CREDIT MANAGEMENT SYSTEMS AND FINANCIAL PERFORMANCE OF SAVINGS AND CREDIT COOPERATIVES (SACCOs) IN MID-WESTERN UGANDA

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ABSTRACT

Purpose: To ascertain the relationship between credit management systems and financial performance of SACCOs in Mid-Western Uganda.

Methodology: A cross-sectional research design and positivist paradigm were used to collect data from 93 SACCOs in Mid-Western Uganda using a closed-ended questionnaire. Standard linear regression analysis was carried out.

Findings: The study findings reveal a moderate, positive and significant relationship between credit management systems and financial performance of SACCOs in Mid-Western Uganda.

Unique contribution to practice and policy: This study suggests to management a need to put into place effective credit management systems if SACCOs are to improve their financial performance by ensuring that favorable terms and conditions, and adequate client appraisal process are in place. In addition, government should support SACCOs by providing staff trainings on credit terms and conditions formulation and improving their competencies in client appraisal.

Key words: Credit Management Systems, Financial Performance and SACCOs
INTRODUCTION

Savings and Credit Cooperatives (SACCOs) are considered as voluntary associations where members are encouraged to make regular savings, and subsequently obtain credit for use in their different activities (Ndiege, Mataba, Msonganzila, & Nzilano, 2016). The economically active poor in emerging economies are excluded from the formal financial institutions’ banking system due to lack of collateral, high transaction costs, high risk of default, low rate of loan recovery, and information opacity (Marwa & Aziakpono, 2015). To bridge the financing gap, SACCOs are considered as drivers for increased access to affordable credit and other financial services by the economically active poor (Marwa & Aziakpono, 2015; Ndiege, Mataba, Msonganzila, & Nzilano, 2016). Through increased access to credit, the economically active poor in emerging economies are expected to become entrepreneurs and start small and microenterprises, hence economically empowered. This could only be achieved when SACCOs have sustainable financial performance.

Whereas empirical studies indicate that there are several factors that can foster financial performance of SACCOs, credit management systems are key drivers of sustainable financial performance. Credit management systems encompass credit terms and conditions, credit appraisal, credit collection policies, credit risk control policies, and credit granting decisions (Ahamed & Ali, 2015; Moti, Masinde, Mugenda, & Sindani, 2012; Kipkoech, 2015). Financial performance is conceptualised in terms of portfolio quality, profitability and liquidity (AMFIU, 2014/2015; Asiligwa, 2017; Magu & Kibati, 2016).

Credit management systems ensure putting into place systems, procedures and controls that are aimed at ensuring efficient collection of loans made to clients in order to minimize credit risk (Kipkoech, 2015). In the event that the main source of income for SACCOs is interest income, SACCO activities are exposed to credit risk (Kipkoech, 2015), hence a need for an effective and efficient credit management systems by SACCOs (Magali, 2013). SACCOs may fail to achieve their set financial objectives due to poor loan performance, as this leads to higher losses, which may lead to the financial institutions’ collapse (Ndiege, Mataba, Msonganzila, & Nzilano, 2016).

Whereas credit management systems play a vital role in realizing credit offered to the economically active poor and their micro enterprises (Magali, 2013). However, less emphasis is put on credit management systems, and yet the main source of income to credit institutions is interest income (Marwa & Aziakpono, 2015). In addition, sustainable financial performance of credit institutions depends entirely on their ability to effectively and efficiently collect credit and interest thereon (Addae, 2014). This implies that poor portfolio quality would have a negative impact on the profitability of firms, and this threatens sustainable financial (Moti, Masinde, Mugenda, & Sindani, 2012). There is a great possibility of loans not being recovered from the borrowers, hence leading to sustainable financial performance challenges (Warue, 2012).

