



## The role of the internal control system on the financial performance of Umurenge SACCO Bwishyura of Karongi District, Rwanda

Jean Baptiste Uwamungu<sup>1</sup>  
 François Xavier Niyibizi (PhD)<sup>2</sup>  
 Alphonse Nteziyaremye<sup>3</sup>  
 Viateur Irakarama<sup>4</sup>  
 Donat Vugayabagabo<sup>5</sup>  
 Herve Bienfait Ishimwe<sup>6</sup>  
 Obed Niyodusenga<sup>7</sup>  
 Jean Claude Mutesa<sup>8</sup>  
 Kayenga Kasereka<sup>9</sup>  
 Ferdinand Habumugisha<sup>10</sup>

<sup>1</sup>uwamungujeanbaptiste2020@gmail.com

<sup>2</sup>niyibizifx@gmail.com

<sup>3</sup>ntezalphonse1981@gmail.com

<sup>4</sup>iravia2@gmail.com

<sup>5</sup>vugadonat@gmail.com

<sup>6</sup>ishimwe11bien@gmail.com

<sup>7</sup>obedneeyo@gmail.com

<sup>8</sup>jc.mutesa@gmail.com

<sup>9</sup>kayengabek@gmail.com

<sup>10</sup>ferdinandhabumugisha@gmail.com

<sup>1,3,4</sup>Rwanda Polytechnic (RP)/Karongi College, <sup>2,8</sup>University Libre de Kigali (ULK), <sup>5</sup>Inkunga Finance, <sup>6</sup>SACCO Tuzigamire Abacu Kivumu, <sup>7</sup>University of Tourism, Technology, and Business Studies (UTB), <sup>9</sup>Kenya Methodist University, Nairobi, <sup>10</sup>Rwanda Polytechnic (RP)/Kitabi College, <sup>1,2,3,4,5,6,7,8,10</sup>Rwanda, <sup>9</sup>Kenya

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### ABSTRACT

This research sought to analyse the role of internal control on the financial performance of one financial institution, namely Umurenge Bwishyura Savings and Credit Cooperative Organization, referred to as Bwishyura SACCO in this research. It specifically sought to assess the relationship between the control environment and the financial performance of Bwishyura SACCO, examine the relationship between control activities and the financial performance of Bwishyura SACCO, investigate the relationship between risk assessment and the financial performance of Bwishyura SACCO, and find out the role of internal control on the financial performance of Bwishyura SACCO. It was descriptive in nature. It was guided by two theories, namely the “Agency Theory (AT)” and the “Stakeholder Theory (ST)”. A quantitative approach was used for collecting, analysing and presenting data. The target population of this research comprised 19 individuals, including 9 staff of Bwishyura SACCO and 10 members of its board of directors. The study sample size included 19 individuals of Bwishyura SACCO. A universal sampling technique was employed in the selection of respondents. Questionnaires were used to collect primary data, whereas a documentary review was utilised for gathering the secondary data of this study. All data were recorded and coded into SPSS software. This research found out that a high and positive relationship exists between the control environment and the financial performance of the SACCO, which is equal to 0.715\*\*, and the sig. is 0.000 (less than 0.01). In addition, this research identified the existence of a high and positive relationship between control activities and the financial performance of this SACCO. Moreover, the study depicted the presence of a high and positive correlation between risk assessment and the financial performance of Bwishyura SACCO. Furthermore, the results indicated that internal control plays a key role in the financial performance of Bwishyura SACCO. This research also identified a coefficient correlation of R=0.898. This means that there exists a positive and strong relationship between internal control and the financial performance of Bwishyura SACCO. However, 14.2% of the variation in financial performance of this SACCO is elucidated by other reasons which are not captured by this model. Finally, this study concludes that internal control is a critical factor influencing the profitability of Bwishyura SACCO, enhancing its financial performance by mitigating risks as well as ensuring its operational efficiency. The study, therefore, recommends that this SACCO should strengthen its risk assessment processes to efficiently detect, evaluate, and moderate risks to always help it protect its assets, reduce losses, and sustain its financial performance.

**Keywords:** Agency Theory (AT), Financial Institutions, Financial Performance, Internal Control System, Stakeholder Theory (ST), Bwishyura SACCO



## I. INTRODUCTION

Nowadays, the use of internal control in leading and avoiding fraud of any financial organizational resources to reach its goals is inevitable (Rafindadi & Olanrewaju, 2019). Financial institutions worldwide operate under a set of policies, rules and guidelines that guide them toward achieving both financial and non-financial objectives. While some of these rules are established internally by the bank's management, others are introduced through external governing laws. The regulations developed inside the Banking organizations as well as other organizations are known as internal controls (Odhiambo, 2022). Banks have heavily invested in enhancing the efficiency of their internal control systems to guarantee their financial, operational, and compliance goals are observed (Oyedokun & Felejaye, 2022).

Internal controls allow Chinese financial institutions to enhance resource allocation and boost financial performance. By implementing effective control systems, resources can be directed to areas that yield the highest returns, thereby maximizing profitability. Additionally, internal controls ensure that Chinese financial institutions adhere to regulatory requirements, which is essential for protecting the stability and integrity of the financial domain (Cheng & Yang, 2020).

Internal controls are essential for protecting assets, managing risks, ensuring compliance, and improving operational efficiency in South African financial institutions. Their successful implementation enhances the financial performance of these institutions by building trust, reducing risks, and maximizing resource use (Britnell, 2017). Operating in a highly regulated environment, financial institutions in South Africa rely on effective internal controls to conform with the industry standards, appropriate laws and regulations. Failure to conform to those guidelines may result in charges, legal penalties, reputational harm, and financial losses (Garcia & Martinez, 2020).

The crisis in the Nigerian financial sector can be credited to several factors, including a high volume of non-performing loans, an absence of transparency, and inadequate capital (Ewa & Udoayang, 2012). Additionally, weak internal controls and ineffective external audits significantly contributed to the sector's troubles. Despite reforms in the Nigerian banking sector, there has been a breakdown in internal control systems, leading to regulatory failures and poor corporate governance. Consequently, the ineffectiveness of internal controls has resulted in financial instability and poor performance within the banking system (Oyedokun & Felejaye, 2022).

Financial institutions in Uganda are required to follow various regulatory standards and guidelines. Internal controls are essential for maintaining compliance, as they help avert fines and legal issues. Non-compliance may cause penalties, reduce reputation, and the loss of licenses, all of which can significantly affect financial performance (Etengu & Amony, 2016). Internal controls have become critically important in Kenyan banks today, as they serve as a cornerstone of an effective accounting system. The growing volatility in international markets and the demand for higher shareholder earnings have driven management to strengthen internal control mechanisms, enhancing their competitive advantage (Muthusi, 2017). This is especially crucial for banks, where weak internal controls are a major contributor to poor performance, primarily due to undetected fraud. From a management perspective, it is critical to implement robust internal control systems to minimize the risk of fraud. It is an integral and dynamic process that must gradually adapt to the evolving challenges of the modern banking industry (Haasan, 2021).

The Rwandan government began acknowledging the significance of the internal audit role, prompting the establishment of rules and regulations governing internal controls. As a crucial element of internal controls, internal audit was recognized as a key contributor to enhancing corporate governance (Mugabo et al., 2022). Therefore, the management of banks should seek and understand the role of the internal controls in their organizations. Weak internal controls in a bank can lead to various negative outcomes, such as heightened fraud risk, financial reporting errors, operational inefficiencies, compliance violations, asset loss, reputational harm, reduced investor confidence, and regulatory challenges (Irudukunda & Kamande, 2022). These weaknesses in the internal control system are primary factors contributing to the poor performance and potential failure of financial institutions, as they adversely impact their operations. According to some researches, there exists a positive relationship between internal control mechanisms and the financial performance of financial institutions. The present research seeks to assess the role of internal control in financial performance of financial establishments in Rwanda with a particular reference to Umurenge SACCO Bwishyura.

