

**EFFECTS OF INTERNAL CONTROL ON THE FINANCIAL PERFORMANCE  
OF SACCOS IN MERU COUNTY**

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## DECLARATION AND RECOMMENDATION

### Declaration

This research thesis is my original work and has not been presented for a degree or any other award in any other University.

Sign..... Date.....

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BUS-3-0291-1-2017

### Recommendation

We confirm that the work reported in this thesis was carried out by the candidate under our supervision.

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## **DEDICATION**

I dedicate this thesis to my family for their endless support and love throughout.

Specifically, to my daughters, Precious Gakeni and Mitchel Kanana.

## **ACKNOWLEDGEMENT**

I express my gratitude to the almighty God for the strength and health throughout my studies. I am deeply indebted to my supervisors Prof. Felix Mwambia, Ph.D., and Dr. Nancy Rintari, Ph.D., for the attention and commitment they have shown. Thank you for the tireless work and time in making my study a success. I acknowledge my husband Eric Mwenda as well as daughters, Precious Gakeni and Mitchel Kanana for their sacrifice, encouragement and unending support throughout my studies. I would also wish to acknowledge the moral support from my colleagues and course peers. Thank you for the encouragement. I would also wish to thank the respondents who took their time and responded to this study's questionnaires. Also, a big thank you to the cyber cafe staff who took the time to print and bind my document.

## ABSTRACT

Sacco's main objective is to empower people's financial health through mobilizing members' savings and issuing credits. World bank 2017 report showed that more than 1.2 billion persons globally belonged to at least one or two of 3 million co-operatives in the world. Kenya's Sacco sector is the largest in Africa and the seventh worldwide with 8 million members in more than 11,000 registered Sacco's. Out of these, 230 have Front Office Service Activities (FOSAs). The study sought to assess the effects of internal controls on the financial performance of Saccos in Meru County. This study evaluated the effect of the control on the financial performance of Saccos in Meru. The objectives of the study were to establish the effect of communication on the financial performance of Saccos; to determine the effect of risk assessment on the financial performance of Saccos; to find out the effect of control functions on the financial performance of Saccos; and to assess the effect of monitoring on the performance of Saccos in Meru County. The theories underpinning the study were agency theory, attribution theory and contingency theory. Questionnaires with open and closed-ended questions were administered to collect primary data among credit managers, finance managers and an auditor in 24 Sacco in Meru County. The research philosophy of the study was positivism. The study adopted a cross-sectional mixed design method. The study targeted a sample size  $n=96$  respondents arrived by multiplying 4 respondents in the 24 Sacco as a basis of analysis. The data was analyzed both quantitatively and qualitatively using (SPSS V 23). The output was presented descriptively by use of mean, standard deviation, frequencies and percentages. Inferential statistics such as correlation coefficient  $\beta$ , coefficients of determination R and P-values were used from a multiple regression equation to measure the direction, strength and significance of the relationship between control activities and financial performance of Sacco Banks. ANOVA was utilized to verify the goodness of fit of the model. The results upon testing the hypotheses indicated that all the four independent variables; communication, risk assessment, control functions and monitoring had a significant relationship with the dependent variable while tested independently. Further, the variables were tested together and the results revealed that only communication and risk assessment had a significant relationship with the financial performance of Saccos in Meru County. The study concluded that all the four independent variables needed to be emphasized since they influenced the financial performance of Saccos in Meru County. The study recommended that Saccos should adopt internal control systems that best fit their kind of operations while emphasizing more on communication and risk assessment as these two seemed to have more influence on the financial performance.

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## **ABBREVIATIONS AND ACRONYMS**

<b>CBK</b>	Central Bank of Kenya
<b>COSO</b>	Committee of Sponsoring Organization
<b>FOSA</b>	Front Office Service Activities
<b>ICS</b>	Internal Control Systems
<b>ROA</b>	Return on Assets
<b>ROE</b>	Return on Equity
<b>ROS</b>	Return on Sales
<b>SACCO</b>	Savings and Credit Cooperative Societies
<b>SASRA</b>	Sacco Societies Regulatory Authority
<b>WOCCU</b>	World Council of Credit Unions

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of the Study**

In the current business world, all businesses are struggling to come up with strategies that enable them to outperform their competitors. Saccos are also not an exception and therefore the reason why most Saccos are adopting internal control systems. Their main aim is to enable them to control the activities within the Saccos to enhance their financial performance. According to Kiaritha (2015), and the International Cooperative Alliance (2005) a cooperative was an independent association of persons united in free will to satisfy similar economic goals. The major doctrines of cooperatives included unpaid and uncluttered affiliation; elected associate control; participant fiscal involvement; sovereignty and freedom; facility of schooling, training and info; collaboration amongst cooperatives; and apprehension for the public (International Cooperative Alliance, 2005; International Labour Organization, 2002).

Rochdale society of equitable pioneers started the modern history of cooperatives in the year 1844. It was the first one to pay patronage dividend being the early purchaser cooperative hence framing the reason for the cutting-edge helpful development. The Rochdale Pioneers' co-operative became the prototype for societies in Great Britain (Gatuguta, Kimotho & Kiptoo, 2014). Mechanization of that, resulted from the industrial revolution which made people come up with innovative ideas to set them free from poverty. The traders joined together to come up with food stores with a cooperative approach. On 21 December 1844, they came up with a small outlet with just flour, sugar,

butter oatmeal, and a few candles as their products. Within a quarter of a year, they extended their determination to incorporate tea and tobacco. Before long, they were known for giving high caliber and unadulterated merchandise. After ten years, the British co-usable development had developed to about 1,000 co-agents. The Cooperative Group is one of the biggest market chains in the United Kingdom (Gatuguta et al., 2014).

### **1.1.1 Global Perspective of SACCOs**

Cooperatives have been embraced by all countries in the world. The history had it that the Chinese learned the idea of cooperatives from Babylonians who farmed as a group and came up with savings and lending business to the farmers (International Monetary Fund [IMF], 2007) as quoted in (Kiaritha, 2015).

In North America, the cooperative movement was also traced from farmers who teamed up in tilling the land, for plantations as well as during harvesting periods. The United States began its first cooperative movement in 1752 nearly a quarter-century before the declaration of independence was signed. Currently, cooperatives have grown tremendously over the years. International monetary fund estimated the total assets of cooperatives to be 14% of the total banking sector market share in 2004 (IMF, 2007). Comparatively, cooperative movements were ranked fairer than commercial banks due to their resilience in times of financial crises (Cook, Chaddad & Iliopoulos, 2004). This was explained by the fact cooperative banks investments tended to be less predictive and therefore their returns were more stable compared to commercial banks (IMF, 2007). Cooperatives in developed countries had a sustainable source of funding and not significantly affected by monetary policies and prices in the financial sector. Further, the

interest rates by the cooperatives were more favorable compared to commercial banks in the developed countries (World Council of Credit Unions [WOCCU], 2009).

### **1.1.2 Regional Perspective of SACCOs**

According to Kiaritha (2015), African Sacco's had grown in a big way with at least 7% of the African population belonging to a Sacco. However, despite the growth, the Saccos were faced with challenges such as poor representation of people in society. Pollet (2009) as quoted in (Kiaritha, 2015) noted there was a division of society by classes due to economic capabilities that acted as a hindrance to further growth. However, by 2008, the savings in Saccos entirely in Sub-Sahara Africa grew by 31.9% on average, a lower growth compared to past years. The credits that were given grew by 12% on average, a lower level compared to the past years (WOCCU, 2009) For example in 2007, the credits offered Saccos increased by 35.3% while in 2006, the credits increased by 21.2 %.

### **1.1.3 Kenyan perspective of Sacco's**

The history of Saccos in Kenya is traced from 1908 which has been growing. The first Sacco was established in 1908 followed by a dairy cooperative in 1931 which was a government first conventional contribution. More cooperatives were formed in 1955 when cash crops began to be grown. This was as a result of the Swinnerton plan which stirred the formation of more cooperatives due to the growth leading to registration of 1,894 societies between 1932-1969. Some of the cooperatives that were formed included (Kenya Cooperative Creameries [KCC], 1925; Kenya Farmers Association [KFA], 1923; and Kenya Planters Cooperative Union [KPCU], 1923) these cooperatives were market oriented and had auxiliary focus. After the first cooperative ordinance was promulgated,

all the companies registered then became cooperatives in 1931. As an initiative towards poverty eradication, the government began the process of implementing Structural Adjustment Programs (SAPs) for a market economy. An area paper No.1 of 1986 on economic management for restored development, laid accentuation on the requirement with the expectation of complimentary private division. This act drove financial turn of events. In the paper, the administration committed itself to enhance Kenyan participation in economic growth through cooperatives (Kiaritha, 2015).

Management of the cooperatives was left to the management committees and the members. The government was only left with the advising job. In the sessional paper No.1 of 1994 on recovery and feasible development to the year 2010, it underlined the requirement for the private part to lead and quicken a continued economy and advancement. The legislature went further in the sessional paper No.6 of 1997 on co-employable in liberalized economic environment and surveyed its association through giving an administrative system to the cooperatives which would assist them with making decisions in the serious financial condition. The expulsion of the administration job in the general public activities through an inspected demonstration nearly observed to the breakdown of the cooperatives in the nation. Following an ever-soaring number of businesses that were failing and the increased cases of fraud, firms laid a greater value on the internal control systems. These systems were unique to each firm given their different operating environments. The management beard the responsibility of designing and implementing effective internal control and communicating the same to the board of directors and shareholders (Kuhn & Sutton, 2010).

Other groups that had an interest in the internal controls included the customers, suppliers and the auditors. This was true since these affect the accountability, the long-term confidence and the corporate structure of the organization (Rittenberg & Schwieger, 2001). Public scandals such as Enron and Tyco international brought to birth the "public company accounting reform and investor protecting act" commonly known as the "Sarbanes-Oxley Act (SOX Act)". This Act also known as the corporate responsibility act of 2002, allowed strict reforms that saw the management assume the responsibility for the control system with regards to financial disclosures within the company and provide an assessment of its effectiveness (Institute of Internal Auditors, 2013).

The Kenya Sacco sub-area contained both store taking (FOSA working Saccos) and non-store taking Saccos. The general pattern was that a Sacco starts as a non-store taking Sacco business and develops to store taking Sacco business (DT-Sacco) so as to grow the scope of monetary administrations to individuals. Saccos that had front office administrations were authorized, directed and managed by Sacco society administrative power (SASRA) (Kiyieka & Muturi, 2018). In Kenya Sacco banks represented 45% of the nation's growth domestic product (GDP).

Until this point, the division has figured out how to assemble over Ksh 200 billion in stores and control resources adding up to Ksh 210 billion (Ministry of Co-operative Development and Marketing [MOCD &M], 2010). These tremendous assets amassed by Sacco banks ought to permit them to contend in an open domain. Wanyama (2009) attested that following the adjustment in the monetary scene in Africa during the 1990s, saw the improvement of new strategies and guidelines in Kenya in 1997 that looked to change co-agents. By and by, the Sacco banks in Kenya are looked at by a variety of



difficulties such as: helpless record keeping, credit overabundances, high lack of education level among the Sacco individuals, review unpaid debts, administrative insufficiency, insufficient capital, and substantial tax assessment.

An examination by WOCCU (2008) demonstrated that Saccos faced genuine liquidity deficiencies and the greater part neglect to coordinate their customers' requests for credits and their reserve funds. Ondieki et al. (2011) further expressed that the insufficiency of administrative aptitudes and expertise kept on influencing Saccos in Kenya. Today, inside control is of prime significance to banks because proficient bookkeeping arrangements of any association flourishes where compelling control frameworks exist (Wanemba, 2010). Since the worldwide markets kept on being unpredictable, there had been expanded need to improve investor return. Firm supervisors are progressively receiving interior control components to increase a serious edge in the market (Rittenberg & Schwieger, 2001).

### **1.1.5 Sacco's in Meru County**

Most Saccos in Meru county are agriculturally based where for instance tea, coffee farmers, or dairy farmers unite to save and borrow from the cooperatives. Other groups include teachers, hospital staff, business people in organizations like the transport sector, and university among others. Different groups pool together to save and get financing for school fees, business, health, and other economic activities. According to Sacco Societies Regulatory Authority [SASRA] (2018), list of registered Sacco in Kenya, include Nyambene Arimi Sacco society ltd; MMH Sacco; Times u Sacco society; Imenti Sacco society ltd; Dhabiti Sacco society; Capital Sacco society; Centenary Sacco society; Yetu

Sacco; Nawiri Sacco; Trans nation Sacco; Unaitas Sacco society; Mwalimu national Sacco society; Kathera rural Sacco society; Joinas Sacco society; and Chai Sacco among others.

The Sacco Societies Act 2008 established the Sacco Societies Regulatory Authority (SASRA) that carried out the licensing, supervision, and regulation of deposit-taking institutions. Saccos were categorized as either deposit-taking, that is regulated by SASRA or non-deposit taking, that is regulated by the commissioner for cooperatives. For Saccos to get SASRA licenses, they ought to be registered under the Cooperative Societies Act CAP 490. This regulatory framework guided the development of Saccos. Co-operatives in Kenya played a key role in the development of the country both socially and economically (Kiyieka & Muturi, 2018). According to the ministry of co-operative development and marketing, cooperatives encompasses all sectors of the economy and provide a platform for mobilizing resources

#### **1.1.6 Internal Controls in Sacco's**

Firm' internal control systems are key for saccos since the existence of a poor control system is the underlining source of poor performance in saccos particularly because fraud goes undetected (Etuk, 2011). From an administration perspective, need arises to guarantee that internal control frameworks are set up considering the end goal to decrease the event of misrepresentation. Inside control is an ever-changing indispensable process that adjusted ceaselessly to progressions in the banking industry (Etuk, 2011). Within every financial institution, it is important to provide products and services at an impartial price that guarantee cost-effectiveness in the production process. Thus, the degree to which internal control allows stability in any organization is seen its increase in

popularity (Rezaee, 2002). This is because these control systems are the foundations of adept accounting and also grows towards the set goals. Internal control is the guideline for any organization to oversee the attainment of the set goals. The goals range from attaining efficiency in operations, accuracy in financial reporting and compliance with relevant laws and regulations (Shabri, Saad & Bakar, 2016). Where these variables lacked, failure is almost inevitable. Indeed, the tread way commission findings in the America in 1987 found fraudulent company financial reporting were rife where internal controls lacked or were weak (Shabri et al., 2016).

