BOARD SIZE AND FINANCIAL SUSTAINABILITY OF UGANDAN MICRO FINANCE INSTITUTIONS

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ABSTRACT
The member owned microfinance institutions, the Savings and Credit Cooperatives (SACCOs), have gained National recognition as important poverty reduction tools in Uganda, through improving access to finance and financial services. However, the positive impact of these SACCOs, on the welfare of the low income people can only be sustained, if they can achieve good financial performance. Moreover, it is well documented that microfinance organisations have had various degrees of sustainability and one such sustainability is financial sustainability. The purpose of this paper therefore, was to examine the effect of board size on financial sustainability of SACCOs in Central Uganda. The study found that when board size in SACCOs reduces, financial sustainability increases and it also culminates into board effectiveness. The key recommendation in this study is that, SACCOs in Uganda, should maintain small boards as stipulated in their legal guidelines.

Keywords: Board size, Board effectiveness, Microfinance Institutions, Savings and Credit Cooperatives. Financial Sustainability, Uganda.

Introduction
Microfinance is about provision of a broad range of financial services such as deposits, loans payment services, money transfers among others to the poor and the low income households and their micro enterprises. Microfinance institutions (MFIs) have expanded the
frontiers of institutional finance and have brought the poor into the formal financial system and have enabled them to access credit in order to fight poverty.

The key providers of microfinance services among institutional providers in Uganda, especially in rural areas are the Savings and Credit Cooperatives- SACCOs (the member–owned microfinance institutions). Their vision is to provide sustainable financial services to the economically active poor, who are unable to access the financial services from the main stream financial institutions. The government supports the development of SACCOs in Uganda. However, despite government support and encouragement to establish SACCOs (at least one per sub-country) and its implementation of its programme “Prosperity for all” of taking financial services near the people to eradicate or reduce poverty through these institutions, SACCOs levels of financial sustainability are still low. Particularly, in central Uganda, SACCOs are formed but survive for a short time (Bank of Uganda, 2008). In the year 2011, government asked the German Development Institute (GDI) to conduct assessment of sustainability of national SACCOs in the light of declining subsidies in the future. Their findings revealed that SACCOs remain the only formal financial providers that clients can access regularly, and that they fulfill important outreach functions for expanding access to financial products and services (Okwee, 2011). Their findings suggest that SACCOs in Uganda should be financially sustainable consistent with Ahlin & Jiang (2008), who also suggested that the benefits of microfinance can only be realized as long as the poor continue to be clients of MFIs.

Microfinance Institutions need to be financially sustainable in order to provide sustainable microfinance facilities and contribute to poverty reduction (LOGOTRI, 2006 and Schreiner, 2000). Financial sustainability allows the continued operation of microfinance provider and the ongoing provision of financial services to the poor.

One of the problem however, facing MFIs which has lasted for a long time is how to attain financial sustainability. Several studies have been conducted to determine the factors affecting financial sustainability, using large and well developed MFIs in various countries (Christen, 2000, Woller & Schreiner, 2002). Most of the previous studies considered financial factors and their effect on different performance measures of MFIs (Ganka, 2010, Bayeh, 2012; Adong et.al, 2005 and Vicki et.al, 2007). Moreover, limited studies have been conducted in Central Uganda in the context of SACCOs, especially their financial sustainability.

Consequently, the factors (including corporate governance practices) affecting financial sustainability of these institutions are not clearly known. This study thus, was set out to bridge this knowledge gap, and our understanding of determinants of financial sustainability especially, in small firms like SACCOs, considered in this study.
Theoretical Review

The theory which underpinned this study is the agency theory, which is the most recognized theoretical perspective applied in Corporate Governance studies. The theory originated from (Berle and Means, 1932). Jensen & Meckling (1976), noted that the agency theory suggests that in many modern organisations there is separation between ownership (principal) and management (agents), and the separation may result in agency problems. Fama & Jensen, (1983), suggest that boards of directors play an important role in maintaining effective Corporate Governance, where agency problems may arise from the separation of ownership and control.

