

## **Effects of Board Processes on Board Roles Performance among Selected Savings and Credit Cooperative Societies in Tanzania**

Lilian S. Mlay<sup>1</sup>, Sylvia S. Temu<sup>2</sup> and Lucas D. Mataba<sup>1</sup>

<sup>1</sup> *Moshi Cooperative University, Kilimanjaro, Tanzania.*

<sup>2</sup> *University of Dar es Salaam Business School,*

### **ABSTRACT**

*This paper examines the effect of board processes on efforts norms, cognitive conflict, and use of skills and knowledge on the board's performance in monitoring, resource provision and strategic roles in SACCOS in Tanzania. The social exchange theory provided theoretical guidance. A cross-sectional design with a mixed-methods approach was used. Data were collected using a questionnaire administered to 198 board chairpersons and an interview with nine key informants from SACCOS managers and cooperative officers. Data were analysed through multiple linear regression and thematic analysis. The results revealed a strong and significant relationship between effort norms and board roles' performance in monitoring, resource provision, and strategic roles. The results further indicated a positive and significant relationship between the application of skills and the knowledge of board members, coupled with their ability to monitor and provide the board with essential resources. The results further revealed that cognitive conflict negatively influenced board members' ability to play strategic roles. Moreover, no significant relationship was found out between cognitive conflict and board roles in monitoring or resource provision. Effort norms and the Use of board members' skills and knowledge significantly predicted board role performance. Therefore, the study recommends that the board chairperson encourage a participatory culture to ensure that board members exert enough effort into and apply their skills and knowledge in fulfilling their roles. Furthermore<sup>2</sup>, SACCOS members should elect board members based on their skills, knowledge, and ability to work and collaborate constructively and respectfully with other members.*

**Keywords:** *Board Processes, Board Roles Performance, Savings and Credit Cooperative Societies, Tanzania*

## **INTRODUCTION**

Boards serve as a building block that foster the governance of savings and credit cooperative societies (SACCOS) through monitoring, strategic direction settings, and provision of resources (Guerrero, Lapalme, Herrbach, & Séguin, 2017; Hakelius, 2018). The board is a central element of a corporate governance system. The board of directors overseeing the management at the organisation's apex and ensures they conduct their affairs ethically and legally (Jones, Money & Swoboda, 2017). Having a board is mandatory; however, having an effective one is crucial (Guerrero et al., 2017). Ssekiziyivu, Mwesigwa, Bananuka, & Namusobya (2018) reported that the primary challenge faced by SACCOS in African countries is the effective performance of their boards. For instance, in Tanzania, SACCOS are legally required to have a board for governing the SACCOS as outlined in the laws and regulations. But still, SACCOS continue to struggle with unsatisfactory long-term survival rates (Magumula & Ndiege, 2019).

The demise of SACCOS creates disappointment and disharmony among SACCOS members and raises questions about the competency and effectiveness of these boards regarding their performance. Assessing the performance of the boards can be challenging due to confidentiality and limited access to the board (Jansen, 2021). This led to most previous studies on SACCOS boards to examine the relationship between board characteristics and financial performance as a proxy for evaluating board performance (Ghosh & Ansari, 2018; Hakelius, 2018; Munene et al., 2020; Reddy & Locke, 2014; Unda et al., 2017). Board characteristics rely on past data alone; they do not provide insight into what happens within the board (Kassim & Manaf, 2013). This leads to a lack of understanding of board behavioural processes and group interactions that determine board performance (Pastra, 2017). Board process behaviour links inputs and outputs, which could influence the effective execution of board role performance (Heemskerk, 2019). However, previous studies neglect the processes that link inputs and outputs, specifically the impact of board processes on the performance of board roles (Minichilli et al., 2015). Then currently, the board processes and role performance have gained ground in scholarly discourse (Jansen, 2021). Different scholars have tended to underscore the importance of investigating board processes and their bearing on the execution of board roles (Jansen, 2021; Heemskerk, 2019). This invites to go beyond board characteristics and require opening the “black box” of what boards do and how they carry out their roles. Board processes cover conduct aspects, dealing with how their members (as a collective) interact, collaborate and communicate during their preparations, participation, critical discussion, and exchange of information based on their

assigned roles (Hongjin Zhu, 2014). Subsequently, the concise and researchable factors presented by Forbes and Milliken (1999) have offered the most promising avenue for evaluating the process behaviour aspect of board members. These factors constitute the primary building block in understanding the behaviour perspective of board members regarding their board's performance. Forbes and Milliken (1999) suggested that board processes entail efforts norms, cognitive conflicts, and the use of skills and knowledge that are more likely to affect the ability of the SACCOS board to perform their functions. Different previous studies have examined the boards' processes on their role performance, but these studies have mainly been limited to the evaluation of a few firms from developed countries, such as manufacturing firms (Minichilli et al., 2012; Zona & Zattoni, 2007), listed firms (Bailey & Peck, 2011; Farquhar, 2011; Jansen, 2021; Mande, 2013; Pastra, 2017), and secondary schools (Heemskerk et al., 2015). Consequently, none has explored these aspects in the SACCOS context and more so in emerging countries such as Tanzania.

Additionally, findings from previous studies were unclear and inconsistent because of varying behavioural determinants of board members depending on the nature of the firm under examination. For instance, the influence of cognitive conflicts on the board's role performance have been often non-significant (Jansen, 2021), negative (Minichilli et al., 2012) or even positive (Heemskerk et al., 2015). Consequently, the results cannot be generalised to SACCOS, given their cooperative nature as a members-based non-profit financial institution that abides by cooperative principles (Favalli et al., 2020; Zivkovic, 2015). Notably, SACCOS are governed by members through elected boards and use a democratic control system of one-member-one-vote in decision-making (Bijman et al., 2013, 2014; McKillop & Wilson, 2015). Since SACCOS board members are elected from the membership, they have a triple set of rights as owners, users and beneficiaries (Bijman et al., 2014; Hakelius & Hansson, 2016). The nature of the SACCOS boards may lead to behaviour variances of their board members in doing their work relative to directors of investor-owned firms. In this regard, the insufficiency of empirical studies investigating board processes and their potential contribution to board role performance in SACCOS constitute another knowledge gap. Therefore, this study aims to fill this research gap by examining the board processes and their effect on the board's performance, which remained untested in the SACCOS context and emerging countries, including Tanzania. Zatton et al. (2015) suggest that board members collaborate to boost board performance and collective knowledge base. Examining the relationship between board process and board role performance can help SACCOS board chairpersons and board members to grasp their behaviour and learn how to manage themselves to boost their

capacity to fulfil their roles. Similarly, the relationship is additive and enriches the existing literature on boards and SACCOS, particularly in Tanzania, a developing country's context.

## **Literature Review**

### **Board Processes**

The board process refers to the board members' behaviour in the decision-making practice, which affects their ability to perform their roles (Heemskerk, 2019; Pastra, 2017). The decision-making process involves board members collectively preparing for the board and participating in intensive discussion and communication through exchanging information (Bailey & Peck, 2011). Board interactions and decision-making are critical in determining the board's performance. Forbes and Milliken (1999) have identified three factors in board processes that can influence board task performance: cognitive conflict, efforts norms, and the use of knowledge and skills. It is noted that cognitive conflict, efforts norms, and the use of knowledge and skills are essential aspects of the board processes (Forbes and Milliken, 1999). These aspects can be linked to the social exchange theory. The theory suggests that parties (individuals or groups) enter into and maintain exchange relationships with others, expecting that doing so will be worthwhile (Homans, 1958). Thus, the board members (as a group) in the SACCOS are attracted to a fair relationship with the perceived value of the resources exchanged and the fairness of the exchange. Similarly, the theory in the context of the SACCOS presupposes that board members' interactions affect the quality of their relationship and their ability to work together effectively (Pastra, 2017). Hence, the board processes regarding effort norms, cognitive conflicts, and the use of skills and knowledge can influence board role performance. This study, therefore, uses Social exchange theory (Homans, 1958) in explaining the relationship between board processes and board role performance in SACCOS.

