

# American Journal of Accounting (AJACC)



**The Mediating Role of Financial Accountability in the Relationship between Internal Control Environment and Financial Performance of Savings and Credit Cooperatives in Mid-Western Uganda**

*Dr. John Baguma Muhunga Kule, Prof. Nixon Kamukama, and Dr. Frederick Nsambu Kijjambu*



## **The Mediating Role of Financial Accountability in the Relationship between Internal Control Environment and Financial Performance of Savings and Credit Cooperatives in Mid-Western Uganda**

**Dr. John Baguma Muhunga Kule<sup>1</sup>, Prof. Nixon Kamukama<sup>1</sup>, and Dr. Frederick Nsambu Kijjambu<sup>1</sup>**

<sup>1</sup>Department of Accounting and Finance, Faculty of Business and Management Sciences,  
Mbarara University of Science and Technology

Authors' Emails: [kule@must.ac.ug](mailto:kule@must.ac.ug), [nkamukama@must.ac.ug](mailto:nkamukama@must.ac.ug), [nsambu.kijjambu@must.ac.ug](mailto:nsambu.kijjambu@must.ac.ug)

### **Abstract**

**Purpose:** This paper aimed at establish the mediating effect of financial accountability in the relationship between internal control environment and financial performance of savings and credit cooperatives (SACCOs). The purpose of this paper is to establish the mediating role of financial accountability in the association between internal control environment and financial performance.

**Methodology:** A cross-sectional research design and positivist paradigm were used to collect data using a close-ended questionnaire. Also, a standard regression analysis, Medgraph program, and Baron and Kenny approach were adopted to test for the mediation effects. Based on the target population of 122 SACCOs, a sample of 93 SACCOs was selected using probability sampling technique.

**Findings:** It is clearly revealed that the true drivers of financial performance in the SACCO sector are financial accountability and internal control environment. Nevertheless, financial accountability exhibits a partial form of mediation in the association between internal control environment and financial performance.

**Unique Contribution to Practice and Policy:** In the event that financial accountability is established as a conduit in the relationship between internal control environment and financial performance, managers in the SACCO sector should work on reinforcing the agents of financial accountability (i.e., value for money and level of transparency) in an effort to enhance sustainable financial performance.

**Keywords:** *Financial accountability, Internal Control Environment, Financial Performance, and SACCOs*

## Introduction

SACCOs are considered as engines for poverty reduction through increased access to affordable credit and efficient provision of savings facilities to the economically active poor in developing economies who are excluded from formal financial institutions, such as commercial banks (Ramath & Preethi, 2014). It is evident that the major challenge for entrepreneurs is the lack of capital for investment, thus a need for SACCOs to bridge the financing gap by extending micro-credit for income generating purposes and business startups (Marwa & Aziakpono, 2015; Kihwele & Gwahu, 2015). SACCOs thus are expected to be viable and financially sustainable, if they are to reduce poverty among the economically active poor (Kipkoech, 2015). Despite of their effort towards sustainable financial performance, SACCOs in Uganda have continued to experience unhealthy financial performance, as revealed by the low levels of return on assets, liquidity, and high portfolio at risk levels.

A number of studies exist on the association between internal control environment and financial performance, but a few scholars have attempted to address the mediating role of financial accountability in such associations. This therefore, creates a knowledge gap to be filled. Kamukama and Natamba (2013) advocate for the establishment of the intervention of a mediator in a given study if a detailed explanation of the study outcome is to be achieved. The ongoing debates indicate that financial accountability plays a key role in the relationship between internal control environment, and financial performance. For instance, Kinyua et al. (2015) and Sahabi, Diibuze and Abubakar (2017) reveal that financial accountability acts as a conduit in the association between internal control environment and financial performance of firms. Whereas the above studies have attempted to test the direct effects of internal control environment on financial performance, none of the studies has addressed the mediating effect (indirect effect). This, therefore, leaves a lot to be desired since the above previous scholars did not test for mediation. Based on the above, the current study was set to find out the mediating effect of financial accountability in the link between internal control environment and financial performance of SACCOs in Mid-Western Uganda.

