

Journal of Finance and Accounting

ISSN Online: 2616-4965



Internal Controls and Financial Performance of Deposit Taking Savings and Credit Co-Operative Societies in Nairobi City County, Kenya

***¹David James Sandimba & Dr. Fredrick W. S. Ndede**

ISSN: 2616-4965

Internal Controls and Financial Performance of Deposit Taking Savings and Credit Co-Operative Societies in Nairobi City County, Kenya

*¹David James Sandimba & ²Dr. Fredrick W. S. Ndede

¹Student, Department of Accounting and Finance Kenyatta University

²Senior Lecturer, Department of Accounting and Finance Kenyatta University

*Email of corresponding author: sadish62@gmail.com

How to cite this article: Sandimba D., J. & Ndede W., S. (2023). Internal Controls and Financial Performance of Deposit Taking Savings and Credit Co-Operative Societies in Nairobi City County, Kenya. *Journal of Finance and Accounting*. Vol 7(5) pp. 46-61. <https://doi.org/10.53819/81018102t30102>

Abstract

Savings and credit cooperatives play a significant role in this country's financial well-being, promoting savings and providing accessible loans to members of all social classes. This study aimed to investigate the impact of internal controls on the financial performance of Savings and Credit Cooperative Societies (SACCOs) operating in Nairobi County, Kenya. More specifically, the research sought to understand the effects of segregation of duties, approval controls, physical controls, arithmetic controls, and organizational plans on the financial performance of deposit-taking SACCOs in Kenya. The study was grounded in agency theory, stakeholder theory, and systems theory. It utilized a descriptive survey design and focused on a target population of 42 registered deposit-taking SACCOs. A census survey technique was adopted, incorporating all 42 SACCOs in Nairobi County. Primary and secondary data were gathered via structured questionnaires, administered using a drop-and-pick method. The data was analyzed using the Statistical Package for Social Sciences (SPSS) software, with descriptive statistics such as mean and standard deviation and inferential statistics including correlation and regression analyses used. The study found that the segregation of duties, approval of accounting transactions, physical controls, arithmetic controls, and the organization's plan significantly influence the financial performance of SACCOs in Nairobi County. Thus, the study concluded that these variables greatly impact the performance of deposit-taking SACCOs in the county. The study further recommended that government bodies such as the Sacco Societies Regulatory Authority (SASRA) should develop policies guiding deposit-taking SACCOs on improving their segregation of duties, approval of accounting transactions, physical controls, arithmetic controls, and organizational plans. This will substantially enhance the financial performance of these firms.

Keywords: *Internal Controls, Financial Performance, Deposit Taking, SACCOs, Nairobi City County*

1.0 Background to the Study

Recent increase in business failure along with decline in financial performance has increased the level of emphasis being placed on the strength of internal control systems. Management of various firms are increasingly under duress in promoting the level of internal controls and to periodically conduct tests to ascertain the health of their internal control systems. (Magara,2013). Internal controls are critical for the financial performance of institutions, they are crucial as they ensure that organizational assets are safeguarded, enhance financial records' reliability together with enhancing the efficiency plus effectiveness of an institution's undertakings. They are set of measures put in place to aid an organization in achieving its objectives. (Eniola & Oluwafemi,2016). Internal controls can be classified as Financial or administrative. Financial controls are concerned with financial activities that may cover aspect including controls over cash and financial statements preparation while administrative controls cover non-financial aspects including controls over personnel, fixed assets as well as policies and procedures. (Kamau,2013). Instituting checks and balances within an organization enables minimization of inherent losses and wastage of resources. Majorly, the source of fraud in the United States of America is due to absence or presence of weak internal controls where the most notable incidences involved: Parmalat in Europe, Enron and WorldCom in the USA plus Chuo Aoyama in Asia (Rimkus, 2016).

On the other continent; Africa, there were accounting scandals experienced in South Africa, specifically JCI and Randgold and Exploration entities as well as in Nigeria particularly Cadbury Nigeria whose profits were inflated for some year's pre-acquisition by its foreign partners which led to dismissal of managing director alongside chief financial officer in the year 2006. (Rimkus,2016). There is a general acceptance that suitably initiated internal controls will always contribute towards enhanced financial performance. Furthermore, it is believed that well established structures of controls will enhance an establishment's accountability function as it increases the reliability of financial statements. (COSO 2013). It is the role of management to prepare reliable financial statements which will in turn provide accurate information to investors hence building investor confidence. Managements' ability to fulfill this role will depend on its ability to design processes and safeguards over accounting and financial reporting. (Kamau, 2013). Internal controls are set of measures installed to aid an organization in achieving its objectives. (Eniola & Oluwafemi,2016). Internal controls consist of five components which incorporates: assessment of risk, control endeavors, control surrounding, information technology plus monitoring. (Pinho 2015). Control environment refers to the set of processes, standards along with structures which forms the basis for practicing internal control to the entire firm. The significance of internal control incorporating required standards of conduct are set at the top by the entity head in collaboration with those charged with governance. (Pinho 2015). Risk assessment involves a procedure for risks identification plus analyses in order to attain entity's goals, analyses of risks, and utilizing that data in deciding on ways to respond to the risks. (Abiola & oyewole, 2013).

