Influence of Board Attributes on Board Roles Performance in Savings and Credit Co-operative Societies (SACCOS) in Tanzania

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Abstract
This paper reports the findings of a study that had evaluated the influence of board attributes size, gender diversity, skills and meetings on board’s role performance in terms of strategic, resource provision and monitoring roles in SACCOS, Tanzania. Data on the boards’ roles were collected using a questionnaire survey administered to 198 SACCOS boards’ chairpersons. Data for board’s attributes were obtained from annual audited financial reports. Data were then subjected to factor analysis and linear regression models. The results show that board meetings have a positive and significant influence on the boards’ ability to perform strategic, resource provision and monitoring roles. The study further shows that board financial skills have positive and significant effect on strategic and monitoring roles. Impliedly, having a financial skill director on board parallel with board meetings help to stimulate active participation of board members in executing their roles. No evidence, however, was found on the effect of board size and board gender diversity on the board roles' performance. Thus, the study suggests that financial skills of members needs high prioritization in the election of board members to boost efficiency in performing their board roles. Also, regular board meetings for worthy strategies settings, advice and effective monitoring of the SACCOS.

Keywords: Board attributes, Board roles performance, SACCOS, Tanzania

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Introduction
Savings and Credit Co-operative Societies (SACCOS) are member-based and democratically-controlled microfinance institutions (MFIs). They are operated by extending financial services such as savings and credit at fair interest rates for members to maintain a common bond (Almehdawe, Khan, Lamsal & Poirier, 2020; Favalli, Gori Maia & da Silveira, 2020). The common bond membership is drawn from certain socio-cultural affiliations based on neighbourhood, ethnicity, tribes, religious and organizations (Goddard, McKillop, & Wilson, 2008). The provision of financial services enables members to participate in productive ventures and, thus, strengthen the general economy as well as their well-being (Kwai & Urassa, 2015; Ndiege, Qin, Kazungu & Moshi, 2014).

Worldwide, the number of registered SACCOS in 2020 was 86,451, operating in 118 countries with assets of USD 2.6 trillion, serving a population of more than 291 million people (World Council of Credit Unions, 2020). Africa accounts for 47 percent of the registered SACCOS worldwide with Tanzania ranking third for having 3,707 registered SACCOS whose assets value stands at TZS 617 billion (about USD293 million) and serving a population of more than 2.4 million people which covers penetration rate of 7.88% (WOCCU, 2020). This shows how SACCOS are used to combat challenge of access to finance to financially excluded individuals. As SACCOS play a crucial role in communities, they need monitoring to ensure sustainable growth in offering services effectively and efficiently (McKillop & Wilson, 2015). To achieve this objective, SACCOS need a well-structured governance system steered by a functional and effective board of directors (Jones, Money & Swoboda, 2017).

Boards play an essential role in directing and controlling the SACCOS on behalf of members (Hakelius, 2018; McKillop & Wilson, 2015). Generally, boards help to strengthen the SACCOS governance by fulfilling important roles of strategic direction setting, providing advice and resources in addition to monitoring and control (Bijman, Hanisch & Sangen, 2014; Guerrero, Lapalme, Herrbach, & Séguin, 2017; Hakelius, 2018). As such, the power vested on the boards requires them to be active and effective in shaping the SACCOS’ performance.

Although having a board is mandatory, the primary area of concern entails having an effective one is an issue of concern (Guerrero et al., 2017; Ssekiziyivu, Mwesigwa, Bananuka & Namusobya, 2018). Studies by Hakelius (2018), Reddy and Locke (2014), and Unda, Ahmed and Mather (2017) show that board attributes such as size, members' expertise, gender diversity and frequency of board meetings influence the effectiveness of the board. This idea has attracted research trying to figure out the influence of boards' attributes on SACCOS’s effectiveness. Much attention has been paid towards evaluation of the relationship between the board attributes and financial performance of the SACCOS (Chemakai, Alala, & Charles, 2018; Grace, 2018; Kanyi, Maina & Kariuki, 2018; Unda, 2017; Otieno, Mugo, Njeje, and Kimathi, 2015). However, determining the relationship between board attributes and financial performance alone does not specifically address the problem pertaining to the effectiveness of the board in performing its roles (Kassim & Manaf, 2012). Better
understanding of the contribution of the board to the organisation requires the assessment of its attributes and how they affect the execution of its roles.

Moreover, the research on the contribution of the board’s attributes on its performance focused on other types of microfinance firms (Mori, 2014; Nalukenge, 2020) and listed firms (Sánchez, Guerrero-Villegas, & Hurtado González, 2017; Al-Hares, Ntim, Al-Hares, & Al-Abed, 2018; and Nkundabanyanga, Tauringana and Muhwezi, 2015; Ogbechie, 2012; Kamardin & Haron, 2011). However, the results cannot be generalised to all SACCOS as the board attributes and board roles vary across different firm types (Namoga, 2010). SACCOS are governed by a democratic system that allows board members to be elected from membership with no outside independent member within the board. Additionally, the election is based on the one-member one-vote principle, popularly known as parliamentary democracy as opposed to one-share one-vote in corporate firms (Chaddad & Iliopoulos, 2013). The differences in contextual factors prompted the study to assess the extent to which board attributes of Tanzania’s SACCOS influence implementation of the board’s roles.

