



**EFFECT OF INTERNAL ACCOUNTING
MONITORING AND CONTROL ACTIVITIES ON
FINANCIAL PERFORMANCE OF SACCOS IN KENYA**

Mackline Wamukota¹ⁱ,

Maniagi Musiega²,

Benedict Alala³

¹PhD Candidate (Accounting),
Masinde Muliro University of Science and Technology,
Kenya

²Dr., Lecturer,
Masinde Muliro University of Science and Technology,
Kenya

³Professor, Lecturer,
Masinde Muliro University of Science and Technology,
Kenya

Abstract:

Internal accounting monitoring and control activities are important tools for enhancing the management of resources in any financial institution. That is monitoring and control activities enhance the prudent use of resources, and accountability and improve institutional efficiency. However, there are numerous cases of poor management, fraud and poor governance of Savings and Credit Cooperative Organizations (SACCOs) as reported by SACCO Societies Regulatory Authority (SASRA) despite the existence of internal accounting control systems required by SASRA. The study sought to examine the effect of monitoring and control activities on the financial performance of SACCOs in Kenya. The study employed a mixed research design targeting 175 SACCOs with 875 respondents. A purposive sampling technique was used. The participants were chosen based on the purpose, hence the chief executive officers, finance managers, risk managers, information communication technology managers and internal auditors. Data was collected by the use of both primary and secondary techniques. A pilot study was conducted to establish the validity and reliability of research instruments. Primary data collection was by use of questionnaires, while secondary data involved documentary analysis to capture information on financial performance. A pilot study was conducted in Nairobi County. Validity was achieved using content and construct validity, where monitoring and control activities yielded an average factor loading of 0.606 and financial performance yielded 0.838. Cronbach's Alpha was applied to establish reliability, which

ⁱ Correspondence: email macklinewamukota@yahoo.com

had a range between 0.896 for monitoring and control activities to 0.916 for financial performance. Data was analyzed by use of descriptive and inferential statistics. Descriptive analysis included; frequencies, mean, standard deviation and percentage while inferential analysis involved regression analysis. From the results, there was a significant positive relationship between monitoring and control activities and financial performance ($r=0.656$, $P=0.000$), monitoring and control activities explain 43.0% ($R^2=0.430$) of variance in financial performance, the beta value for monitoring and control activities from the regression model was 0.526 at $p < 0.05$. The study concluded that monitoring and control activities have a significant positive effect on financial performance. This study recommends that SACCOs should constantly monitor their financial performance by implementing audit reviews as well as performance reviews to make sure that SACCO objectives are achieved accordingly.

JEL: M40; M41; G20

Keywords: internal control accounting system, monitoring and control activities, financial performance, SACCOs

1. Introduction

In today's society, cooperative financial institutions hold a considerable market share, with the IMF estimating that across all banking sector assets in developed countries, the market share of cooperative finance was equivalent to 14 percent in 2019 (Wanjala & Riitho, 2020). Previous research on cooperative finance during the crisis indicates that they tended to fare better than investor-owned savings and loan institutions as they pursued more conservative investment policies. For example, IMF research shows that cooperative banks in developed countries tend to be more stable than commercial banks, especially during the financial crisis, because their investment patterns tend to be less speculative and their returns are therefore less volatile (Hassanain, 2015).

Kalmetova and Zhussupova (2021) analyzed the relationship between the quality of internal control and the performance of commercial banks in the U.S. The research applies the COSO Internal Control Framework for classifying identified control deficiencies. The study finds a negative impact of identified deficiencies in risk management and the information and communication components of internal control systems on bank performance. Nguyen (2021) showed that monitoring and control activities are the factors that have the strongest impacts on the performance of pharmaceutical companies in Vietnam. This can be explained by the fact that, for pharmaceutical companies, good monitoring, information, and tradition will positively affect the effectiveness of internal control in particular and the performance of the business.

Umar and Dikko (2018) revealed that in Nigeria, manufacturing companies that have invested in effective internal control systems have improved financial performance

as compared to those with a weak internal control system. Alemu (2020) showed that soft drink companies in Ethiopia reconciled physical cash with cash book balances. However, most business purchases (receipts) were not recorded, so identifying the actual value of the assets was difficult, leaving accountants with no knowledge of the assets. Kasoga (2020) indicated that monitoring activities contribute to a regular internal audit, supervisory activities, and regular management activities in the revenue collection process of Local Government Authorities in Tanzania. Therefore, the study concludes that; an internal control system significantly improves the performance of revenue collection in Local Government Authorities of Tanzania.

In addition, the Vision 2030 plan, among other things, expects the financial services industry to play a crucial role in mobilizing savings and investments for the growth of the nation by providing a better intermediary between savings and investments than is currently the case. This sector will aid in the mobilization of investment funds that are necessary to put the initiatives outlined in Vision 2030 into action. Within the scope of this endeavor, the provision of financial services will include the use of SACCOs. Only 19% of Kenyans now have access to formal financial services; thus, expanding the scope and accessibility of financial services will be largely dependent on the services offered by SACCOs and other significant financial institutions. It is noteworthy that the contribution of financial services to GDP is around 4%, while the contribution of its assets to GDP is comparable to almost 40% of GDP. The participation of SACCOs will be of the utmost importance in the development of a robust and secure financial system that is envisioned to be built in accordance with the vision for the year 2030. This system will be designed to encourage the accumulation of savings by the populace and to facilitate the economy's more effective use of its available resources (Government of the Republic of Kenya, 2008). By keeping SACCO going, the "net" of financial inclusion would get bigger, bringing in the majority of people who had been left out before (those who society considers to be poor).

