

Prudential Regulation and Survival of Financial Cooperatives in Uganda: The Mediating Effect of Board Role Performance

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Abstract

Financial Cooperatives, also called Savings and Credit Cooperatives (SACCOs) encounter substantial survival challenges in Uganda, often linked to regulatory and governance issues. This study empirically investigates the mediating role of board role performance in the relationship between regulatory compliance—focusing on prudential requirements such as capital adequacy ratios, liquidity ratios, and borrowing limits—and SACCO survival. Adopting a quantitative, cross-sectional survey design, data were gathered from 311 respondents, including board members and senior management across 60 SACCOs. Structural equation modelling shows that regulatory compliance alone does not directly improve SACCO's survival prospects but significantly enhances board role performance, which, in turn, correlates positively with survival indicators like liquidity and gearing.

The study's findings suggest that effective board role performance plays a significant mediating role in translating prudential regulatory compliance into positive survival outcomes for SACCOs. The study recommends that SACCOs, and by implication policymakers, prioritize capacity-building initiatives aimed at enhancing board role performance, recognizing its role in mediating the relationship between prudential regulatory compliance and SACCO survival outcomes. Additionally, providing targeted support to SACCOs in meeting specific regulatory requirements—such as capital adequacy, liquidity thresholds, and borrowing limits, may further strengthen the association between compliance and survival outcomes. A key theoretical contribution of this study is its integration of Institutional Theory with Role Theory, offering deeper insights into the relationship between adherence to prudential regulations and SACCO survival, while emphasizing board role performance as a critical mediator in reinforcing the stability of Uganda's financial cooperative sector.

Key Words: Regulatory Compliance, Prudential Regulations, Board Role Performance, Organisational Survival, SACCO

Introduction

Savings and Credit Cooperatives (SACCOs), a form of financial cooperatives, are member-owned, member-governed, and member-served financial institutions established to advance financial inclusion and promote economic stability, especially in underserved regions (Omeke et al., 2019). By pooling member resources, SACCOs offer accessible savings and credit services,

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often filling financial service gaps in areas where traditional banking infrastructure is limited (Omona, 2021). Globally, the resilience of financial cooperatives has been closely tied to the presence of well-structured governance and regulatory frameworks. Institutions such as the Federal Credit Union Administration (FCUA) in the United States and the Desjardins system in Canada have demonstrated that effective governance structures, when coupled with robust regulatory oversight, can promote cooperative stability, enhance member confidence, and sustain long-term survival (Cuevas & Buchenau, 2018). However, weaker regulatory frameworks often undermine financial cooperative stability in developing regions, particularly Sub-Saharan Africa. Fragmented oversight, limited supervisory capacity, and governance challenges—such as conflicts of interest and insufficient board oversight—compromise the sustainability of these institutions (World Bank, 2024). These disparities underscore the importance of effective board governance and regulatory compliance in ensuring the continued survival of financial cooperatives in varying regulatory contexts.

In Uganda, SACCOs play a critical role in expanding financial access, particularly among rural and underserved communities where formal banking services remain limited (Muhumuza & Bosco Mubiru, 2022). These member-based institutions not only promote financial inclusion but also contribute to community development by facilitating savings mobilization and affordable credit. Despite their importance, SACCO's performance and sustainability face significant challenges stemming from governance and regulatory issues. The World Bank (2022) highlights the fragmented oversight within Uganda's SACCO sector, with multiple regulatory bodies, including the Bank of Uganda (BoU), the Uganda Microfinance Regulatory Authority (UMRA), and the Ministry of Trade, Industry, and Cooperatives (MTIC), all playing roles in licensing, regulation, and resolution processes. The overlapping jurisdiction among these bodies contributes to a disjointed supervisory structure, which may complicate enforcement and challenge uniform compliance with prudential regulations. Furthermore, the unique member-ownership structure of SACCOs presents governance complexities, such as balancing member interests with financial sustainability, which differ significantly from governance models in investor-owned financial institutions (McKillop et al., 2020). These regulatory gaps and governance challenges highlight the need for more coherent regulatory frameworks and capacity-building interventions tailored to the Ugandan SACCO sector.

While regulatory frameworks and compliance issues have been widely examined in financial institutions (Liang et al., 2023; Mathuva et al., 2018; Nalukenge, 2020; Smith et al., 2012), limited attention has been directed toward how adherence to prudential regulations specifically influences the survival of SACCOs. In Uganda, where fragmented regulatory oversight and governance challenges persist (World Bank, 2024), the relationship between regulatory compliance and SACCO survival remains insufficiently explored. Additionally, existing literature often overlooks the role of board governance in mediating this relationship, despite Institutional Theory (DiMaggio & Powell, 1983) and Role Theory (Biddle, 1986) emphasizing governance structures and role execution in organizational effectiveness. Several gaps remain in the existing body of literature concerning the intersection of regulatory compliance, governance, and SACCO survival. First, most prior studies have concentrated on financial institutions more broadly, with a limited focus on SACCOs, which have unique member-based governance models and operational structures (McKillop et al., 2020).

Second, research has often focused on single compliance dimensions rather than examining how multiple prudential regulations—capital adequacy, liquidity ratios, and borrowing limits—jointly relate to organizational survival (World Bank, 2022). Third, while Institutional Theory and Role Theory highlight the significance of governance mechanisms, there remains a notable paucity of empirical studies that specifically examine the mediating role of board role performance in the relationship between regulatory compliance and SACCO survival particularly within the context of developing economies such as Uganda. Existing literature tends to address these constructs in isolation or within broader governance frameworks, without explicitly modeling or testing the mediation pathways. For instance, studies such as Nalukenge (2020) and Mathuva et al. (2018) examine regulatory compliance and board effectiveness, but do not empirically test mediation effects of board role performance between prudential compliance and SACCO survival using SEM techniques. This highlights a gap that the present study seeks to address.