### 1.1 Statement of the Problem

Despite having internal controls in place, irregularities and errors can still go undetected for some time, leading to unreliable and inaccurate accounting records (Odhiambo, 2022). As well, there may be issues where resources are not used for their intended purposes, increasing the risk of misuse of organizational funds and resources. This can result in inefficient operations, unreliable financial and operational reports, inadequate protection of assets against theft, loss, and misuse, non-compliance with laws, regulations and existing rules, ultimately, failure to achieve intended goals and objectives, which negatively impacts financial performance (Haasan, 2021).

Due to weak internal control system, financial institutions especially, Umurenge SACCOs, have recorded incessant cases of errors and fraud, embezzlement, unauthorized debit, providing loans to customers who do not meet



the requirements and other malpractices, these situations affected negatively the financial performance of them (Niyonsenga, 2017). Although internal control is crucial for financial institutions, there is a lack of concrete and tangible evidence demonstrating its direct impact on improved financial performance. The specific influence of internal control on the financial performance of Umurenge SACCO Bwishyura remains unclear, and there is insufficient information on how the internal control impacts the Bwishyura SACCO's financial performance. To the researcher's knowledge, there are few studies that have explored the effect of internal control on the financial performance of banking organizations within the context of Rwanda. Hence, this study tries to fill this empirical gap by assessing the impact of internal control on financial performance of financial institutions centering to Umurenge SACCO Bwishyura.

## 1.2 Research Objectives

- i. To assess the relationship between control environment and financial performance of Bwishyura SACCO;
- ii. To examine the relationship between control activities and financial performance of Bwishyura SACCO;
- iii. To investigate the relationship between risk assessment and financial performance of Bwishyura SACCO;
- iv. To find out the role of internal control on financial performance of Bwishyura SACCO.

## II. LITERATURE REVIEW

### 2.1 Theoretical Review

#### 2.1.1 Agency Theory (AT)

The Agency Theory (AT) was established by Michael C. Jensen (Jensen, 1986). The purpose of the AT is to resolve and clarify issues arising in agency relationships that involve the agent and principal (Jensen, 1986). Usually, the relationship is between shareholders (referred to as principals), and the institutional executive committee who are the agents. The agents represent the principal in a specific business deals and they are supposed to denote the best benefits of the principal regardless of personal interest (Adams, 1994). However, the above-mentioned agents have been suspected to work for own interest than being on the behalf of the principals (Eisenhardt, 1989). The AT, therefore, suggests that a firm's value cannot be exploited unless appropriate motivation or suitable monitoring are effectively enough to maintain strong managers, and prevent them from using their decisions to exploit their own benefits.

The relevance of the AT to this study is that it can help the managers of financial institutions to know how they can act on the behalf of shareholders rather than their own interest, by knowing this they can do their best to carry out control environment, control activities and risk assessment in an orderly and efficient manner. As a result, this may help to successfully improve financial performance related to the Return on Asset (ROA), Return on Equity (ROE) and Net Profit Margin (NPM), and maximize the interests of the shareholders (Jensen, 1986).

#### 2.1.2 Stakeholder Theory (ST)

Edward Freeman's stakeholder theory was developed in 1984 (Freeman, 1984). He is often referred to as the father of stakeholder theory. He argued that business owners have to always consider all stakeholders' interest, not just in decisions making. Freeman proposed that organizations should seek to create value for all stakeholders, rather than solely focusing on maximizing profits for shareholders (Freeman, 1984). The ST recommends that the goal of a business would be to generate as much value as possible for shareholders. For succeeding and being long term sustainable, managers should preserve the customers' interests, employees, suppliers, moneylenders, communities, government and stakeholders associated, and going in the same way. An organization should not only mind the stockholders in their institution, but also other shareholders, who do business with it and also their competitors (Freeman, 1984). This theory is the idea that every stakeholder is a key to the success of a bank, and understanding where their interests are aligned, is the institutional man agent responsibility. The ST states that the managers of a business must not only consider the needs of shareholders and manager, but for all stakeholders (Klimczak, 2007).

The ST is efficient to this study as it stipulates a framework for designing internal control systems that considers the interests of all stakeholders, not only shareholders, during decisions making process of a financial organization. By incorporating stakeholder perspectives into control mechanisms, organizations can enhance control environment, control activities and risk assessment and achieve sustainable performance, growth, and prosperity.

### 2.2 Empirical Review

#### 2.2.1 Relationship between Control Environment and Financial Performance of Financial Institutions

Control environment sets the quality of an organization and influences the overall control consciousness of its individuals. In financial institutions, this component encompasses factors including the integrity, ethical values, and competence of the board of directors and management (Mehta, 2024). This means that financial institutions must establish a strong control environment by promoting ethical behavior, fostering a culture of compliance, and providing adequate training and resources to employees. Also, the control environment incorporates the introduction of policies and procedures that guide operations and decision-making processes within financial institutions (Odhiambo, 2022).



The control environment is the attitude towards internal control and control consciousness introduced and sustained by the managerial team and the staff of an institution (Munene, 2019).

The control environment has a central use in the achievement of the entire organization, how the control environment impacts the design and operation of an organizational internal control measures. It shows how skilled, moral and honest the organizational management is (Muhunyo & Jagongo, 2018). It starts with the tone set by the board of directors and the top management. In financial institutions, senior management and the board play a critical role in establishing and promoting a culture of integrity, accountability, and ethical behavior. Their commitment to upholding high ethical standards and complying with laws and regulations sets the tone for the entire organization (Aitaru, 2017). Therefore, financial institutions should promote a culture of ethical behavior and integrity throughout the organization. This encompasses adopting an environment whereby the staff recognizes the role of honesty, fairness, and transparency in all aspects of their work. Ethical values should be embedded in the financial institution's policies, procedures, and decision-making processes, and employees should be encouraged to report unethical behavior or suspected violations of internal controls (Adebisi, 2018).

The control environment should include mechanisms to ensure that employees possess the needed knowledge, skills, and resources to perform their duties effectively. Financial institutions should invest in training and development programs to enhance employees' competence in areas such as risk management, compliance, and internal controls. Additionally, employees should be held accountable for their actions, with clear expectations regarding performance and conduct (Khamis, 2019). The control environment should promote a mindset of continuous improvement and adaptability. Financial institutions should regularly evaluate the effectiveness of their internal controls, identify areas for enhancement or refinement, and implement changes as necessary to address evolving risks and challenges. This requires a proactive approach to risk management and a willingness to embrace change to maintain the effectiveness of the control environment over time (Olumbe, 2018).

The control environment sets the tone for the entire internal control system and significantly influences the organization's ability to achieve its objectives, mitigate risks, and maintain compliance with laws and regulations. By promoting a culture of integrity, accountability, and continuous improvement, banks can establish a robust control environment that supports sound governance and sustainable business success (Abdullahi & Muturi, 2020).

### **2.2.2 Relationship between Control Activities and Financial Performance of Financial Institutions**

Control activities include the practices, policies, and procedures established by management to mitigate risks and achieve specific objectives. In financial institutions, control activities encompass many activities aimed at ensuring the reliability of financial transactions, safeguarding resources, and complying with existing guidelines (Abdullahi & Muturi, 2020). Samples of control activities in financial institutions are the sharing of duties, approval processes and authorization, physical checking over assets, reconciliation of accounts, and monitoring of transactions for unusual or suspicious activities (Oyedokun & Felejaye, 2022). Control activities include mechanisms, policies and procedures set to make sure orders of the management are effectively implemented (Aitaru, 2017). Control activities are instruments that are manually and automated to avoid or minimize the risks that can hinder success of the purpose and mission the organizational (Muraleetharan, 2013).

