kenya. The study therefore intends to fill the gap of inadequate information and understanding that exists in relation to liquidity risk and financial performance of DT-SACCOs in Kenya.

2.5 Conceptual Framework

The conceptual framework illustrates the variables of interest to the research and provides the hypothesised relationships among the variables. The variables are classified into predicted variable and predictor variable (s). The predicted variable is profitability which is measured using return on assets (ROA). The predictor variable (s) is liquidity risk while the moderating variable is size of the SACCO.



CONCEPTUAL FRAMEWORK

Fig. 1.1 Conceptual Framework (Author, 2022)



3.0 METHODOLOGY

The study will adopt descriptive research design and positivist research philosophy. Positivism philosophy is the suitable since the study will primarily utilize statistical data analysis techniques, mathematical models, theories and hypotheses pertaining to the phenomena as the study will be analyzing quantitative data. This will maximize objectivity, replicability, and generalizibility of findings for prediction. The study will use secondary, longitudinal data collected from the audited financial statements and monthly reports forwarded to SASRA by SACCOs through a structured document review. A census study will be conducted since the population of 175 SACCOs is small as per (Mugenda & Mugenda 2008), which will serve as the benchmark and act as the baseline for comparison. According to Mwangi et al. (2014) when a census approach of study is taken, the validity of the collected data is improved because the collected information is specific and rich to the population and thus legitimate. Collected data will be analysed using inferential statistics and multivariate regression analysis that will be used to test the hypotheses, levels of significance and assess generalisability. Results will be used to find the strength and relationship between liquidity risk and financial performance. A multiple linear regression model, t-static and p-values will be used to determine the relative importance of each independent variable in influencing financial performance.

Results

Literature review shows existence of inconsistency which does not present conclusive results on the research findings on whether liquidity risk positively or negatively affects financial performance of DT-SACCOs in Kenya. Some studies point at negative associations between liquidity risk and financial performance while others report positive relationship. Some studies have been undertaken outside Kenya where the operating environment is different hence the results cannot be applied in Kenya. Other studies have been done in part of Kenya like Counties. Such results cannot be used to generalize the whole country. Studies conducted on banks rather than SACCOs cannot be applicable in SACCOs since banks operate under different regulatory body and different regulations. Hence there is need to address and fill the knowledge gap by investigating the effects of liquidity risk on financial performance of DT-SACCOs in Kenya.

Conclusion and Recommendations: Scholars and other researchers interested in the SACCO sub-sector will benefit from the findings of this study since the findings will add to the body of knowledge existing in this field and provide opportunities for further research in this area. Results will also be useful to the regulatory body, SASRA and other policy-makers to strengthen their regulatory framework as well as in development of a more robust liquidity monitoring policies and enhancement of liquidity risk management. The results will be beneficial to SACCO management and board members as it will highlight how returns are affected by liquidity risk thereby developing more robust liquidity risk monitoring policy as well as enhancement of oversight. SACCO members will get an impetus to continuously hold the management accountable on the level of the profitability because members know they stand to benefit most if liquidity risk is low.



References

- Afzal, A., & Mirza, N. (2010). Ownership structure and cash flows, determinants of corporate dividend policy in Pakistan: International Business Result, Vol. 3(3) p 210-221
- Aulia, I. S; Antyo, P. (2018). Analysis of The Effect of Capital, Credit Risk, and Liquidity Risk on Profitability in Banks. Jurnal Ilmu Manajemen & Ekonomika, Vol 10 No 2; 44-50 ISSN: 2089-4309
- Creswell, J. W. (2009). *Research Design: Qualitative and Mixed Methods Approaches*. SAGE: London, UK.
- Diamond, D.W. and Rajan, R.G. (2001), "Liquidity risk, liquidity creation, and financial fragility: A theory of banking", The Journal of Political Economy, Vol. 109 No. 2, pp. 287-327.
- Deléchat, C., Henao, C., Muthoora, P., & Vtyurina, S. (2012), "The Determinants of Banks' Liquidity Buffers in Central America", IMF Working Paper, WP/12/301.
- Franco-Santos, M., Lucianetti, L., & Bourne, M. (2012). Contemporary Performance Measurement Systems: A Review of their Consequences and a Framework for Research. Management Accounting Research, 23(2), 79-119.
- Getachew, K. (2017). Determinants of Commercial Banks Deposit Mobilization in Ethiopia (Doctoral Dissertation, St. Mary's University).
- Gweyi, M., Olweny, T., & Oloko, M. (2018). Effect of liquidity risk on financial performance of deposit taking savings and credit societies in Kenya. International Journal of Economics, Commerce and Management United Kingdom Vol. VI, 259 ISSN 2348 0386.
- Hakimi, A., & Khemais, Z. (2017). Liquidity Risk and Bank Performance: An Emprirical Test for Tunisian Banks. Business and Economic Research, 46-57.
- Hieu, M. V. (2021). Analysing Liquidity, Credit Risk and Deposit Money Banks Profitability in Nigeria. Turkish Journal of Computer and Mathematics Education Vol.12 No.3 (2021), 2436-2442
- Kamau, F., & Njeru, A. (2016). Effect of Liquidity Risk on Financial Performance of Insurance Companies Listed at the Nairobi Securities Exchange. International Journal of Science and Research, 867-872.
- Khan, M. K., & Syed, N. A. (2013). Liquidity Risk and Performance of the Banking System. Journal of Social Research, 55-70.
- Kimani, E., & Keben, T., (2018). Effect of liquidity risk management on financial performance of deposit taking saccos in Uasin Gishu County, Kenya. International Academic Journal of Economics and Finance, 323-335
- King, M. R. (2013). The Basel III Net Stable Funding Ratio and Bank Net Interest Margins. *Journal of Banking & Finance*, 37(11), 4144-4156.