As such, constant and regular update of internal policies by organizations ensured that their systems of internal control were enhanced. The control mechanism employed by organizations was key to fostering the efficiency and returns of an organization (Kantzos & Chondraki, 2006). According to Fadzil, Haron, and Jantan (2005), a viable control framework guaranteed the realization of organizational performance. This was guaranteed through a thorough audit of the financial information; defending the firm resources and assets; operations that were in consistency with regulatory provisions rules; and guaranteeing viability in the management activities. One of the major responsibilities of top management in any public company in the preparation of reliable financial information (Mutange & Datche, 2016).

Management of a company's business banks on the availability of accurate and precise data. According to Wanjohi (2013), an assessment and analysis of performance were vital to regulating and specifically addresses the subsequent. That is, what happened, reasons for the occurrence, and what to do concerning it. Financial performance responded with regards to the management systems. This was because these systems provided

information on the track of the set objectives by showing the position of the organization, affirming the priorities and driving growth. Thus, it was rendered true that internal controls were the measures whose end was monetary performance (Ibrahim, Diibuzie, & Abubakari, 2017).

However, due to the extent to which the data collection strained the resources of small firms and inadequacy of the available financial information, subjective measures were difficult to adopt (Siminyu, Clive & Musiega, 2016). Whittington and Pany (2004) stated that increased profit, revenue growth, and the return on capital underlined an objective measure of performance. Further, the incorporated market value added (MVA) measure, gauged the firm worth dependent on the investors holding against the all-out ventures (John, 2011). This rating depended on traditional highlights of money related execution. This incorporated net returns, benefit development, net edge, development in deals, and profit for value. Dwivedi (2002) incorporated extra estimates, for example, the drawn-out estimation of the speculation, money related wellbeing, and resource use.

Further, John (2011) referred to return on assets, on equity and sales, ROA, ROE, and ROS respectively, as the standard measures. These measures were obtained by getting the ratio of net income to assets, common equity and net sales respectively. Mary and Byaruhanga (2014) noted that any organization had its internal control system as consisting of policies and procedures that provided a framework within which the firm's objectives and goals were set to be achieved. These included reliable reporting of the financial status, compliance with regulatory provisions, and proficiency in operations (Kambura, 2018). The system control had a controlled environment as a key factor. These factors comprised aspects such as the values; the structure of the organization; and the

integrity of all the personnel in the process of formulation, setting up and administration of controls as well as the directors and audit members (Bett, 2017). These factors depended highly on the degree to which the management was effective.

It showed the importance of such controls in Sacco banks' performance through attitudes and policies adopted by management. Besides, the control environment outlined the culture of an organization thereby setting a supportive attitude for internal control (Kiyieka & Muturi, 2018). The management's failure to institute control culture and laxity in its implementation in the banking institutions could be blamed for the major losses in Sacco banks. The directors and senior management were also partly to blame. These large cases were a reflection of the lacking incentives that allowed management to effectively carry out their supervisory roles and maintain control within the banking institutions (Da Silva, Leite, Guse, & Gollo, 2017).

The management, which included the board, ought to show by example the significance of internal control. This involved the discipline and ethics that management employed while carrying out the business both within and outside the organization (Yogo, Marangu, Kiongera, & Okaka, 2016). How the board of directors and senior management carried themselves both verbally and in actions had a direct effect on the integrity and values of the bank's control culture (Kamande, 2017). A study by Ibrahim, Diibuzie and Abubakari, (2017) found that control activities, internal audits, and monitoring had a positive relationship with monetary performance.

### **1.1.7 Financial Performance in SACCOS**

According to (Magara, 2013), there had always been a perception that improved performance was an outcome of institution and enforcement of proper control systems. Another perception was that improved performance was an outcome of properly instituted internal control systems which encouraged accountability and reliable reports thus boosted good management of institutions (Spira & Page, 2003). According to Verschoor (1999) completeness of all transactions was achieved through properly installed systems of internal control of an entity. The assets owned by the entity were secured from misappropriation and stealing by an organization were it ensured that all the dealings in the monetary declarations were correctly captured and all the company's assets and finances were recoverable in case of any irregularities and occurrences that were in line with the applicable reporting framework (Bett, 2017). Sacco performance was measured through profitability and return on assets. A review on the performance of Saccos for a period of 5 years, that was, from 2006 to 2010 showed that deposits for deposit-taking and non-deposit taking Saccos grew with impressive rates. The deposits grew by an average of 25% for the last five years, whereas non-deposit taking Saccos realized an average growth of 5.6% in the last five years. The deposit-taking category Saccos' loans grew by an average of 16%, while loans for non-deposit taking Saccos grew by 4% (Nkuru, 2015).

The share capital for both deposit-taking and non-deposit taking Saccos grew steadily in the last five years. Saccos offering deposit-taking services realized an average growth of 28% while non-deposit taking realized an average of 256% (SASRA, 2010). The seven Saccos operating deposit-taking and non-deposit taking activities performed well in

income generation, where both categories grew by an average of 16% and 63.9% respectively (Kiaritha, 2015). The total assets for deposit-taking Saccos grew by an average of 12.9% per year; while the non-deposit taking grew by an average of 14.25%. The overall asset growth for both categories for the last five years increased by an average of 12.9% (SASRA, 2010). The improved performance was attributed to the new regulatory framework which put a lot of emphasis on Sacco's internal controls which included the existence of internal and external audit functions, measured to minimize risks exposure, and standardized reporting norms (Magara, 2013).

## **1.2 Statement of the problem**

The establishment of the Sacco's Society Regulatory Authority (SASRA), was in part as a response to growing challenges affecting Sacco banks. Ideally, Sacco were established to improve the living standards of citizens both economically and socially through the provision of services at a lower cost as compared to other lending and savings facilities. However, there was low financial performance of Saccos in Meru County due to limited returns on investments which continued to be a challenge to Sacco banks in Kenya (Chahayo, Bureti, Juma & Aketch, 2013).

In addition, inadequate internal management capacity and operational controls were a major problem in Kenya's Sacco. This was heightened by poor structures of control, technological changes, fraud, and misappropriation of resources. When finances are low, citizens are not able to acquire various Sacco functions such as loans to establish their businesses. This in turn greatly affects the intended intention of Kenya to achieve vision 2030, since there will be a lot of citizens without a reliable source of income due to

unemployment. There was lack of controls thus making organizations fail to achieve their objectives as corruption had become rife and increased collusion between management and external auditors. Technological advances brought about challenges in control systems and prompting new ways of controlling organizations.

The Kenya financial sector stability report by the ministry of finance and the ministry of co-operative development and marketing (2010) stated some of these challenges included poor governance structures; competition; low adoption of information and computer technologies; inadequate legislation to accommodate diversified products; powerless interior control frameworks; deficient performance gauges; absence of revelation necessity measures; poor human resources practices leading to poor quality of staff; and high staff turnover. Despite the importance of the internal control structure, an actual measure of its performance within the organization was almost non-existent and the topic remained relatively unexplored by researchers (Kinney, 2000). This was also true in Kenya as there was little evidence linking internal controls to the profitability levels of the Sacco banks controlled by SASRA.

Keitan (2000) studied the implication of internal audit control function on risk assessment by the external auditor while Kibet (2008) examined how internal audit enhanced corporate governance in state-owned enterprises. Ondieki (2013) studied internal control systems' effect on financial performance on Saccos in Nyeri county. Onyango (2018) studied the effect of capital adequacy on the financial performance of deposit taking savings and credit societies in Meru County, Kenya. However, no study focused on the effect of internal controls on the financial performance of the Sacco sub-sector, especially in Meru County. This was therefore the gap this study sought to fill



through examining how internal controls and financial performance of licensed Sacco's in Meru County related.

### **1.3 General objective**

This study sought to examine the effect of internal control on the financial performance of Saccos in Meru County.

### **1.4 Specific objectives**

The specific objectives included:

- i. To establish the effect of communication on the financial performance of Saccos in Meru County.
- ii. To determine the effect of risk assessment on the financial performance of Saccos Meru County.
- iii. To find out the effect of control functions on the financial performance of Saccos in Meru County
- iv. To assess the effect of monitoring on the financial performance of Saccos in Meru County.

### **1.5 Research hypothesis**

H<sub>01</sub>: Communication did not significantly affect the financial performance of Saccos in Meru County

H<sub>02</sub>: Risk assessment did not significantly affect the financial performance of Saccos in Meru County.

H<sub>03</sub>: Control functions did not significantly affect the financial performance of Saccos in Meru County

H<sub>04</sub>: Monitoring did not significantly affect the financial performance of Saccos in Meru County

### **1.6 Significance of the study**

The study would benefit the Saccos audit committee by providing assurances of the effective functioning of the processes. It would also help in evaluating the risks which the organization was exposed to and that the structures of control adeptly controlling the risk levels. The study would also benefit Sacco's administration in bookkeeping to the board, the development, operation, and monitoring of the control systems. Third, the results of the study would sensitize the employees on the need to adopt control structures to improve financial performance. This study added to the available volume of knowledge. Research institutions and scholars would benefit from evaluating the recommendations and findings of the study. The study findings were also guiding the government by helping them have quality internal and external reporting. Through the study, records were well maintained by following the recommended guidelines promptly and being able to sort pertinent and dependable information from in the interior and outside the organization. Strategic partners and regulatory bodies in the banking sector such as SASRA and the Central Bank of Kenya (CBK) could adopt this study as a basis formulation policy framework on the banking sector.

### **1.7 Scope of the Study**

The study mainly reviewed the internal control systems of Saccos and the effects they had on the financial performance of the Saccos. It focused only on the licensed Saccos that are regulated by SASRA. Further, the study focused on Saccos operating in Meru

County only. It focused on the Sacco managers, auditors, and the operation managers from the respective Saccos. This was because they probably gave more appropriate information on the internal control systems as opposed to those at lower levels in the hierarchy. The study focused on the four key variables of the study which included; communication, risk assessment, control functions and monitoring influence on financial performance of Saccos in Meru County.

### **1.8 Limitations of the study**

It was noted that the respondents were reluctant to disclose information that was considered confidential or that contravened their employment laws. To counter this, the researcher introduced herself and let the respondents understand that the research was purely for academic purposes. The respondents who did not clearly understand the topic under study were briefed on the same to ensure they were able to give accurate responses. The study was carried out in the various selected Saccos in Meru County because they were accessible to the researcher. The researcher was also conversant with the scope thus convenient. Lastly, the respondents were available within the place of work thus ease of collecting data.

## **1.9 Definition of operational terms**

### **Financial Performance**

It referred to the degree of how an organization generated revenue through the use of its assets. Generally, this was also used as a metric to measure the financial standing of a firm and also compare the performance of different organizations in business (Bett, 2017). This was measured by the rate return on assets.

### **Internal Controls**

They were measures established by firms to guarantee that their purposes, goals, and the overall mission were achieved (Etuk, 2011). Internal control involved measuring and management of risk, controlling the setting and actions, and monitoring.

### **Monitoring**

The overall nature of the process of control within a given time frame was assessed through monitoring. The control processes ought to be constantly monitored to ensure the effective and efficient performance of the organization (Chahayo et al., 2013).

### **Risk Assessment**

This was the determination of all the elements that deterred the firm from reaching its targets and purposes. It contained the identification and analysis of risk factors that impeded the mission and goals of an organization (Etuk, 2011).

## **Control Activities**

These were mechanisms and frameworks that guaranteed that the management policies were correctly implemented and carried out (Onyang'o, 2018).

## **SACCOs**

Stood for Savings and Credit Co-operatives Societies. They were an independent group of people who come together by free will to meet similar economic needs through joint ownership of a business registered under the department of cooperatives (SASRA, 2018).

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter in a broader view looked at the subject under study through examining other scholarly works that related to controls and performance. This chapter reviewed how financial performance related to the internal control systems. Factors of internal control studied were communication, risk assessment, control functions, and monitoring. The review also examined the various structures of internal controls adopted by different organizations, the theories behind the control systems, and studies by previous researchers regarding the systems of internal control.

#### **2.2 Theoretical Review**

The study focused on three theories: agency theory, the attribution theory and the contingency theory.

##### **2.2.1 The Agency Theory**

According to this theory, there existed in a firm, the principals who owned the resource and the agents who managed the resource (Jensen & Meckling, 1976). The relationship between the two existed alongside information asymmetry since the agent had more information than the principal. This reduced the ability of the principals to determine whether the agents protected their interests (Jensen & Meckling, 1976).

To guarantee if both the welfares of the principal and their representatives were in tandem, the theory postulated that establishing a contractual agreement ensured that the welfares of the principals were encountered. To strengthen the connection that existed amongst the agent and the principal, the systems like internal audit system and control setting were in place and experts were considered (Jussi & Petri, 2004). The theory went on to assert that a selection problem arose where the information was inadequate regarding the relationship, welfares and ability of the agent.

This resulted in adverse selection and moral hazard which impacted the agent's performance either through a lack of understanding of what was to be done or failure by the agent to do what he was appointed to do. Therefore, the assumptions that underlied the agency theory was that the principal and the agent acted rationally and that they both maximized their wealth (Jensen & Meckling, 1976). The theory was relevant to this study since the adoption of internal controls sought to ensure that the agency problem did not exist in the firm and addressed the problem of information asymmetry.

### **2.2.2 Attribution Theory**

Attribution theory was a communal mindset theory that reconnoitered an understanding of an individual's interpretation of proceedings and actions. It also sought to attribute causes and intentions to their behaviors and actions. This theory was used to explain why people do what they do to use the information available around them (Schroth & Shah, 2000). Reffett (2007) found that in evaluation it was believed two individuals would have behaved contrarily in a similar condition, then the accountability for a result was attributed to the individuals

Reffett's (2007) further extended auditor's liability for perceiving scam in the study whose outcome showed that if an auditor failed to unearth an anomaly yet signs pointed to the existence of such an anomaly, then the auditor was likely to be held liable. The study concluded that auditors suffered liability when an audit failed. This was true when fraud was recognized and measures to probe the recognized fraud peril performed. The theory thus supported the effectiveness of firms' internal control to be reported by auditors.

Auditors, therefore, needed to have an in-depth understanding of the existing controls, their design, execution, and test their operating efficacy. This was esteemed essential for the reviewers' dependence and lessens other review techniques for the normal execution. The attribution hypothesis recommended in case of extortion; pertinent gatherings were considered responsible. According to Reffett (2007), auditors were regarded as "public watchdogs". They were held accountable if it was established that audit services rendered were far from standard. The attribution theory, therefore, placed the load of fraud reporting to the pertinent people within the organizations. As the internal control structure continued to change thanks to the evolving technology, there was always a need for their management. Therefore, those tasked with this responsibility, whether managers and the board of directors, ought to guarantee compliance with pertinent governing frameworks. In this study, this theory pursued to place auditors on the front in reporting cases of fraud.