Furthermore, evidence on the contribution of the board’s attributes to its performance concentrated on either only one board attribute such as diversity (Mori, 2014) and composition (Namoga, 2010), or one board’s role such as monitoring (Kamardin & Haron, 2011), and strategic direction. This study, therefore, examines how SACCOS’ board attributes (board size, board gender diversity, board skills and board meetings) influence the execution of the board roles in terms of strategic, resource and monitoring roles. Prior research indicates that board’s performance based on its execution of roles can be classified into three groups: strategic, resource provision and monitoring roles (Ong & Wan, 2008).

The study contributes to the body of knowledge on SACCOS’ performance by providing insights into how SACCOS’ boards’ attributes relate to the boards’ ability to performing their roles. The rest of the paper has been organised in four sections. The second section provides the review of literature followed by study methods. Then, a section on study findings and discussion follows and the paper is concluded.

**Literature**

**Savings, Credit and Cooperative Societies (SACCOS)**

SACCOS are member-based and democratic controlled co-operative microfinance institutions (MFIs) operating by taking deposits and issuing low-interest loans to members who usually share common bonds (Almehdawe et al., 2020). Membership in SACCOS are connected with common bond which varies from local community, employees of a particular organisation or other organisation affiliations such as religions (churches or mosque), professional associations or geographical locations (Goddard et al., 2008). SACCOS are not profit driven however is use-driven MFIs (Bijman et al., 2014). Dunn (1988) has defined cooperatives (SACCOS being among) on the basis of use- driven and distinguished in three principles that characterised its operation: User- Owner: those who own and finance the
SACCOS are those who use the services; User-Control: those who control the SACCOS are the ones use the service and User-Benefit: benefit of SACCOS is for users. Yet, all owners cannot monitor and control the management at a goal; as such, The Tanzania, Savings and Credit Co-operative Societies Regulations of 2019 provide on how SACCOS can be governed. Board is used as an appropriate tool for bringing in and safeguarding crucial resources for achieving the owners’ objectives. SACCOS boards have numerous roles to monitor management and finances, set strategic direction and build community relationship (Jones et al., 2017).

**Boards’ Attributes**
Board attributes in this study are grounded on recommendations by Zahra and Pearce (1989), who argued that board attributes can be explained in terms of board composition, characteristics, and process. According to Zahra & Pearce (1989), board composition refers to board size; board characteristics include board members’ skills, knowledge, experience, gender, age; and board processes which refer to meetings.

For SACCOS in Tanzania, board attributes are stipulated in the Tanzania SACCOS Regulations of 2019, which outline the standards requirement of each board (URT, 2019). The aim of this standardised requirement is to ensure that a SACCOS is monitored and controlled in a sound and sensible manner by competent board members. Specific board attributes requirements are as follows: board size to have at least 5 up to 9 members, also to contain at least two members with knowledge of either finance, business management, accounting, microfinance or economics. The board’s tenure is pegged at three years, renewable twice only. Finally, the regulations advocate for at least four ordinary board meetings and two extraordinary ones per annum. Due to the nature of the data, this study concentrated on board size, skills, and meetings parallel with gender diversity. Gender diversity within the board is escapable even though it is not explicitly stated in the regulations considering the general national pro-gender equality stance.

**Boards’ Roles Performance**
Board performance refers to the ability of board members to execute board roles (Wan & Ong, 2005). Wan & Ong (2005) proposed three categories of board roles: strategic direction setting, resources provision and monitoring. Monitoring roles constitute the apex of the internal control system of an organisation which tends to pressure the management to work in the interests of the owners (Zahra & Pearce, 1989). Monitoring roles are based on the agency theory, which focuses on addressing the principal-agent conflict that stems from the separation of ownership and control (Fama & Jensen, 1983). Theorists’ contend that boards are an essential mechanism for monitoring and controlling the agents from serving their interest at the expense of the owners’ wealth (Jensen & Meckling, 1976). Board activities within monitoring roles include supervising the performance of the management, monitoring and controlling financial performance through evaluating budgets vs actual results, review expenditure and value for money and following up decisions made by management (Hillman & Dalziell, 2003).

On the other hand, Resource provision roles are grounded on the assumptions drawn from the resource dependency theory, which argues that the survival of the firm is dependent on the
ability to access resources from the environment (Pfeffer and Salancik, 2003). In this concern boards members are responsible for bringing in resources in order to link the organisation with external and other stakeholders and also manage external interdependency. Provision of resources by board members help to lessen dependency and control uncertainties thus boundary spanner and legitimacy of the firm (Hillman & Dalziel, 2003). Activities in resource provision roles include how board members use their expertise to create networks with different stakeholders. The questions also probed on how boards issue directives, expert advice and counselling to executives in finance, on legal matters and on community engagement.