SACCOs in Kenya are currently a leading source of co-operative credit for socio-economic development. The cooperative movement in Kenya now boasts an annual turnover of Ksh 43.6 billion, which is equivalent to 4.5% of the country's Gross Domestic Product (GDP) (SASRA, 2013). This is a huge impact as the movement plays an important role in financial deepening and intermediation in the financial industry. In their operations, cooperatives have mobilized savings of over Ksh 350 billion and provided affordable credit facilities of over Ksh 180 billion to their members. SACCOs control over Ksh 250 billion with over 1.8 million members. Indeed, the government took cognizance of this key sector in financial deepening and provided a legal framework to govern this sector called the SACCO societies regulatory authority (SASRA).

Mbuti (2014) established that SACCOs continue to perform poorly financially due to poor management and fraud. Agrawal and Cooper (2007) observe that key governance characteristics such as the independence of boards and audit committees, and the provision of audit services by internal auditors are important factors that affect performance. Audit reporting is valuable in providing oversight of a firm's operations

and financial reporting. However, the quality of the audit reports and who the internal audit function reports to are just as important. Chen and Divanbeigi (2019) found that SACCOs continue to have trouble with their performance and growth because of bad management and corporate governance.

There have been various governance scandals that have affected various entities. SACCOs have not been untainted by these scandals, as they have been the subject of many financial and corporate governance issues. SACCO governance is the system in which SACCOs as is the case with other organizations, are led. Governance enables a SACCO to be managed effectively and ensures that leaders of the SACCO are held accountable for their management actions and ensure that they manage the SACCOs in the members' interests (Odek & Anyira, 2017).

Marita (2016), states that internal control put in place and enforced is key to combating the loss of revenue and assets caused by fraud. Internal control is looked upon more and more as a solution to a variety of potential problems Coso (2004). Coso adds that internal controls are put in place to keep the organization on course towards profitability goals and the achievement of its missions and to minimize surprises along the way. They promote efficiency, reduce the risk of asset loss, and help to ensure the reliability of financial statements and compliance with laws and regulations. According to Musa (2008), internal control is a system that comprises a control environment and control procedures. it includes all the policies and procedures adopted by the directors and management of an entity to assist in achieving their objectives. The researcher suggested that a good internal control system ensures that functions/duties are properly defined and that duties are properly assigned to qualified staff, and that there is an inbuilt control in the system to ensure feedback, detection and correction of errors in good time. It is the overall good of any organization to ensure its continued existence and growth. They must strive to enhance performance in the ever-competitive finance market and internal control is an institutional strategy for business sustainability.

Ray and Pany (2015) mentioned control activities as another component of internal controls. They note that control activities are policies and procedures that help ensure that management directives are carried out. Controls activities in an organization basically comprise; performance reviews (comparing actual performance with budgets, forecasts and prior period performance), information processing (necessary to check accuracy, completeness and authorization of transactions), physical controls (necessary to provide security over both records and other assets), and segregation of duties (where no one person should handle all aspects of a transaction from the beginning to the end).

Control activities are the policies and procedures implemented by an organization to ensure that management's directives are carried out. These activities are often grouped into the three categories of objectives to which they relate, namely, operations, financial reporting, and compliance (Shelton & Whittington, 2018). They further argue that these control activities include a range of diverse activities such as approvals, authorizations, verifications, reconciliations, reviews of operating performance, security of assets and segregation of duties.

More specific activities include the segregation of duties, the rotation of jobs and internal checks (Marita, 2016). The same authors also reiterate the fact that the segregation of duties is one of the key concepts of internal control. According to them, it is also one of the most effective internal control components in combating employee fraud. They define segregation of duties as the "dividing of tasks among various individuals, making it possible to reduce the risk of error and fraud.". Segregation contributes to an organization's checks and balances. It involves the separation of the following duties in each business process; custody of assets, record keeping, authorization and reconciliation. Ideally "no one person should handle more than one activity of the above-mentioned responsibilities in a given process". Segregation being implemented deters and prevents employee fraud. When segregation cannot be implemented, compensatory measures should be taken, Young (2017) point out. Compensatory measures should be taken by an independent person/body. This means one who has a supervisory role and takes no part at all in custody, recordkeeping, or reconciliation responsibilities for the process.

According to Huang, Tsaih and Yu (2014) rotation of jobs is a control to detect errors and fraud. No one has a given task indefinitely to provide him with security to monopolize the responsibilities of that job long enough to give him the opportunity to commit fraud. Hsien and Chao, (2014) highlight the fact that research has suggested that job rotation may have benefits that outweigh the costs involved with training employees for diversified positions. Li, Liu and Zhao (2016) say that fraud is more of a risk when individuals are given excessive privileges. Rotation of duties not only reduces privilege allocation but also reduces collusion among more than one employee, thereby reducing fraud. Additionally, job rotation has the advantage of cross-training employees while increasing security. The same author adds that another aspect of job rotation is mandatory vacation. Mandatory vacation may expose hidden activities if another employee performs that given role.

Kiragu and Okimbo (2014) analyzed the financial factors affecting the financial performance of deposit-taking savings and credit cooperative societies in Kenya, and found that fund misappropriation influences the financial performance of SACCOs. Kivuvo and Olweny (2014), studied the performance of SACCOs in Kenya using the Altman Z Score Model of Corporate Bankruptcy, bankruptcy predictor variables were studied and the financial stability of SACCOs were studied. The study found that liquidity and leverage had a statistically significant impact on SACCO financial performance. This study examined the effects of internal factors on the financial performance of deposit-taking savings and credit societies in Kenya. Moreover, the researcher acknowledges that the effect of the internal control system on the financial performance of deposit-taking savings and credit societies is scant. Thus, the research study was conducted to fill this research gap.

