



## Effect of accounting information and communication control on financial performance of Sacco's in Kenya

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### ABSTRACT

The study sought to examine the effect of Accounting Information and Communication control on the financial performance of Sacco's in Kenya. The study employed a mixed research design targeting 175 Sacco's with 875 respondents. A purposive sampling technique was used to select the CEOs, Finance Managers, Risk Managers, ICT Managers and Internal auditors. Data were collected by the use of both primary and secondary techniques. Primary data collection was using questionnaires, while secondary data detailed document analysis of audited accounts to capture information on financial performance. A pilot study was conducted in Nairobi County. Content and construct validity were tested at a KMO value of 0.870, which signified that factor analysis was appropriate. Cronbach Alpha was applied to establish reliability, ranging from 0.859 for accounting information and communication control to 0.916 for financial performance. Data were analyzed by use of descriptive and inferential statistics. Descriptive analysis included; frequencies, Mean, Standard deviation and percentage, while inferential analysis involved regression analysis. The results showed a significant positive relationship between Accounting Information and Communication control and financial performance ( $r=0.661$ ,  $P=0.000$ ). Accounting Information and Communication control explained 43.7% ( $R^2 = 0.437$ ) of variance in financial performance; the beta value for Accounting Information and Communication control from the regression model was 0.551 at  $p < 0.05$ . The study concluded that Accounting Information and Communication control has a significant positive effect on financial performance. The study recommended that SACCOS conduct periodic reviews of the effectiveness of its accounting information and communication system to ensure management receives timely, relevant, and reliable reports for decision-making.

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## Introduction

Savings and Credit Co-operative society is a cooperative organization whose goal is to help members save money so that they may build up a reserve of funds that they can then use to lend to other members at a fair interest rate. Additionally, SACCOS have the capacity and opportunity to connect with customers in communities that are unappealing to banks, such as rural or underdeveloped regions. SACCOS' primary goal is to achieve member empowerment via the mobilization of savings and the distribution of loans (Ofei, 2001). In Kenya, SACCOS have been able to mobilize about Ksh.350 billion in savings in their fight to accomplish this goal (Co-operative Bank of Kenya, 2010).

In addition, the Vision 2030 plan, amongst other things, expects the financial services industry to play a crucial role in mobilizing the savings and investments for the growth of the nation by providing a better intermediary between saves and investments than is now 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

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largely dependent on the services offered by savings and credit cooperative organizations (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). The continuation of SACCO would increase the size of the "net" of financial inclusion, bringing in the previously excluded majority (those regarded as poor in the society).

SACCOs in Kenya are currently a leading source of co-operatives credit for socio-economic development. The cooperative movement in Kenya now boasts of 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. Savings and credit cooperative organizations (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) observed that key governance characteristics such as 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 as important. Chen and Divanbeigi (2019) established that poor management and corporate governance in SACCOs continue to hamper their performance and growth.

There have been various governance scandals that have affected various entities. SACCOs have not been untainted by these scandals as they have been 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 to ensure that leaders of the SACCO are held accountable for their management actions and to 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 frauds. 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 organization on course towards profitability goals and achievement of its missions and to minimize surprises along the way. They promote efficiency, reduce risk of asset loss and help to ensure reliability of financial statements and compliance with laws and regulations. According to Musa (2008), internal control is a system that comprises 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.

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

SACCOs not only have a part to play in the provision of financial services, but they also have a part to play in the accomplishment of development objectives. In spite of tremendous efforts made by the government, SACCOs continue to undermine the Sustainable Development Goals (SDGs) and vision 2030 goals of expanding access to financial services. The Saccos in Kenya have exhibited poor financial performance, as indicated by the SASRA report (2020), 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 share 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 in 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 SACCO Societies

Regulatory Authority SASRA (2018), it was indicated that poor performance of SACCOs in Kenya have 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, 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, Wevarcity, Telepost, and Jumuika Sacco Society Limited. However, there are very few studies, if any at all, that have evaluated the effect of accounting information and communication control on financial performance of deposit taking Sacco's in Kenya (Chang, 2019; Masanja, 2018; Lakis, 2012). Several studies have established the significance of internal control systems in the operations of organizations (Chang, 2019; Masanja, 2018; Lakis, 2012).

