Influence of Cost of Borrowing on Financial Performance of Selected SACCOs in Siaya County

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Abstract: The objective of the study was to establish the cost of borrowing on Financial performance of selected SACCOs in Siaya County, Kenya. The study was pegged on credit risk theory and loanable funds theory. This study used cross sectional research design. The target population was 43 SACCOs in Siaya County. This study used cross sectional research design. The target population was 43 SACCOs in Siaya County. A sample size of 39 SACCOs was determined by using Yamane formula (1967). Sampling techniques comprised purposive and simple random sampling. Primary data was gathered by structured questionnaires administered personally by drop and pick approach. The data was analyzed by descriptive statistics such as frequencies and percentages, calculation of means and standard deviations, as well as Pearson correlation and multiple linear regression analysis. The pilot test was conducted on the questionnaire and necessary amendments made to enable respondents answer it without any difficulty. The coefficient of determination calculated, was $r^2 = 0.293$, indicating that about 29.3 per cent of the variation in financial performance was attributed by the cost of borrowing. This means that there was evidence of overlap between the between cost of borrowing on financial performance. The major findings therefore indicated that approximately 29.3 % of the variation in financial performance (profitability) was attributed to variation in cost of borrowing. The study therefore concludes that loan’s cost of borrowing influences the financial performance of SACCOs. The study recommends that SACCOs to reduce the cost of borrowing so that increase profitability can be realized. Researcher proposes further research to be conducted in banking sector so that to ascertain the influence of lending practices on financial performance in the banking industry in Kisumu County.

Keywords: Savings and Credit Management, Cost of borrowing, Financial performance

1. Introduction

1.1 Background to the study

Savings and Credit Co-operative Society is one form of a co-operative society whose business is to provide financial services to its members. SACCOs are legal institutions registered under the cooperative laws (1991) cooperatives Act and 1992 co-operative regulations. SACCOs are owned by their members’ asset and policies through payment of share capital and membership fees to the institution. In addition to the above, as per the Sacco act of (2012), “a Savings and Credit Co-operative (SACCO) is a democratic, unique member driven, self-help, not for profit financial cooperative. It is owned and governed by members who have the same common bond. A Sacco’s membership is open to all that belong to a group, regardless of race, religion, colour, creed, and gender or job status. These members agree to save their money together in the SACCO and to make loans to one another at reasonable rates of interest. Interest is charged to cover the interest cost on saving and the cost of administration.

SACCOs are able to advance loans at interest rates lower than those charged by other financial providers (Moturi & Mbiwa, 2015). In addition, SACCOs have the ability and opportunity to reach clients in areas that are unattractive to banks, such as rural or poor areas (McMahon, 2013). This has made SACCOs more attractive to customers, thus deeply entrenching themselves in the financial sectors of many countries (Kakuru, 2003). In fact, the core objective of SACCOs is to ensure members empowerment through mobilization of savings and disbursement of credit (Moturi & Mbiwa, 2015).

The principal activity of SACCOs is to promote thrift among its members by affording them an opportunity to accumulate their savings to create thereby a source of funds from which loans can be made to them exclusively for provident and productivity purpose at fair and reasonable rates of interest (Cooperative Digest, 2009). Section 43 of the Co-operative Societies Act (Amendment) 2004prohibits a cooperative society from giving loans to non – members, unless the by-laws of the society provide for giving such a loan. Therefore, the law gives SACCOs the leverage to develop a policy framework for lending. The main requirement across all SACCOs is that their members have to have some source of income before qualifying to join the SACCOs. The SACCOs mobilize funds from the members and give them access to financial services like loans, savings facility, front office services which is otherwise inaccessible to them through the main banks that are either unaffordable or physically inaccessible.

An effective credit monitoring system will include measures to; ensure that the bank understands the current financial condition of the borrower or counterparty; ensure that all credit are in compliance with the existing covenant; follow the use customer make of approved credit lines; ensure that...
projected cash flows on major credits meet debt servicing requirements; ensure that where applicable, collateral provides adequate coverage relative. Its obligors’ current condition and identity and classify potential problem credits on timely basis. The problem of credit risk often begins at the loan origination/application stage and increased further at the loan approval, monitoring and controlling stages, especially when credit risk management guidelines in terms of policy and strategic procedures for credit processing do not exist, are weak or incomplete (Greuning & S.B., 2013).