This theoretical gap suggests a need for multi-theory integration to better understand the interaction between regulatory practices and governance structures in financial cooperatives. This study addresses these gaps by examining the relationship between compliance with prudential regulations—specifically capital adequacy, liquidity ratios, and borrowing limits—and SACCO survival, while assessing the mediating role of board role performance in translating regulatory adherence into survival outcomes. By focusing specifically on Ugandan SACCOs, this study offers empirical insights into governance dynamics unique to member-based financial institutions in a developing economy, providing a foundation for the literature review that follows.

Literature Review

Prudential Regulations Compliance and Board Role Performance

Prudential regulations are critical mechanisms designed to ensure financial institutions' stability and sound governance by setting minimum standards for capital adequacy, liquidity management, and borrowing limits (World Bank, 2022). These regulations aim to safeguard institutional resilience by promoting financial discipline, mitigating risk exposure, and ensuring depositor protection. Compliance with such regulations has been widely acknowledged as a key driver of financial stability, reducing institutional vulnerabilities and safeguarding operational continuity (Abhulimen, 2024). Board role performance (board role performance) refers to the degree to which a board effectively fulfills its core governance responsibilities, often categorized into control, service, strategic, and resource co-optation roles (Madhani, 2019).

The control role involves financial oversight and regulatory compliance; the service role offers advisory support and mentoring for management; the strategic role shapes long-term institutional direction; and the resource co-optation role involves securing critical linkages and financial resources essential for sustainability. Several studies have explored the influence of board role performance on regulatory compliance and financial governance. Peasnell et al. (2005) found that effective board oversight significantly reduced earnings management, enhancing financial reporting credibility. Labelle et al. (2009) demonstrated that stronger board monitoring, particularly through a higher proportion of non-executive directors, was linked to lower instances of fraudulent financial reporting. Michelon et al. (2015) and Bananuka et al. (2019) associated active board engagement with improved financial reporting quality and IFRS adoption, while Verriest et al. (2013) linked board structure to regulatory adoption decisions.

Despite these insights, much of the literature has focused on how board role performance influences regulatory compliance rather than examining whether compliance requirements actively drive stronger board role performance. In the SACCO context, prudential regulations impose formal governance expectations that may shape board engagement across control, service, strategic, and resource co-optation roles. This study addresses this gap by investigating the direct association between prudential regulatory compliance and board role performance. Institutional Theory (DiMaggio & Powell, 1983) and Role Theory (Biddle, 1986) jointly provide a framework for understanding how prudential regulations may shape board role performance. Institutional Theory emphasizes how regulatory structures impose formal expectations that organizations must comply with to secure legitimacy. Role Theory further suggests that such expectations can structure how board members engage with their responsibilities across various dimensions. The present study, therefore, hypothesizes that compliance with prudential regulations could enhance board role performance by driving more rigorous board oversight, resource co-optation, and strategic decision-making processes.

Prudential Regulations Compliance and SACCO Survival

Organizational survival, as defined in the current study, refers to a SACCO's ability to sustain operations over the long term while maintaining financial stability and operational continuity, grounded in the going concern principle (Nkundabanyanga et al., 2020; Robu et al., 2012). This principle, initially operationalized by (Altman, 1968) using financial ratios to predict bankruptcy, has since become a standard for assessing financial viability across institutional settings. However, high SACCO failure rates in Uganda raise questions about whether compliance with prudential regulations has translated into enhanced survival. For instance, the 2014 SACCO Census revealed that out of over 10,000 registered SACCOs, only 2,017 remained operational, with a significant proportion (78%) classified as unviable by 2018 (International Fund for Agricultural Development, 2018). Despite regulatory reforms, several SACCOs faced closure risks in subsequent years (International Fund for Agricultural Development, 2022).

Empirical investigations into regulatory compliance have largely centred on its impact on financial performance, focusing on commercial banks and other mainstream financial institutions, while cooperative contexts such as SACCOs remain underexplored. For instance, Jemutai et al. (2024) examined Kenyan commercial banks and reported mixed results, indicating that capital regulation had a positive but statistically insignificant association with financial performance, while credit regulation exerted a significant negative influence. Similarly, Kahuthu and Kenyatta (2016) studied SACCOs in Kenya and demonstrated that compliance with prudential regulations including core capital, credit management, membership growth, and liquidity—resulted in improved financial performance following regulatory reforms, with these variables becoming stronger predictors of financial health. Fewer studies, such as Kiplagat and Kalui (2020), have explored the effects of specific prudential regulations on financial performance, including capital adequacy and asset quality, with findings often yielding inconsistent results. Despite these insights, the relationship between compliance with prudential regulations and SACCO survival, as opposed to financial performance, remains insufficiently investigated in cooperative contexts. Theoretical perspectives suggest that adherence to prudential regulations—through mechanisms such as reduced financial vulnerability, enhanced stability, and operational continuity—could positively influence SACCO's survival, warranting further empirical examination.

Theoretical perspectives suggest that compliance with prudential regulations through mechanisms such as reduced financial vulnerability, enhanced stability, and operational continuity is vital in determining SACCO's survival, warranting further empirical investigation. Additionally, existing research often emphasizes regulatory frameworks as protective mechanisms for financial sector stability (Coelho et al., 2019; Cuevas & Buchenau, 2018; Demirgüç-Kunt et al., 2008) without critically examining whether varying levels of compliance behavior translate into improved operational continuity for the institutions. Specifically, the dimensions of prudential regulations could influence SACCO survival through specific mechanisms. Capital adequacy compliance ensures the institution maintains a financial buffer against unexpected losses, enhancing long-term resilience. Liquidity ratio compliance may safeguard cash flow stability, ensuring timely payouts to members, while borrowing limit compliance can prevent excessive financial leverage, reducing the risk of financial distress. Therefore, compliance is expected to reduce financial vulnerability, enhance stability, and promote operational continuity, making it a critical determinant of long-term sustainability. Despite these logical associations, empirical validations specific to SACCOs remain limited.