Control activities entails techniques, policies, procedures that help ensure adequate mitigation of risks threatening the attainment of an entity's objectives. (Abiola & oyewole, 2013). There are several types of control activities which have been instituted in financial management in order to enhance the financial performance. They entail physical controls, authorization controls, segregation of duties also structural plan. Segregation of duties refers the distribution of roles and responsibilities which in case they are carried out as a single operation will put an individual in position of processing alongside recording an activity from the beginning until its end without

being checked. (Ngwenya,2013). Approval of accounting transaction control is purposed to making sure that any kind of entity transaction(s) passes through a responsible official whose limits of authority is clearly outlined and is in line with the type of transaction(s) he/she can authorize. (Ngwenya, 2013). Physical controls are aimed at only permitting access of the entity's assets to the only authorized personnel at the only authorized duration of time. These controls could be in form of physical barriers whose purpose is restricting direct access to firm's assets by applying physical precautions or indirect limitations using documentations to company assets (Pinho,2015).

The regulatory body SASRA had prescribed indicators that could be used to test the financial performance as well as the stability of Kenya's deposit taking saccos. This was encompassed in the CAEL model which sought to measure the capital adequacy, asset quality, the earnings ratio as well as the liquidity ratio. (SASRA ANNUAL REPORT,2020). This study focused on the earnings ratios and adopted Asset Returns being the measure of the magnitude of the net income per unit of assets of the Saccos. A higher return indicated efficient utilization of the society assets while a lower ratio signaled inefficient utilization. The internal control practices affirmed so far to having a nexus with entity's financial performance entail, plan of institution, physical authorization also approval, division of labor, workforce, arithmetical & accounting controls, management, supervision, performance acknowledgement plus budgeting (Muithya, 2021). Losses were a result of inadequate internal controls which caused ineffective programs (Olumbe, 2012). An effective system of internal control ensured the protection and safeguarding of assets, registers and information, plus the detection and prevention of errors and distortions, executing orders in addition to instructions to company management to ensure that accounting docket are complete plus error-free including production of financial statements that are reliable and on timely basis. (Muithya, 2021). There were 46 deposits taking Saccos registered by SASRA and operating in Nairobi as at December 2020. The Saccos drew membership from diverse sectors including the agricultural sector, education sector, parastatals as well as informal sectors like matatu sector. (SASRA ANNUAL REPORTS,2020). Most of the top rated Saccos were domiciled in Nairobi County, which included Mwalimu National Sacco, Kenya Police Sacco, United Nations Sacco, Harambee Sacco, Afya Sacco, Stima Sacco as well as Kimisitu Sacco. These Saccos had a combined total asset base of an excess of Kes.265 billion as at December 2020. (SASRA ANNUAL REPORT, 2020).

1.1 Statement of the Problem

SACCO societies play a crucial role in our economy. They were established to address fundamental human needs and to facilitate savings and borrowing without risk taking or surrendering substantial power to money lenders. Essentially, they were formed to enhance the livelihood of their members (WOCCU, 2019). However, despite their significance, they are often characterized by poor management capacity and inadequate internal controls. This lack of effective internal controls has led to the loss of investments through fraud, misuse of assets, and a decline in return on assets, subsequently undermining member returns (PROCASUR Africa Report, 2012). Over the past five years, this situation has been exemplified by the revocation of five SACCO licenses by SASRA, due to what the regulator described as non-compliance with IFRS, failure to submit audited statements of accounts, and failure to meet crucial regulatory ratios (SASRA REPORT, 2017 & 2018). Additionally, in 2020, a total of 16 deposit-taking SACCO societies were reported to have failed to meet the statutory core capital of KES. 10 million. They also failed to meet the core capital to assets ratio and the core capital to deposit ratio of 10% and 8%

respectively, as set by the regulator (SASRA REPORT 2020).

Further evidence of these issues is seen in the substantial increase in the number of non-performing loans, with the portfolio at risk rising from KES. 15.3 billion in 2018 to KES. 24.2 billion in 2020. The number of SACCOs with a portfolio at risk above 10% also rose from 56 in 2018 to 71 in 2020 (SASRA REPORT 2018-2020). This has inevitably led to reduced member returns, evidenced by a decline in return on assets from 2.7% in 2017 to 2.4% in 2018 and 2.6% in 2019 (Kenya Financial Sector Stability Report, 2020).

These developments raise questions about the potential role that internal controls could have played in alleviating the situation. Although numerous empirical studies on the impact of internal control on financial performance exist, most were conducted in other institutions, not deposit-taking SACCOs. For instance, research by Kinyua (2016) focused on listed firms in Kenya, Njiru (2016) on water companies, Ngari (2017) on micro-finance institutions, and Wainaina (2011) on educational institutions. A few studies on internal controls and financial performance in deposit-taking SACCOs do exist. For example, Magara (2013) examined the effects of internal controls on SACCOs, and Ouko (2021) investigated how financial performance is influenced by internal control systems. However, these studies used generalized internal control system (ICS) components like monitoring, control environment, risk review, and control activities, failing to capture the effectiveness of SACCOs in executing specific internal control activities. This study aims to fill these gaps by evaluating the effects of specific internal control activities on the financial performance of Kenya's deposit-taking SACCOs.