### **2.2.3 Contingency Theory**

The slant of this theory to the study of organizational behavior was by explaining how the strategy and purpose of establishments were affected by conditional elements like



technology, organization customs, and exterior environments. The assumption was that there was no one size that fitted all structure for organizations. Different organizations had a different organizational structure and their effectiveness was determined by a blend of the right type of organizational structure, organization size, environmental volatility and technology. These theories owed their origin from the social theories of the structure of the organization.

An example of these social theories included the structural approaches to organizational studies by (woods, 2009). This theory explained the connection amid the success of the internal control structure and perfection of the organization in monetary reporting. Cadez and Guilding (2008) explained that firms achieved organizational effectiveness where the internal auditors refined in roles; they drove the internal control structures to efficiency. They further stated those elements of an organization such as the level of technology, the structure adopted; its size, external environment, and strategy affected the systems control and their management. The theory suggested that strategies that harmonized and managed internal activities arose from the increasing demands of the technical task in the organization.

The source of information in an organization concerning the advents of technology and its surroundings was key in shaping the structure of an organization. Where the situation was unsure due to poor technology, then the information was sourced from within. When there was certainty coupled with technology, then the source of information was external. This meant that decentralized authority worked best in an unsure environment whereas in certain environments, centralized authority was more appropriate. In contingency theory, the adoption of a particular control system was

dependent on the organizational situation with which these controls would work (Fisher, 1998). This hypothesis consequently stated that the appropriation of a specific arrangement of control was reliant on determinants. For example, the degree of innovation, the size of the association, outer environmental factors and structure set up.

Other theories related to the objective of this study included risk management theory which stated that organizations ought to identify, assess minimize and monitor risk to achieve success. Risk arose from unknown occurrences that were as a result of financial markets, loan defaults, legal liabilities, accidents or natural disasters. Therefore, the Sacco's credit risk identification and assessment was very essential to predict performance and profitability (Kariuki, 2017). Finally, modern portfolio theory which asserted that investor balances ought to be maintained to increase earnings and expected returns. The theory assumed that investors were always interested in maximizing returns and minimizing risk hence the bank managers ought to choose the portfolio that maximized expected returns.

## **2.3 Empirical literature review**

### **2.3.1 Communication and Financial Performance**

A study carried out by Bett (2017) found that internal controls provided an avenue for recording and informing the roles and responsibilities of all employees in an organization. He further added that cooperatives employed information systems to provide information through the right directions for adherence with operational and financial requirements. This proved that information and communications systems were a very vital part of the internal control system since information system was made up of

people, hardware's software, procedures and data (Inusah & Abdulai, 2015; Mwakimasinde, Odhiambo & Byaruhanga, 2014). Kamau (2014) articulated that for purposes of gathering information, the management held people in different department such as credit, accountable for the processes as well as communicate the expectations and the essence of the internal control system. Further, Kamau (2014) wrote that management ensured that strategies were being implemented and systematic reporting from every individual department. With the ownership of the reporting system by the employees, the organization evaluated whether goals were being implemented effectively (Kamau, 2014).

The study by Akintaro and Shonubi (2016) also stressed the role of good communication in organizational success. The savings and credit cooperatives adopted clear communications and relayed information that was understood as the organization's culture. This caused the work environment to facilitate efficient top-down and bottom-up communication. Achieng Otieno, Waiganjo and Njeru (2015) similarly found that communication improved operational efficiency through interactions and sharing of information. Communication was very important since it created team royalty and they referred to it as the lifeblood flow of the organization.

According to Akintaro and Shonubi (2016), Saccos should record reliable information for the employees to carry out their roles. Adding to that, Frazer in 2012 as quoted by Akintaro and Shonubi (2016) wrote that information systems enabled controls and management of activities as well as monitor implementation of the operational processes. Hanim, Haron, and Muhamad (2005) as quoted by Shabri et al. (2016) noted that relying

on the correct information in time improved audit work of analyzing evaluation and reporting for the achievement of expected organizational goals.

Further information and communication facilitated decision making in customer service, marketing activities, and other business operations (Weber, 2009). According to Kiyieka and Muturi (2018), internal control system had developed over the years since the 1940s. With a high level of business activity, new methods of information technology and systems had achieved better results for instance in minimizing errors and curbing fraudulent activities in cooperative organizations.

A study carried out by Ileri and Idowu (2017) postulated that the major problem Saccos were faced with was several weaknesses due to lack of the required communication and information systems which made it very tough to compete with commercial banks. However, due to inadequate capital base, most Saccos did not embrace fully the use of information and communication systems which presented them with challenges of management and control.

According to Ndegwa (2011), information and communication technology (ICTs) was not sufficiently utilized by Saccos and the ministry of cooperatives. Further, Mary and Byaruhanga (2014) defined IT as the technology that included computing information systems which included computers, software's and high-speed data as well as sound and video. Information systems not only encouraged accurate data capturing but also enabled grouping of transactions for reporting of the months and dates when transactions occurred as well as produce statements of accounts. In addition, Williams et al. (1999) as quoted in by Mary and Byaruhanga (2014) emphasized the need for information security through

systems that recorded movements and tracked servers to ensure input and output control. Further, their study added that at the state of information processing, transactions were monitored and control checks were done to facilitate correctness and thoroughness. This included counter-checking mathematical errors and physical sorting out of reports among others. Controls through the use of information system therefore enhanced performance because losses that resulted from inaccuracies could be reduced. Controls limited access to information that could lead to tampering with financial data without leaving any evidence for audit. However, computers and systems faced challenges due to virus and malware infections and thefts by hackers and crackers.

According to Bett (2017), communication ensured relying on correct and timely financial information. Communication required some control in all dimensions to ensure the beneficiaries of the same information. This including the stakeholders' access to accurate and reliable information which highlighted the status of the financial matters and status (Pandey 2002). Muthusi (2017) noted that information ought to be communicated in every department of the organization to ensure understanding of responsibilities as well as execution. Muthusi (2017) further added that lack of knowledge and clarification of the expectations of the employees was the reason for losses in an organization. Also, incomplete inaccurate and false documentation was the cause of inefficiencies in Saccos. The study concluded that timely, reliable accessible and relevant information in a consistent pattern was very essential for decision making (Theofanis, George & Nikolaos, 2011).

### **2.3.2 Risk assessment and Financial Performance**

Karagiorgos, Drogalas, Gotzamanis and Tampakoudis (2009) explained risk assessment as a tool of noting deviant behaviors that would be falsified into the financial statements. It required that risk was to be observed, documented, estimated and relevant actions taken to minimize them (Inusah et al., 2015). Further, Magara (2013) noted that risk was estimated with or without procedures from the different departments in an organization. Examples included credit risk, fraud risk, customer risk, and operational risk assessment. Kibui and Moronge (2014) added further that credit giving and deposit-taking was the major income source of many cooperative though it involved a lot of risks. The risks were because the borrowers failed to repay their debts in time hence putting the organization and the investors' funds to high risk. Consequently, credit risk was one of the major challenges that faced cooperative organizations (Boateng, 2011). Interestingly, the global financial recession had significantly affected Kenyan banks and cooperatives and this spilled over to the individuals and organizations making it hard for people to repay their loans (Huizinga & Demirguc, 2010). Ntongo (2012) explained that every undertaking involved risk and there was need to reduce it as much as possible through establishing a sound internal control system that enabled routine monitoring and evaluation of risks that likely to affected an organization. Further to assess risks, it required tools of measurement on operations, decision making, clear communication avenues, and internal audit personnel.

Risk assessment involved determining and evaluating factors that hindered the organization from reaching the set goals. This allowed the active analysis of all the pertinent risks confronting the firm (Karagiorgos et al., 2009). The administration held

the obligation of ensuring that the firm faced a satisfactory degree of risk. The administration ought to structure inner control frameworks that guaranteed productivity and adequacy. The inner control framework further permitted solid money related detailing which agreed to the administrative prerequisites. This was ensured through ordinary audit and assessment of the control frameworks.

Many Saccos, due to negligence and failure to acknowledge risk associated with new products and activities, had suffered major losses. This was also caused by the failure to adapt their risk assessments in response to significant changes in their operational status or circumstances. The analysis showed that control systems that worked better with traditional systems and simple products were simply not matched for progressively modern or complex items (Karagiorgos et al., 2009). The extent to which the banking sector was exposed to uncertainties meant that it was associated with high-risk levels. The practice of risk assessment in Saccos , assured the fidelity of the operations as well as the adopted procedures. The environment in which the Saccos operated involved navigating through a large number of risks that threatened their success.

These risks were either be credit, liquidity, foreign exchange, market and interest rate. Such a huge exposure to different types of risks meant that elaborate risk management was needed. Once the risks were identified, then their management was inevitable. There existed a direct relationship between risk and rate of return such that when the returns increased, the risk also increases. When the risks were effectively managed, there was a balance between the return and risk thus yielding a desirable position (Fatemi & Fooladi, 2006). Risk assessment was critical within the financial sector compared to other sectors. This was largely because financial institutions sought to maximize revenues and returns

to shareholders (Al Tamimi & Al-Mazrooei, 2007). Risk assessment practices sought to avoid the possibility of failure which was costly. Although it used a lot of resources, the cost of poor risk management could in some cases lead to the failure of Saccos and the banking system altogether.

According to Shabri et al. (2016), the stakeholders (board of directors) ought to detect the likelihood of risk and departments as well as involve the workers in risk ascertainment, then come up with a clear action plan on mitigation. In addition, Yogo et al., (2016) identifies that after knowing the risks, the management presents the reports of financial statements in a way that gives a true and fair position of the business according to accounting principles. Transactions carried out daily acts as source documents for risk assessment. Moreover, risks determined the level of return on investment where risk-averse organizations failed to invest in some assets. By use of external auditors, the organization easily identified the risk that played a threat to their objectives by interacting with the employees (Mary & Byaruhanga, 2014). The findings of Gisemba (2010) as quoted in (Kariuki, 2017) on an examination on the effect of credit chance administration on financial performance among the 38 Saccos tested, noticed the significance of paying off awful obligations and money related misfortunes to improve execution.

The study found an optimistic connection between credit risk management and organizational performance. He emphasized the need to ascertain, estimate monitor, manage, communicate and minimize credit risks to enable profitability and sustainability of Saccos. If not controlled, credit risk resulted to collapse of business due to liquidation problems (Kithinji, 2010).



### **2.3.3 Control Functions and Financial Performance**

These were mechanisms and procedures that allowed the correct implementation of management policies (Rezaee, Elam & Sharbatoghlie, 2001). Relevant expression of policies and procedural frameworks underlined the performance of control activities. It also provided a basis for auditors' to objectively examine the level of effectiveness a control design had on the management of funds (Aikins, 2011). The actions sought to address risks and attain the set goals. Rezaee et al. (2001) asserted that control activities were present all through the firm. They encompassed activities such as reviews of operating performance, necessary approvals, reconciliations, the security of assets, and separation of duties. The majority were functions of internal audit arm. Saccos' management at the departmental level was tasked with reviewing performance and providing a periodic report on the same.

Reviews by top management often generated questions regarding performance and this constituted a control activity. These activities became effective when undertaken as a routine activity by all personnel, management and employees rather than being an additional activity (Rezaee et al., 2001). This was because when seen as an additional activity, their importance was downplayed and failed to be performed in the event an individual felt they had a lot at hand. Also, incorporating controls in the daily activities allowed prompt adjustments to changing conditions and also saved on cost. Top management enforced control duties as part of the daily functions of each individual to foster a control culture within the bank.

Establishing frameworks for the bank activities and different departments of the Sacco bank alone was not enough for management as they saw to it that policy framework was

complied with and that these frameworks remained adequate. This role fell under the internal audit arm (Kamande, 2017). According to the study by Kiyieka and Muturi (2018), there was a solid connection between inner control exercises and money related execution in that organizations with great control frameworks surveyed and moderated the possible hazard accordingly improving their presentation. Further, Shabri et al., (2016) noted that control activities ensured that strategies and processes were implemented to reduce the risk and achieve organizations' growth.

According to Ratcliffe and Landes (2009), control activities included authorization, adequate documents, processing of information, physical controls, duty segregation, information processing, reconciliation, verification, review of operation performance and supervision. All these activities were geared towards minimizing risk to enable achievements of organizations' goals (Saidu & Zabedah, 2013). The fourth component of internal control was controlled activities, the procedures and policies that ensured how management directives had performed that helped ensure that appropriate corrective and preventive measures were engaged (Frazer, 2012).

According to Hussaini and Muhammed (2018), control activities were either automated or manual but both had the objective of minimizing the risk that delayed the organizational success. The most essential control activity according to audit was performance review processing of information and diversifying of duties. Verifications were done before making payments, reconciliation, review operations and supervision. Among the benefits of control was timely and effective internal and external communication; the easy achievement of organization objectives; communication of objectives; enhanced decision making; and the use of information systems to reduce

manual inaccurate reports. Among the control, activities were addressing segregation of duties; build up important innovation procurement; advancement and support process control exercises; set up pertinent innovation framework control exercises; set up significant security the executives' procedure control exercises; decide reliance between the utilization of innovation general controls; and innovation in business forms.

According to Hussaini and Muhammed (2018), control activities were aligned with organizational policies in which the study proposed a control model that encouraged re-assessment of policies and procedures; take corrective action; perform promptly; perform using competent personnel; establish accountability and responsibility for executing strategies and methodology; and build up arrangements and techniques to help the sending of the board's mandates (Janvrin et al., 2012; Hussaini & Muhammed, 2018). According to Mary et al. (2014) control activities were necessary since they enabled mitigation of risk through enforcement of organizational directives to address the entity's objectives. Mary et al in 2014, indicated that apart from performance review activities such as budgets, forecasts ought to be monitored to ensure deviations were corrected.

#### **2.3.4 Monitoring and Financial Performance**

Monitoring was the assessment process to determine the value of the structure of control over a certain period. The processes of internal controls would be sufficiently examined to build up the level of adequacy of the framework's exhibition. Observing in an establishment ensured the discoveries of reviews and different surveys (Theophanous, Modjtahedi, Batech, Marlin, Luong & Fong, 2011). Amudo and Inanga (2009) stated that the smooth functioning of the controls system was guaranteed through proper monitoring.

Through this process, the adoption and implementation of the policies and guidelines by the organization personnel was fully determined and assessed by management.

Monitoring was achieved through activities like regular supervision, the constant review of the feedback given by the customer and reports by internal auditors. According to Bowrin (2004), internal auditors appraised the system of internal control to determine whether the various functions were performing as expected. This not only allowed a systematic and controlled approach in evaluation but also improved risk management practices. It also promoted the governance process through an evaluation of the existing controls. It also allowed resolutions to be undertaken following the findings of audit reports (Rezaee et al., 2001). Several organizations faced immense challenges when executing an internal control system due to challenges such as lack of skilled staff, information systems, and resources to hire adequate staff. The study found a significant relationship between the inner review and financial performance.