Mixed findings are revealed about loan performance; an indicator of credit management systems, and financial performance (Ndiege, Mataba, Msonganzila, & Nzilano, 2016). It is revealed that a good current ratio may imply that a lot of current assets in SACCOs may be as a result of extending loans to their clients (Ndiege, Mataba, Msonganzila, & Nzilano, 2016), and this is associated with a higher credit risk (Magali, 2013). This contradicts with the findings of Oyoo; where firms with
appropriate liquidity are considered to have enough cash to handle their financial obligations (Oyoo, 2014). However, quick ratio results that show an inverse relationship with loan performance may imply that SACCOs with good liquidity are those with little credit risk (Ndiege, Mataba, Msonganzila, & Nzilano, 2016). In addition, a firm may be profitable as a result of offering credit to borrowers who do not possess proper business plans, hence leading to loan defaults (Ndiege, Mataba, Msonganzila, & Nzilano, 2016). This implies that the firm may be profitable and liquid but not necessarily with a good portfolio quality; hence a basis of the current study to consider financial performance in respect of liquidity, profitability and portfolio quality.

Mixed findings are revealed on the relationship between credit risk controls, credit collection policies, and loan repayment performance (Kahuthu, 2015; Ahamed & Ali, 2015). Credit risk control policies, and credit collection policies have positive, but insignificant impact on loan repayment performance (Ahamed & Ali, 2015). This contradicts the study findings by Justus, Dickson and Mwenyi that reveal a strong and significant relationship between credit risk control and credit collection policies and loan repayment performance (Justus, Dickson, & Harison, 2016). Whereas studies by Gathoni and Arishaba show client appraisal as pertinent in minimizing loan defaults (Gathoni, 2013; Arishaba S., 2011), there is a hesitation created, in the event that most clients of MFIs withhold information that would be relevant in the appraisal process (Addae, 2014). This implies that the debate on the association between credit management systems and financial performance is still ongoing, hence a need for the current study.

The empirical literature on the financial performance of SACCOs in Uganda is scanty, hence a need for the current study to examine the association between credit management systems and financial performance of SACCOs in Mid-Western Uganda. Whereas many empirical studies have looked at financial performance in the perspective of profitability and liquidity, to the researcher’s belief, no single study has considered financial performance of SACCOs in the perspectives of liquidity, profitability and portfolio quality. Besides, there is no one measure of financial performance should be considered on its own (Fujo & Ali, 2016), hence making the current study relevant in closing the empirical literature gap.

A number of studies have attempted to explain the financial performance phenomena. For example, a study on Managerial competence and financial performance of SACCOs in Busoga region, Uganda reveals a positive association between managerial competence and financial performance of SACCOs in Busoga region (Ssekakubo, Ndiwalana, & Lwanga, 2014). However, the findings in the same study reveal the level of influence of Corporate governance on financial performance as only 39%, implying 61% of the variation in financial performance was from other factors outside the model used. Thus, the current study focused on credit management systems as a predictor of financial performance of SACCOs in Mid Western Uganda.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

There is a positive and significant association between credit risk management and loan performance (Ahamed & Ali, 2015). In the same study, the constructs considered in the study are; credit terms, client appraisal, credit risk control policy and credit collection policy. The study reveals an explanatory capacity of the model as 57%, implying that 57% of the variability in the MF Banks’ loan performance is accounted for by credit risk management. Furthermore, the value
of the constant term is also insignificant, implying that there is no need to include more predictor variables in the model, thus signifying that credit risk management is a very key driver of loan performance. Moreover, loan defaults are associated with deteriorating loan portfolios lead to increased operating expenses in form of bad debts written off and provision for bad and doubtful debts, hence negatively affecting the financial performance of firms (Bashabe, Kalu, & Amu, 2017). Loan performance is considered as indicator of portfolio quality (Bashabe, Kalu, & Amu, 2017). The use of more than one measurement of financial performance is highly recommended (Fujo & Ali, 2016). To fill the empirical gap, the current study considered financial performance in the perspectives of portfolio quality, liquidity and profitability.

There is need to establish sound credit management in SACCOs so as to prevent late payment of accounts receivables, thus increasing profitability levels (Kipkoech, 2015). Also, the same study suggests a need for timely settlement of accounts receivables so as to SACCOs avoid facing financial constraints emanating from bad debts. The study reveals that credit management systems significantly influence profitability of SACCOs in Kenya (R-squared = 0.622, P = 0.000). The study implies that the existences of sound credit management systems will in effectively prevent the late payment of accounts receivables, and the end results will be increased profitability levels. Consequently, the study considers credit management systems as a key driver for the success of MFIs since their main source of income is interest earned from loans extended to SMEs. This study focused on profitability as the dimension for financial performance, and the use of more than one dimension of financial performance is highly emphasized (Fujo & Ali, 2016). Thus, the empirical literature gap was addressed in the current study; where financial performance was studied in the perspectives of liquidity, portfolio quality and profitability.