Board Role Performance and SACCO Survival

Board role performance encompasses multiple governance functions—control, service, strategic, and resource co-optation roles—that collectively influence organizational sustainability (Madhani, 2019). The execution of these roles contributes to a SACCO's capacity to oversee financial management, provide strategic guidance, and secure essential resources, all of which are critical for survival. Empirical studies have consistently linked effective board governance with positive organizational outcomes. Gohar and Batool (2015) found that strong board governance practices enhanced both economic and social performance in microfinance institutions in Pakistan. Similarly, Naseem et al. (2017) demonstrated that board size and audit committee independence were positively associated with financial performance. A meta-analysis conducted by Thanh et al. (2020) further confirmed the positive relationship between board governance and institutional performance. However, most studies have focused on financial performance rather than survival metrics such as liquidity and gearing. The collective influence of multiple board roles on SACCO survival remains underexplored, despite theoretical indications that control mechanisms ensure regulatory adherence, strategic planning shapes institutional direction, and resource co-optation secures financial sustainability. Therefore, there is a need to assess whether board role performance, when executed collectively, can safeguard SACCO survival in complex cooperative financial environments.

The Mediation Effect of Board Role Performance

The mediation effect of board role performance refers to its role in transmitting the influence of regulatory compliance on SACCO survival. According to Baron and Kenny (1986), mediation occurs when a third variable explains how or why a predictor affects an outcome. In this study, board role performance is posited to convert prudential compliance into tangible financial outcomes such as effective liquidity management and balanced gearing thereby enhancing survival. This conceptualization is grounded in Institutional Theory (DiMaggio & Powell, 1983), which emphasizes aligning governance practices with regulatory expectations to preserve legitimacy, and Role Theory (Biddle, 1986), which explains how boards translate external demands into strategic, control, service, and resource co-optation functions. Together, these theories support the view that compliance alone may be insufficient unless actively interpreted

and implemented through board governance roles. Empirically, this study tests whether board role performance functions as the conduit through which compliance influences survival outcomes in SACCOs—a relationship largely underexplored in the context of developing economies (DiMaggio & Powell, 1983; Biddle, 1986)

Empirically, effective oversight and compliance, integral to the board's control role, help ensure regulatory standards are met, thus enhancing transparency and stability (Adams & Ferreira, 2009). Resource co-optation, which involves the board's ability to attract external resources, also plays a critical role in supporting regulatory compliance and financial sustainability (Gohar & Batool, 2015). Furthermore, the board's risk management and strategic roles, including resource allocation and long-term planning, have been linked to regulatory success and institutional resilience (Forbes & Milliken, 1999). Despite these insights, limited attention has been paid to whether board role performance mediates regulatory compliance's influence on survival metrics like liquidity and gearing. While studies such as Kahuthu and Kenyatta (2016) have explored the impact of governance on performance, they have not sufficiently examined how board role performance translates regulatory compliance into enhanced SACCO survival outcomes. To date, few empirical studies have investigated the collective influence of board role dimensions—control, service, strategic, and resource co-optation—on both regulatory compliance and organisational survival within the SACCO context in developing economies. While regulatory compliance ensures adherence to capital adequacy, liquidity, and borrowing limits, effective board role performance is theoretically necessary to ensure these regulations translate into financial stability. Therefore, given that previous studies have primarily focused on direct effects between board governance and financial performance, leaving the mediating role of Board Role Performance underexplored.

Summary of Hypotheses

Based on the theoretical and empirical discussions across the literature, the following hypotheses are proposed:

- **H1:** Compliance with prudential regulations is positively associated with board role performance in SACCOs.
- **H2:** Compliance with prudential regulations is positively associated with SACCO survival.
- **H3:** Board role performance is positively associated with SACCO survival.
- **H4:** Board role performance mediates the relationship between compliance with prudential regulations and SACCO survival.

Methods

Research Design

The study employed a positivist philosophical orientation and utilised a quantitative cross-sectional survey design. This approach was selected due to its congruence with the research objectives and suitability for hypothesis-driven inquiry, thereby facilitating the testing of hypotheses. The study population constituted 75 SACCOs on the list of members of the Association of Microfinance Institutions in Uganda (AMFIU) – the only gazetted source of information in the public domain on SACCOs in Uganda at the time of the study. The Yamane (1973) rationale for sample size determination was employed. The sampling technique used was random sampling, and this method was appropriate for the study because of the slight difference between the population and sample $N=75$ and $n=63$. Further, for each SACCO, three board

members and three senior members of management totalled six units of inquiry per SACCO, and an overall 378 respondents were targeted to participate in the study – a number deemed suitable and consistent with similar studies. This sample size was considered representative of the population. Preferably for the board members, preference was accorded to the chairperson of the vice, the board secretary and an ordinary member of the board, while for senior management, preference was given to the general manager, the accountant and a senior credit officer as these were deemed suitable to provide the most appropriate responses.

Primary data was collected in a survey conducted by a team of research assistants using the Kobo Collect Toolkit, assisted by mobile phones. The Kobo Collect data collection form was developed using a skip logic method that ensured no questions were skipped and that specific items were presented to the appropriate respondents to enhance validity and reliability.

Operationalisation of Variables

SACCO's survival was assessed using indicators of gearing and liquidity, which are crucial for evaluating SACCO's financial stability based on the going concern principle of accounting (Nkundabanyanga et al., 2020). Profitability was initially included but excluded after confirmatory factor analysis. The final scale, rated on a five-point Likert scale, measures SACCO's ability to meet financial obligations, maintain cash inflows, avoid large outstanding loans, and sustain liquidity. These items were validated through discussions with SACCO industry specialists. Regulatory compliance was measured with a scale derived from the Uganda Microfinance Regulatory Authority's (UMRA) guidelines, including indicators like annual return submissions, loan loss provisions, and capital and liquidity ratios (Tier 4 Microfinance and Money Lenders (SACCO) Regulations, S.I. No. 51 of 2020). The scale was reviewed with UMRA's compliance manager to ensure accuracy. Board Role Performance was evaluated based on four roles proposed by McLeod (2019): control, resource co-optation, service, and strategic roles. Item measures were adapted from previous studies. Using a five-point Likert scale, this scale reflects the board's effectiveness in governance, resource acquisition, risk management, and strategic planning. As shown in Table 1, each measurement scale was adapted from prior studies and related sources, shared with industry experts for feedback, and rigorously tested for validity and reliability, as indicated in Table 2.