## Literature Review and Hypothesis Development

Following the previous studies' theoretical underpinnings, it is clearly shown that accountability mediates in the link between control environment and financial performance. For example, the need for moral consciousness among employees motivates them to ensure that resources are effectively and efficiently managed and utilized with utmost good faith (Said, Alam, & Khalid, 2016; Sewrathan, 2016). Also, Muchuri and Jagongo (2017) argue that resources need to be safeguarded from unethical and irregular practices such as misappropriation and frauds, if the firms are to achieve improved financial performance. In addition, efficient utilization of organizational resources leads to reduced costs, thus resulting into economic benefits and survival of firms (Keramidou, Mimis, & Fotinopoulou, 2012). Furthermore, lack of integrity may lead to fraudulent practices, which in the end may lead to loss in shareholder's confidence in the management's actions, thus affecting their further investments (Owolaba & Dada, 2011; Jahanshad, Heidapoor, & Valizadeh, 2014). It is worth noting that value for money (efficiency and effectiveness) is a key driver of financial performance of firms (Keramidou et al., 2012; the COSO framework, 2013).

In a related development, Board of directors' commitment to oversight roles motivates management to ensure that quality financial reports are prepared, hence furthering financial reporting (Nalukenge, Tauringana, & Ntayi, 2017). In addition, the Board of directors' commitment to integrity, reflected by its "tone to the top" has an effect on the management's ethical behaviour, hence discouraging managers from involvement into frauds and misappropriations (Nalukenge et al., 2017). Accordingly, Jahanshad et al. (2014) show that inadequate financial reporting may tempt managers to change information in the financial statements, and condition the profits to fit their selfish interest, hence affecting the quality of financial reports. Furthermore, the fear of investors is lessened by the existence of transparency in a firm due to the fact that transparency minimizes fraud, financial scandals, and embezzlement (Simangusong, 2014). Consequently, it is undoubtable that accountability mediates in the correlation between Board of directors' participation and financial performance.

Besides, employees' competence leads to job tasks being handled according to set standards (Mantako, Said, & Nurleni, 2019), hence promoting effective and efficient utilization of organizational resources (Oyoo, 2014). Competent employees ensure quality financial reporting (Kewo, 2017). This is in line with Simangusong (2014) who argues that good quality financial reporting minimizes cost of operations, and reduces the debt levels and loan default risk within financial institutions, thus, boosting financial performance. Whereas theoretical assertions confirm the mediating role of financial accountability in the relationship between internal control environment and financial performance, empirical evidence in the existing literature is limited. Moreover, Jose (2013) argues that conducting a mediational analysis makes it possible to understand the relationship between the independent and dependent variables in greater depth. In light of the above, this study established the practical role of financial accountability in the relationship between internal control environment and financial performance of SACCOs in Mid-Western Uganda.

From the reviewed literature on the mediating role of financial accountability in the relationship between internal control environment and financial performance, the following hypothesis was developed:

**H1:** Financial accountability plays a mediating role in the relationship between internal control environment and financial performance of SACCOs in Mid-Western Uganda.

## Methodology

The study adopted a cross-sectional research design to address the study hypothesis. From the study population of 122 SACCOs, a sample size of 93 SACCOs was considered, and this was obtained using the Yamane's formula of 1973 that guides the sample selection process. According to Yamane (1973), the sample size was determined as follows:

$$n = \frac{N}{1+N(e)^2}$$

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

$$n = \frac{122}{1+122*(0.05* 0.05)}$$

$$n = \frac{122}{1 + 0.305}$$

**n = 93 SACCOs**

Simple random sampling technique was used to obtain the representative sample from the entire study population. This technique was preferred because it offers an equal chance to every item of the study population to be included in the sample (Blumberg, Cooper & Schindler, 2008). Parametric tests were conducted to assess whether data met the assumptions of parametric data, thus assessing the suitability of data for inferential statistics analyses. Consequently, homogeneity of variance, multicollinearity, normality of the distribution of data, and linearity of data tests were conducted, and their standard cut-off points were observed. Mediation tests were carried out to establish the nature of mediation and the extent to which financial accountability influences the relationship between internal control environment and financial performance. The mediation tests were conducted using standard regression analysis, Sobel z-values, and Medgraph program (Jose, 2013), based on the works of Baron and Kenny (1986); Field (2009); Bairabar and Sotorrio (2017), and Newsom (2020).