1.2 Objectives of the Study

- i. Identifying the manner in which segregation of duties affects the financial performance of Kenyan deposits taking SACCOs within the county of Nairobi.
- ii. To identify the impact of approval of accounting transactions on financial performance of Kenya's Nairobi based deposit-taking SACCOs.
- iii. To uncover the role of physical controls on financial performance of Kenya's deposits taking SACCOs based in Nairobi County.
- iv. To identify how arithmetic controls affects the financial performance of Kenya's Nairobi based Deposit Taking SACCOs.
- v. To establish the manner in which plan of organization influences the financial performance of Kenyan Deposit Taking SACCOs within the county of Nairobi.

2.0 Literature Review

The segment covers the review of theoretical along with empirical literature and a conceptual framework depicting the relationship among determining features is also included.

2.1 Theoretical Review

Theories which connect deposit-taking

g Sacco societies' financial performance to internal controls are considered in this study. There are

three theories which incorporates: The Agency Theory, Systems together with Stakeholders' Theory.

2.1.1 Agency Theory

Jensen and Meckling (1976) proposed this theory. Its concerns include solving hardships which agency associations could be experiencing; for example; amid principals (for instance shareholders) plus agents of the principals (such as, firm executives). The goal of the agency theory was to provide solutions to challenges which may occur due to conflict between the principal's desires or goals and that of agent, and the principal is incapable of confirming what the agent is doing also the hurdles which occur due to dissimilar attitudes regarding risks amidst the principal alongside agent. (Nyumoo,2020). There could be a number of shortcomings in agency relationship concerning personal interest of the agent, in scenario that the agent could act partially or else totally forfeit to act in the best interests of the principal. This entails for example, they may misuse their authority for monetary gains, besides in pursuing the principal's interests the agent accepts irrelevant risks due to the fact that the agent considers those risks as being relevant conversely the principal could have completely distinct attitudes towards those risks. Furthermore, there is the challenge of information imbalances where both the principal together with agent have hands on distinct scales of information; practically, this connotes disadvantage to the principal since the agent is deemed to having more information. (Kinyua,2016). For this reason, the theory is so crucial in this survey due to the fact that members of the SACCOs that is stakeholders who have selected the management to act as their agents by passing on their duties of daily running of the establishments therefore, an urgency for a strong internal control system so as to keep safe the interests of members and other stakeholders' sufficiently. The management can initiate internal controls like; physical controls, segregation of duties, arithmetic controls alongside organizational plan. Thus, the presence of control activities in the entities are well supported by the theory.

2.1.2 Stakeholder Theory

Edward Freeman (1984) put forward this theory. A group or every person who is in a position to be affected by an institution's success or failure of their goals can be viewed as a Stakeholder (Freeman,1984). As opined by Friedman (2006), the entity should be viewed as a group of stakeholders while the managers' role is managing the stakeholders' welfare. The satisfaction of the stakeholder's need has been delegated to managers therefore, they should manage the firm in order to be of advantage to their stakeholders. (Njiru,2016). The management is mandated to solve problems on behalf of stakeholders in occurrence of conflict of stakeholder's interest. (Harrison, et all, 2010). According to traditional shareholder's theories, the sole owners of the entity were the shareholders who had a fiduciary duty of increasing their value by putting their needs first. But the Stakeholder Theory disagrees by proving that other parties such as governmental bodies, workforce, financiers, clients, suppliers, trade unions alongside trade associations exists. In addition, at times competitors can be classified as a stakeholder due to their potential of influencing the organization's operations including its stakeholders. (Miles, 2011). The relevance of stakeholder theory in our research is due to its ability of portraying the functionalities of a firm. It stipulates that the venture's success is based on its potential to maximize on creating stakeholder's wealth. The management's role of protecting the entity's assets is usually for the present and future stakeholders, thus highlighting the importance of internal controls which ensures that institutional assets are well safeguarded. (Kinyua,2016).

2.1.3 Systems Theory

According to Keraro (2014), Ludwig von Bertalanffy was the biologist who put forward the systems theory in the 1940s while in 1956 Ross Ashby advanced it in his survey “Introduction to Cybernetics”. As stated by Bertalanffy (1968) real systems were open to, also mingle with, their surroundings, plus they are in a position to attain qualitatively new features via emergence, leading to continual evolution. His argument was that instead of minimizing a firm or enterprise to the properties of its elements or parts, systems theory centered on the system besides the correlation amidst various parts which connect to make it whole. The theory provides useful tools in analyzing internal control systems including comprehending the interactions because a perfect ICS is a system that is integrated with supportive principles, attributes plus interrelated parts. The theory specifies that to have full insights about the whole system operations, it is crucial to understand the integration amidst various individual units or components. All relevant sections of the firm are covered by the internal control system hence a properly organized also controlled unit is created (Cheruiyot, 2014). This is applicable in this study as for the Sacco societies to function as expected and achieve its objectives all the departments must function efficiently hence the need for internal controls to make sure that the goals are met effectively and efficiently.