According to Njoki (2015), monitoring the internal control systems regularly was very important to find out the efficiency and effectiveness of the activities. The study noted that monitoring included regular management and supervisory activities, as well as human resources. Regular monitoring encompassed actions against irregular, unethical and uneconomical internal control methods (Goodwin-Stewart & Kent, 2006). According to Bowrin (2004), the achievement of monitoring results was accelerated through carrying out periodical audits, handling customer complaints appropriately, supervising, managing activities and giving regular feedback.

A challenge that most Saccos faced was that the audits failed to establish and report an existing weakness. Unreported problems could not be resolved therefore leaving management unable to address such challenges. The auditor's report formed a basis for the formulation of guidelines and models that were practiced within the originations by management. Evaluation of guidelines was the responsibility of supervisors in different lines of the organization. Therefore, bank management ensured risk and control activities were addressed critically as well as promoted an environment where all employees were responsible for executing the guidelines (Basle, 1998).

According to Mary and Byaruhanga (2014), physical controls required periodic counter checking out the amount shown in control records authorizations of some computer data files for asset security safeguard. As a result of the audit, frauds were detected in controls and therefore improved the organizational performance. However, the study noted that the effectiveness of physical control in the protection of assets depended on how well financial statements were prepared and the time of assets likelihood of fraud occurrence. Further Ondieki (2013) added that effective internal audits reduced extra costs through showing losses that if not well addressed would lead to continuous poor performance in an organization and safeguarding organizations' assets.

Further, internal audit indispensable instrument that enabled improvement of performance as well as increased stakeholder value. A survey that was conducted by Klynveld Peat Marwick Goerdeler [KPMG] (2007) on the role of internal audit function on organizational performance established that the existence of a functional and effective internal audit aided in organizational performance while at the same time improved performance. The study further concluded that the internal audit function helped in profit

identification while reducing corporate disasters in the areas of financial fraud and identifying weak governance. With a functional and up to date internal audit system, then the organization reduces malpractices and irregularities hence achievement of the set organizational goals and objectives ensuring high productivity and profit maximization.

### **2.3.5 Internal Control and Financial Performance**

Mwachiro (2013) wanted to assess whether internal controls had impacted the operation at the Kenya Revenue Authority in terms of increasing the amount of revenue collected. The variables in the study were the four elements of internal control. The study followed a causal/explanatory research design and correlation was examined between the outcome of internal controls and income assortment. Statistical analysis of data was adopted in this study revealing that for internal controls to work, all four elements were to be available. It further showed that collusion, fraud and embezzlement of revenue were rampant where weak internal controls and poor ethical values in the organization existed. The end of the investigation was that there existed a significant connection between interior controls and an assortment of income at the establishment. Magara (2013) analyzed how inner controls influenced the money related execution of store taking Saccos in Kenya. Money related performance which was reliant variable was analyzed utilizing four autonomous factors to be specific risk assessment, control exercises, control condition and systems of observing. The examination was led on an example of 122 stores taking SACCOs from which essential information was acquired. Auxiliary information was acquired from the occasional reports of the SACCOs. The connection between the ward and the free factors was checked by the utilization of numerous relapse models. The investigation set up that the autonomous factors had a positive solid connection with the needy variable

importance every one of the four positively affected the budgetary presentation of Saccos in Kenya. The investigation further presumed that without the nearness of solid inward controls, saccos would perform ineffectively and inevitably breakdown as a result of poor money related performance.

Ondieki (2013) analyzed how the monetary performance of commercial banks was affected by the internal audit. The effect of each of the aspects of the internal audits on the monetary performance was studied. The study recognized that with additional features, the internal controls effectively unearthed transactions that pointed to fraud or better still prevented the possibility of such fraudulent actions from happening. As much as audits assured the proper working of the internal controls, they hardly unearthed fraud or corrupt dealings. An internal audit aimed to see oversee the fulfillment of the mission of the organization through the strategies of the management. Another study by Ewa and Udoayang (2012) carried out in Nigeria examined the extent to which internal control systems increased the bank's ability to detect and investigat fraud among the staff.

It was established that the internal control plan influenced the employee's position towards fraud and that where firm internal control systems existed, it acted as a deterrent to staff fraud. This was because the control systems put checks that detered such activities. Weak systems on the other hand exposed the institution to fraud and corrupt dealings. The study concluded that a strong internal control mechanism was necessary for checking fraud.

Wainaina (2011) studied the process control in the operations of Kenya Polytechnic University. Internal control function was studied against the following monitoring control

setting, risk evaluation, and control activities. The finding of the study was that the management was heavily reliant on the structures of internal control to put into action its decisions and to control the activities. As such use of efficient Internal Control Systems (ICS's) was key in managing assets of the organization. Thus, the internal control measures were designed to allot, manage, and guarantee proficient utilization of resources. This aimed to ensure that the institutional goals were attained. Besides, ICS's were found to adequately protect the organization's resources by detecting and preventing fraud. The comparison of the plan and performance of internal control systems between the private and the public sector was studied by (Ngugi, 2011). It aimed to find out whether there was any difference in their effectiveness and unearth any similarities and differences in the two sectors. This research examined four of the four elements of control in both sectors. The researcher depended on obtained data by administering questionnaires and through focus group discussions. The analysis of the data obtained showed that while the private sector boast of a stronger internal control system compared to the public sector, the monitoring and control activities were fairly the same.

Barra (2010) investigated the application of impediments, for example, punishments and different proportions of controls on the representative's affinity to be fake. The outcomes indicated that the existence of such measures deterred the occurrence of fraud due to the increase in the charge of committing fraud. In this case, the advantage of carrying out the fraud was greater than the related cost in a setting where duties were separated. Moreover, the "least-cost" method worked to prevent fraud among employees not in managerial positions while maximum penalties for those in management were the "least-cost" fraud disincentives. In conclusion, such methods of controls as segregated duties



depended on detective controls. The success of internal controls in operation in Nairobi was evaluated by (Kakucha, 2009).

The study was carried out on 30 businesses all of which were registered by the National Social Security Fund (NSSF). The study evaluated how internal controls were affected by age of an enterprise, the number of resources it had, and how the internal controls related to the financial performance. The study unearthed deficiencies within the internal control system albeit with varying degrees amongst the sample. Indeed, it found deficiencies such as insufficient risk analysis, poor flow of information, and a lack of awareness as to what a good system of internal control entailed. Statistical analysis further found that there existed a negative relationship between the length of the period business had been in existence and the efficiency of its control system. Also, resources held by an association and their interior controls were contrarily connected. At long last, it found a feeble negative relationship between powerless inside control structures and financial performance. This examination, in any case, didn't inspect the particular highlights of inward control inside the association.

Amudo and Inanga (2009) evaluated the impact of internal control systems on the members of the African Development Bank in the region. The study mainly focused on Uganda. The variables were the factors of internal control namely information and communication, monitoring, risk assessment, control activities, and environment. It was found that aspects of the structure of internal control lacked which affected the effectiveness of the control structures and thus their improvement was recommended. Goh (2009) studied the systems of internal control concerning members of the audit committee, the management, and the improvement of shortcomings in the systems. The

significance of the audit committee was measured by the degree of its autonomy, the size, how regularly do they meet, and through their expertise.

The management's autonomy, size, and the number of times they meet provided insights on their effectiveness, other factors that impact a timely resolution of shortcomings such as the extent of the system's deficiencies, firms' profitability, and intricacy of operations were also examined. The results were that the number of audit committee members and the level of their expertise in financial matters had a positive relationship with the resolution of the deficiencies. Further where the membership in the audit committee was large then the likelihood of resolving the deficiencies was high and prompt. An independent board was less likely to bow to any unwarranted pressure by management and likely to push management towards the remedying of weaknesses.

Olatunji (2009) inspected the effect of the structures of the inward control framework in the financial organizations in Nigeria. The examination identified controls played three functions of being preventive, criminologist, and restorative. Data were analyzed using SPSS version 23. Descriptive statistics such as frequencies, percentages, tables, graphs were used. The study revealed that the leading cause of fraud in the banking system in Nigeria was the absence of effective internal control. The conclusion was that bank management ought to establish a structure of internal control that would guard against any fraud. This would promote efficiency in operation and avoid liquidity concerns for the institutions.

Jones (2008) explored internal controls, responsibility, and the company's domination in both medieval and modern Britain. The variables of the study were the components of

internal controls. He used a modern control framework as a reference point to evaluate methods of control adopted in medieval times. The study found similarities in the aspects of control for both periods. The basic elements of medieval internal control were stewardship and personal accountability. Thus, reiterating on the call to insist on personal accountability in operations. Mawanda (2008) examined how the performance of institutions of higher learning in Uganda was affected by the structure of internal control. The two were found to have a significant relation thus recognized the role of the internal audit department in carrying out its responsibilities and its competence. This was because it had a direct result on financial performance.

Crutchley, Jensen & Marshall (2007) examined the prospect of a firm's involvement in an accounting scandal. The results were that firms with high growth rates, few directors in audit committees and firms that engaged techniques to manage earnings had a high likelihood of an accounting scandal occurring. Those with a low degree of development and having more executives in review boards of trustees had a lesser probability of being associated with a bookkeeping theft. Powerful inner controls and a moral hierarchical culture enormously decreased the chance of such outrages. Beasley, Carcello, Hermanson, and Lapedes (2000) inspected the differences in strategies for corporate administration between organizations.

This examination assembled the associations on the premise of business fixation, innovation, social insurance, and money related administrations. Beasley et al. (2000) findings showed that audit committees had few members who met less often, enjoyed low support, and were not as independent, experienced fraud in their financial reporting.

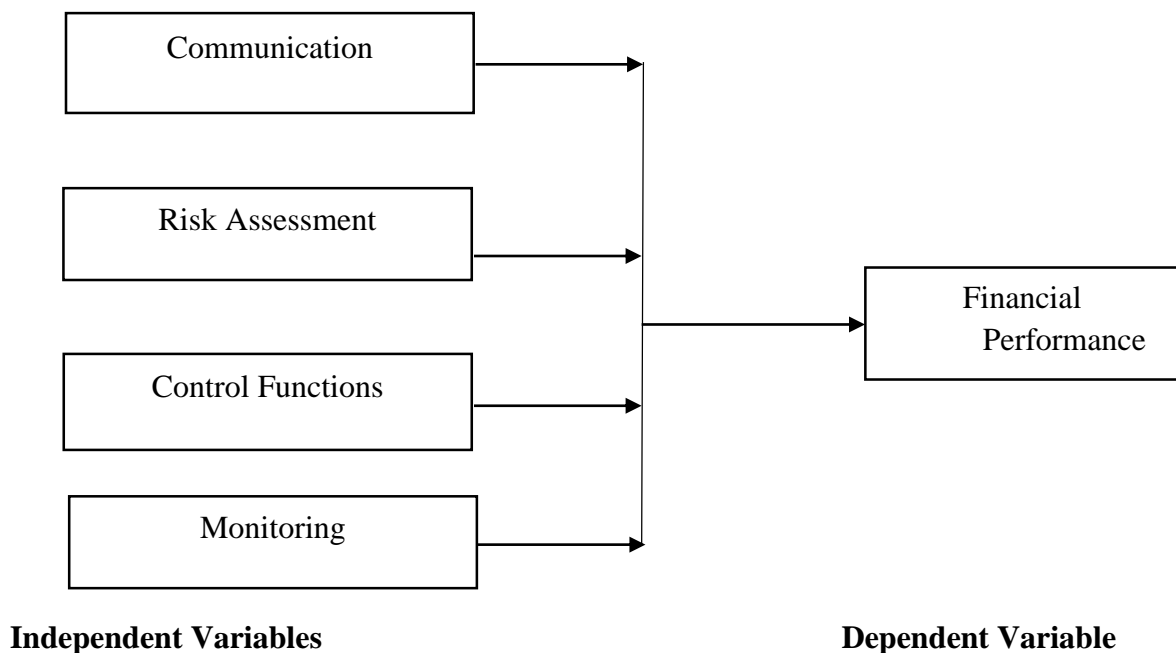
## 2.4 Summary and Research Gap

Studies whose literature was reviewed did not examine the effect of internal control on the financial performance of Saccos in Meru County. Research in this area was sparse especially in developing nations like Kenya. Studies that were done revolving around the variables but did not indicate full implementation and achievement of the core purpose of internal control more also in Saccos in Meru County. Studies left some gaps in the criteria, title, scope, and methodology used. The literature review showed several theories relating to the variables and the analysis between the dependent variable and the independent variable.

## 2.5 Conceptual Framework

**Figure 2.1**

*Conceptual Framework*



### **2.9.1 Explanation of Variables**

The framework explained the relationship that exists between the variable that is the dependent variable and the independent variable.

### **2.9.2 Communication**

It was involved with ensuring that the most important and critical information was captured well and correctly while at the same time ensuring the information flows in a definite direction cutting across all the chambers within and beyond the organization (Njoki, 2015).

### **2.9.3 Risk Assessment**

Any successful institution was surrounded by both internal and external risks (Karagiorgos et al., 2009). For this reason, the study identified some possible risks encountering the deposit-taking Sacco institutions to analyze them and give possible risk management solutions.

### **2.9.4 Control Activities**

This was a managerial unit in the organization and it analyzed policies, procedures, performance review, physical controls, information processing, delegation of duties and responsibilities across the institution while determining its efficiency and effectiveness from the data to be collected (Aikins, 2011).