### **Boards' Roles Performance**

Board performance refers to the ability of board members to play their board roles (Judge & Talaulicar, 2017). Judge & Talaulicar(2017) have proposed three categories of board roles namely; monitoring, resource provision, and strategic direction setting. The monitoring role is derived from the agency theory, which emphasises that the board is responsible for monitoring the agents' actions to ensure that they act in the best interests of the owners and

the organization as a whole (Jensen & Meckling, 1976). Also, board undertakings within monitoring roles comprise supervising the performance of the management, monitoring and controlling financial performance through the evaluation of budgets versus the actual, reviewing expenditures and ensuring value for money, in addition to following up on the outcomes of the management decisions (Zatton, 2015; Nalukenge, 2020). Resource provision roles are grounded in assumptions drawn from the resource dependency theory, which claims that a firm's survival depends on the ability to access environmental resources (Pfeffer & Salancik, 2003). Board members provide expertise as resources to link the organisation with external stakeholders and manage external interdependency. Such resource provisions by board members help to lessen dependency and control uncertainties which serve as a boundary spanner and improve legitimacy (Hillman & Dalziel, 2003). Activities in resource provision roles also cover how board members apply their expertise to advice, counsel the management, and create networks with different stakeholders. Finally, the board's strategic role involves formulating strategic planning, reviewing strategic proposals, and supporting the implementation of strategies and decision-making to attain organisational goals for long-term survival and sustainability (Judge & Talaulicar, 2017). The strategic role is derived from resource dependence theory, which strongly emphasizes that boards provide a firm's management with important strategic planning and advice and may contribute to strategic decision-making.

### **Hypothesis Development**

#### **Effort Norms and Board's Roles Performance**

Effort norms refer to group-level constructed expectations of the group's shared belief at individual resource levels regarding time, energy, skills and commitment invested in the board's roles (task) (Forbes & Milliken, 1999). In this regard, effort norms seek to address each board member's effort level in a group (board) of interdependent individuals in preparing and engaging in the board's endeavours (Zona & Zattoni, 2007). When board members devote ample time to prepare themselves, it may result in active engagement and collaboration in the board meetings. Thus, such commitment could generate much-needed information for supporting quality decision-making and enhancing the effective execution of the board's roles (Namoga, 2011). From social exchange theory, it can be argued that when board members perceive that other members are not matching their efforts, they may feel that the

exchange of resources is unfair, leading to lower levels of commitment among board members, thus affecting board role performance.

On the other hand, when board members think that others match their efforts, they may be more committed, resulting in the board roles' performance. Strong effort norms among board members can also translate into intensive interaction in debating strategic issues and scrutinising management proposals, reports and their performances. Scrutiny of management reports and analysis fosters the monitoring role (Nalukenge, 2020). Meanwhile, the active participation of board members in discussions and during meetings facilitates strategic and resource provision roles (Puyvelde *et al.*, 2018). Also, evidence from empirical studies supports the view that the higher efforts norms on the board significantly raise contributions to strategic settings, resource provision, and monitoring of management (Minichilli *et al.*, 2012; Zattoni *et al.*, 2015). Studies also indicate that the time and preparation board members devote to their boards considerably differ among firms (Zattoni *et al.*, 2015). These differences lead to a variance in the board's ability to perform their respective roles. In this regard, Kleanthous (2017) affirmed significant differences in time, energy, skills, and commitment that SACCOS board members dedicate to their respective boards. And yet, limited studies have focused on evaluating the performance of effort norms on board roles in SACCOS. Thus, we hypothesise:

*H1a: Effort norms are positively related to board monitoring role performance.*

*H1b: Effort norms positively relate to board resource provision role performance.*

*H1c: Effort norms are positively related to board strategic role performance.*

### **Cognitive Conflict and Board Roles Performance**

Cognitive conflict refers to task-related variations in judgment among group members (Forbes & Milliken, 1999; Jansen, 2021). Cognitive conflict often emerges in disagreements on the tasks' content, particularly when board members present divergent views, ideas, or opinions, leading to judgment differentials. Cognitive conflict also ignites a debate among board members on their alternative view points and making critical analyses that could better the resultant decisions (Zattoni *et al.*, 2015). Moreover, cognitive conflict could remind the management that the board actively monitors issues in the firm, leading them to work in the owners' interest (Adi *et al.*, 2022). Social

exchange theory suggests that conflicts can be disruptive, leading to more thorough and creative decision-making processes if managed effectively. When board members feel their opinions are respected and valued, they may be more committed to participating in the discussion, resulting in better board performance. Cognitive conflict also accords board members an opportunity to articulate their views, which could generate more valuable information for the firm, hence reducing the transactional cost of dealings with environmental uncertainties and enhancing the resource provision role (Ogbechie, 2012; Pastra, 2017). Moreover, disagreements align with better advice and quality decisions, may induce consideration and careful evaluation of available alternatives. Cognitive conflicts are also increasingly becoming strategic choices and options as the board members evaluate them carefully and opt for the best decision to smoothen the execution of the board's strategic roles (Barroso-Castro et al., 2017).

Overall, mixed empirical evidence exists on the cognitive conflict and the board's role performance between firms. For example, cognitive conflict tends to have a positive relationship with the board's role performance in monitoring and resource provision roles (Bailey & Peck, 2011; Farquhar, 2011; Heemskerk et al., 2015; Zona & Zattoni, 2007) and strategic roles (Barroso-Castro et al., 2017; Zattoni et al., 2015). Conversely, Minichilli et al. (2012) found a negative relationship between cognitive conflict and board role performance. On their part, Heemskerk (2019) and Jansen (2021) did not find any link between cognitive conflict and the board's role performance. Likewise, the nature of tasks expected in SACCOS boards requires board members to participate in cognitive discussions to reach the best decision-making option. However, excessive cognitive conflict on the board can be detrimental since it can trigger the rise of negative emotions among board members; thus, it can undermine the quality of the decision and, as a result, hamper the board's roles (Heemskerk et al., 2017; Kerwin et al., 2011). Therefore, we hypothesise as follows:

*H2a: Cognitive conflict is positively related to the board-monitoring role.*

*H2b: Cognitive conflict positively affects the board resource provision role.*

*H2c: Cognitive conflict is positively related to the board's strategic role.*

### **Application of Knowledge and Skills and Board's Roles Performance**

For the boards to perform their roles effectively, they need board members equipped with skills and knowledge to execute their respective board's roles (Bailey & Peck, 2011; Bužavaitė & Korsakienė, 2021). The use of

knowledge and skills refers to how board members effectively leverage their collective knowledge and skills to support board roles (Forbes & Milliken, 1999). Such application of knowledge and skills pertains to how they contribute to the firm's well-being in a coordinated manner (Bankewitz, 2018). Evidentially, the board requires the aggressive use of the board members' knowledge and skills to benefit group decisions (Bankewitz, 2016). After all, using skills and knowledge can minimise losses and enhance collective learning among board members (Bužavaitė & Korsakienė, 2021). When board members utilize their expertise and knowledge to inform board discussions and decisions, it can lead to better-informed decisions and improved board task performance. From the social exchange theory, when board members feel that their skills and knowledge are being utilized effectively, they may be more committed and perform better in their board roles. Conversely, when board members feel their skills and knowledge are not being utilized, they may disengage and perform poorly in their roles. In addition, knowledge and skills are essential in implementing the board's roles when directors are heavily interdependent and share mutual responsibilities for the board's performance (Bužavaitė & Korsakienė, 2021).