1.1 Statement of the Problem

Internal control systems are important tools for enhancing the management of resources in any financial institution. That is, internal control systems enhance the prudent use of resources, improve accountability and improve institutional efficiency. Despite the existence of internal accounting control systems among deposit-taking SACCOs in Kenya, they have exhibited poor financial performance, as indicated by the 2020 SASRA report, as it is clear that the average growth rates of the Deposit Taking have continued to shrink over the course of the three (3) years comparative period, resting with an average growth rate of 5.23% in the year 2020. If the current trend continues, then the market shares of Deposit Taking SACCOs is expected to drastically decrease, which is likely to harm both their capacity to compete and their ability to remain sustainable. The Deposit Taking SACCOs recorded the lowest growth rates across the three (3) year periods, with 8.69% in 2017/2018, 7.64% in 2018/2019, and sitting at a low of 7.51% in 2019/2020. These were the lowest rates reported over all three years. Second, the executives of Mwalimu National SACCO, either naive about such acquisitions or driven by self-interest, pushed forward with the deal, ignored all red flags, and bought 75% of the bank in one fell swoop at a cost of Sh2.4 billion, violating all necessary procedures, despite red flags being raised by other apex organizations. This action cost Sh2.4 billion. In addition, based on the inspection report compiled by the SASRA (2018), it was indicated that the poor performance of SACCOs in Kenya has been caused by mismanagement, fraud, corrupt practices, and creative accounting tactics to cover up poor performance. This led to various sanctions being undertaken, including the revocation of licenses, the deregistration of the SACCOs, and others being put on a watch list. The following SACCOs are among those that have been impacted: Elimu, Nandi Hekima, Miliki SACCO and Sukari, Ainabkoi, Goodhope, Jitegemee, Kenya Midland, Orient, Uchongaji, Rachuonyo Teachers, Nyamira Teachers, Stake Kenya, Wevarsity, Telepost, and Jumuika SACCO Society Limited. However, there are very few studies, if any at all, that have evaluated the effect of monitoring and control activities on the financial performance of deposit-taking SACCOs in Kenya (Chang, 2019; Masanja, 2018; Lakis, 2012). The purpose of this research was to determine the effect of monitoring and control activities on the financial performance of SACCOs in Kenya and test the following null hypothesis:

H₀: Monitoring and control activities have no significant effect on the financial performance of SACCOs in Kenya.

2. Literature Review

2.1 Theoretical Review

This study was based on Control Theory. Rotter (2001) said that the theory of control and experience suggests that an individual who goes against a system of controls will be excluded from the collusion process. He argued that the perceived control versus notion and external control signifier makes people understand their day-to-day activities. Rotter

(2001) further says that people with an internal locus of control believe that, results are brought about by individual actions whereas those with an external locus of control attribute events to external environmental factors, for instance, chance or more powerful actions. Recently, institutional theory has gained influence and provides a contradistinction divergent illustration of the reason why new control structures and practices develop in organizations. There are claims of institutional theory becoming a vital theoretical perception in organisation theory and accounting (Dillard, Rigsby and Goodman, 2004). Reasoning, both technical and economic for comprehending company management and the structures that get incorporated in and explained in institutions, as it has been claimed, is challenged by institutional theories.

Internal control systems are aimed at introducing new ways of doing work and procedures, and they are not required to be seen as rational economic cost-benefits. They however provide different aspects which indicate that the organisation develops in design structure and processes. Institutions refer by definition to stability but are subject to both incremental and discontinuous processes of change. Appropriating organizational practices and environment arrangements is an institutional process subject, as suggested by institutional and neo-institutional theory, to the effects of three pressures or coercive forces, normative and mimic. In addition, this theory suggests that these strengths can support organizations to develop similar strategic activities which leads to organizational homogeneity (Adebanjo et al., 2013).

Over time, shareholders' interests have been particularly reflected in efforts by government and professional bodies. More specifically, increased pressure on management to ensure efficient economic governance of an organization for shareholders has been achieved. Much of this pressure has been caused by social expectations following recent corporate scandals (Christopher et al., 2009). This study is based on institutional theory which focuses mainly on organizational management and control structures and which tends to adapt to social expectations. The theory was applied to this study because it shows that the downfall of the company can start with its own internal control system so that the company's success can start from the system of internal control. Therefore, the theory was instrumental in explaining the role of monitoring and control activities on the financial performance of deposit-taking SACCOs.

2.2 Empirical Studies

Segun, Kehinde and Alice (2020) investigated and established the relationship between internal control systems and the financial performance of deposit money banks in Osun state. The study was conducted using both quantitative and qualitative approaches using Survey type and ex-post facto research design. The study found that monitoring exerts a significant positive influence on deposit money banks' liquidity and a positive effect on their solvency. Jeanne (2019) sought to find out whether internal control plays any role in financial performance in a public institution. To accomplish the objective of this study, the study used both primary and secondary data. The study concludes that there is a

significant positive relationship between monitoring and control and financial performance; it concluded that RSSB solvency still needs improvement.

Andove (2019) sought to establish the effect of internal control practices on the financial performance of Faith Based facilities in Kakamega County, Kenya. From the results, the beta value for monitoring control activities from the regression model was 0.426 at $p < 0.05$. These results imply 42.6% of the change in financial performance is attributed to monitoring control activities. Kabue and Aduda (2017) sought to investigate the effect of internal controls on fraud detection and prevention among commercial banks in Kenya. The findings show that these dimensions are strong predictors of fraud detection and prevention. Regression analysis indicates a negative but significant link between reconciliation control and the level of detecting and preventing fraud. Further, there was a negative and significant relationship between financial governance control and the level of fraud prevention and detection, but the association between reporting and budget control and the level of fraud prevention and detection was positive and significant.

Mugo (2013) investigated and sought to establish the relationship between internal control systems and financial performance in Technical Training Institutions in Kenya. The study established a significant relationship between the internal control system and financial performance. Lagat and Okelo (2016) intended to establish the effect of internal control systems on financial management in Baringo County government in Kenya. The research concluded that control activities and monitoring of information communication technology significantly influence financial management as indicated by these analyses. Control activities and ICS monitoring significantly predict changes in financial management. Kalemeera (2018) sought to find out the relationship between internal controls and the financial performance of Uganda Management Institute. The conclusions of the study were that there was a very strong positive significant relationship between internal control monitoring and financial performance (84.7%), and a moderately significant positive relationship between internal control activities and financial performance (48.5%).