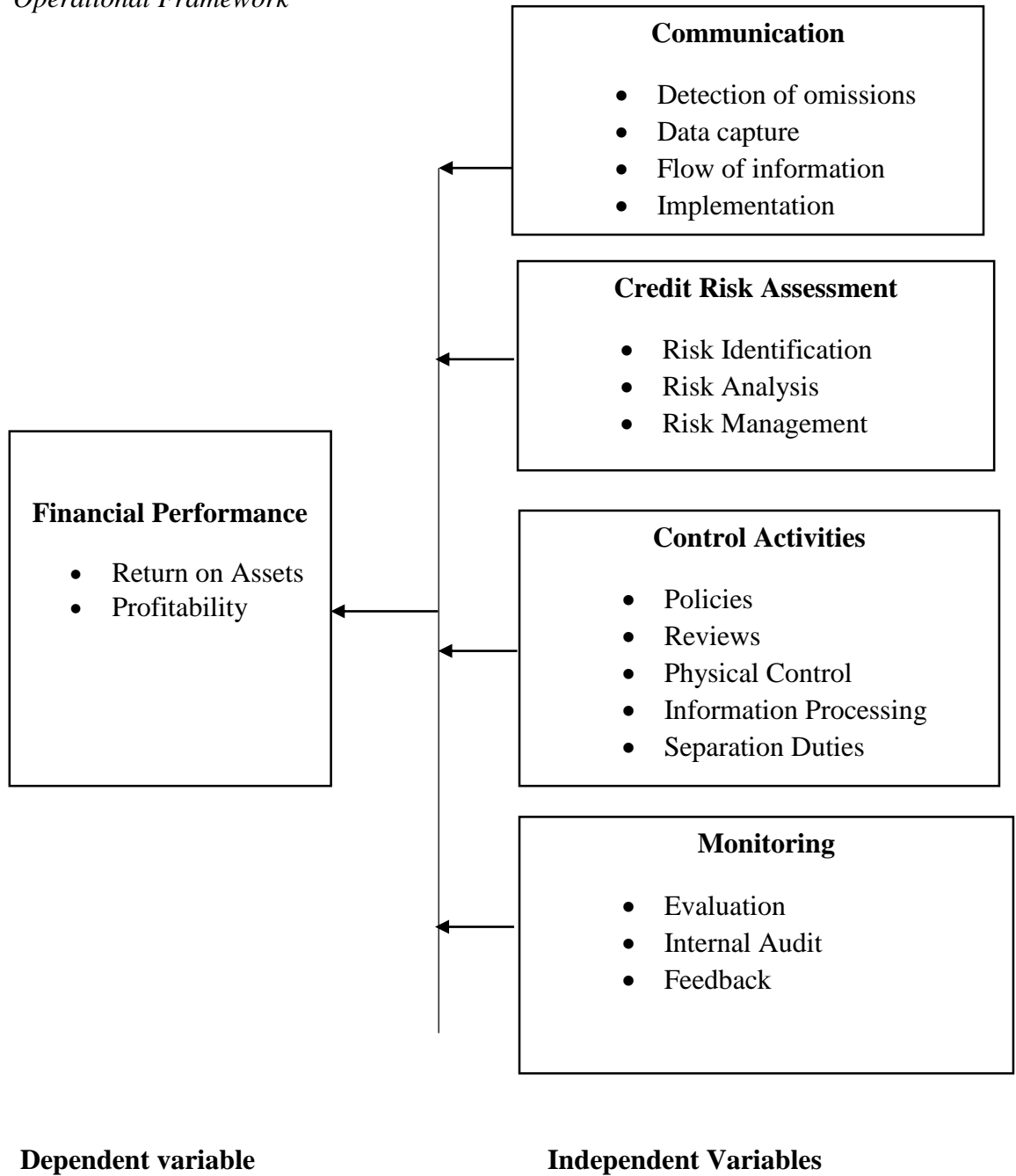
### **2.9.5 Monitoring**

This was a continuous process in any institution to determine the progress and viability of set objectives in the long run to attain its goal (Theophanousset et al., 2011).

## 2.6 Operational Framework

Figure 2.2

*Operational Framework*



## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter described the research methodology of the study. It explained the procedures adopted by the researcher to answer the research questions validly and objectively. This chapter looked at the population, sample, and methods of data collection, procedures, and methods of analyzing the data.

#### **3.2 Research Design**

Bryman and Bell (2014) defined research design as the arrangement and procedures adopted to solve the research problem. This study adopted a descriptive research design where the cause and effect relationships among variables are discovered and measured. The use of descriptive design empowered the researcher to gather extensive data concerning the population under investigation and gave legitimate proposals to the administration of the Sacco in Meru County for better budgetary performance.

#### **3.3 Location of the Study**

A location is a specific place where a study's data is collected (Mugenda & Mugenda, 2003). This study will be located in Meru County. Meru County. Most Saccos in Meru county were agriculturally based where for instance tea, coffee farmers, or dairy farmers unite to save and borrow from the cooperatives. Other groups include teachers, hospital staff, business people in organizations like the transport sector, and university among others. Different groups pooled together to save and get financing for school fees,

business, health, and other economic activities. According to Sacco Societies Regulatory Authority [SASRA] (2018), list of registered Sacco in Meru county, include Nyambene Arimi Sacco society ltd; MMH Sacco; Times u Sacco society; Imenti Sacco society ltd; Dhabiti Sacco society; Capital Sacco society; Centenary Sacco society; Yetu Sacco; Nawiri Sacco; Trans nation Sacco; Unaitas Sacco society; Mwalimu national Sacco society; Kathera rural Sacco society; Joinas Sacco society; and Chai Sacco among others.

The Sacco Societies Act 2008 established the Sacco Societies Regulatory Authority (SASRA) that carried out the licensing, supervision, and regulation of deposit-taking institutions. Saccos were categorized as either deposit-taking, that is regulated by SASRA or non-deposit taking, that is regulated by the commissioner for cooperatives. For Saccos to get SASRA licenses, they ought to be registered under the Cooperative Societies Act CAP 490. This regulatory framework guided the development of Saccos. Co-operatives in Kenya played a key role in the development of the country both socially and economically (Kiyieka & Muturi, 2018). According to the ministry of co-operative development and marketing, cooperatives encompasses all sectors of the economy and provide a platform for mobilizing resources

### **3.4 Target Population**

The study population referred to all individuals whom the researcher deemed relevant to the research study (Mugenda & Mugenda, 2003). The population of the study consisted of 96 respondents drawn from 24 Sacco banks licensed by the SASRA in Meru County. The respondents included the Sacco managers, auditors, and the operation managers from the respective SACCOs.



### **3.5 Sampling**

A subset of the entire population that was selected systematically for a study was known as a sample (Bryman and Bell, 2014). Purposive sampling was used since the population was already defined from which data was obtained. The sample size was 96 respondents from 24 Saccos.

### **3.6 Sample size**

The number of units from which data was gathered was referred to as the sample size (Lavrakas, 2008). In this study, it involved persons familiar and well versed in structures of internal control and financial performance of the Sacco banks. The sample size was 96 respondents which were arrived at by selecting 4 respondents from the respective Saccos including operation manager, senior risk manager, internal auditor, and accountants in the 24 Saccos selected in Meru Saccos in Meru County.

**Table 3.1**

*Sampled Population*

<b>Category</b>	<b>No. of respondents.</b>	<b>24 Sacco's</b>
1. Operation managers	1	24
2. Senior risk managers	1	24
3. Internal auditors	1	24
4. Accountants	1	24
<b>Total</b>	<b>4</b>	<b>96</b>

### **3.7 Research Instruments**

The data which was used was obtained from both primary and secondary sources. The primary data were directly collected from experienced respondents by administering the questionnaires. This method saved time and resources. Secondary data was based on the already collected data obtained from audited financial reports of the Sacco banks for the year 2014 through 2018.

### **3.8 Data Collection Procedures**

The drop and pick method was preferred in data collection. This method involved leaving the questionnaires with the respondents and picked later. This allowed the respondent enough time to respond to the questions.

### **3.9 Reliability**

From the pretest repetitiveness, ambiguity and length of the questionnaires were corrected. To test the reliability of the interviewee's opinion in scale, Cronbach's Alpha coefficient was determined. Cronbach's alpha coefficient was performed to find out whether the questionnaire was consistent. A questionnaire was considered reliable if  $\alpha$  was greater than 0.7. The reliability test was performed on the 10 pilot study responses (Kothari & Garg, 2014).

### **3.10 Data Analysis and Presentation of Results**

The collected data was both in the form of quantitative and qualitative. Quantitative data were analyzed by use of (SPSS 23) and the output presented by the use of descriptive statistics that included frequencies, mean, standard deviation, and percentages. A multiple linear regression model was used to determine whether Sacco banks' performance was a function of the variables, it indicated on the specific objectives using correlation coefficients ( $r$ ), analysis of variance and regression equation coefficients. It provided data on the impact of one independent variable while at the same time minimizing the effects of other independent variables.

### **3.11 Validity**

Validity as noted by Salkind, (2014) was the reliability of the measures adopted to carry out the intended role. It set out to ensure that what was intended to be measured was measured. This study considered content and criterion validity where under content validity. A variable was considered to be varied if it was in general agreement with existing literature (Zohrabi, 2013). Cooper & Schindler (2011) stated that the extent to

which a particular variable related or predicted to the other variable was referred to as criterion validity. Criterion-related legitimacy of the applied system was controlled by looking at the numerous connection coefficients of all the free factors and financial performance. The questionnaire was reviewed by an expert in the field of study to ensure content validity. The researcher worked with the supervisor to uphold the content validity of the data collection instrument. The study also covered all aspects to further ensure the validity of the collected data was enhanced.

### **3.12 Ethical Consideration**

The researcher sought the informed consent of the respondent to participate by explaining verbally and in writing the purpose of the data collected, the identity of the researcher and how the results were used. The researcher further refrained from soliciting personal information that could undermine the confidentiality of the research. The researcher was given an introduction letter by the institution to confirm the research was for academic purposes only. Further, the researcher sought permission to collect data from the research regulating body NACOSTI. All the sources of information were cited using APA format. Everyone involved in the success of this research was acknowledged and data acquired was not fabricated.

## **CHAPTER FOUR**

### **RESULTS AND DISCUSSIONS**

#### **4.1 Introduction**

This chapter presented the findings for each objective. The study set out to establish the effect of internal controls on the financial performance of Sacco banks in Meru County. Internal controls looked at in this study included communication, risk management, control activities, and monitoring. The results included descriptive and inferential statistics presented as tables, graphs, and charts. The magnitude of the effect of the internal controls on the financial performance was determined using a linear regression model. Hypotheses of the study as derived from each objective were tested using the t-test and F-test.

#### **4.2 Response Rate**

The researcher collected 75 questionnaires, which formed 78 percent of the sample size. According to Mugenda and Mugenda (2003), a response rate of 70% is appropriate for generalizing the sample results to the population.

#### **4.3 Demographic Description**

This subsection provided descriptive statistics on academic qualifications and work experience. Other descriptive statistics provided in this section related to the frequency of review of internal controls, the validity of the internal controls to their intended function, and finally, the effectiveness of internal controls in revenue generation. These findings were in the form of tables, pie charts, and paragraphed explanations.

### 4.3.1 Academic Qualification

**Table 4.1**

*Respondent's Highest Academic Qualification*

<b>Academic Level</b>	<b>Frequency</b>	<b>Percent</b>
Certificate/diploma	15	20.0
Undergraduate degree	56	74.7
Master's degree	4	5.3
<b>Total</b>	<b>75</b>	<b>100.0</b>

Table 4.1 showed that the majority of the respondents (80 percent) had at least an undergraduate degree whereas 20 percent had at most a diploma qualification. This showed that the respondents possessed basic qualifications to work in the SACCOs and they possessed knowledge of the questions asked under this study.

### 4.3.2 Working Experience

**Table 4.2**

*Working Experience in the Sacco*

<b>Period</b>	<b>Frequency</b>	<b>Percent</b>
6months-1 year	13	17.3
1-2 years	17	22.7
2-3 years	7	9.3
3-4 years	4	5.3
More than 4 years	34	45.3
<b>Total</b>	<b>75</b>	<b>100.0</b>

According to Table 4.2, the cluster of experience with the highest number of employees was more than four years that had 45.3 percent of the respondents. Forty percent of the respondents possessed less than 2 years of working experience in the Sacco while 14.6 percent of the respondents had between 2 to 4 years of working experience in the Sacco. Therefore, the working experience for the respondents was adequate for them to provide the required information for the study.

### 4.3.3 Frequency of Internal Controls Review

**Table 4.3**

*Frequency of Review of Internal Control System*

<b>Period</b>	<b>Frequency</b>	<b>Percent</b>
After 5 years	7	9.3
Annually	35	46.7
Half-yearly	13	17.3
When need arises	20	26.7
<b>Total</b>	<b>75</b>	<b>100.0</b>

Sacco's' internal controls were reviewed regularly as observed in Table 4.3 where the majority of the respondents confirmed that review was done annually. However, 26.7 percent of the respondents observed that their Sacco only reviewed the internal controls when they deemed fit. This meant that internal controls were present in the Sacco and they were subject to regular review by management.



**Figure 4.1**

*Functioning of Internal Controls*

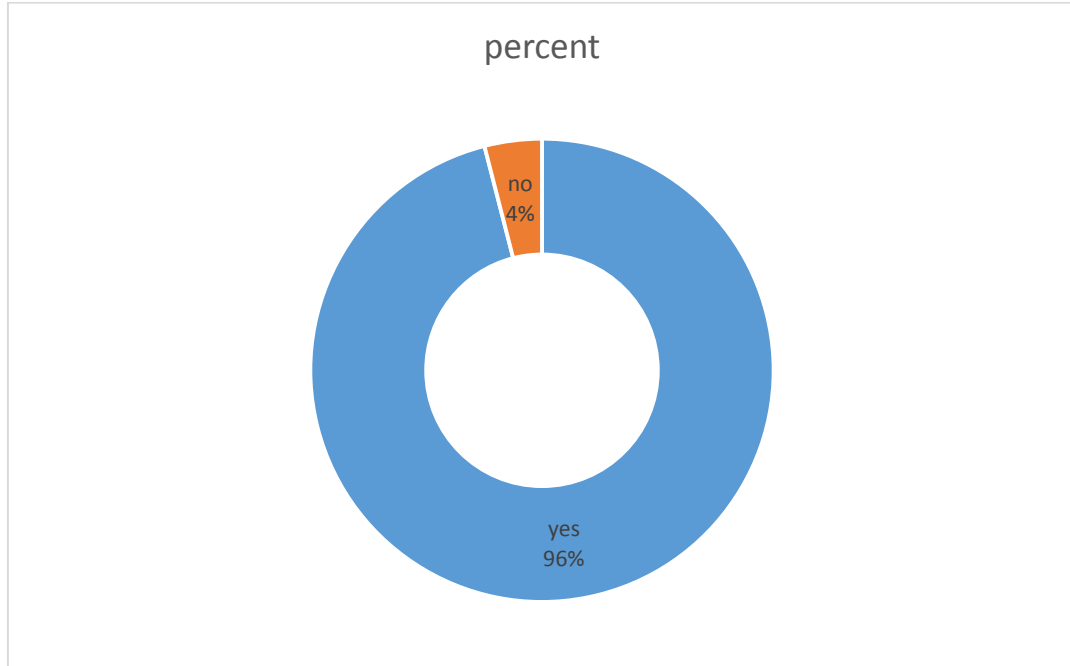


Figure 4.1 further showed that internal controls were functioning as intended by management. This was because of adherence to FOSA and BOSA policies. Respondents further observed that there was good coordination in Sacco operations and that regular audits helped improve the functions of the internal controls. It was also observed that the system was safeguarded to reduce fraud and that policies were clearly articulated.