One of the key control activities in financial institutions is the segregation of duties, which involves sharing duties among different personnel to prevent errors and fraud. By segregating duties, financial institutions reduce the risk of collusion and ensure that no single individual can initiate and complete transactions without mistakes (Ngari, 2017). Control activities in financial institutions often include formal authorization and approval processes for various transactions and activities. This ensures that all transactions are conducted in accordance with established policies and limits. For example, large withdrawals or transfers of funds may require dual authorization to prevent unauthorized transactions. Financial institutions maintain physical controls over assets to prevent theft, loss, or misuse. Physical controls may include security measures such as locked vaults, access controls, surveillance cameras, and security personnel. Additionally, financial institutions may implement procedures for the periodic counting and reconciliation of physical assets to detect discrepancies and ensure their accuracy and completeness (Munene, 2019).

With the increasing reliance on technology in banking operations, control activities also include information technology (IT) controls to safeguard data, systems, and networks from security breaches, unauthorized access, and data manipulation. Control of activities are critical for the establishment and maintenance of efficient internal control systems in financial institutions, they may help financial institutions can mitigate risks, prevent fraud, ensure compliance, and safeguard assets, thereby contributing to the overall integrity and reliability of their operations (Ewa & Udoayang, 2017).

### **2.2.3 Correlation between Assessment of Risk and Financial Performance of Financial Institutions**

The first step in risk assessment is to identify the various types of risks that the financial institution may face. In banking, common risks like market risk, liquidity risk, credit risk, reputational risk, compliance risk, and operational risk must be taken into consideration. According to Mazur (2018), credit risk is the one that arises from the potential for debtors to defaulting on loans, whereas market risk affects the instabilities in interest rates, exchange rates, and asset



cost. Liquidity risk, on the other hand, is all about the inability to meet short-term requirements, while operational risk relates to the risk of deficiencies caused by internal processes, systems, or human error. Finally, the compliance risk is the risk of non-compliance with industry standards, laws, and regulations, while reputational risk arises from negative publicity or damage to the bank's reputation (Mazur, 2018; Garcia & Martinez, 2020).

Once risks have been identified, they need to be assessed for their likelihood and possible impact on the bank's goals. This involves quantifying and prioritizing risks based on factors such as probability, severity, velocity, and persistence. Risk assessment helps to compare the effects of risk analysis with risk criteria to decide if the risk and its extent are acceptable or bearable (Moenga & Mereipei, 2021). Financial institutions may use various risk assessment techniques, such as qualitative assessments, quantitative modeling to evaluate risks and their potential consequences. Risk assessment should take into account both inherent risks that exist without any controls in place and residual risks, which remain after controls have been implemented (Momanyi & Njiru, 2016).

After assessing risks, financial institutions need to develop and implement appropriate tactics to mitigate, transfer, or accept risks in accordance with their risk appetite and tolerance. Mitigation strategies may include the implementation of internal controls, policies, procedures, and risk management practices designed to minimize the possibility or effect of antagonistic proceedings (Haasan, 2021). For example, financial institutions may establish credit risk management policies to limit exposure to risky borrowers, or operational risk controls to enhance the reliability and efficiency of internal processes. Financial institutions may also use risk transfer mechanisms like insurance, hedging or securitization to transfer risks to third parties (Badara & Saidin, 2019).

Risk assessment is a constant procedure that involves consistent monitoring and review to make sure that risks are efficiently managed to remain within acceptable levels (Muhunyo & Jagongo, 2018). Banks should establish mechanisms for monitoring major risk indicators and performance metrics to identify the efficiency of risk management strategies and the changing risk landscape. Regular reviews of risk assessments and risk profiles enable financial institutions to identify emerging risks, evaluate the efficiency of controls, and make right decisions to adapt to changing circumstances. Therefore, according to Mazur (2018), for having reasonable guarantee that the institution will reach its goals, its management must make sure that each risk is evaluated and handled appropriately. The central idea to adopt risk practices of assessment is the avoidance of possible further failures (Hussaini & Muhammed, 2018).

#### 2.2.4 The Role of Internal Control on the Financial Performance of Financial Institutions

Magara (2013) examined the effect of the internal controls on the financial performance of Credit Cooperative Societies in Kenya and deposit-taking savings. A multiple linear regression model was used in this study to test the correlation between the dependent variable and the independent variables. The regression analysis performed established that the independent variable had a positive relationship with the dependent variable. It was also proved by that research that with the absence of strong internal controls, the SACCOs would not have performed well (Magara, 2013; Uwingabiye, 2019). Similarly, Kyasimire and Njenga (2023) investigated the internal control and the financial performance in the Bank of Kigali (BK). Specifically, their study examined the influence of control activities, control environment, risk assessment, and monitoring on financial performance of the bank (Muthusi, 2017). Its findings highlighted that the BK's risk assessment had a very high mean effect on its financial performance (4.34). They also identified that its risk assessment regression coefficients was significant. The results also discovered that control activities in BK were at a very high average or mean (4.63) with positive and significant moderate relation with activities control and the financial performance. Furthermore, the regression of coefficients of control activities was found as  $\beta_2 = 0.503$ ,  $p\text{-value} = 0.016 < 0.05$ ). Finally, the research concluded there is a significant positive correlation between BK'S monitoring system and its financial performance, with a significant regression coefficient (Kyasimire & Njenga, 2023; Odhiambo, 2022).

Mugabo et al. (2022), on the other side, assessed the effect of internal control systems and the performance of World Vision Kigali-Rwanda as a non-governmental organization (NGO). Their findings disclosed that a significant and positive correlation exists between the control environment, control activities, risk assessment, and monitoring within the NGO's performance. This study concludes that World Vision Kigali-Rwanda's operational success depends on its internal control system and the way it functions as influenced by the monitoring systems, control environment and risk assessment to enhance the institutional performance (Mugabo et al., 2022; Uwingabiye, 2019).

Reviewing the above literature, there is a critical research scarcity conducted assessing the internal control impact on the financial performance of financial institutions in Rwanda. Some previous researchers who conducted their research on this topic are from foreign countries. Therefore, their findings are relevant in their countries not in Rwanda. Furthermore, a few of prior studies have deeply discussed on environmental control, assessment of risk, activities control, but they also did not assess the exact correlation of internal control, and financial performance of financial organizations. Some of the theories used in various studies did not highlight their relevance to internal control, and financial performance. They did not show how they connect environmental control, assessment of risk, activities control to financial performance of financial institutions. Finally, as far as methodology is concerned, some studies failed to use secondary data, and did not show how they analyzed financial performance indicators (ROA, ROE and NPM).



Therefore, to address these gaps, it is vital analysis of the importance of internal control on financial performance of financial institutions referring to Umurenge Bwishyura SACCO as the case study.

### III. METHODOLOGY

#### 3.1 Study Site and Scope

This research was conducted in Umurenge Bwishyura SACCO located in Bwishyura Sector, Karongi District of Western Province in Rwanda. Bwishyura SACCO is one of financial institutions operating under the above specified area. It was carried out within a period of three years, from 2022 to 2024.

#### 3.2 Research Design

Throughout this research, researchers used descriptive research design (Irakarama et al., 2024; Nteziyaremye et al., 2024). It firstly aimed to accurately portray respondents and provides a thorough description of the research problem (Creswell & Plano-Clark, 2016; Nteziyaremye et al., 2025). This design was employed to get information about the recent status of the problem. The second objective for using this method was to describe “what exists”, respecting the situation of variables (the correlation between dependent variable and independent variables).

#### 3.3 Population of the Study

The total population for this study comprised of 19 individuals (9 executive members and 10 members of board of directors) of Bwishyura SACCO.

#### 3.4 Sampling Technique

This research used universal sampling technique (Cohen et al., 2018). The universal sampling technique involves choosing a sample where every individual from the target population has an equal likelihood to be selected. The researchers used universal sampling technique to take a sample of all employees and members of board of directors in Bwishyura SACCO since they are few in number (Cohen et al., 2018).

#### 3.5 Sample Size

Because the study's population is small as aforementioned, the researchers used 19 respondents as the sample size since they are few in number. Therefore, the researcher had no challenge in accessing them.