In order therefore, to better align agent principal interests, earlier agency theorists Jensen & Meckling, 1976 and Farma & Jensen, 1983, suggested having an effective governance system which amongst others involves the appointment of board of directors. Agency theory suggests that managers be monitored by the board of directors whose principal task is to ensure that managers discharge their duties in the best interest of shareholders. (Shakir, 2012) Thus, the board characteristic like size of the board is regarded as proxy for board of directors when it is measured against financial sustainability of a firm.

The agency theory is therefore an aid that allows us to understand, describe, explain and predict financial sustainability of SACCOs using size of the board as a proxy for board of directors. The Central idea in the agency theory is having effective monitoring mechanisms in firms in order to reduce on the agency problems and costs, so that firms add value to shareholders’ wealth and also operate on a sustainable basis.

Literature Review

Savings and Credit Cooperatives in Uganda

This study took place in Central Uganda in urban and rural SACCOs. Savings and Credit Cooperatives are member owned MFIs and are formed on assumption that members will save together and give loans to each other on a sustainable basis. SACCOs in Uganda, belong to tier 4 in the Bank of Uganda (BoU) categorization of financial institutions. Tier 4, shares two features: First, BoU does not exercise prudential supervision over them. Secondly, they are forbidden to mobilize deposits from the general public. SACCOs are further regulated under Cooperative Statute 1991 and Cooperative Regulations 1992. However, Kyazze (2010) and Okwee (2011), express their concern that SACCOs operate under a generic Cooperative Law, shared with other Cooperatives such as marketing and hence, their unique needs as financial institutions may go unattended to.
Objectives of SACCOs among others include: creating source of funds from which members in need can take productive loans with low interest rates; educating members with respect to how to save and wise use of savings; providing services to members including financial counseling to enable them solve their financial problems and risk management services to ensure the safety of their savings and loans and provide other related services, e.g money transfer, payment services and insurance (Batarinyebwa and Kabuga, 1995).

In this regard, the ‘success' of SACCOs are judged by their ability to be financially sustainable and poverty reduction objective is assumed to be achieved when SACCOs services are made available to the poor. Savings and Credit Cooperatives as member owned MFIs are considered as a tool for poverty alleviation through improving access to financial services. Microfinance Institutions complement the formal banking sector in providing financial services to the poor (Basu, Blavy & Yulek, 2004)

Financial Sustainability

Although there are several dimensions of sustainability of MFIs, financial sustainability has become the critical point of focus in their analysis. Financial sustainability refers to the ability of MFIs to cover all their costs from their own generated income from operations without depending on external support or subsidy (Bayeh, 2012). It is the ability to keep on going towards microfinance objectives without continued donor support (Dunford, 2003). The definitions of financial sustainability focus on the ability of MFIs to depend on self-operation, and as much as possible making profit out of the microfinance operations.

Financial sustainability can be measured at two levels namely, operational sustainability and financial self-sufficiency. Operational sustainability is the ability of MFI to cover its operating income regardless of whether it is subsidized or not. Financial self-sufficiency is when MFIs are able to cover from their own generated income, both operating and financial costs and other form of subsidy valued at market prices (Meyer, 2002). To be financially sustainable, MFIs must register good financial performance without subsidized resources or funds.

Size of the board and Financial Sustainability

Recent corporate governance has seen the emergency of an extensive body of empirical work on the effectiveness of board of directors in monitoring managers and on their effect on firm performance. The boards take the crucial responsibilities for any corporation such as management and supervision of managerial decisions. Boards play an important role and have emerged as corporate governance mechanisms that make better the never ending agency conflict
between shareholders and managers. However, the efficiency of the boards continues to be questioned. Moreover, it is argued that the effectiveness of the boards depends on their varied characteristics including among others, the board size.