2.2 Empirical Literature

Ngugi (2011) investigated the internal controls design plus implementation both in the public alongside private industry including their influence on effectiveness besides efficiency. He considered independent variables like; information plus communication, risk review, control surrounding, control activities. Data was assembled using focused group discussions plus questionnaire. The Descriptive Alongside Inferential Statistics aided in datum analyses. According to the results, private industry operates under internal control system that is strictly adhered to unlike in the public sector in terms of the entire components of internal control. Wainaina (2011) reviewed the internal controls effectiveness in the Kenya Polytechnic University College. The independent variables under consideration entailed; information plus communication, control endeavors, risk evaluation besides control surroundings. According to the outcomes the executive must bank on internal controls to perform its resolutions also appraise the undertakings they usually oversee. Furthermore, in ensuring optimal utilization of resources plus achievement of a firm’s overall corporate goals, the management of any entity must devise internal control processes.

Muio (2012) undertook a survey using private hospitals in Kenya concerning how their financial performance was being impacted by the systems of internal controls. Information, communication, control endeavors, control surrounding besides risk review were the independent variables under consideration. The entire NHIF accredited private hospitals operating in Nairobi County formed the target population while a Descriptive Research model was utilized. The results highlighted that an efficient system of internal control must comprise the overall five features of internal control system. Additionally, the results ranked monitoring to having the highest impact on the entire financial performance of Kenya’s private hospitals followed by control surrounding, information plus communication, risk review including control undertakings accordingly.

Olumbe (2012) undertook a survey to identify how internal control alongside corporate governance of Kenya’s commercial banks are associated. The variables incorporated; board of directors, enterprise internal plus external supervision vacancy, equity structure also board of

supervisors. The target population was the 43 commercial banks while a Descriptive Research model was employed. The survey used questionnaires plus unstructured interview guides as the primary source of datum. Data analysis was done using Linear Regression while a 3-year performance comparison was undertaken from year 2009 to 2011. The survey confirmed that majority of the banks had measures in place which were utilized in weighing the magnitude of internal controls plus indicated that internal controls alongside corporate governance were well related.

Mwachiro (2013) probed how internal controls affect the operations of Kenya Revenue Authority. The study aimed at determining whether internal controls have impacted positively on the revenue collection. The survey factored in independent variables like; risk evaluation, information & communication, control endeavors besides environment. A descriptive case study making use of causal research model was adopted. Both statistical and narrative mechanisms were used during data analyses and Correlation was useful in appraising the impacts of internal controls alongside revenue collation. The outcomes indicated that internal controls features should exist for effective functioning of controls. Also, the survey noted that presence of poor ethical values including weak internal controls natured a fertile ground for where revenue is lost through fraud. Therefore, the survey indicated that internal controls and revenue collection had significant association.

Ndungu (2013) reviewed how internal controls affects the yielding of revenue in the University of Nairobi Enterprise and Service limited. The survey factored in independent variables like; information & communication, control undertakings, risk review, control surroundings together with monitoring approaches. It was noted that for an enhanced internal control system, all features of internal controls were vital. The research highlighted recommendations to improve the internal control system. Ondieki (2013) investigated the manner in which the commercial banks' financial performance is impacted by internal audits. The survey incorporated independent variables such as; information plus communication, control environment, control undertakings, risk evaluation as well as monitoring approaches. The financial performance being the independent variable. The research outcomes showed that the internal controls can be tailored to have traits that will make it easy to flag and prevent fraudulent transactions. Review of internal controls provides assurance that controls are working.

Magara (2013) investigated how the Kenya's deposit-taking SACCOs' financial performance is influenced by the internal controls. The survey incorporated dependent variable as being financial performance whereas the predicting attributes as; information, and communication, risk evaluation, control surroundings, control undertakings besides monitoring techniques. The target population involved 122 Kenyan deposits taking SSACCOs while both first hand plus second-hand information was applied during the survey. The datum gathered was from the SACCOs' financial statements. In deriving the correlation amidst the variables, a multiple regression technique was utilized. According to the analyses, the predictor variable showed a positive linkage with the control variable. In addition, the research proved that the financial performance of the SACCO would deteriorate with the absence of controls.

Kinyua (2016) investigated ways in which the ICS affects the financial performance of entities listed in NSE. Internal controls were analyzed using the concept of; information & communication, control endeavors, risk review, control surrounding on the other hand, financial performance paid attention to ROE, net profit, earnings per share. The researcher aimed at determining the cause of continuous poor financial performance regarding the internal controls. According to the research,

the systems of internal control together with financial performance had a clear correlation. The survey findings advised the management of listed firms to focus on collective efforts of establishing perfect combination of systems of internal control that is effective plus efficient and agrees with their enterprise requirements in addition to investing in them.

Ouko (2021) investigated ways in which deposit-taking Sacco societies' financial performance based within Makueni County, is affected by internal controls system. The dependent variable under consideration being financial performance focusing on ROE while the independent variables incorporated; risk review, control surrounding, information & communication also control undertakings. From the survey, all the internal controls components were noted to contribute significantly in enhancing financial performance. Furthermore, the survey unveiled that the setting up of the internal control efficiently plus effectively impacts financial performance in a huge way. This study will focus on DT-Sacco societies located within Nairobi with the predictor attributes being internal control activities and their relation to financial performance of these Saccos.

2.3 Conceptual Framework

The conceptual framework displayed in Figure 2.1 probed how internal controls influences the financial performance of Nairobi's based Deposit Taking SACCOs. The independent variables under consideration were plan of institution, segregation of duties, physical controls, arithmetic controls plus accounting transactions approval whereas the controlling variable was financial performance, as evaluated via Return on Assets (ROA).