**Table 1**

*Sample Size Information*

Position of respondents	Population	Sample size	Sampling technique
Manager	1	1	Universal sampling technique
Accountant	1	1	
Loan officer	1	1	
Recovery officer	1	1	
Tellers	3	3	
Internal Auditor	1	1	
Customer care agent	1	1	
Members of Board of Directors	10	10	
<b>Total</b>	<b>19</b>	<b>19</b>	

#### 3.6 Type of Data

Both primary data and secondary data were used as key sources of desired data in this study. The primary data came straight from the respondents as the direct investigation and observations. The data were obtained through self-administered questionnaires (Cohen et al., 2018; Nteziyaremye et al., 2025). On the other side, the secondary data involved information obtained from existing researches related to this study (Cohen et al., 2018) and other reviewed documents, such as books (Creswell & Plano-Clark, 2016), and existing financial reports of Bwishyura SACCO to get background and understand information of studies on similar topics (Kakooza, 1996).

#### 3.7 Data Processing

To check accuracy, completeness, and comprehension of data collected, an editing of raw data was done. The aim of editing was to find out mistakes made during the collection of the field data, to monitor correctness and check if there were any incomplete spaces in the questionnaire. Coding was also used to recap data by categorizing diverse responses, for easy analysis and interpretation (Cohen et al., 2018). Finally, a tabulation including organizing the data



into statistical tables such as percentages of the responses to questions and their calculated occurrences was made by the researchers to clearly present findings in an easy and understandable way.

### 3.8 Data Analysis

Data gathered from the field were recorded and coded into Statistical Package for the Social Sciences (SPSS) software version 16.0 (Baylor University, 2025). They were explored with the use of frequency, average (Mean), and standard deviation. Several regression analyses was used to enable the researcher establish the correlation between the variables under study.

Additionally, various regression analyses and correlation analysis were employed to explore the correlation between internal control and the financial performance of Bwishyura SACCO. An analysis of variance (ANOVA) was also applied to evaluate the implication of the model in explaining the relationship between variables. The statistical significance of the linear regression model was assessed at a 5% significance level. The adopted regression line model is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where:

$Y$  is the dependent variable (financial performance), indicated by the ROA, ROE and NPM (Hartanto, 2023).

$X_1$ ,  $X_2$ , and  $X_3$  are independent variables

$X_1$ : Environment Control

$X_2$ : Activities Control

$X_3$ : Assessment of Risk

$\beta_1, \beta_2, \beta_3$ : The Regression coefficient

$e$ : Error term or Residual term.

#### Evaluation of the coefficient of correlation and interpretation

If  $r = 1$ , there is a perfect relationship or correlation.

If  $r \approx 1$ , there is a strong positive relationship or correlation.

If  $r \approx 0.5$ , there is a moderate positive relationship or correlation.

If  $r \approx 0$ , there is a weak linear relationship or correlation.

If  $r = 0$ , there is no linear relationship or correlation.

If  $r < 0$ , means there is a negative linear relationship or correlation.

#### The mean and standard deviation with interpretation

If  $1.0 < \mu < 1.7$ , means that there is a very low average or mean

If  $1.8 < \mu < 2.5$ , means that there is a Low mean - the fact appears less

If  $2.6 < \mu < 3.3$ , means that there is Neutrality

If  $3.4 < \mu < 4.1$ , means that there is a High mean - the fact appears more

If  $4.2 < \mu < 5.0$ , means that there is a very high mean (strong evidence of the existence of the fact)

If  $\sigma \leq 0.5$ , means that there is Uniformity among respondents.

If  $\sigma > 0.5$ , means that there is variability among respondents.

### 3.9 Reliability and Validity of the Research Instruments.

In this study, the reliability of the questionnaire was ensured through a test-retest method, which engaged an administration of the same questions to the same respondents on two separate occasions to check for consistency in the answers. Contrary, to ensure the accuracy of the measurement, the instruments were carefully evaluated for validity. Additionally, the questionnaires were reviewed by an expert who provided feedback to ensure their correctness and relevance. He played a significant role in refining the study instruments to align them with the topic of this research, and ensure the collection of appropriate data (Mugenda & Mugenda, 2003; Saunders et al., 2007).

### 3.10 Ethical Consideration

In this research study, the following ethical standards were observed whereby the participants were given the option to participate or not after being fully briefed on the study's nature in advance. The details and quality of participants' contributions were kept strictly confidential. Offering confidentiality or anonymity was practiced to encourage participants to provide more open and honest responses (Cooper & Schindler, 2015; Juvylyn et al., 2024).



## IV. FINDINGS & DISCUSSION

### 4.1 Demographic Information of Participants

#### 4.1.1 Gender of Participants

Participants of this study were requested to present their gender characteristics and their responses are displayed in Table below.

**Table 2**

*Distribution by Gender*

Gender	Frequency (Freq)	Percentage (%)
Male	10	52.6
Female	9	47.4
<b>Total</b>	<b>19</b>	<b>100.0</b>

This table 2 shows that 52.6% of respondents are males whereas females were 47.4%. This means that more men than women responded. As the questions were not gender sensitive, the inequality in number of respondents in terms of gender has numerical meaning.

#### 4.1.2 Marital Status

The respondents were requested to show their marital status in order to identify the categories of status that participate in this research. Identification of respondents by marital status is an important variable because it identifies respondents.

**Table 3**

*Distribution by Marital Status*

Marital Status	Frequency (Freq)	Percentage (%)
Single	4	21.1
Married	15	78.9
<b>Total</b>	<b>19</b>	<b>100.0</b>

The above table displays that the majority of the respondents were married (78.9%) whereas only 21.1% of respondents were single. This implies that most of employees of Umurenge Bwishyura SACCO were married. This reflects the reality the SACCO's staff members are married, thus, they are mature enough, and they know the relevance of internal control system on financial performance of the institution (Mukandoli & Rusibana, 2022).

#### 4.1.3 Age of Respondents

Respondents were also requested to indicate their age group, and the gathered information is presented in the following table.

**Table 4**

*Age Distribution of Respondents*

Age group	Frequency (Freq)	Percentage (%)
21-30 years	6	31.6
31 – 40 years	10	52.6
41 and above	3	15.8
<b>Total</b>	<b>19</b>	<b>100.0</b>

Table 4 indicates that 31.6% of respondents were in the range of 21-30 years old whereas 52.6% of them were in the range of 31-40 years, and only 15.8% of respondents were above 40 years old. This implies that the majority of participants are young and mature with their age below 40 years old. This also implies that Umurenge Bwishyura SACCO staff present the maturity characteristics, which shows their recognition of internal control system on financial performance (Mukandoli & Rusibana, 2022).

#### 4.1.4 Education Level of Respondents

Respondents were asked to indicate their highest level of educational and their responses are presented in the following table.

**Table 5***Distribution of Respondents by Education Level*

Education level	Frequency (Freq)	Percentage (%)
Secondary level	5	26.4
University level	14	73.6
<b>Total</b>	<b>19</b>	<b>100.0</b>

Table 5 illustrates that only 26.4% of respondents had a secondary level while 73.6% of them were university graduates. This shows again that Most respondents in this study have attained a university-level education. This suggests that the majority of respondents possess a sufficient level of knowledge about the role of internal control on financial performance of Bwishyura SACCO (Mukandoli & Rusibana, 2022).

#### 4.1.5 Experience of Participants

Respondents were also asked to present their service experience in Bwishyura SACCO for the purpose of ensuring whether they have sufficient information regarding the variables under this study. Their views and opinions are presented below:

**Table 6***Distribution of Respondents by Experience*

Experience range	Frequency (Freq)	Percentage (%)
Between 1-2 years	4	21.1
Between 3-4 years	10	52.6
5 years and above	5	26.3
<b>Sum</b>	<b>19</b>	<b>100.0</b>

Table 6 above summarizes the experience level of the participants. From Table, 21.1% of respondents worked for the SACCO in a period between 1-2 years whereas 52.6% worked for a period between 3-4 years, and 26.3% of respondents worked for a period of 5 years and above respectively. From these findings, it was established that the majority of respondents have a sufficient experience with at least 3-4 and above years of working experience. This means that the majority of respondents demonstrated a sufficient level of knowledge and skills about the role of internal control on financial performance of Bwishyura SACCO due to their presented experience (Juvylyn et al., 2024).