Table 1 – Operationalisation of Variables

Variable	Dimensions	Sources
Regulatory Compliance	Prudential Regulations	(Tier 4 Microfinance and Money Lenders (SACCO) Regulations, S.I. No. 51 of 2020, n.d.)(Tier 4 Microfinance and Money Lenders (SACCO) Regulations, S.I. No. 51 of 2020, n.d.)
Board Role Performance	Control role Service, strategic, and resource co-optation	(Nalukenge, 2020); (Tumwebaze et al., 2022); (Nkundabanyanga et al., 2021) (Zahra & Pearce, 1989);
Organisational survival	Liquidity, Gearing, and Profitability	(Nkundabanyanga et al., 2020); Altman (1968); (Robu et al., 2012)

Source: Literature

Validity and Reliability

The reliability and validity of the study measurement scales presented in Table 2 demonstrate high internal consistency, with Cronbach's Alpha values above .769 and strong composite reliability (CR) values exceeding .782. The Average Variance Extracted (AVE) for each construct is above the recommended threshold of .50, indicating satisfactory convergent validity. Content Validity Index (CVI) values are robust, with scores above .833. Variance Inflation Factor (VIF) values, ranging from 1.881 to 2.133, suggest no significant multicollinearity issues, affirming the constructs' distinctiveness.

Table 2 – Reliability and Validity of Study Constructs

Variable	No. of Items	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)	Content Validity Index (CVI)
Prudential Regulation	6	0.870	0.872	0.607	0.833
Board Role Performance	27	0.883	0.885	0.713	0.850
Organisational Survival	11	0.769	0.782	0.648	0.861

Note: CR – Composite Reliability; AVE – Average Variance Extracted; CVI – Content Validity Index; VIF – Variance Inflation Factor.

Source: Primary Data

Results

The study targeted 378 respondents across 63 SACCOs and achieved an effective response rate of 82.2%, yielding 311 completed responses from 60 SACCOs. Table 3 summarizes key institutional characteristics of the SACCOs surveyed. The capital structure indicates financial diversity, with nearly half of the SACCOs operating with between UGX 500 million and 1 billion, while a significant proportion reported capital exceeding UGX 1.5 billion—suggesting a mature asset base in part of the sector. Board composition patterns reveal that the majority of SACCOs maintain boards with nine or more members, consistent with good governance principles of broad oversight. Meeting regularity is notably high, with most boards convening at least four times annually, indicating strong engagement. Furthermore, over 85% of the SACCOs have been in existence for more than six years, reflecting institutional longevity and resilience.

Table 3 – SACCO Institutional Characteristics (n = 60 SACCOs)

Attribute	Category	Count	Percent (%)
Capital Size (UGX)	Less than 500 Million	12	20.0
	500 Million – 1 Billion	29	48.3
	1 – 1.5 Billion	5	8.3
	Above 1.5 Billion	14	23.3
Number of Board Members	Fewer than 9	16	26.7
	Exactly 9	21	35.0
	More than 9	23	38.3
Board Meeting Frequency (Annual)	Fewer than 4 times	7	11.7

Years in Operation	Exactly 4 times	22	36.7
	More than 4 times	31	51.7
	Less than 3 Years	1	1.7
	3–6 Years	7	11.7
	More than 6 Years	52	86.7

Source: Primary Data

Table 4 summarizes the positional roles and institutional experience of the 311 SACCO respondents. The majority of participants held board-level positions, with Directors constituting nearly 58% of the sample, suggesting that the study captured perspectives from individuals with significant governance responsibility. This was followed by Senior Employees and Managers, ensuring representation across key leadership and operational roles. Tenure-related data further underscore the institutional maturity of the respondent pool. A substantial proportion (68.2%) had served two full terms within their SACCOs, while an additional 10.9% had exceeded two terms—indicative of deep institutional knowledge and continuity. Regarding overall years of involvement, more than 70% of respondents had been affiliated with their SACCO for between five and eight years. In contrast, only a small fraction reported very short or extended tenures, suggesting a relatively stable leadership cohort during the study period.

Table 4 – Institutional Role and Experience of SACCO Respondents (n = 311)

Attribute	Category	Count	Valid Percent (%)
Respondent Designation	Senior Employee	73	23.5
	Manager	58	18.6
	Director	180	57.9
Terms Served	One Term	65	20.9
	Two Terms	212	68.2
	More than Two Terms	34	10.9
Years of SACCO Tenure	Less than 2 Years	11	3.5
	2 – 5 Years	49	15.8
	5 – 8 Years	221	71.1
	8 – 11 Years	16	5.1
	11 – 14 Years	6	1.9
	14 – 17 Years	3	1.0
	Over 17 Years	5	1.6

Source: Primary Data

Before applying Structural Equation Modeling (SEM), as depicted in Figure 1, key parametric assumptions were assessed to ensure the validity of the analysis. The correlation matrix in Table 5 reveals linear associations among the study variables, thereby supporting the assumption of linearity. Skewness and kurtosis values indicated that the data approximated normal distribution, although PLS-SEM does not strictly require multivariate normality. Homoscedasticity was assumed based on the consistent distribution of residuals across variable levels, and the independence of observations was ensured by collecting data from different SACCOs. Given the relatively high inter-variable correlations—particularly between prudential regulation and organisational survival ($r = .694$) and board role performance ($r = .675$)—Partial Least Squares

Structural Equation Modeling (PLS-SEM) was employed. This approach is suitable for prediction-oriented research, robust in the presence of highly correlated constructs, and effective with small to medium-sized samples (Hair et al., 2019). Accordingly, PLS-SEM was deemed the most appropriate method for testing the hypothesised relationships in this study.

