

DETERMINANT OF THE LIQUIDITY OF DEPOSIT TAKING SACCOs IN KENYA: A CASE OF DEPOSIT TAKING SACCOs IN LAIKIPIA COUNTY

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Abstract: The General objective of this research was to assess the determinant of liquidity of SACCOs in Kenya. The specific objective of this project was to establish the effect of capital adequacy, bank size and non-performing loans on liquidity of SACCOs in Kenya. The study adopted secondary data analysis research design. The observations used were date from January the year 2015 to December 2018 and included 48 monthly observations. The population was composed of all the 45 SACCO's in Laikipia County. The data was obtained from Kenya National Bureau of statistics and audited financial statements of individual SACCO's. Correlation and multiple regression were employed as the analytical tools. The study was driven by the absence of laborious studies that address the dynamics of the liquidity risk in commercial banks in Kenya. The research was also motivated by the mixed results that various previous researchers got for the same types of the variables. The results revealed that there was a strong and statistically significant influence of the various bank specific factors on the liquidity risk of commercial banks in Kenya. Only non-performing loans were found to have a positive effect on the liquidity risk. Other factors that is capital adequacy, profitability and bank size were found to have a negative relationship with the liquidity risk. The study thus concluded that the stakeholders especially the management should ensure that their respective banks maintains the correct level of liquidity if they have to survive.

Keywords: firm Size, Capital Adequacy and Non-Performing Loans.

1. INTRODUCTION

SACCOs are very important in any economy; these institutions are established to provide services such as deposit taking and loan disbursements. SACCOs play major roles in developing the economies as they help in distribution of financial resources from individuals and corporates that have excess funds to individuals and corporates that are in deficit of such funds. The impact of co-operative in the world economy is both extensive and impressive. It is estimated that there are 800 million people globally, who are members of the co-operatives and 100 million are employed by co-operatives. In nearly all developed countries, they have been the main contributors to economic growth and poverty alleviation. Europe has 58,000 co-operatives, with a membership of 13.8 million. In the US, there are an estimated 72,000 co-operatives with over 140 million members, including 90 million members of SACCOs (Kobia (2011). Savings and Credit Co-operative Societies (SACCOs) are quasi financial institutions that mobilize savings, provide loans as well as other products to their members [Kenya Union of Savings and Credit Co-operatives (KUSCCO, 2009)]. SACCOs plays an important role in Kenya's financial sector in provision of affordable financial services to their members both urban and rural households (Co-operative Bank of Kenya, 2013). Default on loan repayments poses the greatest risk to stability of the multi-billion shilling savings and credit co-operative movement (SASRA, 2013). The risk of defaults on personal loans granted by SACCOs is high, as the debts are secured only by member guarantees (Maina, Kinyariro & Muturi, 2016). The regulator has also warned that reliance on expensive bank loans, instead of members' share contributions, raised the probability of the SACCOs defaulting on their debt (Keitany, 2013). This is indicated by SACCOs' low liquidity and solvency ratios especially since borrowing costs have sharply increased over the past periods.

Statement of the problem

Swamy (2014), argue that a threat to financial stability anywhere in the world is potentially a threat to financial stability everywhere. As financial stability and macroeconomic stability are intricately related, financial stability can be vulnerable even if there is price stability and macroeconomic stability and hence cannot be taken for granted. Swamy note further, that, although SACCOs are better capitalized in less competitive markets, their default risk remains higher. Particularly in the context of dominated emerging market financial systems where SACCOs dominate more than 30-40 percent of the financial system, SACCOs stability assumes greater prominence in ensuring financial stability.

The financial system enables an economy to be more productive as it allows investors with few resources to use savings from those with few prospects of investing. Moreover, with regard to liquidity, the fundamental role of SACCOs in the maturity transformation of short-term deposits into long-term loans makes banks inherently vulnerable to liquidity risk, both of an institution specific nature and that which affects markets as a whole. Liquidity creation itself is seen as the primary source of economic welfare contribution by SACCOs but also as their primary source of risk (Bryant 1980 or Calomiris and Kahn 1991). Therefore, virtually every financial transaction has implications for of liquidity's liquidity. In recent years, the world economy has experienced a number of financial crises. Often, at the center of these crises are issues of liquidity provision by the banking sector and a financial market. For example, when crises are likely to arrive, SACCOs seem less willing to lend and hold more liquidity due to the low level of liquidity in the market for external finance (Acharya et al, 2011). Berger and Bouwman (2009b) found the connection between financial crises and bank liquidity creation: the subprime lending crisis was preceded by a dramatic build-up of positive abnormal liquidity creation, which implies that "too much" liquidity creation may also lead to financial fragility. Acharya and Naqvi (2010) are also successful in explaining how the seeds of a crisis may be sown when banks are flush with liquidity. Hence, bank liquidity management is important for both bank managers and policymakers in safeguarding overall financial stability.