The purpose of this research is determining the effect of accounting information and communication control on financial performance of Sacco's in Kenya.

## Literature Review

### Conceptual and Theoretical Framework

This study was based on attribution theory. This theory was originally proposed by Heider (1958), an Austrian psychologist, in which he attempted to explain why the perceivers attribute the properties of an object they sense to the object itself when these properties only exist in their minds. Proponents of this theory include Sullivan and Sheffrin (2003), who studied using attribution theory to scrutinize the usage of information in the communal setting to explain events and behaviors.

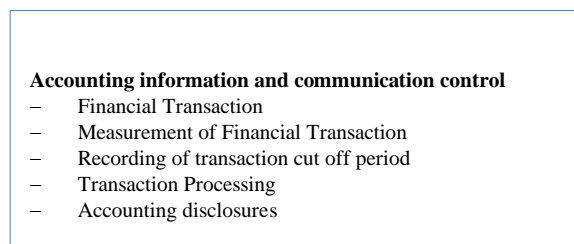
Young Shin Kim (2012) declared that when assessors trust similar people would have acted differently in each circumstance, they (assessors) tend to attribute accountability for consequence to the person. Attribution theory deals with how individuals understand events and behaviors and how they attribute causes to the events and behaviors. On the other hand, when assessors believe similar persons would have acted similarly, the evaluators have a habit of attributing responsibility for the outcome to the situation. According to Frenkel, Hommel, and Rudolf (2000) the first situation denotes to interior or dispositional attributions while the second one refers to external or situational attributions. Earlier literature shows that people are inclined to attribute others behavior to dispositional inclinations and to attribute their own behavior to situational circumstances (Nyong'o, 2014). Often, this is when the experiential deeds are undesirable. Accordingly, assessors are likely to conclude the letdown to detect internal control on assets security as a dispositional inclination on the management's part which concludes that managers and oversight bodies are negligent. Attribution theory therefore proposes that auditors report on the efficiency of firms "internal control systems. Auditors are required to seek to gain a better understanding of the controls activities in place, evaluate, propose, implement and test the operating effectiveness of the internal controls of their client's firms. This is deemed necessary for the auditors "independence and perhaps scaling back of other substantive audit procedures for the required level of security assurance. According to Raviv & Abudy, (2016), evaluators can use the audit processes as a basis to determine negligence if auditors fail to detect internal control related lapses and malpractices that may occur. The attribution theory suggests that when fraud and other malpractices occur, identified parties should be held accountable. Accountable parties will include management, governance bodies and auditors. Auditors, being the "public watch dogs" are most likely to be held accountable if assessors determine poor audit services were provided (MacKay, 2005).

Therefore, they need to have an adequate understanding of the organizational internal control for proper revenue generation. The theory was important as we seek to attribute the effect of accounting information and communication systems on the security of assets. This theory is relevant to the study since it proposes that information and communication systems are key elements of internal control systems that they help to prevent fraud.

### Conceptual Framework

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 accounting information and communication system and the dependent variable was financial performance of Saccos as indicated in figure 1.