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 cooperatives, with a membership of 13.8 million. In the US, there are an estimated 72,000 cooperatives with over 140 million members, including 90 million members of SACCOS. A SACCO is one form of a co-operative society whose business is to provide financial services to its members (Kobia, 2009).

Kenyan Sacco sector is the largest in Africa and the seventh worldwide (Ademba 2010). With over Ksh 230 billion in assets and a savings portfolio estimated at Ksh 190 billion, the SACCO movement in Kenya constitutes a significant proportion of about 20% of the country’s savings (Makori et al 2013). The total assets in the Kenya’s SACCO sector increased to K.sh.248 billion from K.sh. 216 billion in 2010. Currently, the sector is the largest in Africa and accounts for 60, 64, and 63 per cent of the continent’s savings, loan and assets respectively according to (SASRA, 2011). The use of financial products in SACCO saving increased from 9.2 to 10.6 in 2009 and 2013 while ratios for obtaining SACCO credit were 3.1 and 4.0 respectively, an indication of increased activity according to (CBK & FSDKenya, 2013). In the provision of financial services within Kenyan economy, SACCO subsector stands out as a major player to both the households, and small and medium sized businesses. Thereby, verified by the SACCOs’ membership which improved from 2.97 million in 2012 to 3.30 million in 2013 (SASRA, 2013). Although SACCOS are established to help the marginalized poor access financial services, but they have not been able to meet their demands satisfactorily because of their financial performance. Financial performance has been notable implication for firms as far as its operations concerned. Financial performance can lead to better growth of a firm and expansion as well as failure of firms.

1.2 Problem Statement and Justification

Although SACCOS are established to help the marginalized poor access financial services, but they have not been able to meet their demands satisfactorily because of their financial performance. For instance, a study done by Sonya Bells (2016) indicates that the financial performance of SACCOS has been declining from the year 2014 with 2.4% to the year 2015 with 1.7% and with 0.1% in November 2016 as compared to average growth of 5% in the year 2013. Globally a research done by Sohal (2014) showed that there was a 13% decrease of 50 SACCOS’ financial performances. This is majorly due to non-performing loans. A study by (Kirui & Kering, 2017; Mwangi, 2014; Otemo & Oyugi, 2016) among others postulates that financial performance of SACCOS depends on cost of borrowing, there has been conflicting results adduced from other studies. Therefore, the current study intended to bridge the gap by introducing a new dimension in the knowledge.

1.3 Objective

Determine how cost of borrowing affects financial performance of selected SACCOS in Siaya County, Kenya

1.4 Hypothesis

H0: Cost of borrowing has no significant effect on financial performance of SACCOS in Kenya

2. Literature Review

A theory is a reasoned statement or group of statements, which are supported evidence meant to explain some phenomena. Torraço, (1997) asserts that theories are formulated to explain, predict, and understand phenomena and, in many cases, to challenge and extend existing knowledge, within the limits of the critical bounding assumptions. Kotler & Gary (2005) described theoretical framework as a collection of interrelated concepts such as in a theory to guide a research work as it determines the items for measurement and the statistical relationships being studied. The selection of a theory should depend on its appropriateness, ease of application, and explanatory power. The theoretical framework connects the researcher to existing knowledge (Kennedy, 2007). The study will be pegged on credit risk theory. Credit risk theory was started by Melton in 1974. It states that the default event derives from the firm’s diffused asset. Whether due lax credit standards or poor credit risk management in a weak enterprise, loan fund problems have historically been the main cause of losses and failures. Effective management of the financial performance and the credit function is a fundamental to an enterprise funding. Credit theory is the process by which risk that is inherent in the credit process are managed and maintained (Kisivuli, 2013).