Finally, **Strategic roles** refer to the ability of the board members to contribute meaningfully to the management’s strategic planning, direction and guidance essential in the attainment of the mission and goals for long-term survival of the organisation (Judge & Talaulicar, 2017). Assumptions on the strategic roles are based on the resource dependency theory. The theory claims that there is a need for association’s between organizations with the external environment thus the board members serve to the link (Pfeffer and Salancik, 2003). In fact, strategic roles are the heart of the governance system, as they shows a road map for reviewing the organisation by looking at where it is currently, where it would like to be in future, and how to get there (Jones et al., 2017). Activities included in strategic roles are on how the board gets involved in the formulation, assessment of implementation and review of the strategies and decision making towards achieving SACCOS' objectives.

## Hypotheses Development

**Board Size and Board Role Performance**

The Agency theory stipulates that the board serves to address the agency problem that occurs due to the separation of ownership and control (Jensen & Meckling, 1976). The board size is an important element that mitigates agency conflict and affects its ability to achieve effective monitoring roles (Munene, Ndegwa, Senaji & Mugambi, 2020). The agency theory recognizes that small boards are more efficient in monitoring management actions than large ones. The theory also emphasizes the size limit of 7-8 board members (Jensen, 1993). Previous studies such as Guo & Kga (2012); Malik & Makhdoom (2016) also established that smaller boards are more effective in enhancing communication, coordination, and cohesiveness, all of which compel board members to be committed to their monitoring roles. Fernandes, Farinha, Martins & Mateus (2017) contended that the presence of too many board members could turn some board members into free riders. Hypothesis was proposed as follows:

**H1a**: There is a negative relationship between Board size and performance of monitoring roles

The resource dependency perspective favours larger boards as it can enhance links and connections with the external environment which bring various resources used to support the performance of the resource provision role. According to Pfer and Salanick (2003), the better need for effective linkage, the larger the board should be. As such, board members act as a proxy for providing networking, information, skills, knowledge, advice and legitimacy in order to exercise resource provision roles efficiently and effectively (Namoga, 2010). Hakelius
argues that larger boards are more likely to have members with more skills and knowledge than small boards. In contrast larger boards face the problem of cohesiveness and communication which in turn may result in conflict within the board that could affect directors not to practice well their resource provision role (Raheja, 2005). Thus, the following hypothesis is proposed:

**H1b: There is a positive relationship between Board size and resource provision roles performance**

Resource dependency theory supports larger boards as an appropriate tool for providing vital and secure resources for strategic decision-making (Pfeffer & Salancik, 2003; Judge & Talaulicar, 2017). As such, board members act as a proxy for providing information, skills and advice, strategies developers, overseers of strategy implementation, review and decision-making (Nkundabanyanga, Balunywa, Tauringana, Ntayi, 2014). On the other hand, a bloated board is costly and less effective in performing roles especially when it comes to decision making since it becomes difficult to process the suggestions or problems expressed due to a large number of members involved (Mangena, Tauringana & Chamisa, 2012). Under this scenario, the study hypothesised that:

**H1c: There is a negative relationship between Board size and strategic roles performance**

**Board Gender Diversity and Board Roles Performance**

From the agency theory’s point of view, the presence of women adds value to the monitoring of the management activities, which deflates the agency conflicts (Joecks, Pull & Scharfenkamp, 2019; Wang, 2020; Ward & Forker, 2017). Nielsen & Huse (2010) observe that women contain greater sensitivity and are concerned with the welfare of other people. As such, boards with women members can exert efforts into monitoring and controlling of management activities which aimed to achieve the interest of the owners as a result of lowering agency costs. In contrast other studies found that there is no relationship between board gender diversity and monitoring role (Marimuthu & Kolandaisamy, 2009; Mori, 2014). Thus, the following hypothesis is proposed;

**H2a: The presence of women on the board has a positive relationship with monitoring role.**

Furthermore, the resource dependency theory promulgates that women have better attendance records in board meetings than men (Namoga, 2010). Implicitly, their participation in meetings brings their social character, commitment, skills, and knowledge, thus ultimately contributing to heightened legitimacy of the firm (Hafsi & Turgut, 2013). Likewise women have different networks which may provide the richness information to be used in implementing resource provision role (Nielsen & Huse, 2010a). Previous studies by Joecks et al. (2019), Torchia et al. (2018) and Ward & Forker (2017) revealed the positive relationship between the women’s presence in board and resource provision role. On contrary, Ahern and Dittmar (2012) found a negative association; meanwhile Mori (2014) found no effect of women on boards and resource provision role. Hence it is hypothesized that:

**H2b: Presence of women on the board has a positive relationship with the resource provision role.**
Due to different skills, experiences, attitudes as well as underlying values, women can be an important attribute to making a different contribution in fulfilling strategic roles (Nielsen & Huse, 2010b). Women attitude may strengthen board discussions and propose different opinions and alternative solutions on strategic formulation, implementation, and productive ideas as which result to higher quality decision-making related to strategic roles. From empirical studies by Arzubiaga, Iturralde, Maseda & Kotlar (2018); Nielsen & Huse (2010b, 2010a) found a positive relationship between board gender diversity and strategic role. Conversely, Mori (2014) found that women have no added advantage in a strategic role. Thus the study proposes the following hypothesis:

**H2c: The presence of women on the board has a positive relationship with strategic role.**

**Board skills and board role performance**

Boards need to have members with knowledge and skills to deal with the nature and complexity of the organisation (Black, Carvalho, Kim, & Black, 2017). Skills enhance board members’ critical thinking to fulfil their roles of engendering strategic development, advisory, providing important resources as well as monitoring and control (Tricker & Tricker 2015). Due to the nature of microfinance activities SACCOS being among them, board needs members with financial skills who can perform their roles effectively. Financial skilled member(s) can be able to monitor managers more closely and take appropriate actions on their decisions (García-Sánchez, Martínez-Ferrero & García-meca, 2017). The agency theory perspective favours skilled directors, as they can bring expertise for monitoring and controlling activities done by the management. Previous studies by Mori (2014) and García-Sánchez et al. (2017) reveal that directors with skills have a positive and significant impact on monitoring. Under this scenario, the study hypothesised that:

**H3a: There is a positive relationship between Board members’ skills and monitoring role.**

Furthermore, the resource dependency theory works on the assumption that skills directors help an organisation by bringing external networks, and information for controlling uncertainties such as risks hence are able to perform resource provision role (García-Sánchez et al., 2017). Studies by Zattoni, Gnan, & Huse (2012) and Mori (2014) reveal that board skills have a positive and significant impact on resource provision roles. On the contrary, Kim and Rasheed (2014) and Kim, Burns and Prescott (2009) did not find any evidence on skills and board performance linkages. Hence resulting into the following hypothesis:

**H3b: There is a positive relationship between Board members’ skills and resource provision role.**

Furthermore, from microfinance experience, board qualification in terms of skills coupled with education level may influence the implementation of strategic roles. Skills may lead to a better judgement on particular strategies from development and implementation that bolster effective the implementation of the strategic roles (Fernandes et al., 2017). Based on the arguments gleaned from resource dependency theory, board members are supposed to bring
skills to the boards to fulfil their roles (Francis, Hasan, & Wu, 2015). Hence, the study hypothesized that:

**H3c:** There is a positive relationship between Board members’ skills and strategic roles.

**Board meetings and board’s role performance**

Board meetings provide an opportunity for board members to discuss and address pertinent issues facing the organization to accomplish their expected roles. Thus, frequency of meetings is an important attribute of board role performance (Vafeas, 1999). From the agency theory perspective, frequent board meetings help to monitor and control the management to align their interest with those of owners. In meetings, board members interact and discuss management operations hence reducing information asymmetry (Mangena et al., 2012). Some empirical studies supports the argument that the higher the frequency meetings the greater the monitoring role (Lipton & Lorsch, 1992; Mangena et al., 2012; Ntim & Osei, 2015; Paul, 2017). Hence, the study hypothesized that:

**H4a:** There is a positive relationship between board meetings and the monitoring role.

Also, the board meetings serve as a platform for discussing and assessing the overall effectiveness of the board in strategic settings and implementation (Pugliese & Wenstøp, 2007; Vafeas, 1999). However, debate on the influence of frequency board meetings on board performance remains inconclusive. Elad et al. (2018) and Vafeas, (1999) argues that, for effective implementation of strategic setting, frequent meetings held from time to time are essential. On the contrary (Alsartawi, 2019a) views that meetings are not useful because they involve protocols and not for strategic discussions. Hence, the study hypothesized that:

**H4b:** There is a positive relationship between board meetings and the resource provision role.

Resource dependency theory claimed that regular meetings increases board operations because directors can bring new insights, skills and knowledge for the benefit of the firm. In fact, frequent board meetings facilitate members to timely process newly-obtained information, which can facilitate resource provision (Elad, Wong, & Bongbee, 2018). In contrast, Al-Hares, Ntim, Al-Hares, & Al-Abed (2018) and Nkundabanyanga et al. (2015) argue that frequent meetings lead to directors’ waste of time coupled with associated costs implications. Meanwhile, as per researchers’ best knowledge, there are limited empirical studies that have been conducted to test the relationship between the board meetings and SACCOS board roles. Hence, the study proposed the following hypothesis:

**H4c:** There is a positive relationship between frequency board meetings and the strategic role.

**Methodology**

**Data Collection**

Data for this study was collected from SACCOS based in Arusha and Dar es Salaam regions in Tanzania. These are the two regions dominating the SACCOS sector in Tanzania (TCDC, 2019). Data was collected from January to March 2020. Data for board attributes were
collected from annual audited financial statements whereas data for board roles were collected using structured questionnaires. The questionnaires were conveniently distributed at the physical addresses of 225 SACCOS, out of which 198 (88%) SACCOS responded. These were filled by Board Chairpersons, one for each SACCOS. The SACCOS that responded comprised 112 employees and 86 community-based SACCOS. The questions in the questionnaire were assessed with standard five-point Likert scale ranging from 1 to 5, where 1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree and 5 = strongly agree.

**Measures**

This study borrowed and modified questions from previous studies to measure board roles in SACCOS context. *The board monitoring role* measures board members’ ability to monitor and control firm’s activities as well as evaluate management operations (Kamardin & Haron, 2011b). The role was measured using 13 statements related to the monitoring roles modified from (Kamardin & Haron, 2011b; Mori, 2014; Ogbechie, 2012). *The board’s resource provision role* refers to board members ability to provide various resources to the board and the firm (Mori, 2014). The role was measured by nine (9) statements adapted from (Mori, 2014; Ogbechie, 2012). *The board’s strategic role* is defined as board members ability in development of strategies and setting review guidelines for strategic implementation towards the achievement of mission and goals of the firm (Balta, 2008; Ogbechie, 2012). The construct was measured using eleven 11 statements adjusted from (Balta, 2008; Barroso-castro et al., 2017; Kamardin & Haron, 2011a).