#### 4.3.4 Effectiveness of Internal Controls in Revenue Generation

**Table 4.4**

*Rate of Internal Control System concerning Revenue Generation*

	Frequency	Percent
very ineffective	8	10.7
Ineffective	3	4.0
Uncertain	1	1.3
Effective	41	54.7
very effective	22	29.3
Total	75	100.0

Table 4.4 showed that 84 percent of the respondents acknowledged the effectiveness of internal control systems in contributing to revenue generation. The respondents gave the rating as effective. Therefore, there was a consensus that internal controls contributed to revenue generation, which was attributed to its regular review by management (Table 4.3).

#### 4.4 Reliability Analysis

This section showed the findings on reliability as a proxy for the internal consistency of the questionnaire measured during the piloting phase of data collection. Cronbach's

Alpha determined the reliability whereby an alpha of 0.7 and above was required to conclude that the questionnaire section was reliable.

**Table 4.5**

*Reliability Analysis for Communication*

<b>Item-Total Statistics</b>				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
Any omission detected is communicated to the right party	13.0267	7.107	0.795	0.896
All data communicated is captured well	12.8267	7.497	0.834	0.883
There is a clear flow of information in the organization	12.9867	7.067	0.838	0.880
The system implementation process is well communicated	12.8800	7.512	0.770	0.904
<b>Overall section score</b>				<b>0.916</b>

Table 4.5 showed the reliability score for communication together with the change in Alpha score due to the deletion of a questionnaire item. The Alpha for communication was 0.916, which was above 0.7 hence deeming the questionnaire reliable in regards to communication.

**Table 4.6***Reliability Analysis for Risk Assessment*

<b>Item-Total Statistics</b>				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
There is a risk identification policy	8.2933	2.507	0.679	0.466
There is a risk analysis policy	8.2933	2.480	0.742	0.384
There is a risk management department in my organization	8.1867	4.019	0.284	0.906
<b>Overall section score</b>				<b>0.727</b>

Table 4.6 showed the reliability score for risk assessment together with the change in Alpha score due to the deletion of a questionnaire item. The Alpha for risk assessment was 0.727, which was above 0.7 hence deeming the questionnaire reliable in regards to risk assessment.

**Table 4.7***Reliability Analysis for Control Functions*

<b>Item-Total Statistics</b>				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
Policies are governing the control systems	17.1733	9.875	.732	.830
Reviews on the system are regularly done	17.4000	10.703	.630	.854
Physical monitoring on the system is regularly done	17.4000	8.838	.814	.806
Information is processed efficiently	17.3067	10.243	.770	.826
Duties are well separated as per the roles	17.5467	9.467	.574	.879
<b>Overall section score</b>				<b>0.867</b>

Table 4.7 showed the reliability score for control functions together with the change in alpha score due to the deletion of a questionnaire item. The Alpha for control functions was 0.867, which was above 0.7 hence deeming the questionnaire reliable in regards to control functions.

**Table 4.8***Reliability Analysis for Monitoring*

<b>Item-Total Statistics</b>				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
Evaluations of the quality of internal controls are done regularly	8.4400	2.358	0.677	0.851
Internal audit is done on regular intervals	8.2933	2.643	0.776	0.745
Feedback reports are given regularly	8.4933	2.740	0.731	0.786
			Overall Section Score	0.851

Table 4.8 showed the reliability score for monitoring together with the change in Alpha score due to the deletion of a questionnaire item. The Alpha for monitoring was 0.851, which was above 0.7 hence deeming the questionnaire reliable in regards to monitoring.

**Table 4.9***Overall Reliability Analysis*

<b>Item-Total Statistics</b>				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Delete d
Any omission is communicated	59.5467	90.521	0.658	0.918
Data communicated is captured	59.3467	91.500	0.691	0.917
There is a clear flow of information	59.5067	90.848	0.661	0.918
System implementation communicated	59.4000	91.757	0.636	0.919
Risk identification policy	59.6667	94.360	0.442	0.925
Risk management department in my organization	59.7467	95.408	0.342	0.930
Policies are governing the control systems	59.2267	91.745	0.698	0.917
Reviews on the system	59.4533	93.251	0.662	0.918
Physical monitoring on the system	59.4533	88.846	0.764	0.915
Information is processed efficiently	59.3600	91.774	0.794	0.915
Duties are well separated	59.6000	88.865	0.667	0.918
Evaluations of the quality of internal controls	59.5867	89.273	0.769	0.915

Table 4.9 showed the reliability score for the four variables combined with the change in Alpha score due to the deletion of a questionnaire item. The overall alpha was 0.924, which was above 0.7 hence deeming the whole questionnaire reliable in regards to internal controls.

#### 4.5 Description of Study Variables

This section gave the descriptive statistics for the questionnaire items for each variable. The statistics used were frequency, percentages, and means presented in form of tables. The questions were in the form of a five-point Likert scale were 1, 2, 3, 4, and 5 represented strongly disagree, disagree, neutral, agree, and strongly agree respectively.

##### 4.5.1 Communication Descriptive Statistics

**Table 4.10**

*Descriptive Statistics for Communication*

N=75	Question	(1)	(2)	(3)	(4)	(5)	Mean
1	Any omission detected is communicated to the right party	3 (4.0%)	2 (2.7%)	10 (13.3%)	21 (28.0%)	39 (52.0%)	4.21
2	All data communicated is captured well	2 (2.7%)	1 (1.3%)	8 (10.7%)	17 (22.7%)	47 (62.7%)	4.41
3	There is a clear flow of information in the organization	4 (2.7%)	3 (4.0%)	10 (13.3%)	19 (25.3%)	41 (54.7%)	4.25
4	The system implementation process is well communicated	2 (2.7%)	2 (2.7%)	9 (12.0%)	16 (21.3%)	46 (61.3%)	4.36
	<b>Average</b>	3.03%	2.68%	12.33%	24.33%	57.68%	4.31
	<b>Summary</b>	Negative = 18.00%			Positive = 82.00%		



Table 4.10 showed the descriptive statistics for communication summarized by four questions. All the four questionnaire items addressing communication had a mean of more than four out of a maximum of five. This showed that the majority were in agreement with the assertions that omissions were communicated to the right party, that all communication was captured well, there was a clear flow of information, and that the system implementation process was well communicated. The overall mean was 4.31 out of 5; hence, the overall response was positive in support of good communication in the sampled Sacco.

#### 4.5.2 Risk Assessment Descriptive Statistics

**Table 4.11**

*Descriptive Statistics for Risk*

N=75	Question	(1)	(2)	(3)	(4)	(5)	Mean
1	There is a risk identification policy	4 (5.3%)	3 (4.0%)	6 (8.0%)	31 (41.3%)	31 (41.3%)	4.09
2	There is a risk analysis policy	3 (4.0%)	3 (4.0%)	9 (12.0%)	29 (38.7%)	31 (41.3%)	4.09
3	There is a risk management department in my organization	2 (2.7%)	0 (0.0%)	14 (18.7%)	24 (32.0%)	35 (46.7%)	4.20
	<b>Average</b>	4.00%	2.67%	12.90%	37.33%	43.10%	4.13
	<b>Summary</b>	Negative = 19.57%			Positive = 80.43%		

Table 4.11 showed the descriptive statistics for risk summarized by three questions. All three questionnaire items addressing risk had a mean of more than four out of a maximum of five. This, therefore, showed that the majority among the respondents agreed to the assertions that there is a risk identification process, there was a risk analysis policy and finally, that there was a department set in the organization for risk management. The overall mean was 4.13 out of 5; hence, the overall response was positive in support of good risk management in the sampled Sacco.

### 4.5.3 Control Functions

**Table 4.12**

*Descriptive Statistics for Control Functions*

N=75	Question	(1)	(2)	(3)	(4)	(5)	Mean
1	Policies are governing the control systems	1 (1.3%)	5 (6.7%)	0 (0.0%)	16 (21.3%)	53 (70.7%)	4.53
2	Reviews on the system are regularly done	0 (0.0%)	1 (1.3%)	15 (20.0%)	19 (25.3%)	40 (53.3%)	4.31
3	Physical monitoring on the system is regularly done	2 (2.7%)	3 (4.0%)	10 (13.3%)	15 (20.0%)	45 (60.0%)	4.31
4	Information is processed efficiently	1 (1.3%)	1 (1.3%)	6 (8.0%)	26 (34.7%)	41 (54.7%)	4.40
5	Duties are well separated as per the roles	5 (6.7%)	2 (2.7%)	8 (10.7%)	21 (28.0%)	39 (52.0%)	4.16
	<b>Average</b>	2.40%	3.20%	10.40%	25.86%	58.14%	4.34
	<b>Summary</b>	Negative =16 %		Positive = 84%			

Table 4.12 showed the descriptive statistics for control functions summarized by five questions. All the five questionnaire items addressing control functions had means of

more than four out of a maximum of five. This indicated that the majority of the respondents agreed to the assertions of the existence of policies governing control systems, regular monitoring and review of control systems, processing of information was efficient, and finally, separation of duties as per the roles. The overall mean was 4.34 out of 5; hence, the overall response was positive in support of proper control systems in the sampled Sacco.

#### 4.5.4 Monitoring

**Table 4.13**

*Descriptive Statistics for Monitoring*

N=75	Question	(1)	(2)	(3)	(4)	(5)	Mean
1	Evaluations of the quality of internal controls are done regularly	1 (1.3%)	5 (6.7%)	10 (13.3%)	23 (30.7%)	36 (48.0%)	4.17
2	Internal audit is done on regular intervals	1 (1.3%)	0 (0.0%)	11 (14.7%)	25 (33.3%)	38 (50.7%)	4.32
3	Feedback reports are given regularly	1 (1.3%)	1 (1.3%)	12 (16.0%)	35 (46.7%)	26 (34.7%)	4.12
	<b>Average</b>	1.30%	2.67%	14.67%	36.90%	44.47%	4.20
<b>Summary</b>		Negative = 18.63%			Positive = 81.37%		

Table 4.13 showed the descriptive statistics for monitoring summarized by three questions. All three questionnaire items addressing monitoring had a mean of more than

four out of a maximum of five. This showed that the majority of the respondents agreed to the assertions that there was regular evaluation of the quality of internal controls, internal audit was done regularly, and finally, those feedback reports are given regularly. The overall mean was 4.20 out of 5; hence, the overall response was positive in support of monitoring in the sampled Sacco.

#### 4.5.5 Financial Performance

**Table 4.14**

*Descriptive Statistics for Financial Performance*

Performance level	Frequency	Percent
High	34	45.3
Moderate	25	33.3
Low	10	13.3
Very Low	6	8.0
Total	75	100.0

Table 4.14 showed that majority of the Sacco banks had at least moderate performance with only a few (21.3 percent) performing below average financially. This showed that the performance of Saccos in Meru County was good and this trend correlates with the high levels of internal controls observed in Tables 4.10, Table 4.11, Table 4.12, and Table 4.13 representing communication, credit risk assessment, control activities, and monitoring respectively.

## **4.6 Linear Regression Assumptions**

The study used linear regression to link between the dependent variable (financial performance) and the independent variables (communication, credit risk assessment, control activities, and monitoring). To use this model, the study tested four underlying assumptions, which included normality of regression residuals, linearity between independent and dependent variables, homoscedasticity, and absence of multicollinearity among independent variables.

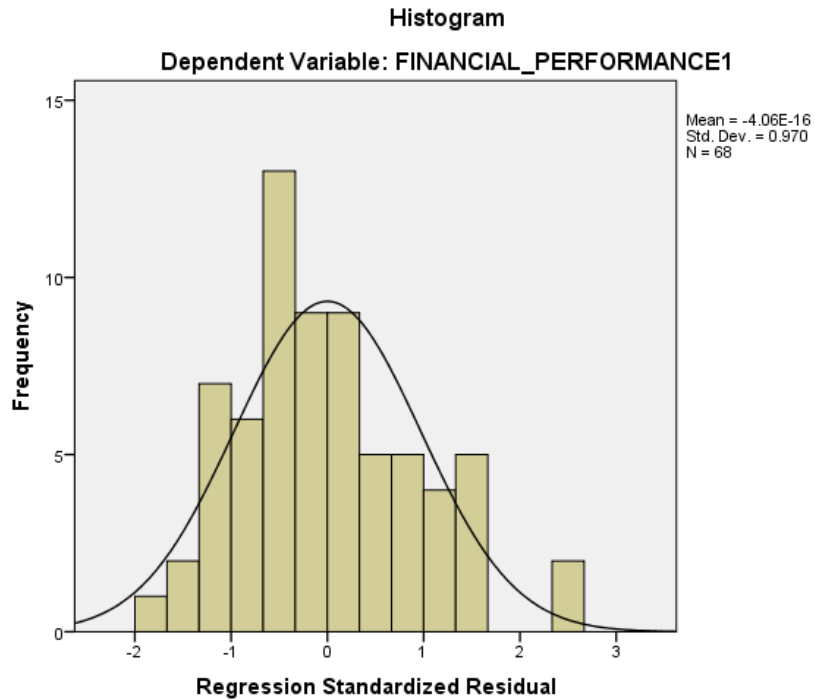
### **4.6.1 Outliers**

Outliers were identified with the aid of SPSS for removal because they compromised the normality of data and often lead to false conclusions (Kwak & Kim, 2017). Mahalanobis statistics and Cook's Distance statistics were generated from an initial regression run. The cutoff value for Mahalanobis statistics was from the chi-square distribution,  $\chi^2$  (5%, five variables) = 11.0705 while the cut-off for Cooks Distance was  $4/(n-k-1)$  where k was several independent variables (k=4) and n was 75 cases;  $4/(75-4-1) = 0.05714$ . From the analysis, seven cases that had values above the aforementioned cutoff points were determined to be outliers. These outliers were unselected for testing of assumptions and consequent linear regression modeling.

## 4.6.2 Normality

**Figure 4.2**

*Histogram of Standardized Residuals*



The histogram of regression-standardized residuals in Figure 4.2 a bell shape slightly skewed to the right. However, the overall visual impression was that the residuals appear normally distributed around the zero value.