Table 5 - Relationship Between Variables

	Mean	SD	1	2	3
Prudential Regulation-1	4.355	.352	1.000		
Board Role Performance-2	4.489	.327	.675**	1.000	
Organisational Survival-3	4.134	.524	.694**	.502**	1.000

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Primary Data

Sample Characteristics

The dataset presents key attributes of 60 SACCOs, showing that the majority are employee-based (56.7%). A significant portion of the Board of Directors (BOD) has more than nine members (38.3%). Most boards meet more than four times a year (51.7%). Among the 311 respondents, the majority hold director positions (57.9%), with most having served two terms (68.2%), while the majority of management staff had been in service for 5-10 years (59.2%), indicating a relatively experienced management and stable leadership.

Variable Descriptions

The descriptive statistics for the 60 SACCOs indicate that all variables have average scores above the midpoint, reflecting generally positive outcomes. Board Role Performance has the highest average score (Mean = 4.460), followed by Regulatory Compliance (Mean = 4.382) and Organisational Survival (Mean = 3.978). The standard deviations range from 0.468 (Board Role Performance) to 0.583 (Regulatory Compliance), indicating varying levels of consistency across the variables. The relatively high average scores for regulatory compliance suggest that SACCOs generally view their boards as performing effectively in their governance roles and adhering to regulatory requirements. While still relatively high, the average score for Organisational Survival is slightly lower than the other variables. This suggests that while SACCOs generally perceive their organisational survival prospects as positive, areas of concern or challenges may need to be addressed.

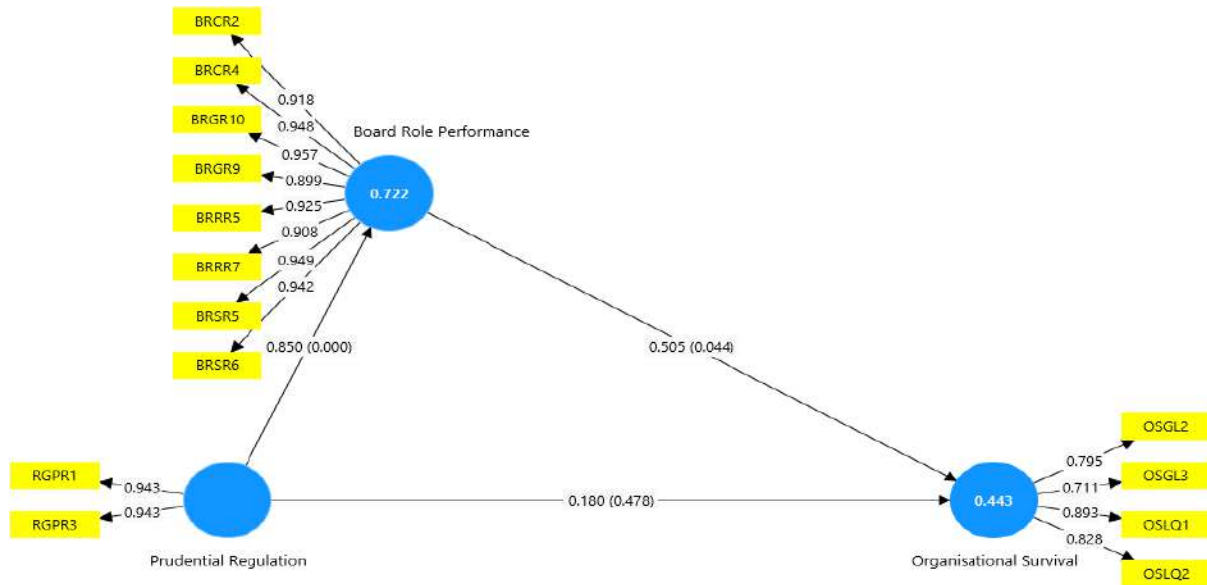


Figure 1 – Structural Model

Hypothesis Testing

The relationships between compliance with prudential regulations, board role performance, and SACCO survival were examined through path analysis, and the results are presented in Table 6 and described thereafter

Table 6 – Path Coefficients and Significance Levels for Hypothesized Relationships (n = 311)

Relationship	β	SE	t-value	p-value	95% CI (Bias-Corrected)
Direct Effects					
Board Role Performance → Organisational Survival	0.505	0.251	2.014	0.044	[0.052, 0.933]
Prudential Regulation → Board Role Performance	0.850	0.045	18.804	0.000	[0.738, 0.918]
Prudential Regulation → Organisational Survival	0.180	0.254	0.710	0.478	[-0.290, 0.713]
Indirect Effect					
Prudential Regulation → Board Role Performance → Organisational Survival	0.429	0.213	2.014	0.044	[0.039, 0.807]
Total Effects					
Board Role Performance → Organisational Survival	0.505	0.251	2.014	0.044	[0.052, 0.933]
Prudential Regulation → Board Role Performance	0.850	0.045	18.804	0.000	[0.738, 0.918]
Prudential Regulation → Organisational Survival	0.610	0.081	7.569	0.000	[0.388, 0.732]

Source: Primary Data

Hypothesis H1: Compliance with prudential regulations is associated with board role performance in SACCOs

The hypothesis that compliance with prudential regulations is associated with Board Role Performance was strongly supported. The analysis revealed a standardised path coefficient (β) of 0.850, with a standard error (SE) of 0.045 and a t-value of 18.804. The p-value for this relationship was 0.000, indicating a highly significant effect. The 95% Bias Corrected Confidence Interval (CI) ranged from 0.738 to 0.918, which confirms the substantial and positive influence of Prudential Regulation on Board Role Performance. This finding highlights that compliance with prudential regulations enhances board role performance within SACCOs, reinforcing the role of prudential regulations in improving board performance.

Hypothesis H2: Compliance with prudential regulations is associated with the survival of SACCOs.