## 4.2 Research Objective-Related Findings

During this research, respondents were requested to indicate their level of agreement on different statements related to environment, control activities, risk assessment and internal control respectively. The following sections present the findings.

### 4.2.1 Relationship between Control Environment and Financial Performance of Bwishyura SACCO

The respondents were requested to share their perspectives on the control environment as an element of internal control activities in Bwishyura SACCO. Table below presents their responses.

**Table 7***Respondents' Views on Control Environment in Bwishyura SACCO*

Statements	Mean	Std. Dev.
The integrity level experienced by operating staff can influence financial performance of SACCO	4.29	0.457
The strict adherence to general ethical values is essential. The strict adherence to general ethical values in the SACCO influences financial performance of the SACCO	4.27	0.450
The SACCO has established policies and procedures that guide operations and decision-making processes	4.23	0.430
The board of Directors is competent and strongly committed to implement the recommendations from the internal audit unit to improve financial performance	4.25	0.442
Management skills in management of banking system influence on the bank financial performance	4.20	0.422
The SACCO has set mechanisms to ensure that employees possess the necessary knowledge, skills, and resources to perform their duties effectively	4.21	0.426
Employees of the SACCO are held accountable for their day to day actions	4.20	0.422
<b>Average</b>	<b>4.235</b>	<b>0.435</b>

From Table 7, the findings revealed that the majority of respondents strongly agreed that the level of integrity experienced by operating staff can influence financial performance of the SACCO (Mean=4.29, S.D=0.457); the strict adherence to general ethical values in the SACCO influences financial performance of the SACCO (Mean=4.27,



S.D=0.450); the SACCO has established policies and procedures that guide operations and decision-making processes (Mean=4.23, S.D=0.430); the board of directors is competent and strongly committed to implement the recommendations from the internal audit unit to improve financial performance (Mean=4.25, S.D=0.442); management skills in management of banking system influence on the bank financial performance (Mean=4.20, S.D=0.422); the SACCO has set mechanisms to ensure that employees possess the necessary knowledge, skills, and resources to perform their duties effectively (Mean=4.21, S.D=0.4256); employees of the SACCO are held accountable for their day to day actions (Mean=4.20, S.D=0.422).

Generally, all seven statements highlighting control environment as a component of internal control activities in Bwishyura SACCO revealed the average of 4.235 and SD of 0.435. This concludes that all respondents strongly agreed that control environment is among components of internal control activities in Bwishyura SACCO. The control environment is crucial for the effectiveness of the internal system and financial performance (Uwingabiye, 2019). A strong control environment, characterized by the moral values, integrity, and competence of the employees, as well as the leadership style and commitment of management and the board, plays a critical role in shaping the design and implementation of control policies and procedures (Uwingabiye, 2019).

According to some researches (Muhunyo & Jagongo, 2018); Uwingabiye, 2019), when the above elements are in place, the bank can ensure that operations are conducted ethically and efficiently, reducing the likelihood of errors, fraud, and regulatory breaches. This fosters a culture of accountability and trust, which enhances the accuracy of financial reporting, safeguards assets, and improves compliance with regulations. Ultimately, a robust control environment supports better decision-making, operational efficiency, and risk management, all of these factors contributes to better financial performance. These findings comply with the observation of Muhunyo and Jagongo (2018), who revealed that control environment and the internal control systems significantly impact the financial performance of higher educational institutions in Nairobi City. Moreover, Uwingabiye (2019) concludes that control environment was revealed to have a positive considerable impact on the financial performance of an institution.

The table below clearly displays the relationship between control environment and financial performance of Bwishyura SACCO.

**Table 8**

*Relationship between Control Environment and Financial Performance of Bwishyura SACCO*

		<b>Control environment</b>	<b>Financial performance</b>
Control Environment	<b>Correlation (Pearson)</b>	1	0.715**
	Sig. (2-tailed)		0.000
	N	19	19
Financial performance	<b>Correlation (Pearson)</b>	0.715**	1
	Sig. (2-tailed)	0.000	
	N	19	19

\*\* . The relationship is significant at the 0.01 level (2-tailed).

In table 8, statistical evidence shows that there is a positive high correlation between control environment and financial performance of Bwishyura SACCO which is equal to 0.715\* when the significance level (sig.) is 0.000 (less than 0.01), the researcher concludes that the variables are correlated. This leads to the confirmation that there is a significant positive relationship between control environment and financial performance of Bwishyura SACCO. This implies that control environment have positive impact on financial performance of Bwishyura SACCO. These findings are in agreement with Magara (2013)'s observation that control environment positively contributes to the financial performance of SACCOs in Kenya. Kyasimire and Njenga (2023), in their study, they revealed a positive significant regression between the coefficients of the control environment and the financial performance of BK. Similarly, Odhiambo (2022) concluded that control environment has a positive correlation with the financial performance.

#### 4.2.2 Relationship between control activities and financial performance of Bwishyura SACCO

Respondents were requested to share their views on control activities as a component of internal control within Bwishyura SACCO. Table below summarizes their responses.

**Table 9***Respondents' Views on Control Activities in Bwishyura SACCO*

Statements	Mean	Std. Dev.
The SACCO maintains physical controls over assets to prevent theft, loss, or misuse	4.23	0.430
The respects segregation of duties by dividing responsibilities among different individuals to prevent errors and fraud	4.20	0.422
The SACCO has set authorization and approval processes for various transactions and activities in accordance with established policies	4.21	0.426
The SACCO information technology to safeguard data, systems, and networks from security breaches, unauthorized access, and data manipulation	4.26	0.448
The SACCO takes corrective action to address identified weaknesses	4.20	0.422
Reconciliation of the SACCO's accounts are done on a daily basis to detect discrepancies and ensure accuracy and completeness	4.25	0.442
<b>Average</b>	<b>4.22</b>	<b>0.431</b>

From Table 9, the results highlighted that the majority of participants agreed strongly that the SACCO maintains physical controls over assets to prevent theft, loss, or misuse (Mean=4.23, S.D=0.430); the respects segregation of duties by sharing responsibilities among various individuals to avoid errors and fraud (Mean=4.20, S.D=0.422); the SACCO has set authorization and approval processes for various transactions and activities in accordance with established policies (Mean=4.21, S.D=0.426); the SACCO information technology to safeguard data, systems, and networks from security breaches, unauthorized access, and data manipulation (Mean=4.26, S.D=0.448); the SACCO takes corrective action to address identified weaknesses (Mean=4.20, S.D=0.422); reconciliation of the SACCO's accounts daily practiced to detect discrepancies and ensure accuracy and completeness (Mean= 4.25, S.D=0.442).

Briefly, all six statements highlighting control activities as a component of internal control activities in Bwishyura SACCO revealed the average mean of 4.22 and SD of 0.431. This is to conclude that all respondents strongly agreed that control activities are among components of internal control activities in Bwishyura SACCO. These imply that the bank enhances its financial performance by implementing robust internal controls activities. These findings are in line with the observations of Muthusi (2017) who found out that control activities contribute positively to the financial performance of commercial banks in Kenya.

Table below presents the correlation between control activities and the financial performance of Bwishyura SACCO, with the findings outlined accordingly.