### Measurement of Study Variables

Financial accountability was measured in terms of value for money (Marwa & Aziakpono, 2015; Sekakubo et al, 2014) and level of transparency (Agwori & Akani, 2017; Nalukenge et al, 2017). All the items of financial accountability were anchored onto a five-point Likert-type of scale in the questionnaire. This was in agreement with the study by Kamukama et al. (2017) that used the following scales: **1** = Strongly disagree; **2** = Disagree; **3** = Undecided; **4** = Agree; **5** = Strongly agree.

## Results

### Demographic characteristics results

**Table 1: Years of Operation of SACCOs**

	Frequency	Percent	Cumulative Percent
Below 5 years	18	19.4	19.4
5-9 years	32	34.4	53.8
9-13 years	32	34.4	88.2
Above 13 years	11	11.8	100
<b>Total</b>	<b>93</b>	<b>100</b>	

*Source: Primary Data (2020)*

Majority of the SACCOs have been in business for a period of more than 05 years. This can be evidenced by the fact that only 19.4% of the SACCOs have been in business for a period of less than 05 years (table 1). This implies that the going concern principle was adhered to by the SACCOs studied. In addition, SACCOs with a substantial period in business are associated with experience in the operations of SACCOs, and being conversant with the dynamics in the

Microfinance institutions' business environment, thus expected to significantly influence financial performance.

**Table 2: Location of the SACCOs**

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

*Source: Primary Data (2020)*

**Table 3: Capital structure for the SACCOs**

	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Equity Capital only	48	51.6	51.6
Equity and Loans	33	35.5	87.1
Equity & Donations	7	7.5	94.6
Equity, Loans & Donations	5	5.4	100
<b>Total</b>	<b>93</b>	<b>100</b>	

*Source: Primary Data (2020)*

Majority of the SACCOs in Mid-Western Uganda (51.6%), as per table 3 financed their business operations by use of equity capital only, while 35.5% used both equity capital and loans. The least of the financing streams were from Equity capital and donations (7.5%) and Equity capital, loans and donations (5.4%). This implies that most of the SACCOs had a stable financing option since they used their own money to run their business, which is expected to reduce the cost of capital, hence impacting on their sustainable financial performance.

### **Testing for Mediation**

Mediation tests were conducted using standard regression to establish whether the four preconditions set down by Baron and Kenny (1986) were met. Table 4 indicates that the four preconditions by Baron and Kenny are met: First, internal control environment and financial performance are correlated ( $\beta = 0.549, p < 0.001$ ), regression model 2. Second, internal control environment significantly influences financial accountability ( $\beta = 0.647, p < 0.001$ ), regression model 1. Third, financial accountability substantially influences financial performance ( $\beta = 0.474, p < 0.001$ ), regression model 3. Finally, the effect of the internal control environment on financial performance reduces on introducing financial accountability (from  $\beta = 0.549, p < 0.001$  to  $\beta = 0.417, p < 0.001$ ), regression model 3. The introduction of financial accountability in the regression model 3 significantly reduced the relationship between internal control environment and financial

performance (i.e., from  $\beta= 0.549$  to  $\beta= 0.417$ ). Thus, the study results depict a partial form of mediation due to the fact that the correlation between internal control environment and financial performance was reduced to a significant level (i.e., from  $\beta= 0.549^{**}$  to  $\beta= 0.417^{**}$ ). The ratio index of 24%, given by:

$\frac{0.549-0.417}{0.549} * 100$ , suggests that 24% of the effect of internal control environment on financial

0.549 performance goes through financial accountability (indirect effect), while 76% of the effect is direct. Therefore, the study findings support the theoretical assumption that financial accountability acts as a conduit in the association between internal control environment and financial performance, hence confirming the study hypothesis.