2.3 Conceptual Framework

A conceptual framework is a hypothesized model identifying the model under study and the relationship between the dependent and independent variables (Mugenda & Mugenda, 2003). In this study, the independent variable was the monitoring and control activities system and the dependent variable was the financial performance of SACCOs as indicated in Figure 1.

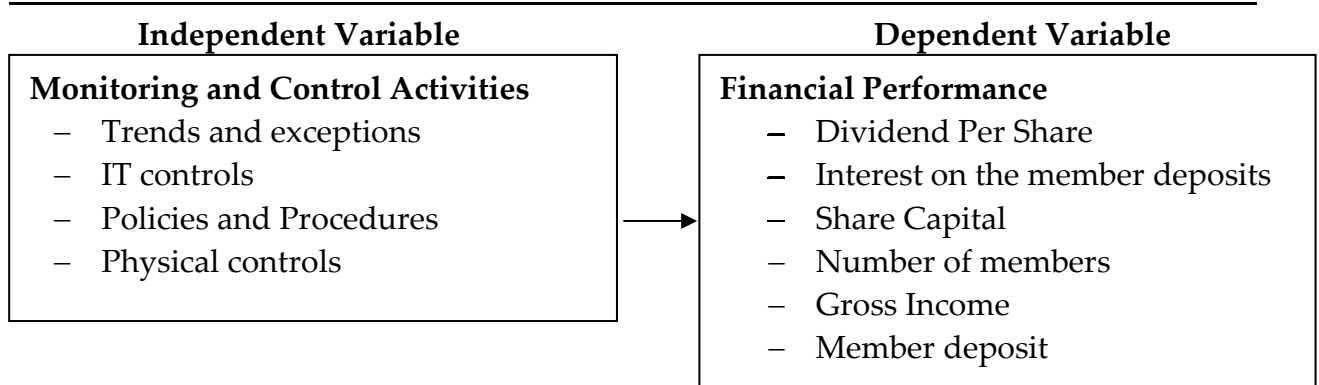


Figure 1: Conceptual Framework

3. Material and Methods

The positivist research philosophy was applied in this investigation. The study's philosophical stance was critical in reaching research goals, from which research hypotheses were formed. The study used a mixed research approach that included casual research and descriptive research. Because the study's goal is to determine the influence of internal accounting control systems on the financial performance of deposit-taking SACCOs in Kenya, a casual research design will be used. The descriptive study design is a scientific approach that entails monitoring and describing a subject's activity without altering it in any manner. The study was conducted in Kenya, with a focus on 175 SASRA-licensed DT-SACCOs.

The population of this study comprised 175 deposits taking SACCOs in Kenya from SASRA records (SASRA, 2021) and 875 respondents in the respective SACCOs. The sampling frame consisted of Chief Executive Officers (CEO), finance managers, internal auditors, Information Communication Technology (ICT) managers and risk managers. The sample size was determined using Yamane's formula for calculating sample size (Yamane, 1967) and the sample size to be used was 122 SACCOs translating to 610 respondents. A purposive sampling technique was used. The participants were chosen based on the purpose, hence the name CEO, Finance Managers, Risk Managers, ICT Managers and Internal Auditor chosen from 175 Deposit Taking SACCOs in Kenya.

The study used two sources, primary and secondary. The study utilized primary data collected using a questionnaire. A five-point Likert-type scale was used for all the constructs with 5-Strongly agree, 4-Agree, 3-Undecided, 2-Disagree and 1-Strongly disagree. The study also utilized a secondary study specifically on financial performance variables. This included profitability, dividend per share and interest on the member deposits. Secondary data was collected from audited financial statements of deposit-taking SACCOs in Kenya covering a period of five years from 2016 to 2020.

A pilot study was conducted on 12 Deposit Taking SACCOs representing 10% of the entire sample size from Nairobi County as recommended by Arain, Campbell, Cooper and Lancaster (2010). Piloting entailed the reliability and validity of the research instrument. This study assessed the validity of the study instrument using construct validity and content validity. Expert judgment of content was employed using

supervisors and other experts from the School of Business and Economics, Masinde Muliro University of Science and Technology. Construct validity which seeks to measure whether an instrument accurately measures the study phenomena was tested using factor analysis. To measure the reliability, Cronbach Alpha technique was employed.

SPSS software version 26 was used for the statistical analysis of quantitative data. Descriptive statistics were mainly used to show the trend of the data. The researcher used descriptive statistics that include measures of central tendency; mean and measure of variability and standard deviation. The study also used frequencies and percentages. The study used inferential statistics analysis such as correlation analysis and regression analysis to test null hypotheses. These statistical tests were at 5% significance level. This data was presented in tables and charts.

4. Results and Discussion

4.1 Preliminaries Results

The respondents of the Deposit Taking SACCOs in Kenya were sent 610 questionnaires for the research, and 473 of them filled them out. The researcher was able to collect information from 77.5 percent of the responses to the questionnaires they distributed. The content validity of the questionnaire was used to evaluate the instrument validity; the questionnaire was pre-tested as its whole to check for question content, language, sequence, form and layout, question difficulty, and instructions. Content validity was also utilized to assess instrument validity. It was determined that the questions were correctly prepared, and throughout the pilot research, not a single responder had any difficulties with them. The convergent validity was verified using construct validity. As a result of the fact that the factor loadings for financial performance were above 0.4 with an average of 0.838 and the factor loadings for monitoring and control activities were likewise above 0.5 with an average of 0.606, it can be said that they attained convergent validity (Ab Hamid, Sami & Sidek, 2017). The Cronbach Alpha approach was used so that we could determine the level of dependability. The reliability of the monitoring and control activities was 0.896, while the reliability of the financial performance was 0.916. Both values were higher than 0.7, which indicates that they are dependable (Cronbach, 1951).