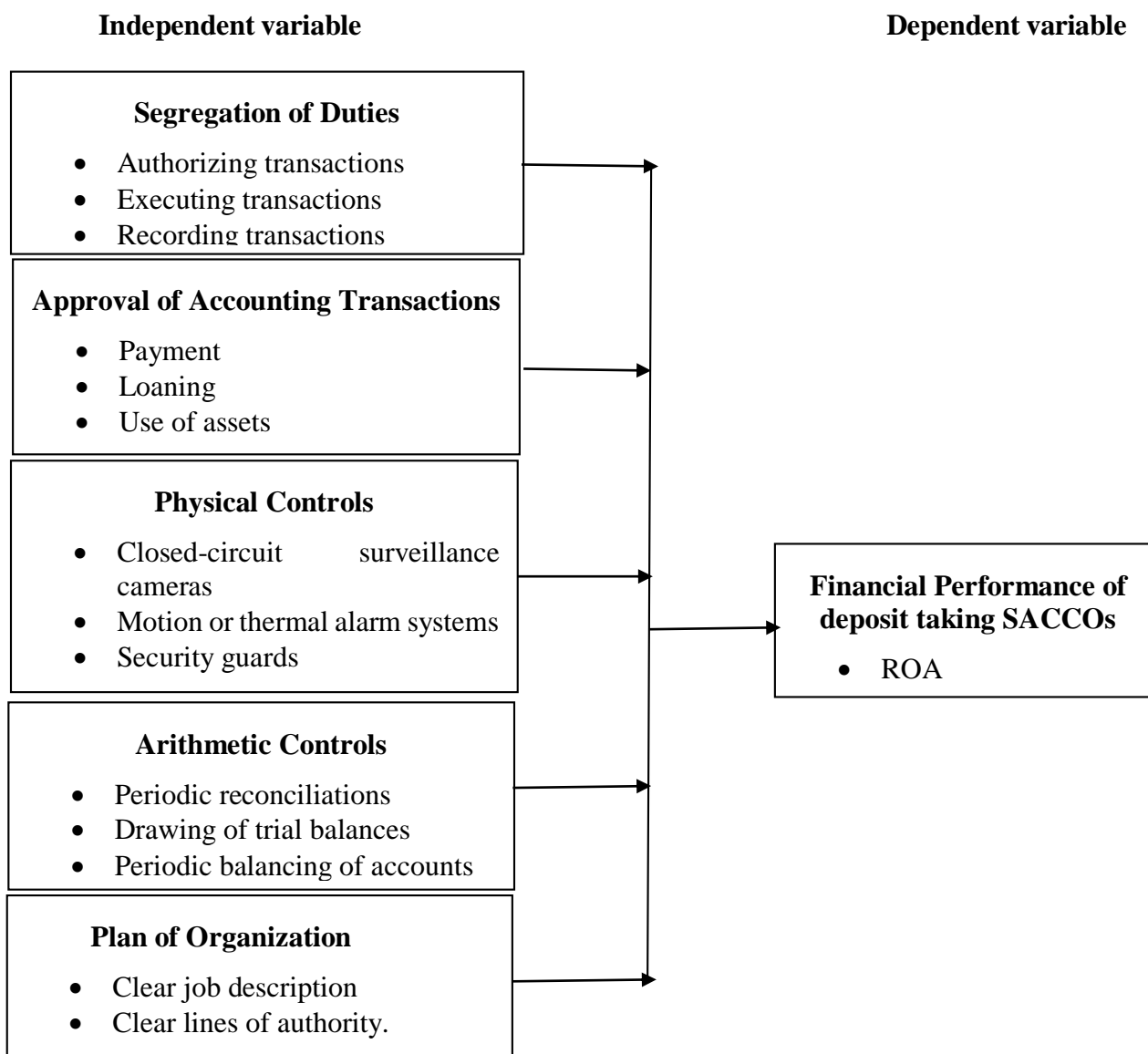


Figure 1: Conceptual Framework

3.0 Research Methodology

The study used a descriptive research design. There were 42 deposits taking Saccos under SASRA’s registration also headquartered in Nairobi. (SASRA Report 2021). All the 42 registered SACCOs will be considered for review since a census survey will be implemented. Both primary plus secondary datum was gathered in order to carry out the study. Structured questionnaires aided in assembling the primary datum. The questionnaire was designed carefully and with the help of a few participants selected from the population was tested to identify areas that required improvement. This promoted the accuracy plus validity of the data. The questionnaire was administered via self-administration thus the academician’s presence was not necessary. The society’s financial statements like the statements of financial position including income statements were used in assembling the secondary data. Quantitative and qualitative data analyses was utilized

in collecting data. Quantitative method included both descriptive and inferential analysis. Data inform of tables was presented via descriptive analysis like the percentages, standard deviation, in addition to frequencies. Datum from questionnaire were recorded and logged in the computer using SPSS.