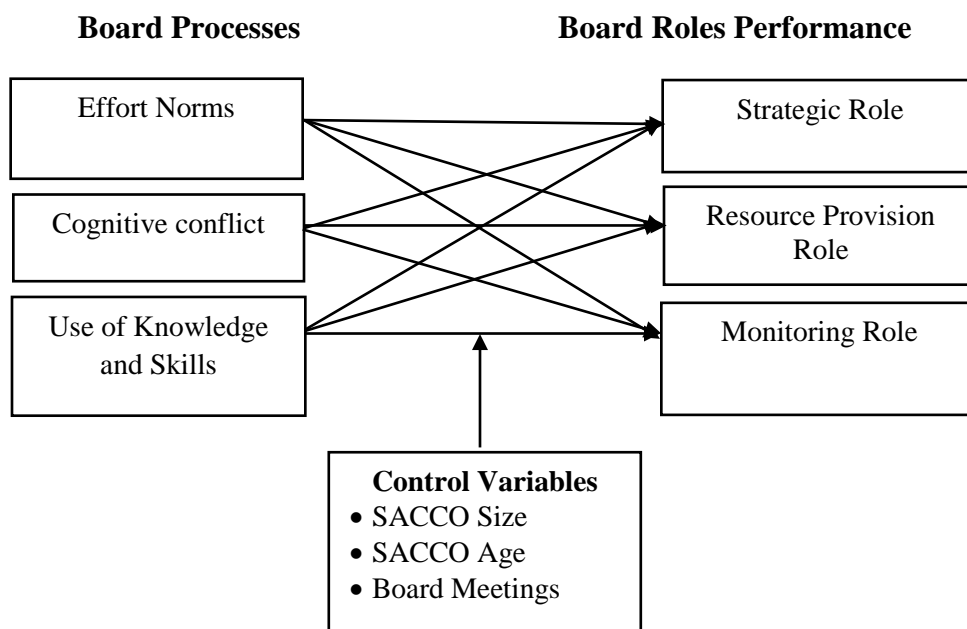
Moreover, applying knowledge and skills is an essential criterion of board performance since it allows for a clear division of roles and responsibilities based on each board member's competency, facilitating information flow between board members (Bankewitz, 2016). Previous studies by Bankewitz (2016), Farquhar (2011), Heemskerk et al. (2017), Minichilli et al. (2012), and Zattoni et al. (2015) found the greater use of knowledge and skills positively associated with the board's roles performance. Even though knowledgeable and skilled board members are essential assets for the board, they sometimes cannot guarantee the use of their expertise to implement board roles because of a possibility of "social loafing" within the board, whereby directors fail to apply their skills and knowledge in executing board roles (Heemskerk et al., 2015). In this regard, an effective board demands active use and integration of the board members' skills and knowledge to inform and enrich the board's decisions. To effectively fulfil their resource provision and strategy roles, these boards should combine their competencies in different functional areas and apply them accordingly and appropriately to address other issues (Forbes & Milliken, 1999). Hence, it is hypothesised that:

*H3a: Use of knowledge and skills positively correlates with monitoring role performance.*

*H3b: Use of knowledge and skills positively correlates with the resource provision role performance.*



*H3c: Use of knowledge and skills positively correlates with strategic role performance.*



**Figure 1: Conceptual Framework**

### **Methodology**

The research design for this study is a cross-section survey requiring data collection at one point in time. This design helps to control the conditions of the study by capturing the present state, facilitating a snapshot of a large population, and allowing for generalisation of findings (Saunders, Lewis and Thornhill, 2012). A mixed research approach allowed qualitative and quantitative data to inform the study in solving the research problem (Creswell, 2009). The quantitative data tested the relationship between board process and board role performance in accordance with the hypotheses. In contrast, qualitative data complemented quantitative data to enhance the validity of the study findings. The study focused on SACCOS drawn from Arusha and Dar es Salaam since the Regions were highly concentrated, with 579 active SACCOS in Tanzania (TCDC, 2019). In addition, the study applied the Yamane (1967) formula to calculate the sample size of 236 SACCOS. The sample size was proportionate to Dar es Salaam and Arusha. A simple random probability sampling technique was used to choose SACCOS in each region, giving each SACCOS an equal chance of being selected. Questionnaires were sent to 236 SACCOS, however only 198 (83.8%) SACCOS were fully responsive and completed the questionnaires

for the study. This responsive and usage rate was sufficient since Mugenda and Mugenda (1999) propose a response rate above 70% as acceptable for generalisation. At the same time, purposive sampling, as the non-probability technique, was used to select the study area, board chairperson and nine key informants from SACCOS managers and cooperative officers.

### **Source and Data Collection**

The study adopted a mixed-methods approach, whereas data were collected from primary and secondary sources from SACCOS as a targeted population. Primary data for the board processes and roles were collected from the board chairperson through the closed-ended survey questionnaire. Moreover, the qualitative primary was collected from key informants using an interview guide kit for triangulation. In contrast, secondary data for board meetings, SACCOS size and age were collected from the audited financial reports. Primary data were collected from January to March 2020. Board chairpersons filled out questionnaires, one for each SACCOS, on behalf of the whole board since board governance studies are usually based on a single respondent to avoid inconsistency in information on the same issue (Zhang, 2010).

The selection of board chairpersons is purposive due to their position in power, authority and presumed knowledge of the SACCOS they serve. Moreover, the chairperson is responsible for giving directions to board members on processes. Previous studies by Barroso-Castro et al. (2017) and Jansen (2021) had similarly collected board information from one board member to represent the whole board. The questions in the questionnaire were assessed based on a five-point Likert scale ranging from 1 to 5, where 1= strongly disagree, 2= disagree, 3= undecided, 4= agree, and 5= strongly agree. In confirming that the questionnaire measures the intended variables for the objectives, the study used Cronbach's Alpha test to determine such reliability. Cronbach's alpha test from 0.7 and above is accepted because it signifies the attainment of internal consistency reliability (Fornell & Larcker, 1981). A pre-test and a pilot study were also conducted before the main survey to test the reliability of the study's questionnaire. On the other hand, the researchers interviewed nine (9) key informants, comprising seven (7) SACCOS managers and two (2) cooperative officers (COs). The selection of key informants was purposive, considering their expertise and experiences in SACCOS boards. The researchers also considered ethical procedures to safeguard the participants' interests, privacy and dignity (Bryman, 2016).

### **Dependent Variables**

The monitoring role was measured by board members' ability to monitor society's activities and assess management performance (Nalukenge, 2020).

The monitoring role was measured by the statements, which asked how to monitor the SACCOS management. The resource provision role refers to board members' ability to bring various vital resources regarding skills and experiences to the board and society (Mori, 2014). There were questions on the resource provision role measuring how board members could bring their expertise in networking their SACCOS with other stakeholders and advising on different fields to benefit the SACCOS. The strategic role measures board members' ability to formulate strategies and set review guidelines for strategic implementation towards achieving the society's mission and goals. The strategic roles asked how the board members developed the strategies and guided the performance. These roles were measured using statements adapted and modified from Balta (2008), Barroso-castro *et al.* (2017), Kamardin & Haron (2011b), Mori (2014), Ogbechie (2012) and Balta (2008).

### **Independent Variables**

Board processes, as independent variables, fall under cognitive conflict, effort norms, and use of knowledge and skill, as hypothesised earlier, measured using a five-point Likert scale. The *cognitive conflict* concerns task-oriented discussions and judgement for implementing board roles. The variable asked how much task-related discussion on agreements and disagreements emerges in meetings. *Efforts norms* refer to the extent to which board members are actively engaged in executing their roles. The *use of knowledge and skills* determined the extent to which board members apply their skills and expertise in performing board roles. The questions on board processes variables were adapted and modified following the suggestions from Zattoni *et al.* (2015), Heemskerk *et al.* (2015), Minichilli *et al.* (2012), and Forbes and Milliken (1999).

### **Control Variables**

Variations in firms' specific characteristics in SACCOS prompted the study to embrace firms size, firm age, and board meetings as control variables like previous studies (see, for example, Bankewitz, 2018; Barroso-Castro *et al.*, 2017; Heemskerk *et al.*, 2015; Puyvelde *et al.*, 2018). SACCOS' age refers to how long it has been in operation. The study measured SACCOS' size based on the value of total assets, but their values were in a wide range and thus were transformed into a natural logarithm to normalise their distribution. Taking the natural logarithm allows for a more effective data analysis by compressing the data into a more manageable scale and making it easier to

interpret and understand. Moreover, large SACCOS generally have recourse to economies of scale to optimise their resources, resulting in better execution of the board's roles. Finally, the number of meetings conducted annually measures total board meetings.