4.2 Descriptive Statistics

Respondents were asked to state their level of agreement with financial performance. The statements were anchored on a five-point Likert-type scale ranging from 5=Strongly Agree to 1= Strongly Disagree and respondents were asked to indicate the extent to which they agreed with the statements. Descriptive measures included percentage, frequency, mean and standard deviation. The pertinent results are presented in Table 1.

Table 1: Descriptive Results for Monitoring and Control Activities (N = 473)

| | 5 | 4 | 3 | 2 | 1 | Mean | Stdev |
|---|----------------|----------------|----------------|--------------|-------------|------|-------|
| 1. There is a segregation of responsibilities on collections, general accountings and general ledger posting of record | 40% (189) | 26.6% (126) | 27.3% (129) | 4.9% (23) | 1.3% (6) | 4.0 | 1.0 |
| 2. Management has a strictly supervisory role over operations | 52.4% (248) | 26% (123) | 15.6% (74) | 4.9% (23) | 1.1% (5) | 4.2 | 1.0 |
| 3. There is an effective internal and external audit system of controls in the SACCO | 46.7% (221) | 31.5% (149) | 15.9% (75) | 4.9% (23) | 1.1% (5) | 4.2 | 0.9 |
| 4. Our SACCO has password access control | 38.9% (184) | 39.3% (186) | 13.5% (64) | 6.8% (32) | 1.5% (7) | 4.1 | 1.0 |
| 5. our SACCO carries out periodic counting of assets | 10.6% (50) | 53.3% (252) | 30.7% (145) | 4.4% (21) | 1.1% (5) | 3.7 | 0.8 |
| 6. Employees in the SACCO are responsible for the security of all assets assigned to them | 38.9% (184) | 53.3% (252) | 1.7% (8) | 4.4% (21) | 1.7% (8) | 4.2 | 0.8 |
| 7. SACCO mgt. assigns responsibilities for the timely review of audit reports and resolution of any non-compliance | 41.4% (196) | 49.3% (233) | 3.8% (18) | 4.4% (21) | 1.1% (5) | 4.3 | 0.8 |
| 8. Reconciliation is done on separate records to properly resolve any differences in the SACCO | 54.1% (256) | 30.4% (144) | 10.6% (50) | 3.6% (17) | 1.3% (6) | 4.3 | 0.9 |
| Key: 1= Strongly Disagree; 2= Disagree; 3= Neither Agreed nor Disagreed; 4= Agree; 5= Strongly Agree; SD= Standard Deviation. | | | | | | | |

On questionnaire on monitoring and control activities section when the respondents were asked on whether There is segregation of responsibilities on collections, general accounting and general ledger posting of record 40 % strongly agreed with the statement, 26.6 % agreed, 27.3 % neither agreed nor disagreed, 4.9 % disagreed and 1.3% strongly disagreed, On whether Management has a strict supervisory role over operations 52.4 % of the respondents strongly agreed with the statement, 26 % agreed, 15.6 % neither agreed nor disagreed, 4.9 % disagreed and 1.1% strongly disagreed, on whether there is effective internal and external audit system of controls in the SACCO 46.7 % of the respondents strongly agreed with the statement, 31.5 % agreed, 15.9 % neither agreed nor disagreed, 4.9 % disagreed and 1.1% strongly disagreed, on the other hand, when the respondents were asked on whether there organization or SACCO has password access control 38.9 % of the respondents strongly agreed with the statement, 39.3 % agreed with the statement, 13.5 % neither agreed nor disagreed, 6.8 % disagreed and 1.5% strongly disagreed. When the respondents were asked whether their SACCO carries out periodic counting of assets 10.6 % of the respondents strongly agreed with the statement, 53.3 % agreed with the statement, 30.7 % neither agreed nor disagreed, 4.4 % disagreed and 1.1% strongly disagreed.

When asked about whether employees in the SACCO are responsible for the security of all assets assigned to them 38.9 % of the respondents strongly agreed with the statement, 53.3 % agreed with the statement, 1.7 % neither agreed nor disagreed, 4.4 % disagreed and 1.7 % strongly disagreed, On whether the SACCO management assigns responsibilities for timely review of audit reports and resolution of any non-compliance 41.4 % of the respondents strongly agreed with the statement, 49.3 % agreed with the statement, 3.8 % neither agreed nor disagreed, 4.4 % disagreed and 1.1% strongly disagreed.

When an inquiry is made on reconciliation is done on separate records to properly resolve any differences in the SACCO, 54.1 % of the respondents strongly agreed with the statement, 30.4 % agreed with the statement, 10.6 % neither agreed nor disagreed, 3.6 % disagreed and 1.3% strongly disagreed. Thus, these findings suggest that the communications practices in the SACCOS were generally good although this did not necessarily mean that there was adequate interaction among the staff.

Table 2: Financial Performance (N = 473)

| Financial Performance | 5 | 4 | 3 | 2 | 1 | Mean | Stdev |
|--|----------------|----------------|----------------|--------------|--------------|------|-------|
| 1. Number of Members | 37.6% (178) | 51.4% (243) | 3.4% (16) | 6.3% (30) | 1.3% (6) | 4.2 | 0.9 |
| 2. Gross Income | 38.3% (181) | 52.6% (249) | 5.3% (25) | 3.4% (16) | 0.4% (2) | 4.2 | 0.7 |
| 3. Share Capital | 42.9% (203) | 52.4% (248) | 0.4% (2) | 4.2% (20) | 0% (0) | 4.3 | 0.7 |
| 4. Members Deposit | 40.6% (192) | 49.7% (235) | 5.5% (26) | 3% (14) | 1.3% (6) | 4.3 | 0.8 |
| 5. Interest on Deposit | 26.6% (126) | 52.2% (247) | 19.5% (92) | 1.3% (6) | 0.4% (2) | 4.0 | 0.7 |
| 6. Rate of Revert | 20.9% (99) | 54.1% (256) | 17.8% (84) | 5.1% (24) | 2.1% (10) | 3.9 | 0.9 |
| 7. Rate of Dividend | 26.2% (124) | 43.3% (205) | 22.4% (106) | 6.3% (30) | 1.7% (8) | 3.9 | 0.9 |
| Key: 1= Strongly Disagree; 2= Disagree; 3= Neither Agreed nor Disagreed; 4= Agree; 5=Strongly Agree; SD= Standard Deviation. | | | | | | | |