The hypothesis that compliance with prudential regulation is associated with organizational survival was not supported. The analysis produced a standardised path coefficient (β) of 0.180, with a standard error (SE) of 0.254 and a t-value of 0.710. The p-value was 0.478, which exceeds the 0.05 significance threshold, indicating that the direct effect of Prudential Regulation on Organizational Survival is not statistically significant. The 95% Bias Corrected Confidence Interval (CI) ranged from -0.290 to 0.713, encompassing zero, which further supports the lack of a significant direct relationship. This result suggests that the association between compliance with Prudential Regulations and SACCO survival is not substantial.

Hypothesis H3: Board role performance is associated with the survival of SACCOs.

The hypothesis that Board Role Performance is significantly associated with Organizational Survival was supported. The analysis yielded a standardised path coefficient (β) of 0.505, with a standard error (SE) of 0.251 and a t-value of 2.014. The p-value for this relationship was 0.044, below the conventional significance level of 0.05. This indicates that Board Role Performance has a statistically significant positive effect on Organizational Survival. The 95% Bias Corrected Confidence Interval (CI) ranged from 0.052 to 0.933, further supporting the robustness of this finding. This result suggests that effective board performance is crucial for enhancing the survival prospects of SACCOs, validating the importance of board governance in sustaining organisational stability.

Hypothesis H4: Board role performance mediates the relationship between compliance with prudential regulations and the survival of SACCOs.

The mediation analysis confirms that Board Role Performance significantly mediates the effect of Prudential Regulation on Organizational Survival. The standardised indirect effect was 0.429, with a significant p-value of 0.044 and a 95% Confidence Interval ranging from 0.039 to 0.807, indicating a robust mediation effect. While Prudential Regulation does not directly impact Organizational Survival, its influence is channelled through Board Role Performance. This highlights the importance of effective board governance, driven by regulatory frameworks, in ensuring SACCO's survival. The findings emphasise that regulatory compliance enhances SACCO's longevity through improved board performance.

Discussion of Findings

Prudential Regulations and Board Role Performance in SACCOs

The study findings confirm a significant positive relationship between compliance with prudential regulations and board role performance in SACCOs, emphasizing the importance of regulatory frameworks in enhancing overall governance effectiveness. Compliance with capital adequacy, liquidity requirements, and borrowing limits strengthens the board's capacity to provide effective oversight, manage risks, and engage in resource co-optation, contributing to institutional stability and operational resilience. Empirical findings reinforce this relationship. Nalukenge (2020) demonstrated that adherence to International Financial Reporting Standards (IFRS) improves board role performance through enhanced governance practices. Similarly, Pascual & Larraza-Kintana (2003) highlight compliance's role in enhancing governance functions, while Hillman et al. (2009) emphasize its contribution to resource co-optation. Ejigu & Desalegn (2023) further support the finding that compliance enhances risk management, directly contributing to board effectiveness in maintaining financial stability. The World Bank (2018) also emphasizes how prudential regulations bolster institutional stability, reinforcing the findings on strengthened board oversight. However, Kiplagat and Kalui (2020) caution that the impact of regulatory compliance on board role performance may vary across institutional sizes, with smaller institutions facing implementation challenges. Reddy (2019) similarly warn that excessive regulatory focus could lead to a box-ticking compliance approach, potentially undermining genuine governance effectiveness. These findings support Institutional Theory by affirming that regulatory compliance enhances organizational legitimacy and stability, while Role Theory is validated as compliance strengthens the overall governance capacity of SACCO boards in overseeing risk management and strategic decision-making processes crucial for SACCO governance effectiveness.

Prudential Regulation Compliance and Survival of SACCOs

The findings revealed that compliance with prudential regulations was not significantly associated with SACCO survival, suggesting that regulatory compliance alone may be insufficient to ensure long-term institutional viability in SACCOs. While prudential frameworks aim to safeguard financial stability through capital adequacy, liquidity thresholds, and borrowing limits, the absence of a significant direct relationship implies that compliance mechanisms may not directly influence survival outcomes without complementary factors. This outcome challenges theoretical expectations where Institutional Theory posits that regulatory adherence enhances legitimacy and stability. The results suggest that while compliance with prudential regulations may promote regulatory legitimacy, it might not automatically lead to improved survival prospects of SACCOs. Empirically, this finding contrasts with studies such as Mwaura et al. (2025) and Maina & Miroga (2025), who found compliance with capital adequacy and liquidity requirements beneficial for institutional resilience. However, it aligns with Kiplagat & Kalui (2020), who reported limited performance benefits from compliance, particularly in smaller institutions, and Reddy (2019) warned against a procedural "box-ticking" approach to compliance that may lack genuine governance impact. These results suggest that compliance with prudential regulations alone may not be sufficient to influence SACCO survival outcomes. While regulatory standards aim to promote financial stability, their direct effect on the survival prospects of SACCOs appears limited, highlighting the need to further explore other factors that may contribute to SACCO resilience.

Board Role Performance and SACCO Survival

The findings reveal a significant positive association between board role performance and SACCO survival, indicating that stronger overall board governance is linked to improved liquidity management and balanced gearing levels. This suggests that when SACCO boards effectively fulfil their roles collectively, they contribute to maintaining sufficient cash flow for member withdrawals and preventing excessive financial leverage, both critical indicators of financial stability. This result aligns with prior research emphasizing the role of comprehensive board governance in institutional sustainability. While governance research often emphasizes structural mechanisms, Levrau and Van Den Berghe (2013) highlight the behavioural dimension of board effectiveness, asserting that proactive and engaged boards are essential for institutional resilience. Supporting this view, Edeh et al. (2024) found that in the banking sector, board independence, accountability, and effectiveness significantly predict institutional resilience. Similarly, Berezinets et al. (2016) found that effective governance was positively associated with improved financial outcomes in financial institutions, reinforcing the role of governance quality in sustaining long-term viability.