### **Data Analysis**

Quantitative data were analysed in three phases. The first phase focused on factor analysis using principal component analysis to group the Likert scale items into their respective scale, as Pallant (2020) recommended. The study only accepted components extracted from PCA with commonalities greater than 0.5. The remaining factors were scaled and formulated into one continuous variable for monitoring, resource provision and strategic roles. Second, the independent, dependent and control variables were subjected to descriptive analysis by determining each variable's mean, median, standard deviation, minimum, maximum, skewness and kurtosis. Third, the study used inferential statistics based on multiple regression. Prior to conducting the regression models, the data for this study underwent diagnostic assumption tests, including assessments for normality and multicollinearity. These tests were performed to ensure that the data adhered to the necessary requirements for regression analysis. Multiple regression analyses were conducted with two blocks (1 and 2) to evaluate the proposed relationship in the hypotheses. In Block 1, we regressed control variables on each board role performance in separate regressions. The models are specified as follows:

$$BP_i = \alpha + \beta_1(\ln SSize)_i + \beta_2(SAge)_i + \beta_3(Bmeet)_i + \varepsilon_i$$

Where  $BP_i$  is the board's performance in monitoring, strategic  $i$ , and resource  $i$  for a firm.  $i$  is firms' observations,  $\ln SSize$  is SACCOS size,  $SAge$  is SACCOS age, and  $Bmeet$  is board meetings. In Block 2, we regressed each board process (cognitive conflict, efforts and use of knowledge and skills) and control variables on each board role performance (monitoring, resource provision and strategic roles) in separate regressions. Hence the following regression model:

$$BP_i = \alpha + \beta_1(CC)_i + \beta_2(EN)_i + \beta_3(SK)_i + \beta_4(\ln SSize)_i + \beta_5(SAge)_i + \beta_6(Bmeet)_i + \varepsilon_i$$

Where  $CC$  is cognitive conflict,  $EN$  is efforts and norms,  $SK$  is the use of skills and knowledge,  $\ln SSize$  is SACCOS size,  $SAge$  is SACCOS age, and

Bmeet is board meetings. On the other hand, qualitative data were analyzed through thematic analysis adopted from Braun and Clarke (2006), which involves six steps. Such steps include becoming familiar with the data, generating initial codes, searching for the themes, reviewing themes, defining and naming the themes and producing the report relating to the importance, relevance, and relation to the theories and study objectives (Braun and Clarke, 2006). The constructed themes and sub-themes were considered to study the effects of board processes behavior and board roles performance in the SACCOS.

## **Findings and Discussions**

### **Exploratory Factor Analysis, Validity and Reliability**

The study used the principle component and Cronbach's alpha ( $\alpha$ ) to evaluate the validity and reliability of the scales as a measure of the board's process (cognitive conflict, efforts norms, and use of skills and knowledge) and board roles in strategic direction, resource, and monitoring. For the validity test, the study extracted an exploratory factor analysis (EFA) on the dataset using the principle component analysis, specifically the Varimax with Kaiser Normalization, to determine whether each construct's scales in the boards' process and roles conveyed the same factor. In this regard, only components extracted from PCA with commonalities greater than 0.5 were acceptable to achieve this objective. Moreover, before performing the PCA for the scales, the assessment for suitability of the data for factor analysis based on sample size adequacy was done through Kaise-Meyer-Olkin (KMO) and the strength of the relationship between variables was assessed through Bartlett tests of sphericity. KMO values from 0.7 and above are acceptable (Pallant, 2020).

In contrast, in Bartlett's test, a significant value less than 0.05 signifies that the data does not result in an identity matrix and, therefore, is approximately multivariate normal and acceptable for further analysis (Pallant, 2020). The results in Table 1 showed that the value of the KMO was 0.884 for board process and 0.801 for board roles performance, while Bartlett's test of sphericity reached statistical significance ( $p < 0.000$ ). Thus, the data was deemed appropriate for factor analysis. After confirming the suitability of the sample for factor analysis, the construct validity of board processes and roles were assessed by examining parameters such as factor loadings. The cutoff value of 0.5 for factor loadings that are commonly recommended was considered (Pallant, 2020). The EFA results showed that the factor loadings

obtained from board processes ranged from 0.584 to 0.968. Three factors were identified that satisfied these criteria and they have named efforts norms, cognitive conflict and use of skills and knowledge, respectively. Similarly, EFA results for board roles performance ranged from 0.558 to 0.820, and three factors were found to meet these requirements, and they were named monitoring, resource provision and strategic roles, respectively. The study measured the factors' reliability using Cronbach's alpha to determine the internal consistency of each item. The results show that all the items registered scored above 0.7. As such, Cronbach's alpha coefficients in both board processes and roles met Nunnally's criterion, which suggests that the suitable coefficient range from 0.7 and above, demonstrating that the data used in this study were reliable (Fornell & Larcker, 1981). Table 1 represents questions used in the board processes and board roles parallel to the factor loadings of each statement and reliability results obtained after following EFA procedures championed by previous scholars (see Pallant, 2020).

**Table 1: Factor Loadings and Cronbach Alpha for Board Process and Roles Scales**

<b>Statements</b>	<b>Factor loadings</b>	<b>Cronbach <math>\alpha</math></b>
<i>Cognitive conflict</i>		0.860
The atmosphere on the board encourages their disagreements and concerns when issues are presented to the board	0.968	
The board reached collectively shared decisions openly and candidly.	0.732	
Board members respect different points of view from others	0.584	
Different opinions or views on the board focus on issues rather than individuals	0.744	
Conflicts and disagreements on the board during the decision-making process	0.776	
<i>Efforts and norms</i>		0.788
Board members are available when needed	0.826	
Board members carefully scrutinize the information provided by management	0.668	
Board members inspect the other relevant issues concerning the organization from the supervisory committee	0.788	
Board members participate actively with critical questions during meetings	0.876	
Board members devote time to carry out board roles	0.896	
<i>Use of knowledge and skills</i>		0.941
Members of this board know each other's areas of expertise	0.903	
Most knowledgeable members generally influence decision-making during a discussion	0.864	

Task delegation on this board represents a match between knowledge and responsibilities	0.935	
Board makes the best use of board members' knowledge and skills	0.931	
<i>Monitoring role</i>		0.888
<i>The extent to which board members:</i>		
Monitors managers in decision making	0.8049	
Analyses budget allocation against actual performance	0.8209	
Reviews SACCOS performance against the strategic plan	0.6572	
Evaluates managers' performance annually	0.6251	
Makes sure financial reports are audited by external	0.6882	
Analyses the expenditures against value for money	0.6268	
Appoints board members to oversee the activities of the society	0.7708	
Monitors the implementation of their decisions	0.7647	
Makes sure management complies with the ACT, regulations	0.7109	
Monitors managers in decision making	0.8049	
<i>Resource provision role</i>		0.889
<i>The extent to which board members:</i>		
Advise the SACCOS on investment issues	0.5589	
Provide support in obtaining knowledge and information	0.7784	
Apply their skills and knowledge to accomplish board tasks	0.8024	
Support the SACCOS to increase its legitimacy in the marketplace	0.7876	
Play advisory role on management issues	0.7764	
Play advisory role on accounting Issues	0.6961	
Skills and expertise help the SACCOS to reduce its environmental uncertainties	0.6865	
Actively search for relevant information before board meetings	0.6931	
Contribute to building networks	0.7511	
<i>Strategic role</i>		0.863
<i>The extent to which board members:</i>		
Review strategic proposals that are formed by managers	0.6406	
Review strategic financial options	0.5677	
Form strategic decisions with the management	0.6182	
Make strategic decisions separately from SACCOS management	0.5637	
Review the effectiveness of risk management as an integral part of strategic planning	0.6398	
Are involved in the formulation of strategic planning and policies	0.6118	

Source (Field data, 2020)

### **Descriptive Statistics**

Respondents' statistics showed that 25 (12.7%) board chairpersons were female, whereas 173 (87.3%) were male. In all, 56 per cent of the

respondents were in the 40-60 age bracket. Table 4.2 presents the descriptive statistics for the board's roles, processes, and control variables of Tanzania's SACCOS. The results also show the mean for monitoring roles of 3.611 and 4.287 for resource provision. The implication is that most board members believed their roles were to monitor the SACCOS and provide various resources such as skills, networking and advice. On the other hand, the mean of the strategic role was 2.962, indicating that board members were neutral on their strategic roles. Regarding the board processes, the mean value of effort norms was 4.35, and for the use of skills and knowledge, it was 4.757. In other words, board members strongly believed that their behaviour was based on effort norms and the use of skills and knowledge to smoothen the execution of board roles.