**Table 4.15**

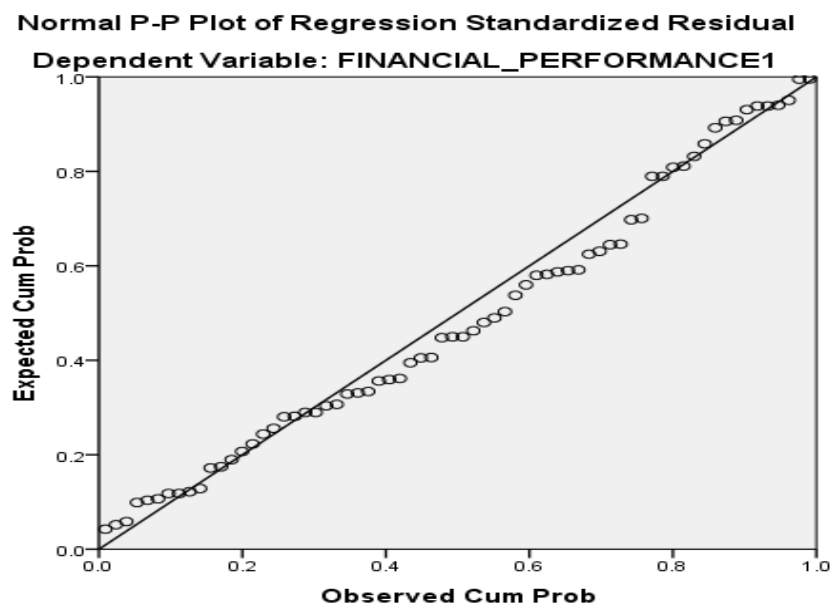
*Tests of Normality*

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Unstandardized Residual	0.085	68	0.200*	0.968	68	0.075

Table 4.15 showed the Shapiro-Wilk test of normality that tests the null hypothesis of a normal distribution of unstandardized residuals against the alternate hypothesis that there was an absence of normality in the data. By observation, Shapiro-Wilk statistics had a corresponding p-value of 0.075, which was more than a 5% significance level; hence, retaining the null hypothesis deeming the unstandardized residuals normally distributed.

**Figure 4.3**

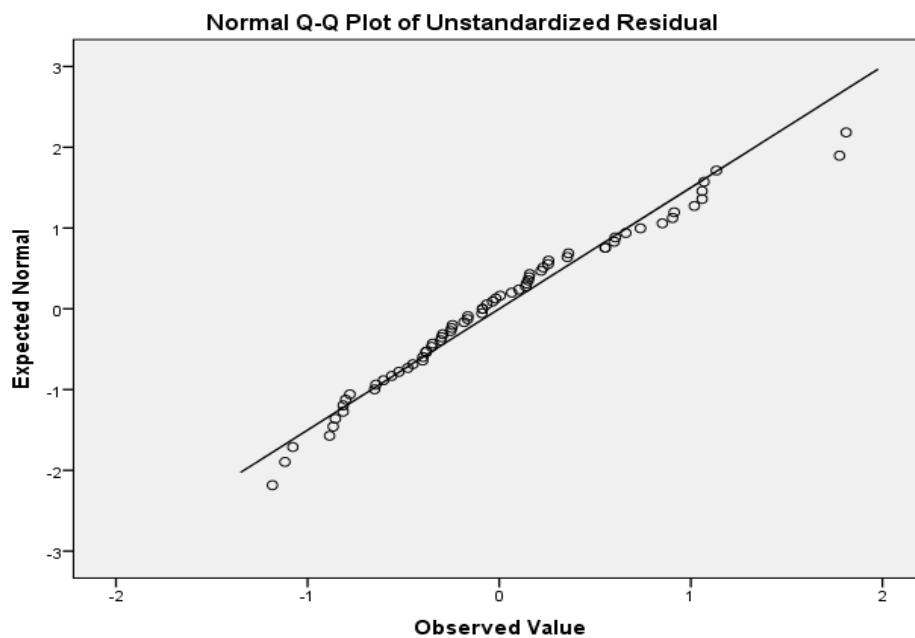
*Normal P-P Plot of Standardized Residuals*



By visually inspecting Figure 4.3, the observed cumulative probability values spread around the expected cumulative probability curve (normal curve) hence concluding that the standardized regression residuals followed a normal distribution.

**Figure 4.4**

*Normal Q-Q Plot of Growth*



Further observations in Figure 4.4 shows that the observed values fitted well along the expected normal curve in the Normal Q-Q plot. This corroborates the findings from Shapiro-Wilk normality test in Table 4.15 as well as the normal p-p plot (Figure 4.3) and histogram of unstandardized residuals (Figure 4.2).



#### 4.6.2 Multicollinearity (Additivity)

**Table 4.16**

*Collinearity Statistics*

<b>Collinearity Statistics</b>		
	<b>Tolerance</b>	<b>VIF</b>
(Constant)	-	-
Communication	0.879	1.138
Control Activities	0.598	1.671
Monitoring	0.486	2.057
Risk	0.653	1.532

The variance inflation factors (VIF) values in Table 4.44 showed the collinearity statistics. The observed VIF values were less than 3.00, which was the cutoff point according to (Bickel, 2007) hence concluding that there was no multicollinearity amongst the independent variables.

### 4.6.3 Linearity

**Table 4.17**

*Analysis of Variance for Combined Independent Variables*

	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>p-value</b>
Regression	18.998	4	4.750	10.057	.000 <sup>b</sup>
Residual	29.752	63	.472		
Total	48.750	67			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Risk, Communication, Control Activities, Monitoring

Table 4.17 showed the analysis of variance, which tested the null hypothesis that the predictors (internal controls) had no linear relationship to the dependent variable (financial performance). The alternative hypothesis was that the predictors were linearly related to the dependent variable. The observed p-value for the F-statistics in ANOVA was 0.000, which was less than the significance level of 5 percent. Therefore, the null hypothesis was rejected bringing to the conclusion that the predictors (internal controls) relate linearly to the dependent variable (financial performance).

**Table 4.18**

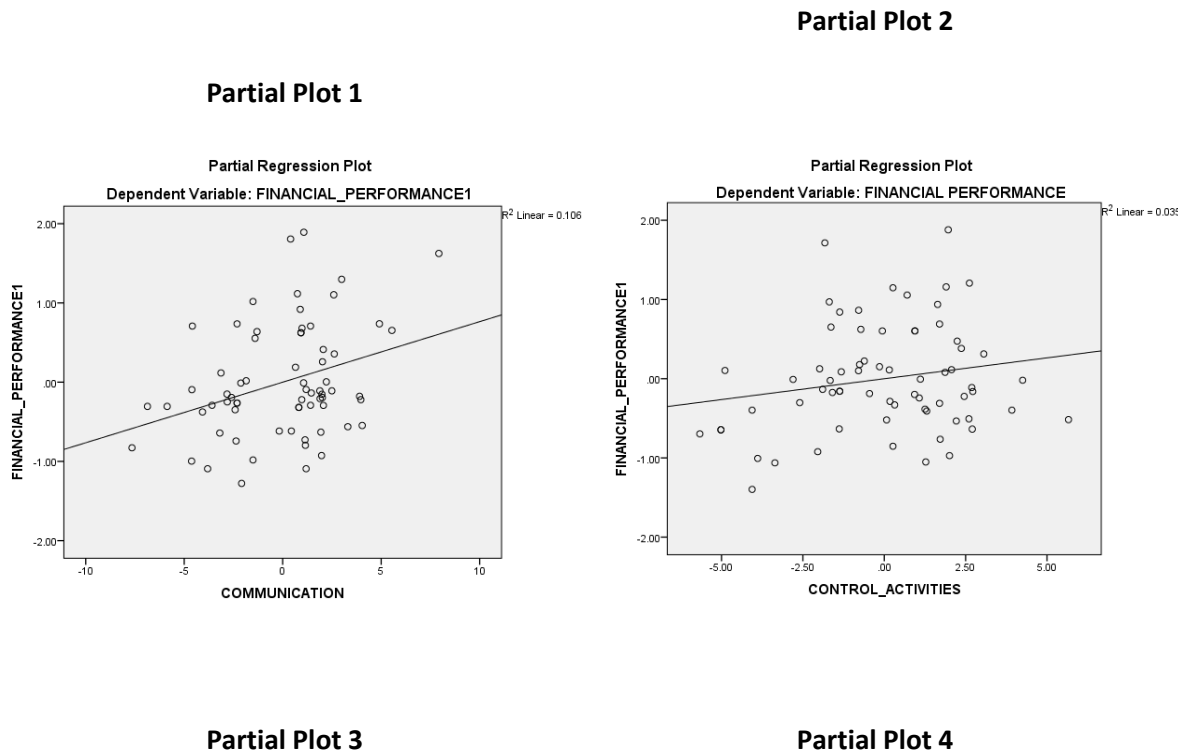
*Model Summary for Combined Independent Variables*

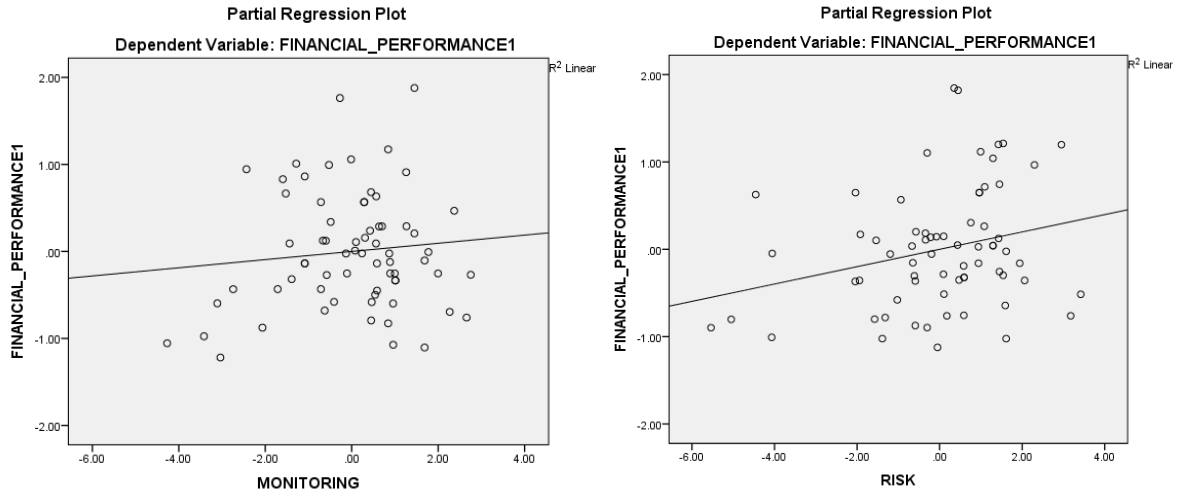
R	R Square	Adjusted R Square	Std. Error of the Estimate
0.624 <sup>a</sup>	0.390	0.351	0.68720

Further, the coefficient of multiple correlations (R) in Table 4.18 was 62.4%, which was a high correlation between the predictors and the dependent variable hence corroborating the findings from the ANOVA.

**Figure 4.5**

*Partial Linearity Plots*





The partial plots in Figure 4.5 showed that each independent variable had a linear relationship with the dependent variable albeit at different degrees. For instance, risk (partial plot 4) and communication (partial plot 1) were more linearly related to financial performance compared to control activities (partial plot 2) and monitoring (partial plot 3). Nevertheless, the slope on all the four plots was positive and visible as depicted by the trend lines therein.

#### 4.6.4 Homoscedasticity

**Table 4.19**

*Breusch-Pagan and Koenker test*

Statistic	LM	P-Values
BP	3.979	0.409
Koenker	3.945	0.413

Table 4.19 displayed the Breusch-Pagan (BP) and Koenker test that tested the null hypothesis that heteroscedasticity was not present (hence, homoscedasticity). Since the observed p-value of BP and Koenker tests were 0.409 and 0.413 respectively, and they were less than 5%, hence there was no heteroscedasticity. Therefore, the assumptions of homoscedasticity had been met.

#### **4.7 Hypothesis Testing**

The study set out to test four null hypotheses in line with the specific objectives.

$H_{01}$ : There was no significant relationship between communication and financial performance

$H_{02}$ : There was no significant relationship between risk assessment and financial performance

$H_{03}$ : There was no significant relationship between control functions and financial performance

$H_{04}$ : There was no significant relationship between monitoring and financial performance

With the aid of SPSS, simple linear regression analysis was carried out to show the relationship between each independent variable (communication, risk, control activities, and monitoring) and dependent variable (financial performance). T-test was used to test the four corresponding hypotheses.

##### **4.7.1 Linear Regression Financial Performance against Communication**

The linear relationship between financial performance and communication was per general form below

$$FP = \alpha + \beta * Comm + \epsilon_t$$

Where;

FP – Financial Performance

Comm – Communication

$\alpha$  – Regression intercept

$\beta$  – Coefficient of communication

$\epsilon_t$  – Regression error term

$$FP = 0.729 + 0.113 * Comm \dots\dots\dots (1)$$

*t-statistic*    1.358        3.825

*p-value*        0.179        0.000

R                0.426 (42.6%)

R-square        0.181 (18.1%)

F-statistic     F = 14.628; p = 0.000

$H_{01}$ : There was no significant relationship between communication and financial performance

Financial performance was the dependent variable in equation 1 while communication was the independent variable. The results showed that financial performance had a positive relationship with communication, which implied that both variables moved in the same direction. The coefficient of determination, (R-square) showed that communication as an independent variable explained 18.1% of variations in the financial performance of Saccos in Meru County. Equation 1 also showed that a unit increase in communication led to a 0.113 increase in financial performance while holding other factors constant. The p-value of the coefficient of communication was 0.000, which was less than 5% (0.05). Therefore,  $H_{01}$  was rejected hence concluding that at a significance level of 5%, communication was significantly related to the financial performance of Saccos in Meru County. The results concurred with those of Akintaro and Shonubi (2016) in a study on effective communication and organizational success which concluded that there was effective communication, activities flow in a definite direction and enhanced coordination leading to organizational success.

#### **4.7.2 Linear Regression of Financial Performance against Risk Assessment**

The linear relationship between financial performance and risk assessment was in the general form below

$$FP = \alpha + \beta * Risk + \epsilon_t$$

Where;

FP – Financial Performance

Risk – Risk Assessment

$\alpha$  – Regression intercept

$\beta$  – Coefficient of Risk management

$\epsilon_t$  – Regression error term

$$FP = 0.493 + 0.181 * Risk \dots\dots\dots (2)$$

*t-statistic*    0.938        4.366

*p-value*        0.352        0.000

R            0.473 (47.3%)

R-square    0.224 (22.4%)

F-statistic    F = 19.065; p = 0.000

$H_{02}$ : There was no significant relationship between risk management and financial performance

Financial performance was the dependent variable in equation 2 while risk management was the independent variable. The results showed that financial performance had a positive relationship with risk management, which implied that both variables moved in the same direction. The coefficient of determination, (R-square) showed that risk management as an independent variable explained 22.4% of variations in the financial



performance of Saccos in Meru County. Equation 2 also showed that a unit increase in risk management led to a 0.181 increase in financial performance while holding other factors constant. The p-value of the coefficient of risk management was 0.000, which was less than 5% (0.05). Therefore,  $H_{02}$  was rejected hence concluding that at a significance level of 5%, risk management was significantly related to the financial performance of Saccos in Meru County. The results were similar to those of Kariuki (2017) in a study on credit risk management practices and financial performance where he concluded that it reduces bad debts and financial losses in turns improving on the financial performance.