The findings further support Role Theory (Biddle, 1986) by suggesting that the collective execution of governance functions positively influences financial outcomes, specifically liquidity and gearing. From an Institutional Theory perspective (DiMaggio & Powell, 1983), the results indicate that adherence to effective governance practices aligns with sectoral expectations, enhancing financial resilience and organizational legitimacy. These findings highlight the need for board capacity development initiatives that emphasize collective governance practices, as stronger overall board performance appears to contribute directly to maintaining adequate liquidity and balanced gearing, safeguarding SACCO survival.

Board role performance, compliance with prudential regulations and the survival of SACCOs.

The findings confirm that board role performance, operationalized through control, service, strategic, and resource co-optation roles, significantly mediates the relationship between compliance with prudential regulations and SACCO survival, measured specifically by liquidity management and gearing levels. While compliance with prudential regulations—covering capital adequacy, liquidity ratios, and borrowing limits—did not directly influence SACCO survival, its positive effect emerged when regulatory compliance was translated into stronger board governance across these four roles. The results emphasize that board role performance enables SACCOs to convert regulatory requirements into improved liquidity and balanced gearing. The control role involves financial oversight, ensuring SACCOs monitor liquidity thresholds and maintain capital buffers sufficient to meet member withdrawal demands and operational expenses. The service role strengthens internal control mechanisms, helping SACCOs mitigate financial risks such as loan defaults and operational inefficiencies that could compromise liquidity. The strategic role ensures that the SACCO's long-term financial strategies align with regulatory expectations, while the resource co-optation role involves securing external funding sources to reinforce cash flow stability, which directly supports liquidity and reduces reliance on external borrowing.

These findings align with both Institutional Theory (DiMaggio & Powell, 1983) and Role Theory (Biddle, 1986). Institutional Theory suggests that regulatory frameworks establish expectations

for sound financial governance, while Role Theory explains how the collective execution of the four board roles influences liquidity management and gearing stability. The results indicate that regulatory compliance influences SACCO survival indirectly by enabling stronger board-level governance practices. Empirically, the results reinforce existing literature emphasizing the indirect role of governance in institutional sustainability. Nalukenge (2020) and (Kabara et al., 2023) demonstrated that regulatory compliance can strengthen institutional performance when paired with active board engagement in financial oversight and strategic decision-making. However, Reddy (2019) and K. E. Kiplagat & Kalui (2020) caution that regulatory frameworks without engaged governance often lead to procedural compliance rather than meaningful improvements in liquidity management and gearing stability. The findings provide both theoretical contributions and practical implications. Theoretically, they confirm that board role performance functions as a mechanism through which compliance influences SACCO viability, particularly in managing liquidity and controlling gearing ratios. Practically, the findings emphasize the need for board training initiatives focused on equipping SACCO directors to execute the control, service, strategic, and resource co-optation roles effectively, ensuring compliance translates into sustainable financial management. This evidence underscores the critical role of board role performance in facilitating the conversion of prudential regulatory compliance into improved liquidity management and gearing stability, essential for the long-term sustainability of SACCOs.

Study Implications

Practical Implications

The findings emphasize the critical importance of board role performance in Uganda's SACCO sector, where fragmented regulatory oversight poses significant challenges to institutional sustainability. While compliance with prudential regulations such as capital adequacy, liquidity ratios, and borrowing limits is essential for financial stability, it does not directly influence SACCO survival. Instead, survival outcomes—measured through liquidity management and gearing stability—are realized when compliance is mediated through board role performance, specifically the control, service, strategic, and resource co-optation roles. In Uganda, where regulatory enforcement remains inconsistent due to multiple supervisory bodies, including UMRA, Bank of Uganda, and MTIC, reliance on regulatory frameworks alone may be insufficient to secure institutional stability. This study reveals that strong board role performance across the four measured roles is necessary for SACCOs to translate compliance requirements into improved liquidity management and balanced gearing levels. Boards that actively monitor liquidity thresholds, implement effective risk management, and secure external funding are better positioned to sustain SACCO operations even in a volatile economic environment.

These findings have direct implications for policymakers and SACCO leadership. Board capacity development programs should be prioritized, focusing on equipping SACCO boards to effectively perform all four roles—control, service, strategic, and resource co-optation. Additionally, regulatory bodies should complement prudential compliance measures with board role performance enhancement initiatives to ensure SACCO boards can convert compliance efforts into sustainable financial outcomes. Finally, harmonizing regulatory oversight among Uganda's financial regulators could reduce fragmentation and improve compliance clarity and governance accountability. The results emphasize that board role performance, not merely board performance, is necessary for converting compliance with prudential regulations into improved liquidity

management and gearing stability—both critical for SACCO survival in Uganda.

Theoretical Implications

This study advances theoretical understanding by applying Institutional Theory and Role Theory to explain the relationship between compliance with prudential regulations, board role performance, and SACCO survival, specifically measured through liquidity management and gearing stability in Uganda. Institutional Theory (DiMaggio & Powell, 1983) emphasizes that prudential regulations, such as capital adequacy, liquidity ratios, and borrowing limits, create formal governance expectations aimed at promoting financial discipline. The findings reveal that while compliance with prudential regulations establishes financial benchmarks, it does not directly influence SACCO survival—operationalized as liquidity management and gearing stability. This suggests that external regulatory frameworks, while necessary, require internal governance mechanisms to convert compliance into positive financial outcomes.

Role Theory (Biddle, 1986) further emphasizes the importance of board role performance—defined through control, service, strategic, and resource co-optation roles—in mediating the relationship between compliance with prudential regulations and SACCO survival. The findings suggest that control roles facilitate liquidity management by ensuring financial reserves meet member withdrawal demands, while the service role strengthens risk mitigation to prevent financial instability. Strategic roles guide decision-making for balanced gearing, and resource co-optation supports external funding acquisition to avoid over-leveraging, thereby enhancing liquidity management and reducing financial risk. By integrating Institutional Theory and Role Theory, this study emphasizes that compliance with prudential regulations alone is insufficient to secure SACCO survival as measured by liquidity management and gearing stability. Instead, board role performance serves as a mechanism for translating prudential regulations into these specific financial outcomes that propel SACCO survival prospects.