**Table 2: Summary of Descriptive Statistics**

Variable	Obs	Mean	Std. Dev	Min	Max	Skewness	Kurtosis
<b>Dependent variables</b>							
Monitoring	198	3.611	0.742	1.0	5.0	-0.028	-0.482
Resource provision	198	4.287	0.957	1.111	5.0	-0.495	-0.524
Strategic	198	2.962	0.653	1.181	5.0	0.084	-0.003
<b>Independent variables</b>							
Effort norms	198	4.352	0.830	1.4	5.0	-0.257	-0.648
Cognitive conflict	198	3.045	0.835	1.0	5.0	-0.174	-0.335
Use of skills and knowledge	198	4.757	1.135	1.0	5.0	-1.626	1.528
<b>Control variables</b>							
Ln SACCO size	198	19.716	1.356	16.4	23.03	0.079	-0.232
SACCOS Age (#)	198	14.227	9.910	3.0	51	1.605	3.033
Board Meeting (#)	198	6.588	1.747	4.0	12	0.803	0.669

*Source: (Field Data, 2020)*

### **Regression Results**

Before running regression, assumptions were tested, with a normal curve used to check for the normality of the dependent variables of data used. The curve was approximately normal (see appendix I). An alternative crosscheck was done through skewness and kurtosis. According to Ahmed (2011), normally distributed data must have zero skewness with an accepted range of -1.0 and +1 and -3.0 to +3.0 for kurtosis. The skewness ranged from -1.6 to 1.6, and the kurtosis ranged from -0.5 to 3; these ranges were within the acceptable range. Furthermore, the study undertook the variance inflation



factor (VIF) tests to check for possible multicollinearity among the variables. According to Hair et al. (2021), the values should not exceed a threshold of 5. In this study, all the values were below the suggested threshold; thus, the multicollinearity level within the data set be tolerated, as Table 3 demonstrates. The developed hypotheses were tested using multiple linear regression analysis presented in blocks 1 and Block 2. Block 1, shown in Table 3, includes Models 1, 2 and 3 were used to measure the control variables, and Block 2 represent model 4, 5 and 6 in Table 4, which combines independent variables of board processes (cognitive conflict, effort norms and use of skills and knowledge) and control variables.

Checking the results of R Square values in block 1, it was realized that control variables were contributed to model 1 (Monitoring role) by 10%, model 2 (Resource provision role) by 18% and model 3 (Strategic role) by 14%. At the same time, R square in block 2, models 4 (Monitoring role), Model 5 (Resource provision role), and Model 6 (Strategic role) were raised to 48%, 32% and 21%, respectively. Therefore, R Square changes were used to tell that board processes (cognitive conflict, effort norms and use of skills and knowledge) which explained additional variance in predicting the board roles performance when the SACCOS age, SACCOS size and board meetings were controlled; thus, there is the necessity of measuring the relationship between variables. Furthermore, the F-statistic is significant in all constructs, implying that the data used were appropriate for regression analysis.

**Table 3: Regression Results for Control Variables and Board Roles Performance (Block 1)**

Model	Monitoring (Model 1)			Resource Provision (Model 2)			Strategic (Model 3)		
	Unstandardize d Coefficients		Sig. (p- values)	Unstandardized Coefficients		Sig. (p- values)	Unstandardize d Coefficients		Sig. p-values)
	B	Std. Error		B	Std. Error		B	Std. Error	
(Constant)	-3.267	1.020	0.002***	-0.571	1.028	0.805	-0.571	1.049	0.587
SACCOS Size	0.159	0.052	0.002***	0.000	0.051	0.182	0.000	0.052	0.997
SACCOS age	-0.021	0.007	0.002***	0.000	0.007	0.948	0.010	0.007	0.158
Board	0.065	0.392	0.100*	0.162	0.039	0.000**	0.104	0.040	0.011**

Model	Unstandardize d Coefficients		Sig. (p-values)	Unstandardized Coefficients		Sig. (p-values)	Unstandardize d Coefficients		Sig. p-values)
	B	Std. Error		B	Std. Error		B	Std. Error	
Meetings						*			*
R-squared	0.102			0.188			0.148		
Adjusted R <sup>2</sup>	0.188			0.174			0.133		
F- Statistics	7.35			6.26			3.23		
RSME	0.955			0.962			0.982		
Observations	198			198			198		

**Note:** \*\*\*, \*\*, and \* represent significance levels at 1%, 5%, and 10%.

Source: (Field data, 2020)

The regression analysis results in block 1, as presented in Table 3, demonstrate a strong positive and statistically significant relationship between board meetings and monitoring ( $\beta = 0.065$ ,  $p < 0.1$ ), resource provision ( $\beta = 0.162$ ,  $p < 0.01$ ) and strategic roles performances ( $\beta = 0.104$ ,  $p < 0.01$ ). It also showed a positive relationship between SACCOS size and monitoring role ( $\beta = 0.159$ ,  $p < 0.01$ ). In contrast, the findings indicated that SACCOS age was negatively associated with the monitoring role ( $\beta = -0.021$ ,  $p < 0.01$ ). Moreover, Table 4 shows the regression results in block 2, which indicates that efforts norms are strongly positive and significantly related to all three board roles, namely; monitoring ( $\beta = 0.363$ ,  $p < 0.01$ ), resource provision ( $\beta = 0.036$ ,  $p < 0.01$ ) and strategic role ( $\beta = 0.230$ ,  $p < 0.01$ ) therefore, supporting hypothesis H1a, H1b, and H1c. Moreover, the results indicated that cognitive conflict had a negative and significant influence on strategic roles ( $\beta = -0.222$ ,  $p < 0.01$ ) while having a negative insignificant on monitoring and resource provision roles; hence hypothesis H2c were accepted. Finally, the use of skills and knowledge has been shown to have a positive relationship with monitoring ( $\beta = 0.458$ ,  $p < 0.01$ ) and resource provision ( $\beta = 0.058$ ,  $p < 0.01$ ) roles; thus, H3a, H3b were supported. Concerning control variables, SACCOS age has a negative relationship with the monitoring role ( $\beta = -0.018$ ,  $p < 0.01$ ). In contrast, board meeting had a positive and significant influence on monitoring ( $\beta = 0.066$ ,  $p < 0.1$ ), resource provision ( $\beta = 0.093$ ,  $p < 0.01$ ) and strategic ( $\beta = 0.071$ ,  $p < 0.1$ ) roles.

**Table 4: Regression Results for Board Processes and Board Roles Performance (Block 2)**

Model	Monitoring Role (Model 4)			Resource Provision Role (Model 5)			Strategic Role (Model 6)			Collinearity Statistics	
	unstandardized Coefficients		Sig. (p- values	unstandardized Coefficients		Sig. (p- values	unstandardized Coefficients		Sig. (p- values	Tolera nce	VIF
	B	Std. Error		B	Std. Error		B	Std. Error			
(Constant)	-1.380	0.799	0.086*	0.356	0.914	0.697	-0.427	1.047	0.684	0.000	0.000
SACCOS Size	0.048	0.040	0.231	-0.052	0.045	0.252	0.001	0.052	0.978	0.934	1.070
SACCOS age	-0.018	0.005	0.007***	0.002	0.006	0.837	0.011	0.007	0.127	0.982	1.019
Board Meetings	0.066	0.031	0.036*	0.093	0.036	0.010***	0.071	0.041	0.084*	0.916	1.092
Cognitive conflict	-0.072	0.054	0.184	-0.485	0.065	0.583	-0.222	0.075	0.002***	0.938	1.066
Efforts Norms	0.363	0.057	0.001***	0.036	0.062	0.000***	0.230	0.071	0.001***	0.925	1.081
Use of Skills and Knowledge	0.458	0.051	0.001***	0.106	0.058	0.071*	0.230	0.067	0.172	0.955	1.047
R-squared	0.482			0.322			0.208				
Adjusted $R^2$	0.466			0.301			0.179				
F- Statistics	29.67			15.12			13.83				
RSME	0.731			0.836			0.958				
Mean VIF										1.06	
Observations	198			198			198				

**Note:** \*\*\*, \*\*, and \* represent significance levels at 1%, 5%, and 10%.

Source (Field data, 2020)

## **Discussion**

### **Efforts Norms and Board Role Performance**

Results in Table 4 revealed that effort norms are positive and significantly related to board performance regarding monitoring, resource, and strategic roles. The results implied that the higher the efforts norms on the devotion of time, preparation and participation of SACCOS board members, the more effective their contribution to and coordination to monitoring, resource provision, and strategic roles. In contrast to other boards made up of members from different organizations who are not necessarily owners, the SACCOS board members were also owners, users, and beneficiaries, so this setup could improve their sense of teamwork when preparing for and participating in activities, as well as the execution of their respective roles (Jones et al., 2017).