Therefore, globally, the adequacy of liquidity plays very crucial roles in the successful functioning of all business firms. However, the issue of liquidity, though important to other businesses, is most paramount to SACCOs. Liquidity shortage, no matter how small, can cause great damage to a bank's operations (Ifeoma et al, 2013). Liquidity crisis, if not properly managed, can instantly destroy those good customer relationships built over the years. Managing liquidity is therefore a core daily process requiring bank managers to monitor and project cash flows to ensure that adequate liquidity is maintained at all times. However, the liquidity fragility is also a source of efficiency. Diamond and Rajan (2001) argue that the financial intermediation structure is efficient in that it disciplines SACCO's when carrying out their lending function. The threat of a run is an incentive for the bank to choose projects with high return. More generally, this also suggests that an "even more liquid" bank might not always be desirable for the efficiency of the financial system. Therefore, effective liquidity risk management helps ensure a bank's ability to meet cash flow obligations, which are uncertain as they are affected by external events and other agents' behavior and to keep their optimal profitability.

The Kenyan financial sector is largely bank-based as the secondary market is still not established in the country. SACCO's dominate the financial sector in Kenya and as such the process of financial intermediation in the country depends heavily on SACCO's institutions. Hence, keeping their optimal liquidity for SACCO's in Kenya is very important to meet the demand by their present and potential customers. On the other hand, in Kenya studies in relation to determinants of banking industry's liquidity considering internal factors are very scanty. In the context of Kenya, to the knowledge of the researcher only one related study conducted by Mugenyah (2015) which tries to identify the impact of some bank-specific and macroeconomic variables of Kenyan banks liquidity. The study overlooked some important variables that can significantly affect liquidity of the Kenyan SACCO's from the point of view of the theories and previous empirical studies. Besides, her study adopts a quantitative approach only without considering a lot of limitations of it. In general, the lack of sufficient research on the determinants of SACCO's liquidity in the context of Kenya and the existence of knowledge gap in the area initiate this study. Therefore, this study sought to fill the gap by providing full information about the determinants of Kenyan SACCO's liquidity by incorporating the untouched ones.

Objectives

- i. To establish the effect of firm Size on the liquidity of SACCO's in Kenya.
- ii. To determine the effect of Capital Adequacy on the liquidity of SACCO's in Kenya.
- iii. To examine the effect of Non-Performing Loans on the liquidity of SACCO's in Kenya.

2. THEORETICAL REVIEW

Bank liquidity creation and financial fragility theory

This theory was first developed by Diamond and Dybvig (1983), who assert that bank runs are a common feature of the extreme crises that have played a prominent role in the monetary history. They note further that 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. They conclude that in a panic with many banks failures, there is a disruption of the monetary system and a reduction in production in the economy.

Prescott (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. Therefore in summary prescott note that this theory has three major components which are: long-term investments are more productive than short-term investments, a random need for liquidity on the part of an individual and private information about an individual's need for liquidity.

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.