Recommendations

For SACCO Practitioners: This study recommends that SACCOs in Uganda prioritize strengthening board role performance by investing in targeted capacity-building initiatives focused on the four critical board roles—control, service, strategic, and resource co-optation. Training should emphasize financial oversight to support liquidity management and risk control measures that ensure prudent use of capital and maintain balanced gearing ratios. To operationalize these improvements, SACCOs should establish specialized committees for audit, compliance, and risk management, ensuring these committees are directly aligned with prudential regulatory requirements. Implementing structured performance assessments tied to measurable board role performance indicators, such as liquidity levels and capital adequacy monitoring, is essential for safeguarding SACCO survival.

For Policymakers: While this study did not include policymakers among its respondents, the findings generate important implications for regulatory reform. Specifically, the results reveal that compliance with prudential regulations alone does not directly influence SACCO survival but does so indirectly through board role performance. This suggests that policymakers—particularly the Uganda Microfinance Regulatory Authority (UMRA), the Bank of Uganda (BoU), and other oversight bodies—should refine existing regulatory frameworks to strengthen governance capacity alongside regulatory enforcement. Such refinement may include clarifying

the expected roles of SACCO boards within compliance guidelines, with emphasis on executing control, service, strategic, and resource co-optation responsibilities. Additionally, continuous professional development for SACCO board members should be mandated, focusing on risk management, liquidity oversight, and strategic governance to ensure that compliance efforts translate into improved liquidity and gearing outcomes. The study also recommends a shift from predominantly punitive compliance approaches toward incentive-based models that link adherence to regulations with capacity-building support and access to liquidity protection schemes. Finally, harmonizing the oversight mandates of UMRA, BoU, and the Ministry of Trade, Industry, and Cooperatives (MTIC) is crucial to addressing fragmented enforcement, which has been observed to constrain governance effectiveness within SACCOs.

For Academics: This study underscores the critical role of board role performance as a mediator between compliance with prudential regulations and SACCO survival in Uganda, contributing to both Institutional and Role Theories. Future research should explore the nuanced contributions of each board role—control, service, strategic, and resource co-optation—in influencing specific financial outcomes, particularly liquidity management and gearing stability. Further studies should also examine contextual regulatory challenges unique to Uganda’s cooperative sector, focusing on multi-layered regulatory frameworks and their implications for governance effectiveness. Additionally, research on whether board composition, including diversity and professional qualifications, influences board role performance in mediating the relationship between regulatory compliance and SACCO sustainability would deepen the understanding of governance dynamics in the SACCO sector.

Limitations and Future Focus

One limitation of this study is its reliance on self-reported data from SACCO board members and senior management, which could introduce bias as respondents may overestimate their compliance or board performance. Additionally, the study's measurement of SACCO's survival was limited to gearing and liquidity, excluding other non-quantitative measures like member satisfaction or operational efficiency. The measurement items for prudential regulations were limited to the Uganda SACCO regulations, which could limit the applicability of findings to SACCOs in different regulatory environments. The small sample size and cross-sectional design further restrict the generalizability and causality of the results. Future research should consider incorporating more objective measures, broader survival indicators, larger samples, and longitudinal designs to provide a more comprehensive understanding of SACCO governance and survival.

Future research should address the limitations identified by examining the dynamics between Prudential Regulation, Board Role Performance, and SACCO Survival across different geographical and regulatory contexts. Comparative studies in various regions could provide a broader understanding of how contextual factors influence these relationships and improve the generalizability of findings. Longitudinal studies are also recommended to explore how these relationships evolve over time, offering insights into the long-term impact of board performance and regulatory compliance on SACCO survival. Expanding the theoretical framework to include behavioural theories could deepen the understanding of how board member behaviours and organisational culture affect outcomes. Investigating leadership styles, decision-making processes, and organisational change may offer a more comprehensive view of board role

performance and survival. Additionally, refining measurement tools and using multiple data sources, such as interviews and financial reports, could enhance the accuracy and reliability of future findings by mitigating the limitations of self-reported data.

Conclusion

This study examines the relationship between compliance with prudential regulations, board role performance, and SACCO survival, focusing on Uganda's cooperative financial sector. The findings emphasize that compliance with prudential regulations, including capital adequacy, liquidity ratios, and borrowing limits, is essential for establishing financial safeguards. However, it does not directly influence SACCO survival when operationalized through liquidity management and gearing stability. Rather, board role performance, encompassing control, service, strategic, and resource co-optation roles, serves as a critical mediator, transforming regulatory compliance into improved financial management and organizational stability. The results reveal that effective board role performance strengthens the governance mechanisms necessary to translate prudential regulations into measurable survival outcomes. Specifically, board engagement in financial oversight, risk management, strategic decision-making, and external resource mobilization supports improved liquidity management and balanced gearing, both central to SACCO sustainability. This reinforces the importance of capacity-building initiatives targeting board effectiveness, particularly in the Ugandan context where regulatory enforcement remains fragmented and survival challenges persist despite regulatory reforms.

The study makes significant theoretical contributions by extending Institutional Theory and Role Theory. Institutional Theory highlights how external regulatory frameworks influence governance practices, while Role Theory provides deeper insight into how board members, when fulfilling their governance roles effectively, can convert compliance requirements into financial sustainability measures. By demonstrating the mediating role of board role performance, the study bridges the gap in governance literature, particularly in cooperative financial institutions where both external regulation and internal governance structures play intertwined roles. These findings hold practical implications for both SACCO practitioners and policymakers, emphasizing the need for strengthened governance capacity alongside regulatory reforms. Effective board role performance is essential for ensuring that compliance with prudential regulations translates into sustained liquidity management and gearing balance, ultimately safeguarding SACCO survival in Uganda's evolving regulatory landscape.

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