4.0 Findings and Discussion

The study achieved an 88.1% response rate, considered a strong representation of the sample population and deemed reliable. The demographic analysis of the respondents included their positions in the organization, education levels, and tenure with the firm. The majority of respondents were managers (51.4%) and accountants (48.6%), providing a knowledgeable perspective on internal controls and financial performance. Regarding education, most (78.4%) had attained bachelor's degrees, and 21.6% had master's degrees, indicating a well-educated workforce capable of addressing organizational challenges. The participants' experience with their SACCOs varied, with the majority (56.8%) having served more than 5 years, 29.7% serving between 3-5 years, and 13.5% serving less than 2 years. This distribution suggested that the participants had a good understanding of the organization's internal controls and financial performance.

4.1 Correlation Results

During the research, correlation analysis was undertaken which entailed several attributes of segregation of duties, approval of account transactions, physical controls, arithmetic controls, and plan of organization. Tabulated below in Table 1 is the correlation matrix of showing all the factors used for the analyses.

Table 1: Correlation Results

Statement	ROA	Segregation of duties	Approval of A/C transactions	Physical controls	Arithmetic controls	Plan of Organization
ROA	1	.490**	.592**	.535**	.414*	.515**
Segregation of duties	.490*	1	0.275	.389*	.437**	0.252
Approval of A/C transactions	.592*	0.275	1	.580**	.381*	.624**
Physical controls	.535*	.389*	.580**	1	.541**	.778**
Arithmetic controls	.414*	.437**	.381*	.541**	1	.629**
Plan of Organization	.515*	0.252	.624**	.778**	.629**	1

As per the Pearson coefficients as well as P-values, the segregation of duties is substantially and positively linked with performance ($r=0.490$, $p<0.05$). This is a clear manifestation that segregation of duties results to better performance. Moreover, the outcomes highlighted that performance along with approval of accounting transactions are strongly and significantly associated as proved by a 0.592 Pearson correlation coefficient in addition to P-value of 0.000. A strong plus notable connection amidst performance and physical controls are proved through the correlation results showing a 0.535 Pearson correlation coefficient while the P-value is 0.000. This shows that performance increases every time physical controls are tightened. Moreover, a notable linkage between arithmetic controls along with performance is affirmed through the correlation outcomes where the Pearson correlation is 0.414 and P value is 0.011. Additionally, plan of

organization is related significantly with the performance as highlighted by the correlation findings where the Pearson correlation is 0.515 and P value is 0.001. The findings of this study support Magara (2013) who conducted an investigation regarding the manner in which the financial performance of Deposit-taking Sacco societies is influenced by internal controls. The analysis unveiled that the independent variable has a positive connection with the independent variable. The study's outcomes also concurred with Kinyua (2016) who investigated the effect of ICSs on financial performance of entities quoted in NSE. The study established that there was a substantial connection amid internal physical controls alongside performance.

4.2 Regression Results

Regression analysis examines how a change in one variable influences another variable. The method of multiple regression was used in this study to explore the impact of several variables. Specifically, a regression analysis was conducted to determine the statistically significant relationship between financial structures on internal controls and the financial performance of deposit-taking SACCO societies based in Nairobi County. The variables included were: segregation of duties, approval of account transactions, physical controls, arithmetic controls, and the plan of organization. The regression model provides a mechanism for modeling and analyzing these attributes, focusing on how the control components interact with one or more predictor attributes. The findings of this study are presented in Table 2.

Table 2: Model Fitness

Model	R	R Square	Adjusted R Square	St. Error of the Estimate
1	0.791	0.625	0.621	0.29172

The R square was 0.515 as indicated in Table 4.12. The results showed that segregation of duties, approval of accounting transactions, physical controls, arithmetic controls, and plan of organization account for 62.5% of financial performance, while the other 37.5% was elucidated by features that this research excluded. R- value being 0.791 is a clear proof that performance correlated substantially with the predictor components. Portrayed in Table 4.13 below are the survey findings.

Table 3: Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sign
1	Regression	35.162	5	11.721	39.557	0.000
	Residual	29.629	31	0.296		
	Total	64.791	36			

Table 3 portrays that F value is 39.557 while p-value is 0.000 which is a clear illustration of the extent that predictor variable impacts the control variable and also proof that the whole model was statistically notable.

Table 4: Regression Coefficients

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	.351	.225		6.011	.000
1					
Segregation of duties	.500	.084	.410	5.941	.000
Approval of A/C transactions		.297	.060	.393	4.932
Physical controls		.604	.070	.588	7.197
Arithmetic controls		.813	.070	.846	11.49
Plan of Organization		.180	.079	.199	2.284

A Multiple regression analysis was undertaken to ascertain the impacts of internal controls on financial performance of Deposit Taking Saccos in Nairobi City County. The multiple regression model used is illustrated as follows

$$Y = 0.351 + 0.500X_1 + 0.297X_2 + 0.604X_3 + 0.813X_4 + 0.180X_5$$

Where,

Y denoted financial performance β_0 denoted the constant

X_1 represented segregation of duties

X_2 represented approval of accounting transactions X_3 denoted physical controls

X_4 denoted arithmetic controls X_5 denoted plan of organization

ε was the error term when there was assumed normal distribution $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ denote independent variable coefficients

Interpretatively, a unit change in segregation of duties, approval of accounting transactions, physical controls, arithmetic controls and plan of organization will lead to a 0.500, 0.297, 0.604,

0.813 and 0.180 change in financial performance among DT-SACCOs respectively, however there were no changes on the variables that were excluded during the current study. The survey factored in the five attributes that were crucial in terms of ensuring that the financial performance is better. Arithmetic controls ($\beta_3=0.813$) proved to be the most vital component whereas plan of organization ($\beta_1=0.180$) appeared to be the least significant factor. Additionally, the study results indicated that if the five selected attributes were held constant, the performance would remain substantial ($\beta = 0.351, p < 0.05$). This is a clear indication that policy makers along with authorities charged with governance ought to make sure they advance approval of accounting transactions, segregation of duties, physical controls, arithmetic controls as well as plan of organization as this will improve performance.