Similarly, since SACCOS board members primarily come from the same working areas, they could readily convene on time as needed for the board, for example, employee-based SACCOS, which might increase their on-time follow-ups and commitment, which may result in improving the board's role performance. Also, the opinions of the majority of interviewees implied that board members felt a sense of ownership, which motivated them to exert greater effort by allocating more time to studying various management reports. Reviewing reports enables them to actively participate in meetings and enhance the effectiveness of their board positions by providing sound advice, monitoring, and quality strategic decisions for their SACCOS. One interviewee explained this by saying:

*"...SACCOS board members, as the owners, mostly have sincere efforts in scrutinizing the information from the management resulting in getting to know their managers well and learning how to monitor their operations to achieve SACCOS members' interests...."*  
(Cooperative officer, Jan 2021)

These results are in line with previous studies findings by Barroso-Castro et al. (2017), Bailey and Peck (2011), Heemskerk et al. (2015), Minichilli et al. (2012), which suggests that effort norms behaviour tends to foster collaboration among board members to improve the efficient performance of board roles. The findings, however, contradict those of Van Ees et al. (2008), who found no connection between effort norms and board task performance. This study's results also support the social exchange theory, which postulates that the positive relationship between effort norms and board role performance is caused by the perceived value of the resources exchanged and the fairness of the exchange, which results in higher commitments among

board members. In turn, effort norms can improve board monitoring by enhancing board member scrutiny of management reports or suggestions, which results in improved performance monitoring roles. Similarly, effort norms boost commitment and active involvement in meetings, increasing the effectiveness of resource provision, with board members working together to identify and secure resources needed to fulfil their strategic board roles.

### **Cognitive Conflict and Board's Role Performance**

The results in Table 4 show that the coefficient of cognitive conflicts is negative, significant with strategic roles, and insignificant with monitoring and resource provision roles. Results also suggest task conflict in the SACCOS board has reduced the ability to implement strategic roles. A possible explanation for the significant negative relationship could be the habit of SACCOS board members toward open discussion. After all, SACCOS board members are all owners with equal rights to vote and make decisions (Zivkovic, 2015). Equal voting rights for board members may lead to more open debate. However, this situation might also trigger negative emotions during decision-making among board members, as each member might want their ideas to be ideal enough to offset the positive sound effects of their discussions.

This situation may impair their conversations and, sometimes, lead to destructive conflicting viewpoints, making other members unwilling to be involved in open dialogue that could affect the execution of the strategic role. The results are similar to the suggestions from Zona and Zattoni (2007) that intensive cognitive conflict leads to negative emotions among group members, as results offsetting its positive effects on the group's task performance. The findings also support the social exchange theory, which holds that a breakdown in board member perceptions of an unequal resource exchange is to blame for the negative association between cognitive conflicts and strategic roles. Sometimes cognitive conflicts can give the impression that board members are in competition with one another, which can lead to hoarding the pursuit of personal goals at the expense of the board's overall strategic goals, disappointing resource exchange, and having a detrimental effect on strategic roles.

### **Use of Skills and Knowledge and Board Role Performance**

Results in Table 4 further show that the use of skill and knowledge has a positive and significant relationship with the monitoring and resource

provision roles but is positively insignificant with the strategic role. Implicitly, using board members' expertise increases the board's ability to monitor resource provision. Using skills and knowledge can also lead to a clear division of tasks between directors, which are more likely to coordinate practical working teams that could enhance the effective execution of monitoring and resource provision roles. Applying skills and knowledge is also more likely to improve the quality of advice in addition to monitoring management operations by assessing the execution of board decisions on both financial and non-financial activities. Similarly, most interviewees confirmed that board members who used their skills and knowledge helped to minimise process losses by identifying problems and solving them professionally and on time, hence leading to effective board role performance. In addition, the interviewees supported the use of skills and knowledge from knowledgeable board members, mainly financial, because they contributed much to monitoring and advising on financial issues in SACCOS. They cited an example of using financial knowledge in credit committees as part of the board, which brought efficiency in approving and maintaining the quality of loans. One manager said:

*“...Board members who use their skills and knowledge are beneficial in making the board strong in monitoring the management of SACCOS and giving the right advice; this leads to the board's effectiveness... (SACCOS Manager, January 2021).”*

These results are consistent with earlier findings by Farquhar (2011), Heemskerk et al. (2017), Pastra (2017), Zattoni et al. (2012), and Zona and Zattoni (2007), which showed that the board's ability to carry out its assigned tasks is increased by applying board members' skills and expertise. Furthermore, the study's regression and thematic analysis findings support the social exchange theory that the positive relationship between the use of skills and knowledge and board roles is due to the perceived value of the resources exchanged, leading to higher levels of effectiveness in board monitoring and resource provision roles. Using skills and knowledge can affect board monitoring and resource provision in several ways. For instance, a board member with financial expertise may provide valuable guidance and support to other members in financial matters because of better monitoring role performance. Similarly, they can lead to more effective resource

provision, as board members can better identify and secure the resources needed to achieve the board's strategic goals.

### **Control Variables**

Table 4 further illustrates that regarding control variables, SACCOS age, the results indicate a significant negative relationship with the monitoring role. At the same time, no evidence was obtained on the resource provision and strategic roles. The findings implied that, as SACCOS aged, the execution of monitoring roles suffered. In this regard, older SACCOS board members assumed that the management was already familiar with their functions and what was expected of them. As a result, managers of the old SACCOS could override all the board's decisions and pursue their interests, a practice that could render the monitoring roles unattainable. As such, the study results are consistent with Machold et al. (2011), who found that the firm's age negatively affected the board's roles. Moreover, the study findings showed that board meetings positively were correlated with the board's role performance. Regular board meetings could motivate board members to prepare for discussions and evaluations of different options to engender better monitoring mechanisms and offer sound advice and decisions. Spending time on conversations and evaluations could also compel board members to apply their skills and knowledge to execute their roles effectively and efficiently. Moreover, frequent meetings can make board members participate in enforcing agreed-upon activities. The study findings also support the expectations of Elad et al. (2018), Paul (2017) and Lipton and Lorsch (1992) regarding the essential nature of frequent board meetings in enabling the execution of board roles.

### **Conclusion and Implications**

#### **Conclusion**

This study investigated the relationship between the board process and board roles performance of SACCOS in the Arusha and Dar es Salaam regions of Tanzania. The results provide empirical evidence that the higher the devotion of board members' efforts norms, the greater the execution of their monitoring, resource provision, and strategic roles. Moreover, effective and efficient application of board members' skills and knowledge matters in executing monitoring and resource provision roles played a pivotal facilitative role. Finally, cognitive conflict negatively contributed to strategic

role performance, but no evidence was obtained in monitoring and resource roles. Thus, the results support the view that effort norms and the use of skills and knowledge are essential predictors of the board's role performance. The variables are primary predictors because they transform a collection of board members into a team with shared knowledge, enabling them to function collaboratively to boost the execution of their board roles.

### **Practical and Policy Implications**

The results reveal that efforts norms and using board members' skills and knowledge are critical to a board's performance in the SACCOS. The study recommends that SACCOS members, during elections of board members, should consider the candidates with specific competencies, skills, knowledge, and ability to work effectively as part of a team and collaborate respectfully to support the board's role performance. This helps to ensure that board members are well diverse and can bring different viewpoints and innovative ideas to the boardroom, leading to better decision-making and board performance. The study further suggests that promoting board member capacity building through training opportunities and knowledge sharing among board members is essential. Capacity building also helps the board members stay updated and be aware of the latest best practices and trends in the SACCOS field, which can apply to organisations for better decision-making and performance. Encouraging board members to continue to grow their skills and knowledge by attending training programs that would enable them to contribute more effectively to board discussions and decision-making can do this.