#### Independent Variable



#### Dependent Variable

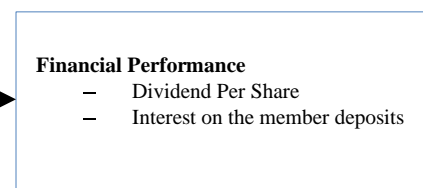


Figure 1: Conceptual Framework

### **Accounting Information and Communication Control**

An information system entails infrastructure (physical and hardware components), software, people, procedures, and data (Fitrios, 2016). Infrastructure and software have less significance, in systems that are manual. Most information systems make use of information technology (IT). A technology that merges computing with high-speed communications links carrying data, sound and video. Accordingly, an information system encompasses methods and records that: Identify and record all valid transactions. Measure the value of transactions in a manner that permits recording their proper monetary value in the financial statements. Determine the time period in which transactions occurred to permit recording of transactions in the proper accounting period. Present properly the transactions and related disclosures in the financial statements. Azmi and Sri (2020) stresses that protection of information system entails; control of access, audit controls that track servers and programs, and people controls (check level of training and separate employee functions, input controls, and output controls). According to Taiwo (2016), internal control requires that all pertinent information be identified, captured, and communicated in a form and time frame that enable people to carry out their financial reporting responsibilities. Effective communications should occur in a broad sense with information flowing down, across, and up within all the sections of the organization (Diavastis, Anagnostopoulou, Drogalas & Karagiorgos, 2016). Recent literature on internal control system frameworks has raised some concerns on information and communication as one of the internal control system components because of their importance in influencing the working relationship within the organization at all levels (Amud & Inanga, 2009). Hence, such information must be communicated throughout the entire organization in order to permit personnel to carry out their responsibilities with regard to objective achievement. Some losses in banks occur because relevant personnel are not aware of or do not understand the bank's policies. In several instances, information about inappropriate activities that should have been reported upward through organizational levels is not communicated to the board of directors or senior management until the problems became severe. In other instances, information in management reports is not complete or accurate, creating a falsely favorable impression of a business situation. Adequate information and effective communication are essential to the proper functioning of a system of internal control. From the bank's perspective, in order for information to be useful, it must be relevant, reliable, timely, accessible, and provided in a consistent format. Information includes internal financial, operational and compliance data, as well as external market information about events and conditions that are relevant to decision making. Internal information is part of a record-keeping process that should include established procedures for record retention (Diavastis, Anagnostopoulou, Drogalas & Karagiorgos, 2016).

### **Financial Performance**

According to Nyakundi (2014), performance refers to the ability to operate efficiently, profitability, survive grow and react to the environmental opportunities and threats. In agreement with this, Sunday et al. (2018) asserts that, performance is measured by how efficient the enterprise is in use of resources in achieving its objectives. It is the measure of attainment achieved by an individual, team, organization or process. Performance refers to the capacity to work successfully, profitably, to thrive, to evolve and to adapt to environmental opportunities and threats (Hanoon, Khalid, Rapani, Aljajawy & Al-Waeli, 2021). As a result of applying internal controls, the Saccos may be able to have adequate capital. This may be as a result of elimination or reduction of wastages of resources and loss due to errors, also through the reduction of fraud not only in their day-to-day business operations but also in totality. This may lead to more increased confidence by their members, thus encouraging them to deposit more of their incomes with their Saccos. The ultimate goal that will be realized will be increased profits at the end of each financial year (Bhunia, Mukhuti & Roy, 2015).

Also, the outcome of effective internal controls will be reduced costs of operations. Revenues will be recorded properly with reduced leakages. Increased revenue growth and reduced costs leads to improved profitability performance (Fullerton & Wempe, 2019). Members will enjoy increased dividend pay outs. The value of shares of members will increase. Internal control leads the management of Saccos to be more accountable to their members' resources. By placing specific roles and responsibilities to every official members of their board of directors, the management team and other employees, a better administration structure will be realized. And it would be easy for each office holder to be held accountable in the event either any mismanagement if noted or misappropriation of financial resources hence adequate capital, savings mobilization and increased profits. Sethibe and Steyn (2016) mention accounting-based performance using three indicators: return on assets (ROA), return on equity (ROE), and return on sales (ROS). Each measure was calculated by dividing net income by total assets, total common equity, and total net sales, respectively. According to Kotler (2016), strong performer firms are those that can stay in business for a good number of years. Nyakundi (2014) also found out that, the ability of a firm to survive in business in an indicator of good financial performance.

### **Empirical Review**

Muhunyo and Jagongo (2018) sought to establish the effect of internal control systems on financial performance in public institutions of higher learning in Nairobi City County. The study used a descriptive research design. It took on a sample of 96 employees. Primary data was collected from sample population using open and closed ended questionnaires. The study realized that the information and communication as indicators of internal control systems have a significant influence on the financial performance of the institutions of higher learning in Nairobi City County, Kenya. The variables explained 99.1% of the changes in financial performance of the institutions.