From the reviewed empirical literature on credit management systems and financial performance, the following hypothesis was derived:

**H02: There is no statistically significant relationship between credit management systems and financial performance of SACCOs in Mid-Western Uganda.**

**RESEARCH METHODOLOGY**

The study employed Cross-sectional research design. This is so because it attempts to explain the connection between the study variables at a point in time (Blumberg, Cooper, & Scindler, 2008). In addition, a positivist paradigm was used in the study because hypotheses were developed and tested, scientific analyses carried out, and conclusions were made based on the sample size (Bashabe, Kalu, & Amu, 2017). The study sampled 93 SACCOs out of 122 SACCOs in Mid-Western Uganda (Microfinance Support Center, 2019). The Yamane’s formula of 1973 that directs the sample selection process, was used. According to Yamane (1973), the sample size of the study was determined by:
\[ n = \frac{N}{1 + N(e)^2} \]

Where: \( n \) = Sample size; \( N \) = Study population; \( e \) = Error term = 5%.

\[
n = \frac{122}{1 + 122 \times (0.05 \times 0.05)}
\]

\[
= \frac{122}{1 + 0.305}
\]

\[
= 93
\]

Stratified sampling technique was used to obtain the representative sample from the study population, and the stratification was based on districts. Besides, the study employed a multi-stage sampling approach; where population was stratified, and probability used to provide equal chance of selection to all elements in the population, and then simple random sampling was carried out (Kinyua J. K., 2016) The study used self-administered open-ended questionnaires to collect data from key SACCO staff.

Standard linear regression analysis was conducted to establish the direction and strength of the relationship between the independent and dependent variables, as revealed by R and R-squared, respectively, as indicated in table 4. The following is an analytical regression model for testing the association between credit management systems and financial performance of SACCOs in Mid-Western Uganda:

\[
FP = b_0 + b_1CMS + e
\]

Where; \( FP \) = Financial performance; \( b_0 \) = Constant; \( b_1 \) = Beta coefficient; CE=Credit Management Systems; \( e \) = Error term.

Measurement of Study Variables

Credit management systems’ items were in terms of credit terms and conditions, credit appraisal, credit collection policies, credit risk control policies, and credit granting decisions( Moti, Masinde, Mugenda, & Sindani, 2012); (Kipkoech, 2015); (Ahamed & Ali, 2015)). All items of credit management systems were anchored onto a five-point Likert-type of scale, in the questionnaire. This was in agreement with the study by (Kamukama & Natamba, 2013) that used the following scales: 1 = Strongly disagree; 2 = Disagree; 3 = Undecided; 4 = Agree; 5 = Strongly agree.

RESULTS

Demographic Characteristics

Descriptive statistics were used to develop frequency distributions for the SACCOs in Mid-Western Uganda, and the results are shown in tables; 1, 2 and 3.
Table 1: Years of operation of SACCOS

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 5 years</td>
<td>18</td>
<td>19.4</td>
</tr>
<tr>
<td>5-9 years</td>
<td>32</td>
<td>34.4</td>
</tr>
<tr>
<td>9-13 years</td>
<td>32</td>
<td>34.4</td>
</tr>
<tr>
<td>above 13 years</td>
<td>11</td>
<td>11.8</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source:** Primary Data (2020)

Based on the study findings revealed in table 1, majority of the SACCOS have been in business for a period of more than 05 years. This can be evidenced by the fact that only 19% of the SACCOS have been in business for a period of less than 05 years. This implies that the Going concern principle was being implemented in the SACCOS studied. In addition, SACCOS with a substantial period in business are associated with experience in the operations of SACCOS, and also being conversant with the dynamics in the Microfinance institutions’ business environment.