Furthermore, due to the positive association between the use of directors' skills and the board's performance, thus, SACCOS has to promote a culture of information sharing and collaboration. Board members should be encouraged to share their expertise and learn from each other. In this case, the board chairperson must promote a participatory culture among board members. Such a participatory culture can encourage board members to engage in open discussions and raise their spirits of using skills and knowledge to find the best alternatives leading to board performance. For policy implication, the overall efforts norms, and the use of skills and knowledge are critical to effective board performance; thus, as a regulator, Tanzania Cooperative Development Commission (TCDC) should design the board performance evaluation system. Board performance evaluation can



include evaluating the use of skills and knowledge of board members and their contribution to board performance. Evaluating board performance can help identify areas for improvement and ensure that the board is operating effectively through board members utilizing their efforts, skills and knowledge to support the execution of their roles to reach the set goals.

## REFERENCES

- Adi, N., Wan Yusoff, W. F., & Mohamad, A. (2022). Does Board Behaviour Matter for Board Effectiveness in Small and Medium Industries (SMEs)?: A Preliminary Observation. *Malaysian Journal of Social Sciences and Humanities*, 7(2), 1-6.
- Ahmed, D. A. (2011). Modelling the density of inflation using autoregressive heteroscedasticity, skewness and kurtosis models. *Ensayos Revista de Economia*, 30(2), 1–28.
- Alin, A. (2010). Multicollinearity. *Wiley interdisciplinary reviews: computational statistics*, 2(3), 370-374.
- Bailey, B. C., & Peck, S. (2011). Board Processes, Climate and the Impact On Board Task Performance. *First International Conference on Engaged Management Scholarship*, 1–21.
- Balta, M. E. (2008). *The Impact of the Business Environment and Boards of Directors on Strategic Decision-Making: A Case Study of Greek Listed Companies* (Unpublished Doctoral Dissertation). Brunel University, London.
- Bankewitz, M. (2016). Boards' different advisory tasks - What makes board members use their knowledge? *American Journal of Management*, 16(1), 54–69.
- Bankewitz, M. (2018). Board Advisory Tasks: The Importance of Differentiating between Functional and Firm-Specific Advice. *European Management Review*, 15(4), 521–539.
- Barroso-castro, C., Villegas-Periñan, M., & Dominguez, M. M. (2017). Board members' contribution to strategy: The mediating role of board internal processes. *European Research on Management and Business Economics*, 16, 1–8.
- Bijman, J., Hanisch, M., & Sangen, G. van der. (2014). Shifting control? The changes of internal governance in agricultural co-operatives in the EU. *Annals of Public and Co-operative Economics*, 85(4), 641–661.
- Bijman, J., Hendrikse, G., & van Oijen, A. (2013). Accommodating two worlds in one organisation: Changing board models in agricultural co-operatives. *Managerial and Decision Economics*, 34(3–5), 204–217.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Bužavaitė, M., & Korsakienė, R. (2021). Does Board Usage of Knowledge and Skills Affect Internationalization Performance of Smes? a Case of Lithuania. *Journal of Business Economics and Management*, 23(1), 145–161.
- Creswell, J. W. (2009). Mapping the field of mixed methods research. *Journal of mixed methods research*, 3(2), 95-108.
- Elad, F. L., Wong, M. N., & Bongbee, N. S. (2018). The Role of Board

- Characteristics in Effective Corporate Governance: The Case of Airbus Group. *International Journal of Social Sciences Perspectives*, 2(1), 87–95.
- Farquhar, S. S. (2011). *The impact of board processes on board role performance and effectiveness: An empirical study of UK listed companies*. (Unpublished Doctoral dissertation) University of Wolverhampton, London, England.
- Favalli, R. T., Gori Maia, A., & da Silveira, J. M. F. J. (2020). Governance and financial efficiency of Brazilian credit unions. *RAUSP Management Journal*, 55(3), 355–373.
- Forbes, D. P., & Milliken, F. J. (1999). Cognition and corporate governance: Understanding boards of directors as strategic decision-making groups. *Academy of Management Review*, 24(3), 489–505.
- Fornell, C., & Larcker, D. F. (1981). Fornell, C. and Larcker, D.F. (1981), “Evaluating structural equation models with unobservable variables and.pdf. *Journal of Marketing Research*, XVIII, 39–50.
- Ghosh, S., & Ansari, J. (2018). Board characteristics and financial performance: Evidence from Indian co-operative banks. *Journal of Co-operative Organization and Management*, 6(2), 86–93.
- Guerrero, S., Lapalme, M. È., Herrbach, O., & Séguin, M. (2017). Board member monitoring behaviors in credit unions: The role of conscientiousness and identification with shareholders. *Corporate Governance: An International Review*, 25(2), 134–144.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook* (p. 197). Springer Nature.
- Hakelius, K. (2018). Understanding the board of Swedish farmer co-operatives – Cases focusing on board composition and interaction patterns. *Journal of Co-operative Organization and Management*, 6(2), 45–52.
- Heemskerk, K. (2019). Promising avenue or dead end street? A meta analytic review of the Forbes and Milliken model of board behaviour. *Corporate Governance*, 19(3), 471–489.
- Heemskerk, K., Heemskerk, E. M., & Wats, M. M. (2015). Behavioral Determinants of Nonprofit Board Performance the case of Supervisory boards in Dutch Secondary. *Non-profit Management and Leadership*, 25(4), 417–430.
- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), 383–396.
- Homans, G. C. (1958). Social behavior as exchange. *American journal of sociology*, 63(6), 597-606.
- Jansen, P. A. M. (2021). Board processes revisited: an exploration of the

- relationship between board processes, board role performance and board effectiveness in comparable European listed companies. *Corporate Governance*, 21(7), 1337–1361.
- Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership. *Strategic Management Journal*, 21(4), 1215–1224.
- Jones, P. A., Money, N., & Swoboda, R. (2017). *Credit union strategic governance*. Liverpool: Liverpool John Moores University.
- Judge, W. Q., & Talaulicar, T. (2017). Governance Board Involvement in the Strategic Decision Making Process : A Comprehensive Review. *Annals of Corporate Governance*, 2(2), 51–169.
- Kamardin, H., & Haron, H. (2011). Internal corporate governance and board performance in monitoring roles. *Journal of Financial Reporting and Accounting*, 9(2), 119–140.
- Kassim, I., & Manaf. (2013). Board Process , Capital Structure Decisions and Company Performance. *Management Science and Engineering*, 6(1), 81–87.
- Kerwin, S., Doherty, A., & Harman, A. (2011). “It’s not conflict, It’s differences of opinion”: An in-depth examination of conflict in non-profit boards. *Small Group Research*, 42(5), 562–594.
- Kleanthous, A. S. (2017). *Co-operatives, credit unions and principles : a post-2008 critique*. (Unpublished Doctoral dissertation). The University of Glasgow.
- Lipton, M., & Lorsch, J. W. 1992. A Modest Proposal for Improved Corporate Governance. *The Business Lawyer*, 48(1): 59–77.
- Machold, S., Huse, M., Minichilli, A., & Nordqvist, M. (2011). Board leadership and strategy involvement in small firms: A team production approach. *Corporate Governance: An International Review*, 19(4), 368–383.
- Magumula, B. D., & Ndiege, B. O. (2019). Members’ Participation, Sustainability of Savings and Credits Co-operative Societies: a Qualitative Case Study. *East African Journal of Social and Applied*, 1(2), 132–145.
- Mande, B. (2013). How Use of knowledge, Skills and Cognition Enhance Board Performance in Nigerian market: A SEM-Approach. *Issues In Social And Environmental Accounting*, 7(3), 139.
- McKillop, D. G., & Wilson, J. O. S. (2015). Credit Unions as Co-operative Institutions: Distinctiveness, Performance and Prospects. *Social and Environmental Accountability Journal*, 35(2), 96–112.
- Minichilli, A., Zattoni, A., Nielsen, S., & HUSE. (2012). Board task performance: An exploration of micro- and macro-level determinants of board effectiveness. *Journal of Marriage and Family*, 33(1), 193–215.
- Mori, N. (2014). Directors’ Diversity and Board Performance: Evidence from