**Table 10***Relationship between Control Activities and Financial Performance of Bwishyura SACCO*

		Control activities	Financial performance
Control activities	<b>Correlation (Pearson)</b>	1	0.823**
	Sig. (2-tailed)		0.000
	N	19	19
Financial performance	<b>Correlation (Pearson)</b>	0.823**	1
	Sig. (2-tailed)	0.000	
	N	19	19

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

Here, the statistical evidence shows that there is a positive high correlation between control activities and financial performance of Bwishyura SACCO which is equal to 0.823 and the sig. is 0.000 - less than 0.01. If the Sig. is less than significant level, therefore, the researcher concludes that variables are highly related. This leads to confirm that there is a significant positive relationship between control activities and financial performance of Bwishyura SACCO. This implies that control activities have positive impact on financial performance of Bwishyura SACCO. These findings are in agreement with the observations of Hussaini and Muhammed (2018), who revealed that there is a positive and significant relationship between control activities and bank performance.

#### 4.2.3 Relationship between Risk Assessment and Financial Performance of Bwishyura SACCO

The respondents were requested to share their perspectives on risk assessment as part of the internal control activities at Bwishyura SACCO, and Table below presents their responses.

**Table 11***Respondents' Views on Risk Assessment in Bwishyura SACCO*

Statements	Mean	Std. Dev.
The SACCO has a functioning well risk management board	4.20	0.422
Management has criteria of identifying which risks are most critical and this influences financial performance to great extent	4.26	0.448
SACCO conducts regular risk assessments to evaluate the likelihood and potential impact of credit risk, market risk, operational risk, liquidity risk, and compliance risk, among others on their operations	4.23	0.430
The SACCO identifies various types of risks that it may face	4.20	0.422
Management has developed and implemented appropriate strategies to mitigate, transfer and accept risks	4.21	0.426
SACCO uses transfer mechanisms of risk such as insurance, hedging and transferring risks to third parties	4.25	0.442
Management commitment in the installation of risk management techniques helps in boosting the financial performance of the SACCO	4.26	0.448
The SACCO conducts regular monitoring and revise to ensure that risks are managed effectively and remain within acceptable levels	4.20	0.422
<b>Average</b>	<b>4.226</b>	<b>0.432</b>

From Table 11, the findings revealed that the majority of respondents strongly agreed that the SACCO has a well-functioning risk management board (Mean=4.20, S.D=0.422); Management has criteria of identifying which risks are most critical and this influences financial performance to great extent (Mean=4.26, S.D=0.448); SACCO conducts regular risk assessments to evaluate the likelihood and potential impact of credit risk, market risk, operational risk, liquidity risk, and compliance risk, among others on their operations (Mean=4.23, S.D=0.430); the SACCO identifies various types of risks that it may face (Mean=4.20, S.D=0.422); management has developed and implemented appropriate strategies to mitigate, transfer and accept risks (Mean=4.21, S.D=0.442); SACCO uses risk transfer mechanisms such as insurance, hedging and transferring risks to third parties (Mean=4.25, S.D=0.442); management commitment in the installation of risk management systems help to boost the financial performance of the SACCO (Mean=4.26, S.D=0.448); the SACCO conducts consistent monitoring and review to ensuring risks are successfully implemented and remain within acceptable levels (Mean=4.20, S.D=0.422).

Concisely, all 8 statements highlighting risk assessment as a component of internal control activities in Bwishyura SACCO revealed the average of 4.226 and SD of 0.432. This is to conclude that all respondents strongly agreed that risk assessment is among components of internal control activities in Bwishyura SACCO, when it is well treated it can lead to financial performance. These findings are in line with the observation of Magara (2013) who found out that risk assessment positively contributes to the financial performance of SACCOs in Kenya. Table below displays a correlation between risk assessment and financial performance of Bwishyura SACCO and the findings are presented in Table below:

**Table 12***Relationship between Risk Assessment and Financial Performance of Bwishyura SACCO*

		Risk assessment	Financial performance
Risk assessment	Correlation (Pearson )	1	0.837**
	Sig. (2-tailed)		0.000
	N	19	19
Financial performance	Correlation (Pearson )	0.837**	1
	Sig. (2-tailed)	0.000	
	N	19	19

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

In table 12, statistical evidences show that there is a positive high relationship between risk assessment and financial performance of Bwishyura SACCO which is equal to 0.837 and the sig. is 0.000, less than 0.01. This leads to confirm that there is a significant positive relationship between risk assessment and financial performance of Bwishyura SACCO. This implies that risk assessment has positive impact on financial performance of Bwishyura SACCO. These findings are in accordance with the observation of Muthusi (2017) whoshowed a positive and significant relationship between risk assessment and financial performance of the commercial banks.

**4.2.4 Role of Internal Control in Financial Performance of Bwishyura SACCO**

Respondents were also requested to present their views on the role of internal control on financial performance of Bwishyura SACCO.

**Table 13***Respondents' View on the Role of Internal Control on Financial Performance of Bwishyura SACCO*

Statements	Mean	Std. Dev.
Internal control helps in preventing and detecting error and frauds	4.23	0.430
Internal control enables management of the SACCO to carry out business operations in orderly and efficient manner	4.20	0.422
Internal control ensures effective utilization of resources	4.25	0.442
Internal control helps to safeguard the SACCO's assets	4.20	0.422
Internal control provides reasonable assurance regarding the accuracy completeness and reliability of the accounting records and financial reporting	4.21	0.426
Internal control ensures compliance with internal policies and other applicable laws and regulations	4.26	0.448
<b>Average</b>	<b>4.22</b>	<b>0.431</b>

From Table 13, the findings highlighted that a great number of respondents strongly agreed that internal control helps in preventing and detecting error and frauds (Mean=4.23, S.D=0.430); internal control enables management of the SACCO to carry out business operations in efficient and orderly way (Mean=4.20, S.D=0.422); internal control ensures effective utilization of resources (Mean=4.25, S.D=0.442); internal control helps to safeguard the SACCO's assets (Mean=4.20, S.D=0.422); internal control provides reasonable assurance regarding the accuracy completeness and trustworthiness of the accounting records and financial reporting (Mean=4.21, S.D=0.426); Internal control ensures agreement with internal policies and other relevant laws and regulations (Mean= 4.26, S.D=0.448).

Generally, all 7 statements highlighting the effect of internal control in financial performance of Bwishyura SACCO demonstrated the average mean of 4.23. This leads to that most of respondents strongly agreed that internal control plays a significant role in financial performance of Bwishyura SACCO. These findings are in agreement with the observations of Hussaini and Muhammed (2018) and Muthusi (2017), who proved the existence of a positive and significant relationship between internal control and bank performance.

### 4.3 Multiple Regression Analysis

This research also conducted multiple regression analysis where the results contained the model summary, analysis of variance (ANOVA), and the regression model coefficients as presented below.

**Table 14***Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.898 <sup>a</sup>	0.869	0.858	0.000

a. Predictors: (Constant), Control environment; Control activities and Risk assessment

b. Dependent Variable: Financial performance of Bwishyura SACCO

Table 14 above shows that the coefficient correlation R=0.898. This indicates that there is a positive strong relationship between internal control and financial performance of Bwishyura SACCO. The coefficient of determination, adjusted R Square indicates the variation in the dependent variable (financial performance) due to variation in the independent variable. From the findings in the above table, the value of adjusted R square was 0.858. This indicates that there was a variation of 85.8% in financial performance of Bwishyura SACCO due to changes in internal control factors (control environment; control activities and risk assessment). The overall result shows that 85.8% of the variation in financial performance of the bank is justified by the identified internal control components. However, 14.2% of the variation in the financial performance of this SACCO is justified by other components that are not captured by this model.

**Table 15***ANOVA Table*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.268	3	1.341	4.097	0.001(a)
	Residual	7.027	16	2.51		
	<b>Total</b>	<b>18.295</b>	<b>19</b>			

a. Predictors: (Constant), Control environment; control activities and risk assessment

b. Dependent Variable: Financial performance of Bwishyura SACCO

Table 15 shows the value of significance (p-value) of the model was 0.001 which is less than 5%. This indicates that the selected variables (control environment; control activities and risk assessment) are true predictors of financial



performance of Bwishyura SACCO. Besides, these parameters are perfect for making conclusions as the value of significance (p-value) is below 5%. There is an indication that the control environment, control activities and the risk assessment significantly influence the financial performance of Bwishyura SACCO. As the significance value was less than 0.05, this indicates that the model is statistically significant at a 95% level of confidence (Kwak, 2023).