Table 2: Location of the SACCOS

<table>
<thead>
<tr>
<th>Location</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kasese</td>
<td>12</td>
<td>12.9</td>
<td>12.9</td>
</tr>
<tr>
<td>Bunyangabu</td>
<td>19</td>
<td>20.4</td>
<td>33.3</td>
</tr>
<tr>
<td>Kabarole</td>
<td>20</td>
<td>21.5</td>
<td>54.8</td>
</tr>
<tr>
<td>Kyegegwa</td>
<td>12</td>
<td>12.9</td>
<td>67.7</td>
</tr>
<tr>
<td>Kyenjojo</td>
<td>10</td>
<td>10.8</td>
<td>78.5</td>
</tr>
<tr>
<td>Kamwenge</td>
<td>11</td>
<td>11.8</td>
<td>90.3</td>
</tr>
<tr>
<td>Kitagwenda</td>
<td>9</td>
<td>9.7</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Primary Data (2020)

22% of the SACCOS studied were located in Kabarole district, while 20.4% were located in Bunyangabu district (table 2). The least of number of SACCOS studied (9.7%) were located in Kitagwenda district.

Table 3: Capital structure for the SACCOS

<table>
<thead>
<tr>
<th>Capital Structure</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity Capital</td>
<td>48</td>
<td>52</td>
<td>35</td>
</tr>
<tr>
<td>Equity and Loans</td>
<td>33</td>
<td>36</td>
<td>84</td>
</tr>
<tr>
<td>Donations</td>
<td>7</td>
<td>8</td>
<td>91</td>
</tr>
<tr>
<td>Loans only</td>
<td>5</td>
<td>5</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Primary Data (2020)

Besides, the study findings represented in table 3 indicate that majority of the SACCOS in Mid-Western Uganda (51.6%) financed their business operations by use of equity capital, while 35.5%
used both equity capital and other peoples’ money (loans). The least of the financing streams were from donations (7.5%) and loans only (5.4%). This implies that most of the SACCOs had a stable financing option since they used their own money to run their business operations, and this has an impact on their financial sustainability.

**Regression analysis results**

In an effort to establish the direction and strength of the relationship between credit management systems and financial performance, and the model fitness, standard linear regression analysis was conducted. The results are indicated in table 4.

**Table 4: Regression analysis results**

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>.480a</td>
<td>.230</td>
<td>.222</td>
<td>.57366</td>
</tr>
</tbody>
</table>

**ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>8.944</td>
<td>1</td>
<td>8.944</td>
<td>27.179</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>29.947</td>
<td>91</td>
<td>.329</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>38.892</td>
<td>92</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-1.304</td>
</tr>
<tr>
<td></td>
<td>Credit Management Systems</td>
<td>.015</td>
</tr>
</tbody>
</table>

Dependent Variable: Financial Performance

The study findings in table 4 reveal a moderate, positive and significant relationship between credit management systems and financial performance of SACCOs in Mid-Western Uganda (R = 0.48, P = 0.000). This implies that a higher proportion of credit management systems is related to financial performance. Thus, the hypothesis that states that there is no statistically significant association between credit management systems and financial performance of SACCOs in Mid-Western Uganda, H02, is rejected. In addition, 23% of the variation in financial performance is explained by credit management systems, while 77% of variation is explained by other factors not considered in this study. Also, the beta coefficient (B = 0.015) reveals that for every unit of credit management system, financial performance of a SACCO increases significantly by 0.15 units. The constant (-1.304) was statistically insignificant (P = .082>0.05), implying that there was no need for more variables to be added in the model, hence signifying the model’s fitness.
DISCUSSION