The relationship between board structures and board workings to firm value has been a central point of a long standing debate in finance literature. Larmou (& Vafeas, 2010). Existing literature discusses the inefficiencies in the monitoring of the board of directors when the membership is too large and have found negative relationships between board size and firm performance in both large and small firms (Kajola,2008; Mak & Kusnachi,2005; Paul, 2009; Shobod Deba, Saiful & Anup, 2015, Lee & Filbeck,2006; Eiseburg et al., 1998; Lipton & Lorch, 1992 and Jensen,1993). However, Sandra et al., 2005, found out that firm performance is positively correlated with small as opposed to large boards in Nigeria

Locally, studies also exist on size of the board and firm’s performance measures. For example, Akodo (2007), established that board size had a negative effect on financial performance of public universities in Uganda. Rosette (2002), established that board composition in terms of size, significantly affect board effectiveness and performance in selected financial institutions in Uganda. Mala Ijalla (2006) reported that, board size was inevitably a critical factor for long term survival of financial institutions in Uganda.

Beyond Uganda, different and opposing theoretical arguments are presented in the literature to support either the large or small board size. Large board size is argued to benefit corporate performance as a result of enhancing the ability of firm to establish external links with the environment, securing more resources and bringing more exceptional qualified counsel (Dalton et al., 1999 Lee & Filbeck (2006). Furthermore, large board size may improve the efficiency of decision making process as a result of information sharing. Other studies offered supportive evidence for the positive influence of large board size (Bozee and Dia, 2007; Mak and Li, 2001 and Adams and Mechr, 2005). Moreover, other scholars revealed no relationship between board size and corporate performance (Keymark and Bekats, 2008). Eisenberg et al., (1998) found a negative correlation between board size and profitability, which supported theories put forward by Lipton and Lorch (1992) and Jensen , (1993). All the above different results add to the on-going debate of how inconclusive the size of the board is on various performance measures

Since different and opposing theoretical arguments are presented in the literature to support either the large or small board size in corporate performance and since other studies were on listed companies with extra regulations and many of them beyond Uganda, there is need to determine whether board size both influence financial sustainability and effectiveness of the
board in the context of SACCOs. The study also wanted to confirm whether the stipulated small board size by Cooperative Law regulating these institutions (SACCOs) in Uganda, explain variations in financial sustainability, as well as making the board more effective in carrying out its practices. This therefore, led to testing of two null hypotheses:

H\textsubscript{1}O: Size of the board does not significantly influence financial sustainability of SACCOOs in Central Uganda.

H\textsubscript{2}O: Size of the board does not significantly influence effective carrying out of the board practices in SACCOs in Central Uganda

Drawing from agency theory and previous studies, the independent variable in the study, was size of the board, which was assumed to negatively relate with financial sustainability and effectiveness of the board. Size of the board was measured in terms of total number of directors on the board. Effectiveness of the board was measured in terms of board’s ability to carry out its roles and responsibilities successfully. Financial sustainability was measured in terms of the ability of MFIs to cover all their costs from their own generated income from operations without depending on external support or subsidy.

Methodology

The study took a quantitative correlational cross-sectional survey, and ex post facto design. It was quantitative because it was based on variables measured with numbers and analysed with statistical procedures. The correlational design was chosen because the problem in the study was identifying factors that influenced an outcome that is, financial sustainability of SACCOs and effectiveness of the board. (Amin, 2005).

The study was cross-sectional, because it was conducted across participants at a point in time and was intended to pick only some representative sample elements of the cross section of the population. It did not necessitate the researchers to make a follow up on the participants. It was thus, used on account of its rapid turn-around in data collection as Creswell (2003) advises.

Both quantitative and qualitative approaches were employed. Self administered questionnaires and interviews were used to collect data from five districts of Central Uganda, in 26 Savings and Credit Cooperatives (SACCOs) and from a sample of 454 respondents including members, board of directors, audit committee members and staff of selected SACCOs. Factor, correlation and regression analyses were employed to reduce on the dimensionality of the variables, determine the relationship between the variables as well as determining the casual
relationship between size of the board and financial sustainability of SACCOs and effectiveness of the boards in Central Uganda, respectively.

Findings and Discussions

Descriptive results

Table 1: Descriptive statistics on aspects of board size and board of directors practices

<table>
<thead>
<tr>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall mean and standard deviation on all board roles and responsibilities (effectiveness of the board)</td>
<td>2.75</td>
</tr>
<tr>
<td>Board size</td>
<td>7.51</td>
</tr>
</tbody>
</table>

Descriptive statistics in Table 1, indicate that the board size on average in all the 26 SACCOs was almost 8 board members. This was in agreement with Cooperative Regulations 1992, and SACCOs bye-laws, which stipulate a size comprising of a minimum of 5 members and Maximum of 9 members. There was no significant differences between the 13 urban SACCOs and the 13 rural SACCOs in terms of size of the board (urban=7.44, rural=7.58). This was because board size is an issue included in the legal guidelines.