www.iprjb.org

- Maina, K., & Otwoko, E.B. (2021). Effect of liquidity risk on the financial performance of deposit taking savings and credit cooperative organisations (SACCOs) in Kenya. International Journal for Research in Business & Social Science. 2147-4478
- Makaa, Z., & Ondigo, H. (2013). The Relationship between Liquidity Risk and Financial Performance of Commercial Banks in Kenya. (Doctoral Thesis University of Nairobi)
- Marozva, G. (2016). Liquidity And Bank Performance. International Journal of Economics and Business Research, 453-462.
- Mertens, D. M. (2005). Research Methods in Education and Psychology: Integrating
- Diversity with Quantitative and Qualitative Approaches (2nded.). Sage: Thousand Oaks, UK.
- Muheebwa, F., (2018). The Influence of Liquidity on the Financial Performance of SACCOs in Uganda. *Journal of Economics*, 3(2), 55-70.
- Muriithi, J.W. (2014). The effect of Non Performing Loans on liquidity risk of commercial banks in Kenya. URI <u>http://hdl.handle.net/11295/75167</u>
- Muriithi, J. G., & Waweru, K. M. (2017). Liquidity Risk and Financial Performance of Commercial Banks in Kenya. Internatioanl Journal of Economics and Finance, 256-265.
- Mwaniki, S. M., Oluoch, J. O., & Ndambiri, A. N (2018). Effect of financial structure on the financial performance of deposit taking savings and credit cooperatives in Kenya The Strategic Journal of Business & Change Management. ISSN 2312-9492(Online).Vol. 5, 788 – 806.
- Mutunga, D. & Owino E. (2017). Moderating Role of Firm size on the relationship between Micro Factors and Financial Performance of Manufacturing Firms in Kenya. *Journal of Finance and Accounting*, 1(1), 14 27.
- Nkuru, F. N. (2015). Factors Affecting Growth of SACCOs within the Agricultural Sector in Kenya: A Case of Meru Farmers SACCOS. Global Journal of Commerce & Management Perspective, 34-45.
- Ochanda, C. A. (2018). *The Effect of Interest Rates Caps on Bank Performance Amongst Kenyan Commercial Banks* (Doctoral dissertation, United States International University-Africa).
- Oganda, A. J., Mogwambo. V. A., & Otieno. S. (2020). Liquidity risk management on financial performance of commercial banks in Kenya. International Journal of recent research in commerce economics and management, 33-50
- Olagunju, A., David, A. O., & Samuel, O. O. (2012). Liquidity Management and Commercial Banks' Profitability in Nigeria. Research Journal of Finance and Accounting, 24-38
- Oluoch, O., & Nduati, G. K. (2021). Determinant of the liquidity of deposit taking saccos in Kenya: A case of deposit taking saccos in Laikipia County. International Journal of Recent Research in Commerce Economics and Management, 1-7
- Otwoko, B. E., Maina, K. E., & Kwasira, J. (2021). Analysis of the Moderating Effect of DT SACCO Size on the Relationship between Interest Rate Drivers and the Financial



www.iprjb.org

Performance of Deposit Taking SACCOs in Kenya. Journal of Finance and Accounting, 16-27

- Rajeeva S. (2006). Corporate Governance and Shareholder Value Analysis: Global Business Review Sacco Societies Regulatory Authority. (2015).
- Sammy, A., Philemon. B., & Juma., (2013). Analysis of Financial Mismatch in Co-Operative Societies: A Case of Kakamega County, Kenya. *International Journal for Management Science and Technology (IJMST)*, 2321-0362.
- Sekaran, U., & Bougie, R. (2011). Research Methods for Business: A Skill Building Approach. (5th.Ed.). Aggarwal Printing Press, Delhi, ISBN: 978-81-265-3131-8.
- Shen, C. H., Chen, Y. K., Kao, L. F., & Yeh, C. Y. (2009). Bank Liquidity Risk and Performance. *17th Conference on the Theories and Practices of Securities and Financial Markets*, Hsi-Tze Bay, Kaohsiung, Taiwan.
- Song'e, H. K. (2015). *The Effect of on the Financial Performance of Deposit taking SACCOs in Nairobi County*, *1*(1), 35-40. (Doctoral dissertation, JKUAT-COHRED).
- Uddin, M. R., Syed R. M. A., & Saurav, D. (2016). Liquidity Risk and Performance: A Study on the Banking Sector of Bangladesh. A Journal of Business Administration Discipline, Khulna University, Volume: 11, 35-42.
- Syed, M. H. (2017). Impact of Credit Risk Management on Banks Performance: A Case Study in Pakistan Banks. European Journal of Business and Management Vol.9, No.1, 2017
- Zeng, S. (2012). Bank non-performing loans (NPLs): a dynamic model and analysis in China. Mod Econ 3:100–110