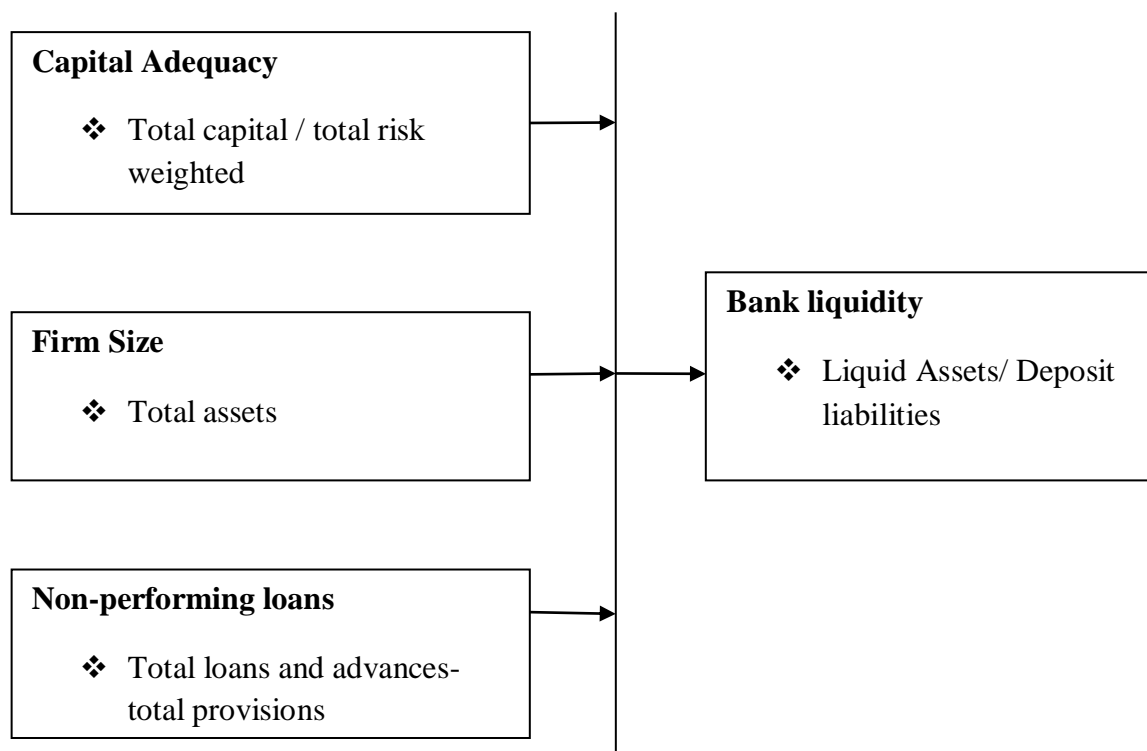
According to Miller and Orr's (1966), the cash balances fluctuates irregularly over time in both positive and negative directions, that is build up when operating receipts exceed expenditures and falling off when the reverse is true. They note further that if build up is at all prolonged, a point is eventually reached at which the financial officer decides that cash holdings are excessive, and transfers a sizeable quantity of funds either to the control of the portfolio staff for temporary investment. They also assert that if prolonged drain is observed, a level is reached at which the portfolio managers will be instructed to liquidate securities.

Agency theory

The agency theory was developed by Jensen and Meckling(1976). They defined the agency relationship as a contract under which one or more persons (the principal) engage another person(the agent) to perform some service on their behave which involve delegating some decisions making authority to the agent. The theory state that if both parties to the relationship are utility maximizers, there is good reason to believe that the agent will not always act in the best interest of the principle. The agency cost is defined as the monitoring expenditures by the principal, the bonding expenditures by the agent and the residual loss. Their study note that agency cost arise in any situation involving cooperative effort by two or more people even though there is no clear-cut principal-agent relationship.

Sheikh and Wang (2011), explain that conflicts between managers and shareholders arise because managers hold less than 100 percent of the residual claim. Owing to this, managers may invest less effort in managing the firm's resources and may be able to transfer the firm's resources for their own personal benefits. The managers bear the entire costs of refraining from these activities, but capture only a fraction of the gain. As a result, managers overindulge in these pursuits relative to the level that would maximize the firm's value. This inefficiency is reduced when a large fraction of the firm's equity is owned by the managers.

Conceptual Framework



Research Gaps

Melese (2015), noted that since liquidity is very crucial to the existence of SACCO's factors that affect it should be identified. The author note that further research on the area of factors that affect liquidity of SACCO's by incorporating any more relevant variables would enhance the understanding of the sector. The literature available on liquidity on Kenyan context is limited. The few papers that have been written on liquidity in Kenya have been supported mainly by reviews of papers from other countries. Some of these papers are Mugenyah (2015), Maaka,(2013)and Karani (2014)who investigated the effect of liquidity on SACCO's performance