Results in Table 2 indicated that a number of members had a mean of 4.2 and a standard deviation of 0.9. On the other hand, gross income had a mean of 4.2 and a standard deviation of 0.7. The results also revealed that share capital had a mean of 4.3 and a standard deviation of 0.7. Similarly, member's deposits had a mean of 4.3 and 0.8. Interest on deposit had a mean of 4.0 and a standard deviation of 0.7. The results also revealed that the rate of revert had a mean of 3.9 and a standard deviation of 0.9. Similarly, the rate of dividend had a mean of 3.9 and a standard deviation of 0.9.

4.3 Inferential Statistics

Inferential statistics are used to make inferences about the population based on the survey results. The findings would be more generalizable to the population if the sample

is more representative. To generalize from the study to the population, hypothesis testing techniques are used. Inferential statistics is a term used to describe this form of analysis (Mugenda & Mugenda, 2003). Inferential statistics consisted of Pearson correlations and linear regression:

Table 3: Correlations Analysis

| | | Monitoring and control activities | Financial performance |
|-----------------------------------|---------------------|-----------------------------------|-----------------------|
| Monitoring and control activities | Pearson Correlation | 1 | |
| | Sig. (2-tailed) | | |
| | N | 473 | |
| Financial performance | Pearson Correlation | .656** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 473 | 473 |

Source: Field Data (2022).

Table 3 above shows that monitoring and control activities were positively correlated to financial performance ($r=0.656^{**}$, $p\text{-value}<0.01$) and it was significant at a 99% confidence level thus increase in monitoring and control activities makes financial performance increase. The findings showed a positive relationship between monitoring and control activities and financial performance.

Linear Regression analysis for Monitoring and control activities on financial performance was done so as to find out the effect of Monitoring and control activities jointly on the financial performance of SACCOs in Kenya. This aided in coming up with the coefficients of the study model as well as R square of the study. The results are shown in Table 4.

Table 4: Regression Analysis of Independent Variable and Financial Performance

| Model Summary ^b | | | | | | |
|--|-------------------|-----------------------------|-------------------|---------------------------|----------------------------|-------------------|
| Model | R | R Square | Adjusted R Square | | Std. Error of the Estimate | |
| 1 | .656 ^a | .430 | .429 | | .47246 | |
| a. Predictors: (Constant), Monitoring and control activities | | | | | | |
| b. Dependent Variable: Financial performance | | | | | | |
| ANOVA ^a | | | | | | |
| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
| 1 | Regression | 79.226 | 1 | 79.226 | 354.932 | .000 ^b |
| | Residual | 105.135 | 471 | .223 | | |
| | Total | 184.361 | 472 | | | |
| a. Dependent Variable: Financial Performance | | | | | | |
| b. Predictors: (Constant), Monitoring and control activities | | | | | | |
| Coefficients ^a | | | | | | |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.943 | .117 | | 16.598 | .000 |

| | | | | | |
|--|------|------|------|--------|------|
| Monitoring and control activities (MCA) | .526 | .028 | .656 | 18.840 | .000 |
| a. Dependent Variable: Financial performance | | | | | |

From Table 4 the value of R square was 0.430, this means that monitoring and control activities explain 43.0% of the variance in dependent variable financial performance. From the ANOVA table, the F value of the model was $F(1,471)= 354.932$, $p < 0.01$) this shows that it was significant at a 99% confidence level hence the model is feasible.

Thus, the model is stable and significant at a 99% confidence level. The regression equation for monitoring and control activities becomes;

$$Y_{Per} = 1.943 + 0.526 MCA$$

From the regression equation, it means that when monitoring and control activities increase by 0.526% financial performance would change by 1% in the same direction thus foreign exchange has a positive relationship to financial performance for a commercial bank in Kenya. The above result concurs with the correlation results of monitoring and control activities and financial performance where a positive relation was shown. It is evident most of Deposit Taking SACCOs have segregation of responsibilities on collections, general accountings and general ledger posting of record, strict supervisory role over operations, effective internal and external audit system of controls in the SACCO, employees in the SACCO are responsible for the security of all assets assigned to them.

4.4 Discussion

The objective of the study was to determine the effect of monitoring and control activities on the financial performance of Deposit Taking SACCOs in Kenya. Results from descriptive results indicated that the majority of the respondents were in agreement that there is segregation of responsibilities on collections, general accountings and general ledger posting of record, management has a strictly supervisory role over operations; there is effective internal and external audit system of controls in the SACCO. Control activities are the policies and procedures implemented by an organization to ensure that management's directives are carried out. These activities are often grouped into the three categories of objectives to which they relate, namely, operations, financial reporting, and compliance (Shelton & Whittington, 2018). They further argue that these control activities include a range of activities as diverse as approvals, authorizations, verifications, reconciliations, reviews of operating performance, security of assets and segregation of duties. More specific activities include the segregation of duties, rotation of jobs and internal check (Marita, 2016).

The inferential results revealed that there is a direct significant relationship between monitoring and control activities and the financial performance of Deposit Taking SACCOs in Kenya ($R=0.656$, $P=0.000$) as provided for by the Pearson Correlation analysis. This postulated that an increase in monitoring and control activities would

result in a significant increase in the financial performance of Deposit Taking SACCOs in Kenya. This research supports research by Segun, Kehinde and Alice (2020) who found that monitoring exerts a significant positive influence on deposit money banks' liquidity and a positive effect on their solvency in Osun state. Further, the study is supported by Jeanne (2019) found out that there is a significant positive relationship between monitoring and control and financial performance. On the other hand, the study contradicted other studies such as Ambuso (2021) who revealed that monitoring activities have a negative and insignificant effect on the financial performance of private hospitals in Western Region of Kenya. Further, Sigilai (2017) revealed that monitoring and control activities have a positive and insignificant effect on revenue collection at Nakuru Level Five Hospital. Asiligwa and Rennox (2017) also revealed that monitoring and control activities have a negative and insignificant effect on the financial performance of commercial banks in Kenya.