Kendogor (2018) sought to establish the influence of internal controls on financial management in Uasin Gishu county government of Kenya. The study adopted descriptive research design. The target population for this study consisted of the six administrative divisions in the County Government of Uasin Gishu. Questionnaires were administered to the heads and deputy heads of finance, internal audit and procurement as the respondents of the study. In conclusion, the results shows that an increase in accounting information system positively influences financial management and therefore accounting information system is essential but other strategies must be applied to enhance financial management. Kisanyanya (2018) sought to establish the effect of internal control systems on financial performance of public institutions of higher learning in Vihiga County. The study adopted a descriptive research design. The target population comprised of 140 employees of the four public institutions of higher learning under study in Vihiga County. The study had a sample of 96 employees. Primary data in this study was collected from sample population with aid of semi-structured questionnaires. The study found that the institutions under study had effective flow of information and communication channels. The institutions had modern and efficient information and communication technologies to enhance adequate transfer of information, excellent record of transactions and proper accountability for assets. In addition, the study found that effective flow of information and communication enhanced financial accountability and financial performance of the institutions. Githui (2019) sought to investigate the effect of internal control system on credit risk management among commercial banks in Kenya. Descriptive research design was used in investigating the research questions. The study used census. Questionnaires were used to collect primary data in this study. The regression findings showed that the Information and communication had a positive influence on credit risk management, but the relationship was not statistically significant. Finally, there was a positive and significant effect of control activities on credit risk management. Urquia (2018) investigated the relationship between internal control systems and financial performance in Surigao del Sur State University. The research was conducted using both quantitative and qualitative approaches using survey, correlation and case study as research designs. Data were collected using questionnaires and interview guide basically Deans, and Finance and Accounts staff as respondents from a population of 13 Surigao del Sur State University staff. The study found that management of the institution is committed to the control systems. The Study therefore concludes that accounting information systems do function although with hiccups and that there was a significant relationship between internal control systems and financial performance in an Institution of higher learning. Wanjohi (2014) assessed fraud in the banking industry in Kenya, with the primary objective of establishing the causes of different types of fraud and determining the appropriate strategies that can be employed to prevent and control for the occurrence of fraud. The study was a case study of the Commercial Bank of Africa (CBA) and the researcher selected a sample size of 68 employees drawn from CBA branches in Nairobi County. Data was collected using questionnaires and analyzed using SPSS. The findings showed that the major causes of fraud were availability of opportunities for the commission of fraud, poor personnel practices, and relaxed accounting systems and controls. In terms of weak internal controls and accounting systems, the results showed that nearly half of those surveyed said that the accounting systems and controls were weak and was responsible for fraud in the bank. In addition, about 4 out of 10 of the employees surveyed noted that poor IT structures also contributed to fraud cases. The regression analysis revealed that poor IT structures was negatively correlated with the pressure to commit fraud and the rationalization of the act. IT structures had a positive effect on effective prevention and control of fraud.

In the same study by Mwazo, Weda, Omondi and Njenga (2017) in which they sought to investigate the role of internal controls in service delivery at the Taita Taveta Treasury, the information and communication system was conceptualized as communication system, communication channels, communication structures, mutual relationships and demands of results. A survey of opinions showed that the treasury had established good communication systems, that there are good communication channels, and that there was good mutual understanding among institutional groups. The correlation analysis showed that communication systems had a positive association with service delivery. Kiyieka and Muturi (2018) investigated the role of internal controls in the performance of deposit taking SACCOs in Kisii, Kenya. The target population was 10 deposit-taking SACCOs. The researchers investigated the information and communication system and found out that deposit taking SACCOs had established a team of personnel responsible for managing the various activities in the communication system, that employees understood the importance of internal controls, and that there were guidelines and policies governing communication. The regression analysis showed that there is a positive relationship between the information and communication system and the financial performance of SACCOs in Kisii, Kenya.

#### *Research hypothesis*

Ho1: Accounting information and communication have no significant effect on financial performance of Sacco's in Kenya

## **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. 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 of 175 deposit taking SACCOs in Kenya from SASRA records (SASRA, 2021) and 875 respondents in the respective Sacco's. The sampling frame consisted of CEOs, finance managers, internal auditors, ICT managers and risk managers. The sample size was determined using the 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 Sacco's in Kenya.

The study used from two sources, primary and secondary. The study utilized primary data collected using 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 secondary study specifically on financial performance variable. 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 reliability and validity of research instrument. This study assessed 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 statistical analysis for quantitative data. Descriptive statistics was mainly be used to show the trend of the data. The researcher used descriptive statistics that include measure 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.