Results presented in table 4 reveal a moderate, positive and significant association between credit management systems and financial performance of SACCOs in Mid-Western Uganda (R = 0.48, P = 0.000), hence in disagreement with hypothesis H02. The beta coefficient (B = 0.015) a significant influence of credit management systems to the variation in financial performance of SACCOs in Mid-Western Uganda. The results imply that 48% of the variation in financial performance was caused by credit management systems. The study findings are consistent with empirical studies by scholars (Kipkoech, 2015; Kalui, 2015; Kariuki, 2017; Moti, Masinde, Mugenda, & Sindani, 2012; Kagoyire & Shukla, 2016) that reveal positive and significant association between credit management systems and financial performance. From the theoretical perspective, the resource-based view theory advocates for nurturing and managing the scarce resources of the firm if the firm is to achieve high financial performance. This calls for effective credit management systems (Corte, Barney, Arikan, & Sciarell, 2012). In addition, there is need to hire competent employees with capabilities of firm’s resources, if the firm is to attain its financial objective (Arishaba S., 2011). Besides, the relevance of the modern portfolio theory is highlighted by the fact that managers are duty bound to manage default risks associated with loan portfolios (Nthanga, 2017). The modern portfolio theory also points out that deterioration of loan portfolios results into decreased revenues and increased operational costs (Adugna, 2014), and this has an impact on financial performance. To mitigate this, the systems theory considers knowledge transfer as key in attaining superior performance (Corte, Barney, Arikan, & Sciarell, 2012). There is a need for the existence of processes in an organization; transforming inputs into outputs through the provision of an overview function, hence revealing the relevance of the systems theory (Kinyua J. K., 2016). It is the SACCOs’ role to intermediate savings into loans to generate interest income (Ndiege, Mataba, Msonganzila, & Nzilano, 2016).

Theoretical implication

The study confirms empirical literature in terms of positive influence of credit management systems on financial performance. Additionally, studies have been conducted to establish the association between credit management systems and financial performance (Kipkoech, 2015). However, no empirical study that has attempted to explain the effect of credit management systems on financial performance of SACCOs in a Ugandan context, and specifically, Mid-Western Uganda. The empirical gap has been addressed by the current study.

Besides, SACCOs’ resources are associated with default risks, hence a need for suitable credit management systems. There is need for information dissemination to both the principals and the agents, in an effort to avoid information opaqueness. The institutional theory advocates for credible disclosures as a means of alleviating information opaqueness. Moreover, information opaqueness is the root cause of credit management systems failures in MFIs. Also, concealing information makes credit granting decisions difficult to make. This makes the stewardship theory relevant, since it disassociates itself from agency problems. Hence, managers should focus on transitioning from agency-centered approach to steward-centered approach. Additionally, the modern portfolio theory assumes that deterioration of loan portfolios results into decreased revenue and increased operating expenses. Moreover, the stewardship theory assumes that for a firm to increase its financial performance, it should work on ensuring that operational costs are minimized.
Managerial implication

Besides, the results of this study suggest a need for management to put into place effective credit management systems if SACCOs are to improve their financial performance. The SACCO managers should focus greatly on ensuring that favorable credit terms and conditions, and adequate client appraisal process are in place. This could be achieved through the provision of trainings to SACCO staff to further their skills in credit terms and conditions formulation, and improve the staff competencies in client appraisal.

CONCLUSION

This study focused on establishing the association between credit management systems and financial performance of SACCOs in Mid-Western Uganda. Based on the empirical literature review, credit management systems as driver of financial performance were taken into account, and the direction of its influence on financial performance was hypothesized. Based on the study hypothesis, it can be concluded there is a moderate, positive and significant association between credit management systems and financial performance of SACCOs in Mid-Western Uganda. It can be concluded that financial performance of SACCOs could be boosted by putting into place effective credit management systems.

RECOMMENDATIONS

1. Managers should make it a point to put into place effective credit management systems so as to improve financial performance. This could be through putting into place mechanisms geared towards the formulation of favourable terms and conditions, and ensuring that an adequate appraisal process is upheld.
2. Besides, an increasing rate in NPLs is usually associated with failure of commercial banks’ credit terms and conditions. Thus, top management should ensure that regular review of terms and conditions is carried out.
3. Top management should ensure that credit officers and clients are actively involved in the formulation of credit terms and conditions.
4. Managers should enhance client appraisal techniques, as this enable SACCOs to establish credit worth clients, hence, reducing their non-performing loans.
5. In an effort to reduce loan default levels, as well as non-performing loans, thus improving the financial performance levels, there is need for top management regularly review credit risk control policies.

AREAS FOR FURTHER RESEARCH

This study was conducted in Mid-Western Uganda. A comparative analysis of SACCOs in other parts of the region, while considering the same variables (control environment and financial performance), could be beneficial.

This study adopted a cross-sectional research design. A longitudinal study, using the same hypothesis, H02, could be carried out to obtain a deeper understanding of the association between credit management systems and financial performance of SACCOs.
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