The coefficient of determination through the R square indicated that up to 43.0% of the change in the financial performance of SACCOs in Kenya is significantly accounted for by monitoring and control activities ($R^2=0.430$, $P=0.000$). This implies that monitoring and control activities are a significant predictor of the financial performance of SACCOs in Kenya. These results are adequately supported by numerous previous studies. Andove (2019) sought to establish the effect of internal control practices on the financial performance of Faith Based facilities in Kakamega County, Kenya. These results imply a change in financial performance is attributed to monitoring control activities. The results are further supported by Kabue and Aduda (2017) who established a significant relationship between the internal control system and the financial performance of Technical Training Institutions in Kenya. However, some studies have also found contradicting results, Ng'etich (2017) examined the effect of internal controls on the financial performance of firms listed at the Nairobi Securities Exchange. The findings revealed that monitoring activities have a positive and insignificant effect on the financial performance of firms listed at the Nairobi Securities Exchange. This also differed from Serem (2016) who revealed that monitoring and evaluation have a positive and insignificant effect on the financial performance of commercial banks in Kenya. Ndembu (2015) also revealed that monitoring has a negative and insignificant effect on the financial performance of commercial banks in Kenya.

Regression coefficient results indicated that when risk assessment, control environment and accounting information system are controlled, a unit increase in monitoring and control activities will result in a significant increase in performance by 0.526 units ($\beta_1=0.526$, $P=0.000$). Therefore, there was sufficiently evident to reject the third null hypothesis that posits: H_0 : Monitoring and Control activities have no significant influence on the financial performance of SACCOs in Kenya. These findings are in agreement with Kalemeera (2018) who found out that there was a very strong positive significant effect of internal control monitoring on the financial performance of Uganda Management Institute. Mugo (2013) established a significant relationship between internal control monitoring and control systems and financial performance in Technical

Training Institutions in Kenya. However, some studies have recorded otherwise results, for instance, Matata (2015) revealed that monitoring and control activities have a positive and insignificant effect on the financial performance of commercial banks in Kenya. Kemboi (2019) revealed that monitoring activities have a positive and insignificant effect on the financial performance of commercial banks in Kenya. Kiyieka and Muturi (2018) revealed that monitoring and control activities have a positive and insignificant effect on the financial performance of deposit-taking saving and credit cooperative societies in Kisii County, Kenya.

5. Conclusion

The study concluded that monitoring and control activities have a significant influence on the financial performance of Deposit Taking SACCOs in Kenya. With appropriate monitoring and control activities against frauds and other threats to their operations, SACCOs are in a better financial performance position. The presence of a monitoring system for SACCOs' operations is critical to their financial performance. Internal controls need to be adequately monitored in order to assess the quality and effectiveness of the system's performance over time. The study established that monitoring and control practices such as reconciliation being done on separate records to properly resolve any differences in the SACCO, assigning responsibilities for the timely review of audit reports and resolution of any non-compliance and effective internal and external audit system of controls in the SACCO positively influence financial performance. However, not all SACCOs have segregation of responsibilities for collections, general accounting and general ledger posting of records and management does not have a strictly supervisory role over operations.

6. Recommendation and Implications of the Study

This study recommends that SACCOs should constantly monitor their financial performance by implementing audit reviews as well as performance reviews to make sure that SACCO objectives are achieved accordingly. This study also recommends that SACCOs should develop mechanisms for events and transaction monitoring to ensure that financial performance is achieved in the organization. During monitoring, SACCOs should carry out periodic counting of assets. In relation to SACCO control activities, there should be more emphasis on diligently complying with the recommendations of the internal audit report as they understood the SACCOs internal operations better than the outsiders.

The results and findings of this research suggest that the management of SACCOs in Kenya needs to incorporate monitoring and control activities in their daily operations since it is a very important factor in the financial performance of SACCOs. The top management should ensure that the right structures exist in the organization to support monitoring and control activities. This would help to build a positive culture that ensures

that management does not override the internal control systems, which will then translate to healthy financial performance. All managers should ensure that there are adequate internal control activities that safeguard the assets of the company from misuse and fraud. The internal audit function should carry out regular reviews of the entire system of internal controls to provide assurance to the board and management on the adequacy and effectiveness of the mitigation controls that are in place. Having identified the moderating role of government policy, it should also be of special interest to those, designing internal control systems. Managers should design and implement flexible internal control systems that can accommodate changes in the regulatory framework.

Acknowledgements

I would like to thank the Almighty God for seeing me through this long and turbulent journey towards the ladder of success in my academic circles. I am greatly indebted to my supervisors Prof Alala and Dr, Maniagi who have professionally guided me in the formulation and execution of this thesis. Additionally, I would like to thank the staff at the School of Business and Economics especially Prof Egezza, Dr Maingi, and Dr Ooko, to name a few, as well as my PhD class of 2020, for their prompt advice and support whenever I needed it.

Conflict of Interest Statement

The authors declare no conflicts of interest.

About the Authors

Mackline Wamukota is an Accounting PhD student at the Department of Accounting and Finance, School of Business and Economics, Masinde Muliro University of Science and Technology, Kenya.

Dr. Maniagi Musiega is a senior Lecturer at the Department of Accounting and Finance, School of Business and Economics, Masinde Muliro University, Kenya.

Prof. Benedict Alala is an Associate Professor at the Department of Accounting and Finance School of Business and Economics, Masinde Muliro University, Kenya.