2.2 Empirical Literature

Nkusu (2012) analyzed the impact of borrowing cost on credit lending on loan advance. The aims to investigate the impact of borrowing cost on financial performance on loan lending. The study used 11 commercial banks listed at national security exchange. To credit lending, the study employed earning per share on capital employed and price book value. Descriptive design was adopted with secondary data from financial statements from 2001 to 2004 periods. Using Pearson correlation analysis and regression analysis model to analyze the collected financial data, it was found that there exist a insignificant relationship between interest rates and credit lending. Moreover, there is a negative correlation between debt asset ratio and earnings per share.
on return on capital employed. The use of book price ratios was the most significant impact on interest rates and credit lending.

Mathea (2014) examined repayment cost on loan decision making process by youths in banks. The main objective was to examine the interest rates on loan decision making process by youths in banks. The study used causal research design and to examine the impact of interest rates on loan decision making process by youths of 42 banks. Financial reports from the year 2009 to 2013 were derived. The study adopted regression model to determine and analyze the relationship between interest rates and loan decision making process by youths 42 banks. The study revealed that interest rates had no relation with loan decision making process by youths in banks.

Al-Tally (2014) studied the effect of cost of borrowing cost on external financing requirement by youths in Saudi Arabia's public listed companies. The study aimed at examining the effect of interest rates on external financing requirement by youths in banks. The study used 43 respondents who were given structure questionnaires to collect primary data and secondary data which was obtained from financial statements in the year 2012 and 2007. The panel data methodology was adopted for listed companies. The results showed that a negative correlation between management efficiency in financing requirements. Correlation analysis was used to establish the relationship independent variables and dependent variables. The study revealed that interest rates had a great influence on external financing requirement in demand for credit.

### 3. Research Methodology

#### 3.1 Research design

This study utilized a cross-sectional research design based on a sample that cut across Siaya County. It usually relate to the present state of affairs and involve an attempt to provide a snapshot of how things are at a specific time at which the data is collected (Franken & Wallen, 2006). It also involved the idea of getting out of the chair, going out of the office and purposefully seeking the necessary information ‘out there’. It is often characterized by the selection of random samples from large populations to obtain empirical knowledge of a contemporary nature (Saunders & Thornhill, 2007). The cross-sectional survey was adopted in this study based on the conceptual relationship between the independent variable and the dependent variable.

#### 3.2 Target Population

The unit of study consisted of 43 active SACCOs in Siaya County. The target population of SACCOs is distributed as follows AlugoUsonga 7, Bondo 10, Gem 6, Ugunja 9, Rarieda 5, and Ugenya 6. The study area was selected after considering factors such as accessibility and the vibrancy of the SACCOs in Siaya County.

### 3.3 Sample Size and Sampling Techniques

The population being heterogeneous, the stratified sampling procedure was adopted. Stratified sampling technique was adopted to categorize the respondents under the study as shown in table 3.1. This ensured that all the SACCOs who form the study population are included in the study. A sample of 39 respondents was used which is determined by Yamane formula (Yamane, 1967), as shown below:

\[
n = \frac{N \times e^2}{N - 1}
\]

Where,

- \(n\) = Sample Size
- \(N\) = Population
- \(e\) = Error margin
- \(\text{level of precision}\)

Kothari (2011) asserts that when a sample size is obtained using the above formula it is considered optimum because it fulfils the requirements of efficiency, representativeness, reliability and flexibility.

A stratified random sampling technique was used to group the target population into categories of strata, and then a sample was collected from each stratum proportionately. Purposive sampling technique was then be used to pick respondents for the study. Mugenda and Mugenda (2004) refers to purposive sampling as a technique that allows a researcher to use cases that have the required information with respect to the objectives of his or her study. Respondents are therefore hand-picked because they are informative or they possess the required characteristics. Convenience sampling was also used during data collection targeting respondents based on their availability during data collection for the study. A total of 39 SACCOs was selected for the study.