- East African Microfinance Institutions. *Journal of African Business*, 15(2), 100–113.
- Mugenda, O. M., & Mugenda, G., A. (1999). *Research Methods: Quantitative and Qualitative Approaches*. Acts Press, Nairobi- Kenya.
- Munene, H. nguta, Ndegwa, J., Senaji, T., & Mugambi, K. M. (2020). Influence of Board Characteristics on Financial Distress of Deposit Taking SACCOs in Nairobi County, Kenya. *International Journal of Finance & Banking Studies*, 9(4), 97–110.
- Nalukenge, I. (2020). Board role performance and compliance with IFRS disclosure requirements among microfinance institutions in Uganda. *International Journal of Law and Management*, 62(1), 47–66.
- Namoga, M. O. (2011). *Corporate Governance and Board Performance: Empirical Evidence from Pacific Island Countries Thesis*. (Unpublished Doctoral dissertation). James Cook University.
- Ogbechie. (2012). *Key Determinants of Effective Boards of Directors- Evidence from Nigeria*. In Brunel Business School (Unpublished Doctoral dissertation). Brunel University September.
- Pallant, J. (2020). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. New York: Routledge and Kegan.
- Pastra, A. S. (2017). *Board of Directors ' Dynamics, Board Effectiveness and Organisational Performance : The case of Nordic Region* (Unpublished Doctoral dissertation). Brunel University.
- Paul, J. (2017). Board activity and firm performance. *Indian Journal of Corporate Governance*, 10(1), 44-57.
- Pfeffer, J., & Salancik, G.R. (2003), *The external Control of Organisations: A Resource Dependence Perspective*. Stanford, California: Stanford University Press.
- Reddy, K., & Locke, S. (2014). The relationship between ownership structure, capital structure and corporate governance practices: A case study of co-operatives and mutuals in New Zealand. *International Journal of Managerial Finance*, 10(4), 511–536.
- Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research Methods for Business Studies*, Pearson Profession Limited, Great Britain. Sixth edition
- Ssekiziyivu, B., Mwesigwa, R., Bananuka, J., & Namusobya, Z. (2018). Corporate governance practices in microfinance institutions: Evidence from Uganda. *Cogent Business and Management*, 5(1), 1–19.
- TCDC. (2019). *Statistics by regions and co-operative types*. Dodoma: Tanzania Co-operatives Development Commission.
- Unda, L., Ahmed, K., & Mather, P. (2017). Board characteristics and credit-union performance. *Accounting and Finance*, 2015, 1–30.
- Van Puyvelde, S., Brown, W. A., Walker, V., & Tenuta, R. (2018). Board effectiveness in nonprofit organizations: Do interactions in the boardroom matter? *Nonprofit and Voluntary Sector Quarterly*, 47(6),

1296-1310.

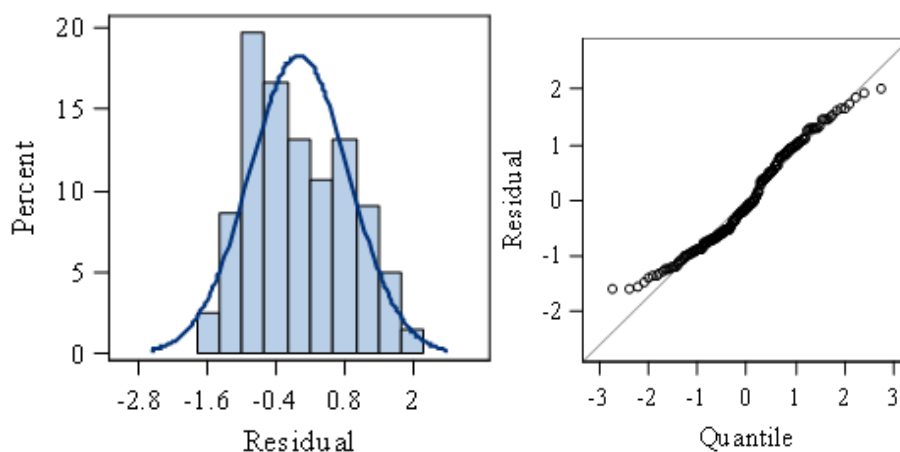
- Wageman, R. (1995). Interdependence and group effectiveness. *Administrative science quarterly*, 145-180.
- Wan, D., & Ong, C. H. (2005). Board structure, process and performance: Evidence from public-listed companies in Singapore. *Corporate Governance: An International Review*, 13(2), 277–290.
- Zattoni, A., Gnan, L., & Huse, M. (2015). Does family involvement influence firm performance? Exploring the mediating effects of board processes and tasks. *Journal of Management*, 41(4), 1214-1243.
- Zivkovic, S. (2015). *Impact of the relationship between managers and the board of directors on the financial performance of agricultural co-operatives*. (Unpublished Doctoral dissertation) Texas Tech University.
- Zona, F., & Zattoni, A. (2007). Beyond the black box of demography: Board processes and task effectiveness within Italian firms. *Corporate Governance: An International Review*, 15(5), 852–864.

## Appendix I: Diagnostic Test for Normality Test

### Monitoring Roles

#### 1. Normality Test checked by Histogram

To assess the normality of a dataset, one commonly used method is to perform a graphical check by plotting the standardized residual values on a histogram along with a fitted normal curve.

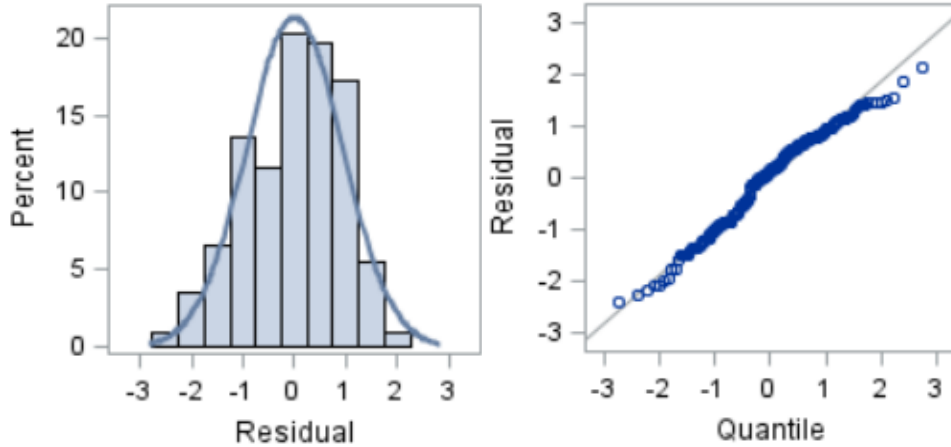


#### 2. Statistical Test for Normality

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized residual	0.0484	198	>0.0757	0.0646	198	>0.0973

**Resource Provision Role**

**1. Normality Test checked by Histogram**



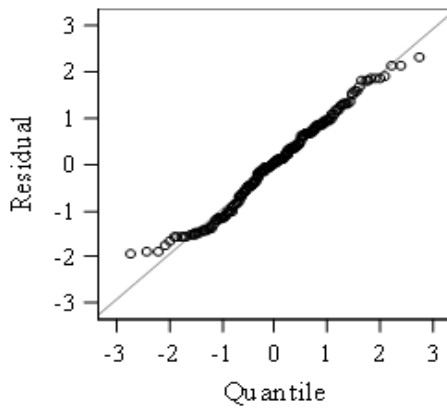
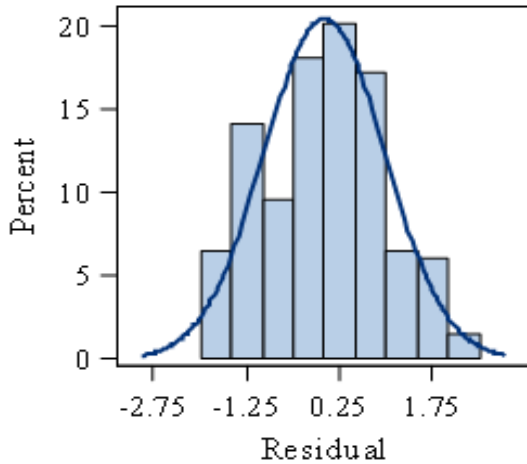
**2. Statistical Test for Normality**

	<b>Kolmogorov-Smirnov</b>			<b>Shapiro-Wilk</b>		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardize d residual	0.0822	198	>0.1313	0.0515	198	>0.1252



## Strategic Role

### 1. Normality Test checked by Histogram



### 2. Statistical Test for Normality

Standardize d residual	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
	0.0467	198	>0.1123	0.056361	198	>0.0732