The independent variables were the four board attributes: board size, diversity, skills and meetings as hypothesized earlier. Following the empirical studies reviewed to mention the few (Assenga, Aly & Hussainey, 2018; Hakelius, 2018), board size was measured by the number of board members. Board gender diversity measured by the number of women in the board. Board skills measured by number of board members with financial skills (accounting and finance) from certificate level or above. Finally, board meeting measured by number of board meetings held per annum.

**Control Variables**

To control divergences due to SACCOS specific characteristic, this study include SACCOS size, age and past performance return on assets (ROA) as control variables, similar to most of the previous studies reviewed for instance (Barroso-castro et al., 2017; Unda et al., 2017). SACCOS’ age refers to the number of years since its commencement. SACCOS’ size, measured by total assets but transformed into natural logarithm to normalise its distribution. ROA was measured using surplus over total assets of the previous year. Barroso-castro et al. (2017) argues that as an institution gets older, it is expected to have gathered experience in operations thus may increase the chances for the better board roles performance. Furthermore, large SACCOS usually use economies of scale in utilizing their resources resulting to better performance. Past firm’s performance has been used to predict future performance (Tuggle, Sirmon, Reutzel, & Bierman, 2010). Stiles (2001) argued that ineffective firm performance may trigger directors to participate more in their roles.
Data Analysis

Exploratory Factor Analysis

Factor analysis based on principal components and Cronbach’s α were used to examine the validity and reliability of the measurement scales of board roles in monitoring, resource and strategic direction. Exploratory factor analysis (EFA) was conducted to determine if the measurement scales for each board role construct converges to the same factor. Principle components for each variable are extracted by running principle component analysis using Varimax with Kaiser Normalization and factor loadings for construct that were below 0.5 were suppressed and removed from the list because of weak contribution (Nkundabanyanga et al., 2015). Factor loadings results obtained ranged from 0.5589 and 0.8209 see Table I.

Before conducting factor analysis for our scales, we examined the suitability of the data for factor analysis based on sample size, sampling adequacy, the Kais-Meyer-Olkin (KMO), Bartlett tests and strength of correlation among variables. The EFA results revealed that the value of KMO measure of sampling adequacy was 0.801 and Bartlett’s test of sphericity was significant (p = 0.000).

Table I represents questions for each board roles performance, factor loadings and reliability results obtained after following the procedures for EFA as recommended by Pallant (2020). The factor’s reliability was assessed through Cronbach’s alpha in order to determine internal consistency reliability for the remaining items for each construct. The obtained standardized α coefficients were for monitoring role α 0.888, resource provision α 0.889 and strategic direction α 0.863. Cronbach’s alpha obtained were within the acceptable range of 0.7 and above, signifying that internal consistency reliability was attained (Fornell & Larcker, 1981).

Multiple Regression Analysis

For board roles in monitoring, resource provision and strategic direction, factor analysis was conducted to determine the groups of statements fitting into each board roles performance dimension. Based on factor loadings obtained we scaled and formulated one-factor score for each board role. Finally, regression analysis was conducted to examine the relationship between board attributes and board roles including the control variables. The regression and variables used were as follows;

\[ BRP_{it} = \alpha + \beta_1(BSize)_{it} + \beta_2(Bgdiv)_{it} + \beta_3(BSkill)_{it} + \beta_4(Bmeet)_{it} + \beta_5(SAge)_{it} \]
\[ + \beta_6(ln - SSize)_{it} + \beta_7(ROA) + \epsilon_{it} \]

Where, BRP_{it} is the board roles performance in strategic it, resource it and monitoring it for firm at time t, i=firms’ observations, which takes 1-n, t time. Bsize is board size, Bgdiv is board gender diversity, Bskill is board skills, Bmeet is board meetings, SAge is SACCOS age, ln – SSize is SACCOS size and ROA is previous performance.
Table I: Factor Loadings and Cronbach Alpha for Board Roles Measurement Scales