**Table 4: Standard regression analysis results for the mediation of accountability in the relationship between control environment and financial performance**

	Dependent Variables								
	Accountability			Financial Performance					
	Model 1			Model 2			Model 3		
	Unstandardized Coefficients		Standardized Coefficients	Unstandardized Coefficients		Standardized Coefficients	Unstandardized Coefficients		Standardized Coefficients
Predictor	B	SE	Beta	B	SE	Beta	B	SE	Beta
(Constant)	16.973	7.360		-2.683	0.836		-3.041	0.849	
Control Environment	0.194	0.024	0.647***	0.017	0.003	0.549***	0.013	0.004	0.417***
Accountability							0.490	0.010	0.474***
<b>Model Summary:</b>									
<b>R-Square</b>				0.302			0.326		
<b>R-Square Change</b>				-			0.024		

Note: \*\*\*  $p < 0.001$ ,  $N=93$

Source: Primary Data (2020)

## Discussion

This study investigated and tested the mediating effect of financial accountability in the association between internal control environment and financial performance of SACCOs in Mid-Western Uganda. Consequently, the results reveal that financial accountability exhibits a partial form of mediation in the link between internal control environment and financial performance. The results signify that not all the effect on financial performance goes through internal control environment but also financial accountability. This implies that the association between internal control environment and financial performance is weakened by the existence of financial accountability in the model. This therefore, confirms that financial accountability partly acts as a conduit in the

association between internal control environment and financial performance. Thus, internal control environment and financial accountability are true drivers of financial performance of SACCOs in Mid-Western Uganda.

The study findings are consistent with the theoretical assertions in the works of Said, Alam, & Khalid (2016), Owolaba & Dada (2011), Bello (2013), and Quayes & Hasa (2014) that reveal the role of financial accountability in the relationship between internal control environment and financial performance. In this case, there is need for moral consciousness among employees as this motivates them to ensure that resources are effectively and efficiently managed and utilized with utmost good faith (Sewrathan, 2016; Said et al., 2016). This in the end will enable the firm realize an improvement in financial performance since resources will be safeguarded from unethical and irregular practices, such as misappropriations and frauds (Muchuri & Jagongo, 2017). Similarly, lack of integrity within an organization leads to fraudulent practices, and may affect the shareholders interest in making further investments in the firm's activities (Owolaba and Dada, 2011; Jahanshad, Heidapoor, & Valizadeh, 2014; Mwangi, Nyachwaya, & Cheruyoit, 2015). Muchuri & Jagongo (2017) postulate that when audit committee effectively oversees and monitors management while conducting its financial statements preparation tasks, financial performance is likely to improve. Consequently, investors are motivated to entrust management with more resources that can be used to generate more revenue (Bello, 2013). In support of the above assertion, Quayes and Hasa (2014), Jahanshad et al., (2014), and Mwesigwa, Nasiima, & Suubi (2014) argue that the firm's high level of financial disclosure attracts more investors in the firm, thus, leading to low cost of capital. Equally, Nalukenge, Tauringana, & Ntayi (2017) indicate that effective Board of directors' commitment to its oversight roles provokes management to ensure that good quality financial reports are prepared, hence discouraging managers from indulging in creative accounting. In regard to the above theoretical assertions, effective internal control environment influences financial performance through financial accountability.

## **Study Implications**

### **Theoretical Implication**

This study affirms the theoretical proclamations that financial accountability acts as a conduit in the connection between internal control environment and financial performance. Additionally, the study has addressed the empirical gap by conducting a mediation test to establish the nature of mediation effects of financial accountability in the connection between internal control environment and financial performance. By this, the study has established that financial accountability partially mediates in the association between internal control environment and financial performance of Mid-Western Ugandan SACCOs. Subsequently, it has contributed to the mediation debate in the field of accounting.

### **Managerial Implication**

In the event that financial accountability has been shown as a casual chain in the relationship between internal control environment and financial performance of SACCOs, it becomes imperative that managers of SACCOs ensure that the elements of financial accountability (value for money and level of transparency) are strengthened, and by doing this, the level of financial performance is expected to increase.



It is always prudent that the mediating variable is studied so as to come up with logical conclusions. Indeed, Kamukama et al., (2013) emphasize the need to examine the intervention of the mediating variable in the study if a detailed explanation of the study outcome is to be registered. Thus, since the results reveal that financial accountability is a key driver of financial performance, managers should never undermine its role.