## Result And Discussion

### Preliminaries Results

The study administered 610 questionnaires to respondents of the Deposit Taking Saccos in Kenya out of which 473 responded. The researcher obtained data from 77.5% of the administered questionnaires. Content validity was used to test instrument validity; all aspects of the questionnaire were pre-tested to check for question content, wording, sequence, form and layout, question difficulty and instruction. Construct validity confirmed convergent validity. Financial performance factor loadings were above 0.4 with an average of 0.838 while accounting Information and Communication control factor loading were also above 0.5 with an average of 0.719 hence they achieved convergent validity (Ab Hamid, Sami & Sidek, 2017). To measure the reliability, Cronbach Alpha technique was employed. Accounting Information and Communication control had Cronbach Alpha of 0.859 while financial performance had 0.916. Both values were greater than 0.7 hence reliable (Cronbach, 1951).

### 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 to the statements. Descriptive measures included percentage, frequency, mean and standard deviation. The pertinent results are presented in Table 1.

**Table 1:** Descriptive Results for Accounting Information and Communication control

Accounting Information and Communication control	5	4	3	2	1	Mean	SD
1. An accounting information System for collection and follow up for due accounts	55.8% (264)	29.2% (138)	8.7% (41)	2.7% (13)	3.6% (17)	4.3	1.0
2. SACCO Reporting system spells out responsibilities of each department	55.4% (262)	18% (85)	19.2% (91)	6.1% (29)	1.3% (6)	4.2	1.0
3. SACCO has policies and guidelines for effective communication	23.3% (110)	48.4% (229)	22.2% (105)	5.1% (24)	1.1% (5)	3.9	0.9
4. Management practice demands that all relevant information is conveyed in accurate, clear and reliable manner	33.4% (158)	45% (213)	14.6% (69)	5.7% (27)	1.3% (6)	4.0	0.9
5. SACCO ensures that all relevant information is conveyed in a timely manner	26.8% (127)	49.3% (233)	17.1% (81)	5.7% (27)	1.1% (5)	4.0	0.9
6. Management Provides feedback to employees on operation of accounting information system	29.2% (138)	55% (260)	9.5% (45)	5.3% (25)	1.1% (5)	4.1	0.8
7. Information can be disclosed to both internal and external interested parties	17.3% (82)	63% (298)	11.2% (53)	6.8% (32)	1.7% (8)	3.9	0.8
8. SACCO conducts periodic review of effectiveness of its accounting information system	29.6% (140)	53.3% (252)	6.1% (29)	10.4% (49)	0.6% (3)	4.0	0.9

N=473; KEY: 1= Strongly Disagree; 2= Disagree; 3= Neither Agreed Nor Disagreed; 4= Agree; 5=Strongly Agree; SD= Standard Deviation.

From table 1, On questionnaire on accounting information system section on whether there is accounting information System for collection and follow up for due accounts in their organization, 55.8% strongly agreed, 29.2% agreed, 8.7% neither agreed nor disagreed, 2.7% disagreed and 3.6% strongly disagreed. On the statement if SACCO Reporting system spells out responsibilities of each department, 55.4 % strongly agreed with the statement, 18 % agreed, 19.2% neither agreed nor disagreed, 6.1% disagreed and 1.3% strongly disagreed. And on whether the SACCO has policies and guidelines for effective communication 23.3% of the respondents strongly agreed, 48.4% agreed, 22.2% neither agreed nor disagreed, 5.1% disagreed and 1.1% strongly disagreed.

On the other hand when asked if Management practice in their organization demands that all relevant information is conveyed in accurate, clear and reliable manner 33.4% of the respondents strongly agreed, 45 % agreed, 14.6 % neither agreed nor disagreed, 5.7 % disagreed and 1.3 % strongly disagreed. When asked whether their SACCO ensures that all relevant information is conveyed in a timely manner 26.8% of the respondents strongly agreed with the statement, 49.3 % agreed with it, 17.1 % neither agreed nor disagreed, 5.7 % disagreed and 1.1 % strongly disagreed.