References

- Andove, M. K. (2019). *Internal control practices and financial performance of faith-based facilities in Kakamega county* (Doctoral dissertation, KIBU).
- Asiligwa, M., & Rennox, G. (2017). The Effect of internal controls on the financial performance of commercial banks in Kenya. *Journal of Economics and Finance*, 8(3), 92-105.
- Chen, R., & Divanbeigi, R. (2019). Can Regulation Promote Financial Inclusion?. *World Bank Policy Research Working Paper*, (8711).

- Hassanain, K. M. (2015). Integrating Zakah, Awqaf and IMF for poverty alleviation: Three models of Islamic microfinance. *Journal of Economic and Social Thought*, 2(3), 193-211.
- Huang, S. Y., Tsaih, R. H., & Yu, F. (2014). Topological pattern discovery and feature extraction for fraudulent financial reporting. *Expert systems with applications*, 41(9), 4360-4372.
- Jeanne, M. (2019). *Internal control components and financial performance in public institutions in Rwanda case study: Rwanda Social Security Board (RSSB)* (Doctoral dissertation).
- Kalemeera, J. M. (2018). *Internal Controls and the Financial Performance of Public Higher Institutions of Learning in Uganda; A case study of Uganda Management Institute* (Doctoral dissertation, Uganda Management Institute).
- Kasoga, Z. S. (2020). *Effects of internal control system on the performance of revenue collection in local government authorities of Tanzania* (Doctoral dissertation, The University of Dodoma).
- Kemboi, E. K. (2019). *Effect of Internal Controls on Operational Efficiency of SACCOs Registered by SACCO Society Regulatory Authority in Nairobi County* (Doctoral dissertation, University of Nairobi).
- Kiyieka, E. N., & Muturi, W. (2018). Effect of internal controls on the financial performance of deposit-taking saving and credit cooperative societies in Kisii county, Kenya. *International Journal of Social Sciences and Information Technology*, 4(10), 30-40.
- Lagat, C., & Okelo, C. (2016). Effect of internal control systems on financial management in Baringo county government, Kenya. *Journal of Economics Finance and Accounting*, 3(1).
- Li, Y., Liu, Y., & Zhao, Y. (2006). The role of market and entrepreneurship orientation and internal control in the new product development activities of Chinese firms. *Industrial Marketing Management*, 35(3), 336-347.
- Marita, R. M. (2016). *Effects of Internal Control on Financial Performance of SACCOs: A Survey of SACCOs in Nakuru County, Kenya* (Doctoral Dissertation, Kabarak University).
- Matata, L. M. (2015). *The effect of internal controls on the performance of water companies in Kenya* (Doctoral dissertation, University of Nairobi).
- Mbuti, E. M. (2014). *Effect of internal audit reporting quality on the financial performance of savings and credit cooperative societies: A case study in Murang'a county in Kenya* (Doctoral dissertation).
- Mugo, D. M., Muathe, S., & Waithaka, S. T. (2017). Moderating effect of government policies on the relationship between mobile technology services and performance of deposit-taking SACCOs in Kenya. *International Journal of Scientific Engineering and Technology*, 6(2), 66-70.
- Mugo, J. M. (2013). *Effects of internal controls on the financial performance of technical training institutions in Kenya* (Doctoral dissertation, University of Nairobi).
- Ndembu, Z. N. (2015). *The effect of internal controls on the financial performance of manufacturing firms in Kenya* (Doctoral dissertation, University of Nairobi).

- Ng'etich, W. K. (2017). *The Effect of Internal Controls on the Financial Performance of Firms Listed at the Nairobi Securities Exchange* (Doctoral dissertation, University of Nairobi).
- Nguyen, T. M. (2021). The impact of responsible accounting on organizational performance: a case study of pharmaceutical enterprises in Vietnam. *The Journal of Asian Finance, Economics and Business*, 8(3), 1065-1071.
- Odek, R., & Anyira, M. F. (2017). Analysis of corporate governance practices and financial performance of savings and credit corporative societies: A case study of kite SACCO society limited Kisumu City, Kenya. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, 1(1).
- Radojević, A., Dragičević, P., & Milašinović, M. (2022). Interdependence Of Control Activities and Monitoring as Components of The Internal Control System of Manufacturing Companies in The Republic of Serbia. *Acta Economica*, 20(36), 175-194.
- Ray, D., & Pany, D. (2001). A bridge too far?: Consistent quality initiatives in financial services. *The TQM Magazine*, 8(5), 5.
- Segun, A. C., Kehinde, O. J., & Alice, O. O. (2020). Effect of Internal Control Systems on the Financial Performance of Deposit Money Banks in Osun State. *World Journal of Innovative Research (WJIR)* ISSN: 2454-8236, Volume-9, Issue-1, July 2020 pp. 59-66
- Serem, E. (2016). *The Relationship Between Internal Management Controls and Efficiency of Service Delivery of Commercial Banks in Kenya* (Doctoral dissertation, University of Nairobi).
- Shelton, S. W., & Whittington, O. R. (2018). The influence of the auditor's report on investors' evaluations after the Sarbanes-Oxley Act. *Managerial Auditing Journal*.
- Sigilai, D. K. (2017). *Assessment of internal control systems effects on revenue collection at Nakuru Level Five Hospital* (Doctoral dissertation, COHRED-JKUAT).
- Umar, H., & Dikko, M. U. (2018). The effect of internal control on the performance of commercial banks in Nigeria. *International Journal of Management Research*, 8(6), 13-32.
- Wanjala, K., & Riitho, D. G. (2020). Internal control systems implementation and fraud mitigation nexus among deposit taking SACCOs in Kenya. *Finance & Economics Review*, 2(1), 11-29.
- Young, E. R. (2017). *Preventing fraud in churches: An analysis of segregation of duties implementation* (Doctoral dissertation, Appalachian State University).

Creative Commons licensing terms

Authors will retain copyright to their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Economic and Financial Research shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflict of interests, copyright violations and inappropriate or inaccurate use of any kind content related or integrated on the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).