### **Policy Implication**

The study findings are linked to SACCOs in Mid-Western Uganda, the same results have policy implications to other parts of Uganda and to the entire region. The lessons learnt from this study are that the government of Uganda needs to review its strategies geared at ensuring that SACCOs achieve sustainable financial performance. Fundamental to the study outcomes, it is clearly evident that internal control environment cannot accurately explain financial performance without financial accountability. It is thus agreed that the association between internal control environment and financial performance is mediated by financial accountability. Therefore, estimating a model without considering mediation does not intensely enlighten the accurate connection between the independent and dependent variables.

### **Conclusion**

Financial accountability mediates in the relationship between internal control environment and financial performance. The existence of financial accountability in the model weakens the strength of the direct relationship between internal control environment and financial performance by 24%; thus, signifying partial form of mediation. This implies that financial accountability regulates the effectiveness with which internal control environment's actions are transformed into financial performance. The presence of the partial form of mediation suggests that the direct link between internal control environment and financial performance is not completely stopped by the existence of financial accountability in the model.

### **Recommendations**

For SACCOs to achieve sustainable financial performance, there is need for the management of SACCOs to embrace accountability in the SACCOs' operations, since the results of the study have considered accountability as a key driver of financial performance. SACCOs should put in place systems to safeguard their resources from fraud and misappropriation, thus calling for effective and efficient utilization of resources. Also, the level of transparency should be scaled up through effective financial reporting and disclosures. The end result of this is built trust and confidence in the actions of management of SACCOs by the owners, and thus improving the financial performance of SACCOs through increased investments. This is so because investments by members provide cheaper sources of funding to SACCOs.

### **Areas for Further Research**

This study was conducted in Mid-Western Uganda. A comparative analysis of SACCOs in other parts of the region, while considering the same variables (financial accountability and financial performance), could be beneficial. This study adopted a cross-sectional research design. A longitudinal study, using the same hypothesis, H, could be conducted so as to obtain a deeper understanding of the mediating role of financial accountability in the relationship between internal control environment and financial performance of SACCOs.

## References

- Agwor, T., and Akani, F. N. (2017). Financial Accountability and Performance of Local Governments in Rivers State, Nigeria. *International Journal of Economics, Commerce and Management*, 1(10), 620-635.
- Bairabar, E., and Sontorrio, L. L. (2017). The Mediating Effect of Transparency in the Relationship Corporate Social Responsibility and Corporate Reputation. *Review of Business Management*, 20(1), 5-21.
- Baron, R., & Kenny, D. (1986). The Moderator-Mediator Variable Distinction in Social-Psychological Research Strategic, Conceptual and Statistical Considerations. *The Journal of Personality and Social Psychology*, 51, 1173-1182.
- Blumberg, B., Cooper, D. R., and Schindler, P. S. (2008). *Business Research Methods. Second European Edition*. London: Mc Graw Hill.
- Bello, H. (2013). Audit Committee role in Enhancing Accountability of Albanian Publis Sector. *Risk and Audit Consulting, Albania*, 8(4). COSO. (2013). *Internal Control Integrated Framework*.
- Field, A. (2009). *Discovering Statistics using SPSS* (Third Edition ed.).
- Jahanshad, A., Heidapoor, F., and Valizadeh, Y. (2014). Relationship between Financial Information Transparency and Financial performance of Listed Companies in Tehran Stock Exchange. *Research Journal of Recent Sciences*, 3(3), 27-32.
- Jose, P. (2013). *Doing Statistical Mediation and Moderation*. Gullford Publications.
- Kamukama, N., and Natamba, B. (2013). Social Capital: Mediator of Social Intermediation and Financial Services Access. *International Journal of Commerce and Management*, 23(3), 204-215.
- Keramidou, I., Mimis, A., & Fotinopoulou. (2013). Exploring the Relationship between Efficiency and Profitability, Benchmarking. *An International Journal*, 29(5).
- Kewo, C. L. (2017). The Influence of Internal Control Implementation and Managerial Performance on Financial Accountability of Local Governments in Indonesia. *International Journal of Economics and Financial Issues*, 7(1), 293-297.
- Kihwele, E. A., & Gwahula, R. (2015). Impact of savings and Credit Cooperative Societies in Poverty Reduction. Empirical Evidence from Tanzania. *European Journal of Business and Management*, 7(23), 2222-2839.
- Kinyua, J. K., Gakure, R., Gekara, M., and Orwa, G. (2015). Effect of Internal Control Environment on the Financial Performance of Companies Quoted on the Nairobi Securities. *International Journal of Innovative Finance and Economics Research*, 3(4), 29-48.
- Kipkento, C., Langat, C., Okello, A., & Terer, W. (2016). Effect of Internal Control Systems on Financial Management in Baringo County Government, Kenya. *Journal of Economics, Finance, and Accounting*, 3(1).