Correlation Results

Table 2: Correlation between size of the BoD and financial sustainability and effectiveness of the board (N =389)

<table>
<thead>
<tr>
<th></th>
<th>Effectiveness of the board</th>
<th>Size of the board</th>
<th>Financial sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness of the board</td>
<td>Pearson correlation</td>
<td>1</td>
<td>-0.123(**</td>
</tr>
<tr>
<td>Size of the board</td>
<td>Pearson correlation</td>
<td>-0.123(**</td>
<td>1</td>
</tr>
<tr>
<td>Financial sustainability</td>
<td>Pearson correlation</td>
<td>0.467(***</td>
<td>-0.258(***</td>
</tr>
</tbody>
</table>
Correlation results in Table 2, indicate that board effectiveness have a low negative, but significant associative relationship with size of the board ($r = -0.123$) at 0.01 significance level. The negative associative relationship suggests that, if board of directors’ practices is to increase ability of the board to carry out its roles and responsibilities (its effectiveness), size of the board must reduce.

Further, correlation results in Table 2, indicate that size of the board has low negative but significant associative relationship at 0.01 significance level with financial sustainability ($r = -0.258$). The negative associative relationship suggest that, if boards of SACCOs in Central Uganda, reduce, financial sustainability increases.

Assuming that the above associative relationships were predictive – these results would imply that if the board size reduces, financial sustainability of SACCOs and effectiveness of the board will increase. The assumptions made it necessary to establish whether the relationships were predictive or not. In this case therefore, a linear regression analysis was carried out. Results are presented in Table 3.

### Regression Results

**Table 3: Regression results of board size on financial sustainability**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of square</th>
<th>df</th>
<th>Mean square</th>
<th>$F_c$</th>
<th>$F_t$</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3.775</td>
<td>1</td>
<td>3.775</td>
<td>27.530</td>
<td>6.900</td>
<td>Significant</td>
</tr>
<tr>
<td>Residual</td>
<td>53.063</td>
<td>387</td>
<td>0.137</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>56.838</td>
<td>388</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a. Predictors (constant) board size  Adjusted $R^2 = 0.060$

*b. Dependant variable: financial sustainability.*

Regression results of board size on financial sustainability, in Table 3, indicate that the computed F value ($F_c=27.530$), is greater than the F tabulated ($f_1, 387; 0.01=6.900$), indicating that board size is an explanatory variable of financial sustainability of SACCOs. The obtained F ratio is likely to occur by chance with a $P<0.01$. The hypothesis that size of the board does not significantly influence financial sustainability of SACCOs in Central Uganda was rejected. There was therefore a statistically significant negative relationship between board size and financial sustainability. However, size of the board only explains 6% to variations in financial sustainability (adjusted R square $=0.060$). This is also supported by the regression value of 3.775 compared to residue value of 53.063, suggesting that there are other factors that strongly affect financial sustainability of SACCOs other than board size.
The negative relationship meant that if the board size reduces, financial sustainability of SACCOs increases. This implies that limiting the board size to a particular level as stipulated in SACCOs bye-laws in Uganda (between 5 and 9), improves financial sustainability. When the size is small, firm value increases, consistent with earlier studies (Yermack, 1996; Liang and Li, 1999; Rosette, 2002; Mala Ijalia, 2006; Eisenberg et al., 1998 and Kyereboah & Biekpe, 2007).