The current study's findings were in agreement with Muio (2012) who conducted a survey on how the financial performance of Kenyan based private hospitals is impacted by internal control systems. In order to attain a sturdy ICS, the findings pointed out that all the five attributes must be present. The study also concurs with most of the other studies which indicated that internal control systems impacts the performance positively (Mawanda, 2008; John, 2011; Muraleetharan, 2011; Mary et al., 2014). The current survey's outcomes concurred with Magara (2013) who investigated the manner in which internal controls affected the financial performance of Kenyan Deposit Taking sacco societies. The analysis established that the predictor variable has a positive correlation with the independent factor. The analyzed outcomes concurred with Kinyua (2016) who probed the impact of ICS on financial performance of establishments quoted in NSE. The survey highlighted that systems of internal control related with the financial performance significantly.

5.0 Conclusions of the study

As per the study findings, several conclusions have been made as per the objectives. For number one goal, the survey deduces that DT-SACCOs have in place institutional structure which precisely outlines flow of authority along with the responsibilities; no employee can complete a transaction from inception to completion; all the responsibilities of each division are well spelt out by the reporting system on institutional charts; all valuable information is not accessible to a single employee without the senior staff consenting and that entire workforce have full insights regarding the concept along with the significance of internal controls together with the separation of duties. This study concludes that approving the accounting transactions leads to increase in financial performance amid Deposit-taking sacco societies within Nairobi County. The study also concludes that Deposit-taking SACCOs have documented policies on various transaction approval limits in the society which has been communicated to all staff in the society; approvers adhere to the delegated limits as stated in the society's policies and procedures; approvers review documentary evidence of transactions before approving the transactions and the supreme decision-making body is the Board and AGM with major capital expenditures or liabilities needing approval by AGM and BOD. The research also concludes that an improvement in physical controls among DT-SACCOS influences financial performance positively.

The study further concludes that critical society documents e.g. cheque books and receipts are stored under lock and key; there is limited and documented access to critical sections of the society including the vault; society building as well as fixed assets are accessible to only authorized staff/personnel; and that society electronic assets are insured and protected against hazards like fire and flooding. The research also concludes that an improvement in the arithmetic controls will lead to a rise in financial performance of DT-SACCOS. The study also concludes that society ERP

generates regular exceptions report that highlights deviations from the norm; personnel manning the accounting function are qualified and competent; Accounting balances are reconciled frequently as per policies and procedures; budgets and forecast reports are reviewed to ensure they are accurate and workable; and there are regular reviews of reconciliations done by supervisors to ensure accuracy. The research also concludes that an improvement in the plan of the organization will lead to a rise in financial performance of DT-SACCOS. The study also concludes that duties and responsibilities of everyone in the organization has been well defined; lines of reporting for all operations and controls have been well defined; there is a clear guideline on how accounting and financial duties should be delegated; and that there is a clear flow of authority and responsibilities with minimal conflicts in duties, authorities and powers.

6.0 Recommendations

As per the conclusions, the survey provides the following recommendations for policy, practice besides further researches. The study suggests the need for government through its agencies i.e SASRA alongside the Central Bank of Kenya should develop policies guiding financial firms on the procedure of approving financial transactions as this will go a long way in minimizing leakages and enhancing performance. Further, the government should come up with measures aimed at monitoring whether the players are following the laid down procedures. The study recommends the need for government through its various agencies to come up with policies guiding implementation of arithmetic controls. The players in the financial sector should adopt ERP systems that generate regular exceptions report that highlights deviations. From the norm and should also ensure the personnel manning the accounting function are qualified and competent. The study also recommends the need for government through its various agencies to come up with policies guiding financial firms on how to implement plan of organization. The management of deposit taking SACCOS should ensure that duties and responsibilities of everyone in the organization has been well defined; lines of reporting for all operations and controls have been well defined; there is a clear guideline on how accounting and financial duties should be delegated; and that there is a clear flow of authority and responsibilities with minimal conflicts in duties, authorities, and powers.

The research recommends the need for deposit taking SACCOS in addition to other players in the financial industry in Kenya to enhance segregation of duties in their organizations. They should ensure that there is no single staff who can authorize a transaction from its commencement to the final process. Policy-makers ought to come up with policies that will improve the segregation of duties among players in the financial sector such as DT-SACCOS. The research recommends the need for deposit taking SACCOS and other players in the financial industry to enhance their physical controls. The firms should ensure that critical society documents are stored under lock and key; there is limited and documented access to critical sections of the society including the vault; society building as well as fixed assets are accessible to only authorized staff/personnel; and that society electronic assets are insured and protected against hazards like fire and flooding.