- Mantako, S. A., Said, D., & Nurleni. (2019). The Influence of Organizational Commitment, Competence of Village Fund Management Officers and utilization of information technology on accountability of village financial management. *AFEBI Accounting Review*.
- Marwa, N., and Aziakpono, M. (2015). Efficiency and Profitability of Tanzanian Savings and Credit Cooperatives: Who is a Star? *Journal of Economics and Behavioural Studies*, Vol. 6, No.8, pp. 658-669.
- Muchiri, N. W., & Jagongo, A. (2017). Internal Auditing and Financial performance of Public Institutions in Kenya: A case study of Kenya Meat Commission. *African Journal of Business Management*, 11(8), 168-174.
- Mwangi, J. K., Nyachwaya, Z. O., and Cheruyoit, R. (2015). Effect of Corporate Governance Practices on Financial Performance of SACCOs in Kericho Municipality. *ISOR Journal Of Economics and Finance*, 6(3), 57-75.
- Mwesigwa, R., Nasiima, S., & Suubi, S. (2014). Corporate Governance, Managerial Competence, Accountability, and Financial Performance of Commercial Banks in Uganda. *International Journal of Economics, Commerce, and Management*, 11(9).
- Nalukenge, I., Tauringana, V., and Ntayi, M. (2017). Corporate Governance and Internal Controls over Financial Reporting in Uganda Microfinance Institutions. *Journal of Accounting in Developing economies*, 7(3), 294-317.
- Newsom. (2020). Structural Equation Modeling. *Psy* 223/623.
- Owalaba, S., & Dada, S. (2011). Audit Committee: An Instrument of Effective Corporate Governance. *European Journal of Economics, Finance, and Administration Sciences*(35).
- Oyoo, C. O. (2014). Effect of internal control on Financial Performance of Microfinance Institutions in Kisumu Central Constituency, Kenya. *Scholarly Journal of Scientific Research and Essay(SJSRE)*, Vol. 3(10), pp.139-155.
- Quayes, S., and Hasan, T. (2014). Financial Disclosure and Performance of Microfinance Institutions. *Journal of Accounting and organizational Change*, 10 (3), 314-337.
- Ramath, P., & Preethi. (2014). Microfinance in India-for Poverty Reduction. *International Journal of Research and Development-A Management Review (IJRDMR)*, 2(4), 2319-5479.
- Sahaba, I., Diibuzie, G., and Mohammed, A. (2017). The Impacts of Internal Control Systems on Financial Performance, the case of Health Institutions in Upper Region of Ghana. *International Journal of Academic Research in Business and Social Sciences*, 7 (4).
- Said, J., Alam, M., & Khalid, M. A. (2016). Relationship between Good Governance and Integrity System. Empirical Study on the Public Sector of Malaysia. *Humanomics*, 32(2), 151-171.
- Ssekakubo, J., Ndiwalana, G., and Lwanga, F. (2014). Managerial Competency and the Financial Performance of Savings, Credit and Cooperative Societies in Uganda. *International Research Journal of Arts and Social Science*, 3(3), 66-74.
- Sewrathan. (2016). Analyzing the Financial Controls that Promote Accountability in KwaZulu-Natal Office of the Premier: A case study Approach.

Simangusong, R. (2014). The Impact of Internal Control Effectiveness and Internal Audit Role towards the Performance of Local Government. *Journal of Finance and Accounting*, 5(7), 50-58.