<table>
<thead>
<tr>
<th>Monitoring role</th>
<th>Factor loadings</th>
<th>Cronbach α</th>
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<tbody>
<tr>
<td>The extent to which board members:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitors managers in decision making</td>
<td>0.8049</td>
<td>0.888</td>
</tr>
<tr>
<td>Analyses budget allocation vs. actual performance</td>
<td>0.8209</td>
<td></td>
</tr>
<tr>
<td>Reviews SACCOS performance against strategic plan</td>
<td>0.6572</td>
<td></td>
</tr>
<tr>
<td>Evaluates managers performance annually</td>
<td>0.6251</td>
<td></td>
</tr>
<tr>
<td>Makes sure financial report are audited by external</td>
<td>0.6882</td>
<td></td>
</tr>
<tr>
<td>Analyses the expenditures vs. value for money</td>
<td>0.6268</td>
<td></td>
</tr>
<tr>
<td>Appoints board member to oversee activities of the society</td>
<td>0.7708</td>
<td></td>
</tr>
<tr>
<td>Monitors the implementation of their decisions</td>
<td>0.7647</td>
<td></td>
</tr>
<tr>
<td>Make sure management comply with the ACT’s, regulations</td>
<td>0.7109</td>
<td></td>
</tr>
<tr>
<td>Monitors managers in decision making</td>
<td>0.8049</td>
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<tr>
<th>Resource provision role</th>
<th></th>
<th>0.889</th>
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<tbody>
<tr>
<td>The extent to which board members:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advise the SACCOS on investment issues</td>
<td>0.5589</td>
<td></td>
</tr>
<tr>
<td>Provide support obtaining knowledge and information</td>
<td>0.7784</td>
<td></td>
</tr>
<tr>
<td>Apply their skills and knowledge to accomplish board tasks</td>
<td>0.8024</td>
<td></td>
</tr>
<tr>
<td>Support the SACCOS to increase its legitimacy in the marketplace</td>
<td>0.7876</td>
<td></td>
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<tr>
<td>Play advisory role on management issues</td>
<td>0.7764</td>
<td></td>
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<tr>
<td>Play advisory role on accounting issues</td>
<td>0.6961</td>
<td></td>
</tr>
<tr>
<td>Skills and expertise help the SACCOS to reduce its environment uncertainties</td>
<td>0.6865</td>
<td></td>
</tr>
<tr>
<td>Actively search for relevant information before board meetings</td>
<td>0.6931</td>
<td></td>
</tr>
<tr>
<td>Contribute to building networks</td>
<td>0.7511</td>
<td></td>
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<table>
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<tr>
<th>Strategic role</th>
<th>Factor loadings</th>
<th>Cronbach α</th>
</tr>
</thead>
<tbody>
<tr>
<td>The extent to which board members:</td>
<td></td>
<td>0.863</td>
</tr>
<tr>
<td>Review strategic proposals that are formed by managers</td>
<td>0.6406</td>
<td></td>
</tr>
<tr>
<td>Review financial strategic options</td>
<td>0.5677</td>
<td></td>
</tr>
<tr>
<td>Form strategic decisions with the management</td>
<td>0.6182</td>
<td></td>
</tr>
<tr>
<td>Form the strategic decisions separately from SACCOS management</td>
<td>0.5637</td>
<td></td>
</tr>
<tr>
<td>Review the effectiveness of risk management as an integral part of strategic planning</td>
<td>0.6398</td>
<td></td>
</tr>
<tr>
<td>Involved in formulation of strategic planning and policies</td>
<td>0.6118</td>
<td></td>
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Results and Discussion

Board Members’ Profiles
Statistics for respondents showed that 173 (87.3%) were male and 25 (12.7%) female. In total 56% of the respondents were in the age bracket of 40-60 years. Furthermore, descriptive statistics of the variables used showed that average board size is 7, which falls within the
The required statutory range of 5-9 board members as stipulated by Tanzania SACCOS Regulation of 2019. The average women on board is 2 members out of 7 and some SACCOS had none implying that SACCOS boards are male-dominated and, thus, some missed out on the women’s substantive contributions. Mean value of board members with financial skills is 1 member out of 7 and in some zero, indicating that only 20% of studied SACCOS boards have financial skills. Number of board meetings averaged 7, with minimum and maximum of 4 and 12 respectively. This implies that some SACCOS hold more frequent meetings implying a possibility of implementing their roles effectively.

**Regression results**

Table II presents the results of multiple regression analysis. The adjusted $R^2$ for monitoring role is 0.2095, resource provision role is 0.092 and strategic role is 0.1898 and F-statistic is significant in all three constructs, thus data was used for presenting linear regression analysis.

<table>
<thead>
<tr>
<th>Table II: Regression results for board attributes and board roles performance</th>
<th>H1a,2a,3a,4a</th>
<th>H1c,2c,3c,4c</th>
<th>H1b,2b,3b,4b</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>Monitoring</td>
<td>Resource</td>
<td>Strategic</td>
<td></td>
</tr>
<tr>
<td>Board size</td>
<td>-0.061</td>
<td>0.075</td>
<td>-0.048</td>
<td>1.064</td>
</tr>
<tr>
<td>(0.041)</td>
<td>(0.044)</td>
<td>(0.042)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board gender diversity</td>
<td>0.005</td>
<td>-0.023</td>
<td>0.017</td>
<td>1.057</td>
</tr>
<tr>
<td>(0.046)</td>
<td>(0.049)</td>
<td>(0.047)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board Skills</td>
<td>0.244**</td>
<td>0.103**</td>
<td>0.071</td>
<td>1.128</td>
</tr>
<tr>
<td>(0.046)</td>
<td>(0.049)</td>
<td>(0.047)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board meetings</td>
<td>0.058*</td>
<td>0.162***</td>
<td>0.209***</td>
<td>1.057</td>
</tr>
<tr>
<td>(0.031)</td>
<td>(0.039)</td>
<td>(0.038)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SACCOS Age</td>
<td>-0.016**</td>
<td>-0.001</td>
<td>-0.008</td>
<td>1.114</td>
</tr>
<tr>
<td>(0.007)</td>
<td>(0.007)</td>
<td>(0.007)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>-0.0026</td>
<td>-0.008</td>
<td>-0.016</td>
<td>1.029</td>
</tr>
<tr>
<td>(0.013)</td>
<td>(0.014)</td>
<td>(0.014)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ln-SACCOS Size</td>
<td>0.079</td>
<td>-0.103</td>
<td>-0.156***</td>
<td>1.108</td>
</tr>
<tr>
<td>(0.049)</td>
<td>(0.053)</td>
<td>(0.051)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-1.595</td>
<td>0.382</td>
<td>2.050</td>
<td></td>
</tr>
<tr>
<td>(1.013)</td>
<td>(1.086)</td>
<td>(1.044)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>198</td>
<td>198</td>
<td>198</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.2376</td>
<td>0.124</td>
<td>0.1898</td>
<td></td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.2095</td>
<td>0.092</td>
<td>0.1599</td>
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<tr>
<td>F-statistics</td>
<td>8.46***</td>
<td>3.85***</td>
<td>6.36***</td>
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<tr>
<td>RSME</td>
<td>0.8891</td>
<td>0.9528</td>
<td>0.9165</td>
<td></td>
</tr>
<tr>
<td>Mean VIF</td>
<td>1.079</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Standard errors reported in parentheses, ***, ** and * represents significance level at the 1%, 5% and 10%.*