Furhtermore, when asked on whether the management of their organization provides feedback to employees on operation of accounting information system 29.2% of the respondents strongly agreed with the statement, 55 % agreed with it, 9.5 % neither agreed nor disagreed, 5.3 % disagreed and 1.1 % strongly disagreed. On the statement whether Information can be disclosed to both internal and external interested parties, 17.3% of the respondents strongly agreed, 63 % agreed, 11.2% neither agreed nor disagreed, 6.8 % disagreed and 1.7% strongly disagreed. On whether the SACCO conducts periodic review of effectiveness of its accounting information system 29.6% of the respondents strongly agreed with the statement, 53.3 % agreed with it, 6.1 % neither agreed nor disagreed, 10.4 % disagreed and 0.6 % strongly disagreed. The results are similar to;

Muhunyo and Jagongo (2018) realized that the information and communication as indicators of internal control systems have a significant influence on the financial performance of the institutions of higher learning in Nairobi City County, Kenya. The variables explained 99.1% of the changes in financial performance of the institutions. Kendogor (2018) showed that an increase in accounting information system positively influences financial management and therefore accounting information system is essential but other strategies must be applied to enhance financial management. Kisanyanya (2018) found that the institutions under study had effective flow of information and communication channels. The institutions had modern and efficient information and communication technologies to enhance adequate transfer of information, excellent record of transactions and proper accountability for assets. In addition, the study found that effective flow of information and communication enhanced financial accountability and financial performance of the institutions.

**Table 2:** Financial Performance

<b>Financial Performance</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>Mean</b>	<b>Stdev</b>
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

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

### **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

		Accounting system	information Financial Performance
Accounting system	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	473	
Financial Performance	Pearson Correlation	.661**	1
	Sig. (2-tailed)	.000	
	N	473	473

**Source:** Field Data (2022)

From the table 3 above it shows that accounting information and communication system was positively correlated to financial performance ( $r=0.661$ ,  $p < 0.01$ ) and it was significant at 99% confidence level thus increase in accounting information system makes financial performance to increase. The findings are in agreement with a research conducted by Muhunyo and Jagongo (2018) sought to establish the effect of internal control systems on financial performance in public institutions of higher learning in Nairobi City County. The study noted that the information and communication as indicators of internal control systems have a significant influence on the financial performance of the institutions of higher learning in Na

irobi City County, Kenya. Further, Kendogor (2018) showed that an increase in accounting information system positively influences financial management and therefore accounting information system is essential but other strategies must be applied to enhance financial management.

Nonetheless, other studies have indicated that accounting information system as an element of internal accounting control system does not always lead to significant and positive effect on financial performance. Sigilai (2017) focused on the assessment of internal control systems effects on revenue collection at Nakuru Level Five Hospital. The study revealed that accounting information system has negative and insignificant effect on revenue collection at Nakuru Level Five Hospital. Ng'etich (2017) who examined the effect of internal controls on the financial performance of firms listed at the Nairobi Securities Exchange. The findings revealed that accounting information system have positive and insignificant effect on financial performance of firms listed at the Nairobi Securities Exchange.

### Linear Regression Analysis

Linear Regression analysis for Accounting Information and Communication control on financial performance was done so as to find out the effect of Accounting Information and Communication control 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 as shown in Table 4.

**Table 4:** Regression Analysis of Independent Variable and Financial performance

<b>Model Summary<sup>b</sup></b>						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.661 <sup>a</sup>	.437	.436	.46951		
a. Predictors: (Constant), Accounting information system						
b. Dependent Variable: Financial performance						
<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	80.534	1	80.534	365.336	.000 <sup>b</sup>
	Residual	103.827	471	.220		
	Total	184.361	472			
a. Dependent Variable: Financial Performance						
b. Predictors: (Constant), Accounting Information System						
<b>Coefficients<sup>a</sup></b>						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.886	.118		15.925	.000
	Accounting information System (AIS)	.551	.029	.661	19.114	.000
a. Dependent Variable: Financial performance						