Table 4: Regression results of board size on Effectiveness of the board

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of square</th>
<th>df</th>
<th>Mean square</th>
<th>F_c</th>
<th>F_t</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>8.811</td>
<td>7</td>
<td>1.269</td>
<td>2.132</td>
<td>2.090</td>
<td>Significant</td>
</tr>
<tr>
<td>Residual</td>
<td>199.502</td>
<td>338</td>
<td>0.590</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>308.312</td>
<td>345</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R² = 0.042, Adjusted R square= 0.022

Regression results of board size on effectiveness of the board, Table 4, indicate that board size is an explanatory variable of board of directors’ ability to carry out its roles and responsibilities (board’s effectiveness). F computed F_c (2.132) is greater than F tabulated F_t (f, 338:0.05 = 2.090). The obtained F ratio is likely to occur by chance with a P<0.05. However, board size only accounts to 2.2% of variations in board effectiveness (adjusted R square =0.022). This is also supported by regression value of 8.811 compared to residual value of 199.502. Results suggest that there are other factors that strongly affect the successful functioning of the board, for example, board working together as a team, board having good faith towards the SACCO and trustworthiness of the board among others (Batarinyebwa and Kabuga, 1995 and Buwule, 2008). The hypothesis that there is no significant influence of board size on effectiveness of the board was rejected. There was a statistically significant influence of board size on effectiveness of the board. It implies that if size of the board reduces, the board becomes more effective.

Results are at par with (Kajola, 2008 and Lipton and Lorch, 1992), who urge that too big a board is likely to be less effective in substantive discussion of major issues among directors in their supervision of management and that large boards are less effective and easier for the CEO to control. Findings in this study support other previous studies for example, Shobod Deba, & Anup,(2015); Lee & Filbeck,(2006) and Paul,(2009) who found strong negative relationship between board size and firm profitability. Results further support results by Rosette (2002) who established that board composition in terms of size, significantly affect board effectiveness and performance in selected financial institutions in Uganda. Results on board size and effectiveness
of the board support the Regulatory guidelines which stipulate that the board size should be between 5 and 9 members for good performance and effectiveness.

Conclusion and Recommendations

The purpose of the study was to investigate the influence of the size of the board on both financial sustainability of SACCOs and the effectiveness of SACCOs boards in Central Uganda. Board size significantly influences financial sustainability of SACCOs in Central Uganda. Limiting the board size to a particular level as stipulated in Cooperative Regulation 1992, and SACCOs bye-laws in Uganda, adds value to SACCOs and improves financial sustainability of these institutions. Further, the board size improves the ability of the board to carry out its roles and responsibilities. If board size reduces, it culminates into board effectiveness. For SACCOs in Central Uganda to have effective governance and achieve their objective, grow and become financially sustainable, they should maintain small board sizes as stipulated in their legal guidelines. Board size is a significant predictor of both effectiveness of the board and financial sustainability of SACCOs in Central Uganda.

Although our study makes contributions to the understanding of the relationship between size of the board and financial sustainability as well as the board’s effectiveness in SACCOs in Central Uganda, it has limitations. Therefore findings should be used with caution to the extent of the following limitations; First, there were few variables included in the model, although financial sustainability is mainly influence by financial factors. Further, the effectiveness of the board is also influenced by many other factors including board composition and quality, board diversity, information asymmetries and board culture among others. Secondly, the study, is essentially a cross-sectional study that examines board structure phenomenon at a particular point. This may not give a complete picture of the phenomenon studied and limits some of the conclusion obtained. Thirdly, the study is restricted to the member owned Microfinance Institutions, only (the SACCOs), which are not supervised by the Central bank and which are not listed to take advantages of extra regulations. Fourthly, the nature of the sampling units under study cannot be generalized to a large population as only 5 districts were examined out of 112 districts in Uganda.

Therefore, in view of the limitations, the study opens up areas for further research. One, more constructs including constructs on board structure and others should be added into the model based on literature and be tested empirically to increase our understanding of an effective board and financial sustainability of SACCOs. Secondly, future studies should explore appropriate econometric methods that improve the understanding of financial sustainability and board effectiveness. Thirdly, future studies should extend the model to other types of MFIs and
even other financial organisations. Lastly, large sample size, should be used for more accurate findings and which are more generalizable nation wide

References


Cooperative Societies Regulation 1992

*Cooperative Statute, 1991*


Shakir, R. (2012). Board Size Board Composition and Property Firm Performance. , Department of Estate Management, Faculty of Built Environment, Universiti Malaya.