**Table 16**

*Linear Regression Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.553	0.603		2.473	0.001
	Control environment	0.374	0.093	0.360	3.287	0.001
	Control activities	0.471	0.087	0.451	3.215	0.000
	Risk assessment	0.480	0.072	0.472	2.412	0.000

Dependent Variable: Financial performance of Bwishyura SACCO

Table 16 above reveals that holding control environment control activities and risk assessment to a constant zero, financial performance of Bwishyura SACCO would be 0.553; a unit increase in control environment could lead to the increase of financial performance of Bwishyura SACCO by a factor of 0.374; a unit increase in control activities would lead to increase in financial performance of Bwishyura SACCO by a factor of 0.471; and a unit increase in risk assessment would lead to increase in financial performance of Bwishyura SACCO by a factor of 0.480.

This study also discussed that the p-values of control environment (0.001), control activities (0.000), risk assessment (0.000) were less than 0.05; an indication that the influence of control environment; control activities and risk assessment was enough to improve financial performance of Bwishyura SACCO. Therefore, the research concludes that the control environment has a positive-significant correlation with the financial performance of the SACCO (Kwak, 2023). The control activities also have positive and significant relationship with the financial performance of Bwishyura SACCO. Similarly, the risk assessment was found to have positive and significant relationship with the financial performance of the SACCO. Thus, the control environment; control activities and risk assessment positively influence the financial performance of Bwishyura SACCO. Therefore, the estimated linear regression model (Equation) was then identified as follows:

$$Y = 0.553 + 0.374X_1 + 0.471X_2 + 0.480X_3$$

## V. CONCLUSIONS & RECOMMENDATIONS

### 5.1 Conclusions

Based on this study's findings, it was concluded that internal control is a critical factor influencing the profitability the SACCO, enhancing its financial performance by mitigating risks and ensuring operational efficiency. Proper control environment, regular risk assessments, strong management commitment to risk management, and continuous monitoring help the bank maintain risks within acceptable levels. Key controls activities, such as segregating duties, ensuring proper authorization, safeguarding assets, daily reconciliations, and using information technology to protect data, contribute to accuracy and fraud prevention. Internal controls also ensure compliance with policies and regulations, improve decision-making, prevent fraud, safeguard assets, and enhance trust among stakeholders, ultimately boosting financial performance. Moreover, the study indicated that control environment, control activities and risk assessment explain 85.8% of the variations in the financial performance of the SACCO.

### 5.2 Recommendations

Based on this study's findings' Bwishyura SACCO should continue to enhance robust and strong control environment for better operational effectiveness, decision-making, and risk management. As a result, these may contribute to improved financial performance. It should, then, strengthen its risk assessment processes to successfully identify, evaluate, and mitigate risks, which could help protect its assets, reduce losses, and boost financial performance. Bwishyura SACCO also should maintain robust control activities to detect, prevent, and rectify errors or fraud while ensuring adherence to regulations and internal policies, which can result in increased operational efficiency, lower risk, and improved financial performance.

Lastly, as the current study sought to investigate the role of internal control in financial performance of financial institutions with a case study of one Umurenge SACCO, further studies should be made to expand the sample size, scope and consider the impact of other factors of internal control and their role in the financial performance of financial institutions in Rwanda.



## Declaration of Interest

The authors declares that they do not have any known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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## REFERENCES

- Abdullahi, M., & Muturi, W. (2020). Effect of internal control systems on financial performance of higher education institutions in Puntland. *International Journal of Economics, Commerce and Management United Kingdom*, 4(3), 23–42.
- Adams, M. B. (1994). Agency theory and the internal audit. *Managerial Auditing Journal*, 9(8), 8–12.
- Adebiyi, I. M. (2018). Impact of effective internal control in the management of Mother and Child Hospital Akure, Ondo State. *Journal of Finance and Accounting*, 5(1), 61–78.
- Aitaru, B. (2017). Internal controls and performance of international non-governmental organizations in Uganda: A case of the Danish refugee council in Uganda. *Journal of Financial Economics*, 7(8), 56–68.
- Badara, M. S., & Saidin, S. Z. (2019). Impact of the effective internal control system on the internal audit effectiveness at local government level. *Journal of Social and Development Sciences*, 4(1), 16–23.
- Baylor University. (2025). Guide: SPSS statistical software. Baylor University Libraries. <https://libguides.baylor.edu/spss>
- Britnell, J. O. (2017). The impact of internal control design on banks performance in Nigeria. *International Journal of Research in Economics and Social Sciences*, 1(2), 32–43.
- Cheng, H., & Yang, S. (2020). Resource allocation efficiency in Chinese financial institutions: The role of internal controls. *Journal of Banking and Finance*, 40(4), 112–125.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge. <https://doi.org/10.4324/9781315456539>
- Cooper, D. R., & Schindler, P. S. (2015). *Business research methods* (7th ed.). McGraw-Hill. <https://contents.lspr.ac.id/2022/05/Donald-R-Cooper-Pamela-S-Schindler-Business-Research-Methods.pdf>
- Creswell, J. W., & Plano-Clark, V. L. (2016). *Designing and conducting mixed methods research* (2nd ed.). SAGE Publications.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *The Academy of Management Review*, 14(1), 57–74. <https://www.jstor.org/stable/258191?origin=crossref&seq=1>
- Etengu, R., & Amony, M. (2016). Internal control system and financial performance in non-governmental organisations in Uganda: A case study of International Union for Conservation of Nature. *International Journal of Contemporary Applied Sciences*, 3(2), 17–25. <https://ijcas.net/Files/CMSUserOwnFolder/issue/February-2016/18.pdf>
- Ewa, E. U., & Udoayang, J. O. (2012). The impact of internal control design on banks' ability to investigate staff fraud, and lifestyle and fraud detection in Nigeria. *International Journal of Research in Economics & Social Sciences*, 2(2), 32–43. <https://www.semanticscholar.org/paper/the-impact-of-internal-control-design-on-banks%27-to-ewa-udoayang/d5ac9b94ae66a2ad90aedb1867adce0bc2485adb>
- Freeman, E. (1984). *Strategic management: A stakeholder approach*. Cambridge University Press.
- Garcia, M., & Martinez, R. (2020). The impact of internal controls on financial reporting: Evidence from South African banks. *Accounting Research Journal*, 30(1), 78–91.
- Haasan, A. (2021). Effects of internal controls on performance of financial institutions in Nairobi City County, Kenya. *African Journal of Business Management*, 5(8), 2120–2128.
- Hartanto, A. J. (2023). The influence of return on equity (ROE), return on assets (ROA) and net profit margin (NPM) on PT Minimal Tiga Kata, 2019–2023. *Journal of Social Sciences and Business Studies (JSSBS)*, 1(3), 81–90. [PDF]
- Hussaini, U., & Muhammed, U. D. (2018). The effect of internal control on performance of commercial banks in Nigeria. *International Journal of Management Research & Review*, 8(6), 13–32.
- Iradukunda, P., & Kamande, M. (2022). Internal control system and financial performance in banking industry: A case of Guaranty Trust Bank-Rwanda. *International Journal of Scientific and Research Publications*, 12(11), 53–65. <https://doi.org/10.29322/ijsrp.12.11.2022.p13108>
- Irakarama, V., Nteziyaremye, A., Kuradusenge, J. P. R., Bucyedusenge, V., Uwimana, J. C., & Ndayayisaba, D. (2024). ICT integration in teaching and learning mathematics for secondary schools: Case of TTC Gacuba II, Rwanda. *African Journal of Empirical Research*, 5(3), 143–154. <https://doi.org/10.51867/ajernet.5.3.14>