From the table above 4 the value of R square is 0.437 shows that accounting information and communication system explains 43.7% of variance in financial performance of Deposit Taking Sacco's in Kenya. From the ANOVA table the significance of the model has a value ( $F(1,471) = 365.336$ ,  $p < 0.01$ ) thus it is significant at 99% confidence level this shows that the model was feasible. From



the coefficient table accounting information system was significant at 99% confidence level ( $p$  value  $< 0.01$ ). These results are in agreement with other studies. Kiyieka and Muturi (2018) showed that there is a positive relationship between the information and communication system and the financial performance of SACCOs in Kisii, Kenya. Further, Mwazo, Weda, Omondi and Njenga (2017) showed that communication systems had a positive association with service delivery. Githui (2019) showed that the Information and communication had a positive influence on credit risk management, but the relationship was not statistically significant. Other studies have not supported results of this study for example; Mogunde (2016) revealed that accounting information system has positive and insignificant effect on financial performance of cement manufacturing companies in Kenya. Yemer (2017) found that information and communication were not significant predictors of hotels revenue. Further, Asegdew (2016) revealed that some components of accounting information systems had insignificant contribution to the financial performance of a manufacturing firm.

The regression equation for accounting information system becomes;

$$Y \text{ Per} = 1.886 + .551 \text{ AIS}$$

From the regression equation it means that when accounting information system increase by 0.551% financial performance would change by 1% in the same direction. This result is similar to correlation findings where accounting information system was positively correlated to financial performance. In this regards, an accounting information System for collection and follow up for due accounts, reporting system spells out responsibilities of each department, policies and guidelines for effective communication and presence of periodic review of effectiveness of its accounting information system enhance financial performance of deposit taking Sacco's in Kenya.

These results are supported by other researcher, for instance, Githui (2019) sought to investigate the effect of internal control system on financial performance among commercial banks in Kenya. Regression findings showed that the Information and communication had a positive influence on credit risk management, but the relationship was not statistically significant. Kisanyanya (2018) also found that effective flow of information and communication enhanced financial accountability and financial performance of the institutions. However, the results are not incongruent with other studies such as Asiligwa and Rennox (2017) who investigated the effect of internal controls on the financial performance of commercial banks in Kenya. The study revealed that information and communication has positive and insignificant effect on financial performance of commercial banks in Kenya. Serem (2016) who examined the relationship between internal management controls and efficiency of service delivery of commercial banks in Kenya. The study revealed that accounting information system has positive and insignificant effect on financial performance of commercial banks in Kenya.

## Conclusion

The study concluded that accounting information and communication has no significant influence on financial performance of Deposit Taking Sacco's in Kenya. The level of information accessibility to the employees as well as the effectiveness of the Sacco's' communication system contributes greatly to the ability of the banks to grow financially. The study gives evidence that the Sacco's in Kenya' confidential information is a key asset to the Sacco's as access to unauthorized personnel may ruin the Sacco and contribute to the threats of losses. To enhance financial performance, Sacco's ensure information is disclosed to both internal and external interested parties and conducts periodic review of effectiveness of their accounting information system. The study also established not all Sacco's have an accounting information System for collection and follow up for due accounts and SACCO Reporting system does not adequately spells out responsibilities of each department.

Information and information flow is central to the smooth running of an internal control system. Effective communication between personnel and flow of information across organizational hierarchies should be continuously improved. The study recommended that anti-fraud policies should be updated regularly in line with the changing nature of risks and risk exposure. Further, the study recommended that SACCO should conduct periodic review of effectiveness of its accounting information system this would ensure that the management receives timely, relevant, and reliable reports for decision-making.

Despite the contributions made by this study, it highlights a few aspects to be considered by future researchers. Firstly, the propositions put forward in this study emphasize the importance of having efficient and effective accounting information and communication in Sacco's. The accounting information and communication explained up to 43.7% implying there are other factors that may have influence financial performance of Sacco's despite accounting information and communication which further studies should consider. Methodologically, the study focused on Sacco's which are regulated by SASRA. This limits the applicability and generalizability of the study recommendation to the other financial institutions which are not regulated by SASRA. This includes commercial banks and microfinance banks which are regulated by Central Bank of Kenya.

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**Institutional Review Board Statement:** Ethical review and approval were waived for this study, due to that the research does not deal with vulnerable groups or sensitive issues.

**Data Availability Statement:** The data presented in this study are available on request from the corresponding author. The data are not publicly available due to privacy.

**Conflicts of Interest:** The authors declare no conflict of interest.

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