The data set was tested to ensure that data meet the multiple regression analysis assumptions. Normality test was checked through normal curve and were approximately normal. Further
cross check was done through skewness and kurtosis. According to Ahmed, (2011), normally distributed data must have zero skewness with accepted range of -1.0 and +1 and -3.0 to +3.0 for kurtosis. The skewness range (0.0079 and 1.625) and kurtosis range (-0.093 and 3) were within the recommended range. Furthermore, variables were examined for multicollinearity problem by using variance inflation factor (VIF) and the threshold is not required to exceed a value of 10 (Alauddin & Nghiemb, 2010). As seen in Table II all values were below the recommended threshold thus multi-collinearity problem was not existent.

**Board size and board’s roles performances**

Results as shown in from Table II revealed that Board size is negative and insignificantly associated with the strategic role (β -0.048, p> 0.1), monitoring role (β -0.061, p> 0.1) and positive but insignificant with resource role (β 0.075, p> 0.1), thus H1a, H1b and H1c are not supported. These findings imply that the number of board members by itself does not have any impact on the performance of its roles. This situation could be attributable to the nature of the SACCOS board members who are elected from membership with a common bond (Zivkovic, 2015). Board members with like-minded nature in thinking and experience could have been limited with a variety of skilled people that can affect their ability in performing their roles. For instance, SACCOS of motorcycle riders or small farmers regardless of their number in the board, the nature of the members involved may lead to impairing competence in fulfilling their roles. Thus, many or less board members in SACCOS could add no significant value in raising the ability in executing the board’s roles.

The results from the regression analysis are in line with the findings from previous cooperative studies by Bond (2009); (unda et al., 2017), which showed that the board size does not have any effect on its roles performance, because board members are not elected due to their expertise but rather due to community influence. However, findings contradict with results from non-financial firms which reveal that, board size and board roles are significantly because the increase in size of the board provides an increased pool of skilled members as a result support performance of board roles (johl et al., 2015; Munene et al., 2020; Puni & Anlesinya, 2020).

**Board gender diversity and board roles performance**

Regarding board gender diversity from Table 2, the findings indicate a positive but insignificant relationship with strategic role (β 0.017, p > 0.1) and monitoring (β 0.005, p> 0.1), also negative but insignificant with resource (β -0.023, p > 0.1). These results failed to support all three hypotheses H2a, H2b and H2c. This implies that the presence of women within the SACCOS board does not add value to the implementation of board roles. This could be a result of having fewer (only 28%) women members on the board. Underrepresentation of women on the SACCOS board could create social capital imbalance and as a result, may impair their involvement in the implementation of board roles. Boards with less women members are not gathering the benefits female members can provide (Herbert, 2019).

The findings are in line with the results by Mori (2014) which indicate that board gender diversity has no significant relation with the board roles because many women do not possess
skills and experience in the microfinance industry thus limiting their contribution to the board. However, the obtained results contradict Joecks et al. (2019), and Ward & Forker (2017), which indicate that board gender diversity enhances resource provision roles. According to Ward and Forker (2017), when the firms include women on their boards, they concurrently come with extra values such as social character and commitment. Besides, it makes them have stronger links with the community which consequently promotes board role performance. Moreover, Adams and Ferreira (2009); Terjesen et al. (2016) also observed that women had good attendance in the board’s meetings which led them to participate more in board activities.

**Board’s financial skills and roles performance**

As table 2 illustrates, Bskill has a positive and significant relationship with resource ($\beta 0.103$, $p < 0.05$) and monitoring ($\beta 0.244$, $p < 0.05$). However, no evidence was found on strategic roles. Thus H3b and H3c were supported. In other words, boards with member(s) possessing financial skills enhanced their ability to perform their resource and monitoring roles. Financially skilled members were more likely to assist in monitoring management performances including financial controlling through comparing actual spending with budgets, and observance of value for money in SACCOS activities. The findings are consistent with Mori (2014); García-Sánchez et al. (2017) and Ogbechie (2012), which support the role that boards with financial skills play in augmenting the monitoring role. Regarding agency theory, the boards are charged with the monitoring role of the firm’s management. Thus, a board with financially skilled member(s) is better placed to effectively exercise the function of monitoring management over financial matters.