#### Table 1: Sample design

<table>
<thead>
<tr>
<th>Sub County</th>
<th>Target population of loan officers</th>
<th>Sample size</th>
<th>Proportionate Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AlugoUsonga</td>
<td>7</td>
<td>6</td>
<td>15%</td>
</tr>
<tr>
<td>Bondo</td>
<td>10</td>
<td>9</td>
<td>23%</td>
</tr>
<tr>
<td>Gem</td>
<td>6</td>
<td>5</td>
<td>13%</td>
</tr>
<tr>
<td>Ugunja</td>
<td>9</td>
<td>8</td>
<td>21%</td>
</tr>
<tr>
<td>Rarieda</td>
<td>5</td>
<td>5</td>
<td>13%</td>
</tr>
<tr>
<td>Ugenya</td>
<td>6</td>
<td>6</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>43</strong></td>
<td><strong>39</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>


The sample size was proportionately distributed as shown in Table 2. The sample size of 39 was distributed as follows; AlugoUsonga 6, Bondo 9, Gem 5, Ugunja 8, Rarieda 5, and Ugenya 6. From the selected SACCOs, the loan officers were purposively and conveniently selected as informants for the study. Given the nature of their job designation, they are considered to be the ones who can give information related to the research objectives.

#### Data Collection Instruments

This study used both qualitative and quantitative approaches and data from primary and secondary sources. The
researcher also used face to face interview technique to obtain information that was not be observed directly. Self - administered structured questionnaires were used with the help of two trained research assistants to collect primary data from loan officers of SACCOs, i.e. to seek general information on influence of loan lending practices on financial performance of selected SACCOs in Siaya County. According to Gall and Borg (2010), questionnaires are appropriate for studies since they collect information that is not directly observable as they inquire about feelings, motivations, attitudes, accomplishments and experiences of individuals. A questionnaire provides an opportunity for anonymity to promote high response rates (Mugenda and Mugenda, 2012). The study adopted the personal interview schedule to collect information from key respondents in order to verify the reliability of the information gathered by the questionnaire. The interview was conducted only where more in-depth clarification was required to supplement the data from questionnaire. The advantage of an interview is that the respondent will provide in-depth data which is not possible to get using a questionnaire. A sample of the interview questions was provided. Secondary data was gathered from the records of the SACCOs. The financial records and inventory records containing information pertaining to loan repayment period were examined.

3.4 Validity and Reliability of Research Instruments

The study carried out a pilot test, to test the validity and reliability of the instrument used in collecting data for purposes of this research study. The pilot test was conducted on the questionnaire and necessary amendments made to enable respondents answer it without any difficulty. According to Mugenda and Mugenda (2003), a pilot test is carried out to ensure that items in the instrument are stated clearly and have the same meaning to all respondents. Piloting was done using 5 randomly selected loan officers who were included in the final sample. This was necessary to avoid response bias; in case they happen to complete the same questionnaire in the main study. According to Cooper & Schindler (2011), 5% to 10% of the target sample should constitute the pilot test.

3.4.1 Validity of the Research Instrument

Saunders, Lewis and Thornhill (2003) define construct validity as the extent to which the questions used for measurement actually measure the presence of those constructs that one intended to measure. The questionnaire in this study was divided into sections to ensure that every item relates to a specific objective and to the conceptual framework. According to Kung’u (2015), content validity is the extent to which the measurement device provides adequate coverage of the investigative questions. In this study, the questionnaire was validated by discussing it with input by the appointed supervisors from JOOUST.

According to Mugenda and Mugenda (2003), reliability is a measure of the degree to which a research instrument yields consistent results after repeated trials. The questionnaire must be reliable so as to provide accurate representation. Gerber- Nel, Nel & Kotze (2011), define reliability as the instrument which measures the repetition of research findings. In this study, Cronbach’s alpha correlation coefficient was used to verify reliability of the questionnaire. The closer the coefficient is to 1, the higher the internal consistency and reliability. In this study, a Cronbach alpha of 0.8 was recorded and thus the research instrument was considered as acceptable because it was above 0.7.

3.4.2 Data Collection Procedures

Clearance to conduct the research was sought from the School of Business & Economics of Jaramogi Oginga Odinga University of Science & Technology (JOOUST). The permit was used to secure permission from the SACCOs to carry out the research in the study area. The researcher before collecting data from the participant will inform the Directorate of Co-operatives Development, County Government of Siaya in advance about the study. The researcher visited Sacco’s offices in the County (Siaya County) before hand for familiarization and to get acquainted with targeted respondents.