- Jensen, M. C. (1986). Agency cost of free cash flows, corporate finance and takeovers. *Journal of American Economic Review*, 76(1), 323–329.
- Juvvlyn, B. A., Miles, A. P. A., Kathleen, M. C. F., K. P. I., Neal H., S. T., Cleo-Jill, S. T., & Hardie, G. M. C. (2024). Examining the relationship between work experience, educational background, and employability: A correlational study. *Psychology and Education: A Multidisciplinary Journal*, 24(8), 973–985. <http://doi/10.5281/zenodo.13684365>
- Kakooza, T. (1996). *An introduction to research methodology*. National Adult Education Association.
- Khamis, H. A. (2019). Contribution of internal control systems on the performance of financial institutions. *Journal of Finance and Accounting*, 4(3), 55–67.
- Klimczak, M. (2007). Risk management theory: A comprehensive empirical assessment. Warsaw: Leon Academy, Poland. [https://mpra.ub.uni-muenchen.de/4241/1/MPRA\\_paper\\_4241.pdf](https://mpra.ub.uni-muenchen.de/4241/1/MPRA_paper_4241.pdf)
- Kwak, S. (2023). Are only p-values less than 0.05 significant? A p-value greater than 0.05 is also significant! *Journal of Lipid and Atherosclerosis*, 12(2), 89–95. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10232224/pdf/jla-12-89.pdf>
- Kyasimire, H., & Njenga, G. (2023). Internal control and financial performance of commercial banks in Rwanda: A case of Bank of Kigali. *Global Scientific Journals*, 11(5), 3050–3067. [https://www.globalscientificjournal.com/researchpaper/Internal Control And Financial Performance Of Commercial Banks In Rwanda A Case of Bank of Kigali.pdf](https://www.globalscientificjournal.com/researchpaper/Internal%20Control%20And%20Financial%20Performance%20Of%20Commercial%20Banks%20In%20Rwanda%20A%20Case%20of%20Bank%20of%20Kigali.pdf)
- Magara, C. N. (2013). Effect of internal controls on financial performance of deposit taking Savings and Credit Cooperative Societies in Kenya [MBA thesis, University of Nairobi]. [PDF]
- Mazur, P. (2018). The importance of the risk management process in banks. *Management and Business Administration. Central Europe*, 26(4), 157–171.
- Mehta, A. M. (2024). Internal auditing: A practical approach. *Open Library*. <https://ecampusontario.pressbooks.pub/internalauditing/chapter/05-01-the-control-environment/>
- Moenga, O., & Mereipei, T. (2021). Effect of internal control systems on financial performance of the tea factories in Kisii County, Kenya. *The Strategic Journal of Business and Change Management*, 8(2), 485–500. <https://www.strategicjournals.com/index.php/journal/article/view/2015>
- Momanyi, J., & Njiru, A. (2016). Financial risk management and performance of savings and credit co-operative societies in Nakuru East Sub County, Kenya. *International Journal of Research in Business Management*, 4(4), 55–66. <https://discovery.researcher.life/article/effect-of-credit-risk-management-on-the-financial-performance-of-savings-and-credit-cooperative-societies-in-kenya/7c3a79dfe8463f45a6deed7497c32174>
- Mugabo, A., Twesigye, D., & Bihira, M. A. (2022). Assessment of internal control system and the performance of non-governmental organizations at World Vision–Kigali Rwanda. *Global Scientific Journal*, 10(11), 233–276. [https://www.globalscientificjournal.com/researchpaper/Assessment of Internal Control System and the Performance of Non Governmental Organizations at World Vision Kigali Rwanda.pdf](https://www.globalscientificjournal.com/researchpaper/Assessment%20of%20Internal%20Control%20System%20and%20the%20Performance%20of%20Non%20Governmental%20Organizations%20at%20World%20Vision%20Kigali%20Rwanda.pdf)
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods, quantitative and qualitative approaches*. Acts Press.
- Muhunyo, B. M., & Jagongo, A. O. (2018). The impact of internal control mechanisms on the financial performance of Kenyan public higher education institutions. *International Academic Journal of Human Resource and Business Administration*, 3(2), 273–287. <https://ir-library.ku.ac.ke/server/api/core/bitstreams/da2c1f3f-00b0-4a1d-a7aa-971b0c6ceaea/content>
- Mukandoli, A., & Rusibana, C. (2022). Internal control system and performance of financial institutions in Rwanda: A case of Bank of Kigali in Nyarugenge District. *Journal of Finance and Accounting*, 6(1), 90–107. <https://doi.org/10.53819/81018102t2058>
- Munene, M. J. (2019). Effects of internal controls on performance of technical training institutions in Kenya. *Journal of Accounting, Business and Management*, 7(12), 21–42.
- Muraleetharan, P. (2013). Control activities and performance of organizations (Special reference in Jaffna District). *International Journal of Marketing, Financial Services & Management Research*, 2(4), 10–16. <https://www.semanticscholar.org/paper/Control-Activities-and-Performance-of-Organizations-Muraleetharan/4ffcf1d0eed779faeab6f9f4469e8a557171e056#citing-papers>
- Muthusi, D. M. (2017). Internal controls and financial performance of commercial banks in Kenya [Master's thesis, Kenyatta University]. <https://ir-library.ku.ac.ke/items/22bb3c14-38f5-450d-993e-150c196e7783>
- Ngari, G. M. (2017). The effect of internal controls on performance of NGOs in Kenya. *International Academic Journal of Economics and Finance*, 2(3), 112–140. [https://www.iajournals.org/articles/iajef\\_v2\\_i3\\_112\\_140.pdf](https://www.iajournals.org/articles/iajef_v2_i3_112_140.pdf)
- Niyonsenga, E. (2017). Internal control system and financial performance in financial institutions in Rwanda: A case of I&M Bank Ltd Rwanda. *African Journal of Business and Industry*, 2(3), 46–58. <https://www.scribd.com/document/539575838/internalcontrolsystemandfinancialperformanceinfinancialinstitutionsinrwanda>



- Nteziyaremye, A., Ndizeye, A., Nzabakirana, A., Benimana, R., & Mugisha, P. (2024). The impact of code switching and code mixing on learning of English language in lower secondary school level: A case study of selected schools in Rubavu District, Rwanda. *African Journal of Empirical Research*, 5(3), 571–587. <https://doi.org/10.51867/ajernet.5.3.50>
- Nteziyaremye, A., Nibyobyiza, S., Uwamwiza, C., Ndahimana, D., Bucyedusenge, V., Maniraguha, I., & Ndacyayisenga, S. (2025). The role of debate in enhancing students' English-speaking skills in lower secondary schools of Nyabihu District, Rwanda. *African Quarterly Social Science Review*, 2(4), 750–761. <https://doi.org/10.51867/AQSSR.2.4.68>
- Odhiambo, C. A. (2022). Effect of internal controls on the financial performance of commercial banks listed in the NSE and licensed by the CBK [Master's thesis, Strathmore University].
- Olumbe, C. O. (2018). The relationship between internal controls and corporate governance in commercial banks in Kenya. *Journal of Finance and Accounting*, 4(3), 55–67.
- Oyedokun, G. E., & Felejaye, O. A. (2022). Internal control system and financial performance of non-governmental organisations in Nigeria. *Account and Financial Management Journal*, 7(8), 129–148. <https://everant.org/index.php/afmjh/article/view/678/507>
- Rafindadi, A. A., & Olanrewaju, Z. A. (2019). The impact of internal control system on the financial accountability of non-governmental organizations in Nigeria: Evidence from the structural equation modelling. *International Review of Management and Marketing*, 9(3), 49–63. <https://doi.org/10.32479/irmm.7909>
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods for business students* (4th ed.). Pearson Education Publishers. [PDF]
- Uwingabiye, M. J. (2019). Internal control components and financial performance in public institutions in Rwanda: A case study: Rwanda Social Security Board (RSSB) [MBA thesis, University of Rwanda]. <https://dr.ur.ac.rw/bitstream/handle/123456789/677/BY%20UWINGABIYE%20Marie%20Jeanne.pdf?sequence=1&isAllowed=y>