Nalukenge (2020) argued that the involvement of the board on resource provision role is dependent on the respective firm’s board skills. In other words, board with financial skill will be able to provide financial management information as well as link the SACCOS with other key stakeholders. Furthermore, financially skilled member can be able to provide professional advice on financial matters which is the core function in SACCOS. Theoretically, this study’s findings support the postulations from the resource dependency theory that financially skilled member within the board is a resource which is used to boost execution of better links, connections and advise to the management. This study results are similar to the previous results from (Mori, 2014; Nkundabanyanga et al., 2015; García-Sánchez et al., 2017)

Moreover, board financial skills members had a positive but insignificant relationship with the strategic role, which might be attributable to few financial skilled members in the board, i.e. an average of one. Furthermore, Nalukenge (2020) found that cooperatives boards play a passive role regarding strategic role, higher emphasis is on monitoring and resource provision roles, this could be another reason behind financial skilled member(s) do not concentrating on strategic roles.

**Board meetings and role performance**

The results summarised in Table 2 indicates that board meetings had a positive relationship with strategic roles and resource provision by ($\beta 0.209$, $p < 0.01$), ($\beta 0.162$, $p < 0.01$) and ($\beta 0.058$, $p < 0.1$) respectively, hence H4a, H4b and H4c were supported. Implicitly, regular
board meetings promote the commitment of its members to fulfilling their strategic, resource and monitoring roles. Regular board meetings would enable board members to make rigorous follow-ups on activities they have agreed upon and ensure that management actions (agents) are better and timely aligned with owners’ aspirations. Findings support the perception that frequent meetings are more likely to make board members active in participating in monitoring activities. Theoretically, the findings are in line with Lipton and Lorsch (1992) expectations, that regular board meetings allow directors to take their monitoring roles effectively.

Furthermore, board meetings would give board members more time for discussing strategic agendas, evaluate management operations performance as well as incorporate owners’ options so as to archive goals and objectives. Spending time on discussions and evaluations could be an important resource because board members may be able to contribute their skills and experience in decision making as well as in advising the management. The findings are supported by Elad et al. (2018); Mangena et al. (2012); Ntim & Osei (2015) that regular board meetings are crucial in enhancing the performance of the board’s roles. However, the findings contradict Alsartawi (2019b, 2019a) who argued that frequent board meetings contribute to negative board roles performance as most of the meetings are dominated by protocols and not for meaningful discussion of ideas. The findings support theoretical arguments relating to the agency theory, which suggests that when boards meet regularly they boost the ability of the board members to enrich monitoring activities. Likewise, they support the resource dependency theory, which advocates for regular meetings for board members to focus on creating networks, and seeking and sharing knowledge and experiences from different stakeholders, thus increasing their ability to provide valuable strategic issues and advice to the management.

**Conclusion**

The purpose of this study was to examine the relationship between boards’ attributes and board’s roles performance in SACCOS in Tanzania. The results provide the empirical evidence on boards with members possessing financial skills raised the prospects of engendering effective execution of monitoring and resource provision roles. Furthermore, board meetings matter in achieving all three roles; strategic direction setting, resource provision and monitoring. The results also support the importance of having members with financial skills in addition to holding regular meetings as effective board roles performance mechanisms. The study, however, found no evidence on the effect of board size and board gender diversity on board roles performance, implying that the number of board members and presence of women do not add value in raising board roles performance in SACCOS. Implicitly, the findings confirm the agency theory’s perspectives that board possessing members with financial skills parallel with regular meetings are the important instruments for effective execution of monitoring role in SACCOS’s context. Moreover, the results validate resource dependency perspective that board with financial skilled members and frequent meetings facilitate fulfilment of resource provision roles.

The study has both practical and policy implications. Practically, the study revealed that financial skills members and regular meetings are important attributes for the
implementations of board roles in SACCOS. The study suggests that SACCOS members must consider the election of board members with financial skills as stipulated in the Tanzania SACCOS Regulation for the better performance of board roles. Also, SACCOS ought to build the capacity in financial management of both board members and ordinary members to enhance the execution of board’s roles. Finally, the co-operatives’ regulator in the country has a duty of strengthening oversight role on SACCOS boards to execute their roles to the expected level and in compliance with the statutory requirements.

From policy perspective, the government through the Tanzania Cooperative Development Commission (TCDC) as regulator and co-operatives policy maker needs to review and re-examine the existing regulations and consider increasing board meetings frequency. Doing so would allow board members to be informed more properly about the activities done within the SACCOS and take the right decisions on time. This study focused on how board attributes are related to the boards’ ability to implement their roles thereafter the future research should empirically examine the impact of the board’s role performance on the financial and social performance of the SACCOS, which were not necessarily the focus of this study.

**Declaration of Conflicts Interest**
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