3.4.3 Data Analysis and Presentation

Data was analysed using both descriptive statistics and inferential statistics. Quantitative data was used for data analysis using descriptive statistics with the help of Statistical Package for Social Sciences. The package was used to help run descriptive statistics such as frequency, percentages, standard deviation and mean so as to present the quantitative data in form of tables and graphs based on the major research questions. Descriptive statistics was used because it enables the researcher in formulation of generalizations. Correlations and regression analysis were also used to establish the relationship between variables. Regression models were used to establish the relationship between independent variables on dependent variable through computation of the regression coefficients of linear function.

3.4.4 Statistical model Specification

Simple Linear Regression Model was used to analyze data; 

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

\(Y\)- financial performance (profitability) of SACCOs
\(\beta_0\) – Constant 
\(\beta_1\) Regression coefficients (change induced in \(Y\) by each \(X\))
\(X_1\)– cost of borrowing
\(\varepsilon\)– Error term.

4. Findings & Discussion

Correlation analysis between cost of borrowing and financial performance (profitability)

The research carried out correlation analysis on the relationship between cost of borrowing on financial performance. The finding is shown table 2.

Table 2: Correlation analysis between cost of borrowing on financial performance

<table>
<thead>
<tr>
<th>Profitability</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of borrowing</td>
<td>.541*</td>
<td>.011</td>
</tr>
</tbody>
</table>

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<tr>
<td>Cost of borrowing</td>
<td>.541*</td>
<td>.011</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
The results of correlation analysis in table 2 revealed a positive moderate \((r = 0.541; p < 0.05)\) relationship between cost of borrowing on financial performance. Since the significant value is less than 0.05, therefore from these finding it was reasonable to conclude that there was a significant positive relationship between cost of borrowing on financial performance.

The coefficient of determination was calculated, \(r^2 = 0.293\), indicating that about 29.3 per cent of the variation in financial performance was attributed by the cost of borrowing. This means that there was evidence of overlap between the between cost of borrowing on financial performance.

4.1 Regression analysis between cost of borrowing and financial performance

The research carried out regression analysis on the significance between cost of borrowing and financial performance. The finding is shown Table 6.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>517.396</td>
<td>518.610</td>
<td>610</td>
</tr>
<tr>
<td></td>
<td>cost of borrowing</td>
<td>803.286</td>
<td>541.2805</td>
<td>011</td>
</tr>
</tbody>
</table>

**Goodness of Fit:**

- \(R^2 = 0.541\)
- \(R^2 = 0.293\)
- \(F = 7.867\)
- \(P < 0.05(0.011)\)

Regression result showed that moderate degree of positive correlation \((r = 0.541)\) between cost of borrowing and financial performance. \(R^2 = 0.293\) measured part of financial performance which was explained by loan repayment period. It showed that approximately 29.3% of the variation in financial performance attributed to variation in cost of borrowing. The adjusted \(R^2\) value provides an idea of how the model may be generalized. It should be as close to \(R^2\) square as much as possible if not the same. In this case, the difference for the final model is small; i.e. .037 or 3.7%. This means if the model was derived from the population rather than a sample, then it would have accounted for approximately 3.7% less variance in financial performance. Since the \(p\) value was <0.05, the study concluded that cost of borrowing had a significant influence on financial performance. Further, the table showed that the regression model between the cost of borrowing and financial performance was:

\[ Y = 517 + 0.541x \]

The above regression model 2 revealed a moderate degree of positive correlation \((r = 0.541)\) between cost of borrowing and financial performance.

The finding of the study above concurred with Al-Tally (2014) who established that cost of borrowing had effect on external financing.

5. Conclusion

Based on the findings above, the study concluded that: cost of borrowing had a significant influence financial performance;

6. Recommendation

Based on the results, the study made the following recommendations:

a) There was need for SACCOs to reduce the cost of borrowing so that to improve profitability.

b) There was need for SACCOs to allow top up on loans for prompt repayments by members.

c) There was need for the SACCOs to adopt appropriate recovery strategies for loans defaulters.

d) The SACCOs also need to develop friendly lending policy to encourage more clients.

7. Suggestions for Further Research

Studies should be conducted on effect of financial management practices on profitability in other sectors. Similar study should be carried out in banking sector so that to ascertain the influence of lending practices on financial performance in the banking industry in Kenya.

References