REFERENCES

- Bertalanffy, A. R., Boulding, K. E., Ashby, W. R., Mead, M., & Bateson, G. (1968). *L. von Bertalanffy, General System Theory*. New York: George Braziller.
- Cheruiyot, S. K. (2014). Effectiveness of Systems of internal control in Safeguarding Inventory: A Case Study of Rift Valley Institute of Science and Technology. Unpublished MBA Project. Kabarak University, Kenya
- Eniola, O. J., & Akinselure, O. P. (2016). Effect of internal control on financial performance of firms in Nigeria (a study of selected manufacturing firms). *Journal of business and management*, 18(10), 80-85.
- Freeman, R.E. (1984). *Strategic Management: A stakeholder Approach*. Boston, MA: Pitman.
- Friedman, A. L., & Miles, S. (2006). *Stakeholders: Theory and practice*. OUP Oxford.
- Han, M. O. (2014). Determinants of SMEs' Performance: The Case of Kyaing Tong, Eastern Shan State, Myanmar. Graduate School of Business - Assumption University
- Jensen, Michael C., Meckling, William H. (1976). "Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure". *Journal of Financial Economics* 3 (4): 305–360.
- Kamau, J. (2016). *Effects of Internal Control Practices On Financial Performance of Small and Medium Enterprises in Nairobi County* (Master). University of Nairobi.
- Keraro, V. N. (2014). The Role of Governance in the Strategic management of Counties in Kenya.
- Kinyua, J. K. A. (2016). *Effect of internal control systems on Financial performance of companies quoted in the Nairobi Securities Exchange* (Doctoral dissertation, Jomo Kenyatta University of Agriculture and Technology).
- Magara, C. N. (2013). Effect of internal controls on financial performance of deposit taking savings and credit cooperative societies in Kenya (Doctoral dissertation, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI)
- Muraleetharan (2011) Internal control and Impact of Financial Performance of the organizations. *Special reference public and private organizations in Jaffna district" University of Jaffna*.26(2), 301-325.
- Mwachiro, D. (2013). The Effect of Internal controls on revenue Collection: A Case study of the Kenya Revenue Authority, MBA Thesis, University of Nairobi, Kenya
- Ndungu, H. (2013). The Effect of Internal controls on revenue Generation: A Case study of the University of Nairobi Enterprise and Services Limited, MBA Thesis, University of Nairobi, Kenya
- Ngari (2017). The effect of internal controls on financial performance of microfinance institutions in Kenya. *International Academic Journal of Economics and Finance*, 2(3), 112-140
- Ngugi, K. M. (2011). A survey of Internal Control Systems among the Listed Private Companies and the Public Sector Companies in Kenya. Unpublished Research Thesis. University of Nairobi

- Ngwenya, B. (2013). Application of Internal Controls in NGOs: Evidence from Zimbabwe. *Application of Internal Controls in NGOs: Evidence from Zimbabwe*, 1(2), 39–47.
- Njiru, D. (2016). *The effect of internal controls on financial performance of public water companies in Kenya* (Doctoral dissertation, KCA University).
- NYUMOO, A. (2020). *Effect of Control Functions on the Financial Performance of Saccos in Meru County*. (THESIS). KENYA METHODIST UNIVERSITY.
- Ogilo, F. (2012). The impact of credit risk management on financial performance of commercial banks in Kenya. *DBA Africa Management Review*, 3 (1), 22-37.
- Olumbe, C. O. (2012). The relationship between internal controls and corporate Governance in commercial banks in Kenya, Unpublished thesis, University of Nairobi
- Ondieki, N. M. (2012). Effect of Internal Audit on Financial Performance of Commercial Banks in Kenya. Master's Thesis, University of Nairobi.
- Pinho, C. (2015). Implementation of internal control systems to combat money laundering and financing of terrorism: an applied exploratory study to the Angolan financial sector. *International Journal of Business and Social Research*, 5(7), 38-50.
- PROCASUR (2012). An Overview of SACCOs in Kenya; In pursuit of ideas to develop Savings and Credit Cooperatives. Learning from Kenyan SACCOs, March 2012, Kenya Report.
- Sacco Societies Regulatory Authority (SASRA) (2015). SACCO Supervision reports 2017. Retrieved from <http://www.sasra.go.ke/>
- Sacco Societies Regulatory Authority (SASRA) (2016). SACCO Supervision reports 2017. Retrieved from <http://www.sasra.go.ke/>
- Sacco Societies Regulatory Authority (SASRA) (2017). SACCO Supervision reports 2017. Retrieved from <http://www.sasra.go.ke/>
- Sacco Societies Regulatory Authority (SASRA) (2018). SACCO Supervision reports 2018. Retrieved from <http://www.sasra.go.ke/>
- Sacco Societies Regulatory Authority (SASRA) (2020). SACCO Supervision reports 2020. Retrieved from <http://www.sasra.go.ke/>
- Shukla, A. (2017). The Relationship Between Corporate Social Responsibility and Financial Performance of Indian Banks. *IUP Journal of Corporate Governance*, 16(2).
- Wainaina, S. W. (2011). An Evaluation of the Internal Control Function: The Case of Kenya Polytechnic University College, Unpublished MBA Thesis, University of Nairobi, Kenya