3. RESEARCH METHODOLOGY

This study adopted a secondary data analysis research design since the data to be used has been previously been collected and tabulated by other sources. The target population for this study was all the 45 SACCO's in Laikipia. This study used census sampling since the population also constitute the sample that is the 45 SACCO's institutions. The data that was used was dated from year 2015 January to 2018 December. Each year consists of 12 monthly observations for each variable so in total 48 observations which is a fairly large sample above the minimum acceptable small sample size of 30 for inferential analysis. This data is authentic since it is secondary data that has been collected by credible agents and published by the Republic of Kenya. The researcher used secondary data in empirical analysis. The data was obtained from the central bank of Kenya database, Kenya National Bureau of Statistics public website link, and the financial statements of all the SACCO's institutions in Laikipia County. A schedule was then used to organize the data that was collected. The data analytical techniques that was used was quantitative techniques in nature. These are correlation analysis and multiple regression analysis. The data was analysed using the help of STATA econometric software.

Model

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y = Liquidity

β_0 =Intercept term

β_i =coefficients of the independent variables

X_1 = Firm Size

X_2 = Capital Adequacy

X_3 = Non-performing loans

ε = error term

4. REGRESSION RESULTS

Table 4.1: Significance of Independent Variables

Variable	Coefficient	Standard error	t-statistic	p-value
Bank size	-0.1678	0.0413	-4.0630	0.000
Capital Adequacy	- 0.2011	0.0377	-5.3342	0.000
Non-performing loans	1.2071	0.2107	5.7290	0.000
Constant	1.000	0.3010	3.3222	0.000
F-statistic = 73				
Prob>F = 0.0000		Adjusted R-squared=0.87		

The regression model is as follows:

$$\log Y = 1.00\log\beta_0 - 0.1678\log X_1 - 0.2011\log X_2 + 1.2071\log X_3 + \varepsilon$$

Standard Error 0.3010 0.0413 0.0377 0.2107

t-Statistics 3.3222 -4.0630 - 5.3342 5.7290

p-value 0.0000 0.000 0.000 0.000

F-statistic = 73

Prob>F = 0.0000

Adjusted R-squared=0.87

Where: Y = Banks liquidity risk, β_0 = Constant Term, β_1 = Beta coefficients, X1 = bank size, X2 = capital adequacy, X3 = non-performing loans,

ε = Error Term

The regression equation above has established that taking all factors into account (bank size, capital adequacy and non-performing loans) constant at zero, liquidity of SACCO's in Kenya in Kenya will be 1.00. The findings presented also show that taking all other independent variables at zero, a unit increase in the bank size would lead to a 0.1678 decrease in the scores of liquidity of SACCO's in Kenya and a unit increase in the scores of capital adequacy would lead to a 0.2011 decrease in liquidity of SACCO's in Kenya. Finally, the findings shows that a unit increases in the scores of non-performing loans would lead to a 1.2071 increase in of SACCO's in Kenya.

5. CONCLUSION

The study concluded that bank size, capital adequacy and non-performing loans are the key determinants of liquidity among SACCOs in Kenya. 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. On the overall the study concludes that there is a strong and statistically significant relationship between the determinant factors and the liquidity of SACCOs in Kenya. The SACCOs are encouraged to explore the different financial factors internal to the firm that affects the liquidity of SACCOs. The study note that all the measures used for the variables were adequate for this study. The study also notes that the regression model a well specified model since the variables included were able to explain up to 87% of liquidity of SACCOs.

6. RECOMMENDATION

The variable bank size was found to be statistically significant and therefore it is recommended that managers should be keen on the level of bank size. The management of these SACCOs should be focused towards expanding the bank size if they have to survive. Since the increase in bank size as measured by assets size was found to have a negative influence on the liquidity, the management should make sure that the level of bank size is maintained high. Furthermore, the variable capital adequacy was found to be statistically significant and therefore it is recommended that managers should be keen on the level of capital adequacy. The management of these SACCOs should be focused towards expanding the capital adequacy if they have to survive. Since the increase in capital adequacy as measured was found to have a negative influence on the liquidity the management should make sure that the level of capital adequacy is maintained high. Finally, since the results revealed that Non-performing loans was the most influential variable there is the need for all the stakeholders to be aware of this. Any bad news that may accompany the Non-performing loans as measured could lead to some very devastating effects on the financial performance of SACCOs in Kenya. Therefore there is the need to come up with better non-performing loans management strategies that are suspected to affect the liquidity of SACCOs in the country. High level off the non-performing loans can cause runs in SACCOs in the country which may lead to financial crises of the banking system.

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