#### **4.7.3 Linear Regression of Financial Performance against Control Functions**

The linear relationship between financial performance and control functions was in the general form below

$$FP = \alpha + \beta * Ctrl + \epsilon_t$$

Where;

FP – Financial Performance

Ctrl – Control Functions

$\alpha$  – Regression intercept

$\beta$  – Coefficient of Control Activities

$\epsilon_t$  – Regression error term

$$FP = 0.052 + 0.124*Ctrl \dots\dots\dots (3)$$

*t-statistic*    0.080        4.164

*p-value*        0.936        0.000

R                0.456 (45.6%)

R-square       0.208 (20.8%)

F-statistic    F = 17.339; p = 0.000

$H_{03}$ : There was no significant relationship between control functions and financial performance

Financial performance was the dependent variable in equation 3 while control functions as the independent variable. The results showed that financial performance had a positive relationship with control functions, which implied that both variables moved in the same direction. The coefficient of determination, (R-square) showed that control functions as an independent variable explained 20.8% of variations in the financial performance of Saccos in Meru County. Equation 3 also showed that a unit increase in control functions led to a 0.124 increase in financial performance while holding other factors constant. The p-value of the coefficient of control functions was 0.000, which was less than 5% (0.05). Therefore,  $H_{03}$  was rejected hence concluding that at a significance level of 5%, control functions were significantly related to the financial performance of Saccos in Meru County. The results concurred with those of Kiyieka (2018) in a study on internal control

activities and financial performance which revealed a significant relationship between the two variables.

#### 4.7.4 Linear Regression of Financial Performance against Monitoring

The linear relationship between financial performance and risk is in the general form below

$$FP = \alpha + \beta * Mon + \epsilon_t$$

Where;

FP – Financial Performance

Mon – Monitoring

$\alpha$  – Regression intercept

$\beta$  – Coefficient of Monitoring

$\epsilon_t$  – Regression error term

$$FP = 0.261 + 0.196 * Mon \dots\dots\dots (4)$$

*t-statistic*    0.464        4.488

*p-value*        0.644        0.000

R 0.484(48.4%)

R-square 0.234 (23.4%)

F-statistic F = 20.140; p = 0.000

$H_{04}$ : There was no significant relationship between monitoring and financial performance. Financial performance was the dependent variable in equation 4 while monitoring was the independent variable. The results showed that financial performance had a positive relationship with monitoring, which implied that both variables moved in the same direction. The coefficient of determination, (R-square) showed that monitoring as an independent variable explained 23.4% of variations in the financial performance of Saccos in Meru County. Equation 4 also showed that a unit increase in monitoring led to a 0.196 increase in financial performance while holding other factors constant. The p-value of the coefficient of monitoring was 0.000, which was less than 5% (0.05). Therefore,  $H_{04}$  was rejected hence concluding that at a significance level of 5%, monitoring was significantly related to the financial performance of Saccos in Meru County. These results concurred with those of a study conducted by Njoki (2015) on the role of monitoring activities on the effectiveness and efficiency and concluded that regular and continued monitoring and evaluation led to enhanced efficiency and effectiveness in the financial performance.

#### 4.7.5 Multiple Linear regression of Financial Performance against Internal Controls

The linear relationship between financial performance and internal controls was in the general form below

$$FP = \alpha + \beta_1 * Comm + \beta_2 * Risk + \beta_3 * Ctrl + \beta_4 * Mon + \epsilon_t$$

Where;

FP – Financial Performance

Comm – Communication

Risk - Risk

Ctrl – Control Activities

Mon – Monitoring

$\alpha$  – Regression intercept

$\beta_1$  – Coefficient of Communication

$\beta_2$  – Coefficient of Risk Assessment

$\beta_3$  – Coefficient of Control Functions

$\beta_4$  – Coefficient of Monitoring

$\epsilon_t$  – Regression error term

The regression equation of the linear regression analysis is:

$$Y = -1.593 + 0.076\text{Comm} + 0.099\text{Risk} + 0.053\text{Ctrl} + 0.047\text{Mon} + e \dots(5)$$

	+	+	+	+	+
<i>Std. error</i>	0.704	0.028	0.035	0.057	0.046
<i>t – stat</i>	-2.262	2.734	2.138	1.517	0.822
<i>p- value</i>	0.027	0.008	0.036	0.134	0.414

R 0.624 (62.4%)

R-square 0.390 (39%)

F-statistic F = 10.057; p = 0.000

Equation 5 showed the results from the multiple linear regression analysis with all internal controls of the study entered jointly as the independent variables while financial performance was the dependent variable. The results contained t-statistic and the corresponding p-values that were used to form conclusions on the study's hypotheses. The beta coefficients for each internal control showed the increment of financial performance for the marginal increment of each respective internal control.

In regards to communication, the observed p-value was 0.008, which was less than 0.05 hence the null hypothesis on communication was rejected. Therefore, communication significantly affected the financial performance of Sacco banks in Meru County while

holding other factors constant. The marginal increase in communication as an internal control led to 0.076 increase financial performance of Sacco banks in Meru County while holding other factors constant.

In regards to risk, the observed p-value was 0.036, which was less than 0.05 hence the null hypothesis on risk was rejected. Therefore, risk significantly affected the financial performance of Sacco banks in Meru County while holding other factors constant. The marginal increase in risk assessment as an internal control led to 0.099 increase financial performance of Sacco banks in Meru County while holding other factors constant.

In regards to control functions, the observed p-value was 0.134, which was more than 0.05 hence the null hypothesis on control activities was not rejected. Therefore, control functions did not significantly affect the financial performance of Sacco banks in Meru County while holding other factors constant. The marginal increase in control functions as an internal control led to 0.053 increase financial performance of Sacco banks in Meru County while holding other factors constant.

Concerning monitoring as an internal control, the observed p-value was 0.414, which was more than 0.05 hence the null hypothesis on monitoring was not rejected. Therefore, monitoring did not significantly affect the financial performance of Sacco banks in Meru County while holding other factors constant. The marginal increase in monitoring as an internal control led to 0.047 increase financial performance of Sacco banks in Meru County while holding other factors constant. Mwachiro (2013) in a study on internal control systems and financial performance concluded that effective internal control systems were the key pillars towards the achievement of financial performance in financial institutions.

#### **4.8 Chapter Summary**

The study established that all the internal controls (communication, risk assessment, control functions and monitoring) severally had a significant effect on financial performance as shown by equations 1, 2, 3 and 4. However, when jointly regressed with financial performance (equation 5), only two controls had a significant effect on financial performance. They were communication and risk assessment. The summary was provided in Table 4.20 of the hypothesis's summary.



**Table 4.20***Hypotheses Summary based on Independent Linear Regressions*

<b>Null Hypothesis</b>	<b>P-Value</b>	<b>Decision</b>	<b>Remarks</b>
$H_01$ : There is no significant relationship between communication and financial performance	0.000	$H_01$ rejected	P<0.05
$H_02$ : There is no significant relationship between risk assessment and financial performance	0.000	$H_02$ rejected	P<0.05
$H_03$ : There is no significant relationship between control functions and financial performance	0.000	$H_03$ rejected	P<0.05 NB: Is not significant after joint regression (equation 5; p = 0.134)
$H_04$ : There is no significant relationship between monitoring and financial performance	0.000	$H_04$ rejected	P<0.05 NB: Is not significant after joint regression (equation 5; p = 0.414)

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presented a summary of the findings of the study. The conclusions to the main issues of the study, recommendations and areas of further research were also established. The problem of the study was inadequate internal management capacity and operational in Sacco banks. This was heightened by poor structures of control, technological changes, fraud, and misuse of assets, leading to revenues losses and poor performance. There was lack of controls thus making organizations fail to achieve their objectives as corruption had become rife and increased collusion between management and external auditors. Technological advances brought about challenges in control systems and prompting new ways of controlling organizations. The objectives of the study were to establish the effect of communication on the financial performance, to determine the effect of risk assessment on the financial performance, to find out the effect of control functions on the financial performance and to assess the effect of monitoring on the financial performance of Sacco banks in Meru County.

#### **5.2 Summary of the Findings**

The study found out that the majority of the respondents held undergraduate degrees and served in different capacities within the respective institutions. The Saccos employed people with relevant training to work and serve in various departments.

The objective of communication in the Saccos was a key factor in their daily undertakings where employees were keen to identify and highlight any omissions which

would lead to losses if not handled appropriately. The employees on the other hand ensured that all the data was captured accordingly into the system and to the correct accounts for smooth running and more accurate outputs. The systems also ensured that information flow was well defined as to know the correct channels and medium for better reporting and feedback of information. Implementation of the communicated information was ensured since spoken and written policies and information should match the actions taken.

Risk management objective to some extent was taken care of with the policies and guidelines on how to identify risk areas within the system and how to handle and report the same to the relevant department. Risk analysis was also done with committees and people responsible for risk handling and solution in the Saccos. There were procedures followed for risk analysis available to employees as a support tool towards risk reduction in the institutions. There was also a risk management team responsible for handling all the cases reported on risk within the institution. The management team would also come up with risk avoidance and handling measures ready for implementation at different levels within the Saccos.

Objective three looked at control functions and the majority agreed that reviews were done though at different intervals in different Saccos. This had a variation in terms of how often reviews were done in the respective Saccos. There was physical control as supported by the majority of the respondents admitting that there were those in charge of physical controls and operations within the organization. Information on the other hand was processed effectively and efficiently though there were some cases of breakdown here and there due to poor maintenance of the systems or even power related. Duties were

distinctively defined and employees were aware of their mandate which to some extent made their work easier as most of them were aware of what was expected of them.

Objective four affirmed that monitoring was done in the Saccos whereby the systems were up to date and the team responsible for the same ensured continuous evaluation just to be sure the system is up and running. The activities were also monitored daily to ensure up to date reports and results. An internal audit was an integral part of the Saccos as not a single Sacco that did not engage in an internal audit whether from within or outsourced. This varied on duration in different Saccos as their policy and procedure states. After monitoring and evaluation were done, the feedback was given with recommendations where necessary. This gave a sense of direction and focus in the respective Saccos.

### **5.3 Conclusions**

In conclusion, sometimes communication was not very effective as there could be the detection of omissions at later dates and this in turn led to losses. Omissions would not allow the books of account to produce accurate reports as there is evidence of gaps in the reports. It may be a result of unfamiliarity with the systems, poor training on adaptability, or even a system that is not up to date. Sometimes also data was not captured correctly or all of it was not captured into the system hence produce poor or wrong results. At some point there was a communication breakdown where the correct channel of information was not followed, also when the system was complicated to the users or it is not user friendly and also a failure to update the system led to communication breakdown. Some employees were struggling with the implementation of the communicated expectations as

not everyone was conversant with the entire system and in some cases, the expectations were not in line with the already available system.

The study also concluded that many Saccos had policies on risk assessment but to some extent did not do a strict follow up on the same procedures and policies. Some of the employees were not aware of any risk areas thus were not able to identify possible risks. Another group was aware of the possible risks but even after identification, they were not able to report the risk. In most cases, the Saccos were not able to conduct a risk analysis program that would enable those involved to understand the entire risk analysis procedure which helps them be able to analyze a situation and be able to know how to identify the possible loopholes before they turn to a risk crisis. Risk management was poorly done in some Saccos while in others tried to manage risk to a stable level. Risk management required for the Saccos to have backup plans and policies that stipulated how to handle different types of risks that could be suffered at any given point in time to ensure situations don't get out of control causing serious damages and losses to the Saccos.

There were policies on the control functions that helped in regulating and ensuring all the functions were controlled and that all that is happening is captured. The operations were regularly reviewed to ensure the systems and functions were up to date. On a normal working day, there were people responsible for the physical operational control of functions within the organization to make sure nothing goes unnoticed leading to errors and malfunctioning of the system. Information was timely produced with the help of the standardized systems and updated systems operated by trained personnel. In some cases, there were information breakdowns where wrong data was picked or the system was not up to date or where there were power shortages. Duties were clearly defined where each

and everyone knew their roles and what was expected of them. This, therefore, reduced confusion and improved efficiency and effectiveness in the operations and enhanced performance.

Finally, monitoring was an essential consideration in all the Saccos since to some extent policies were guiding the operations and they were continually monitored and evaluated. The evaluation made sure to do a follow up on the compliance with the expectations. All the Saccos had an internal audit department and at some point, an internal audit was done to counter check the operations and results against the expectations. This was done through the utilization of the internally available auditors or outsourced services. The period through which internal audit was done varied from one institution to the other. The process of monitoring and evaluation was aided by constant feedbacks with recommendations where necessary. Feedback was very important in the control process where the actual results were measured against the expected results to acquire the level of achievement and performance.

#### **5.4 Recommendations**

It was recommended that the Saccos should design a very effective communication channel that was user friendly and that accommodates all sorts of information that need to be shared. The communication system should also be updated regularly to avoid breakdowns. The way data was captured into the system ought to be very clear and accurate to avoid the generation of wrong outputs and information to be implemented should be compatible with the available system. The flow of information ought to be well defined and not too complicated to avoid distortion of information before it gets to the intended recipient to ensure the correct feedback is acquired. Since communication was

very important as it carried information and conveyed the message, all the institutions should adopt the most appropriate channel that is user friendly.

All businesses were prone to risks though they vary from one business to the other and keep on changing from time to time. Therefore, it was of great essence that the Saccos have risk assessment procedures and policies that would help them in handling the various risks that may arise. There should be adequate training on risk identification and analysis to ensure everyone is aware of the possible risks, the preventive measures they should take and the risk reduction, avoidance and solution measures. There should always be an active and working risk management team that will always handle and guide the organization on how to go about the risks that may arise to ensure the situation does not get out of control leading to losses that are beyond repair.

The control functions should be readily available and continually updated as they are the heart of the Saccos. If the functions are not working then it means the operations will eventually be paralyzed. This could be achieved by ensuring the guiding policies and guidelines are always available at the disposal of the user. Reviews should also be done regularly to ensure they are not outdated and to match the changing needs of the market and functional requirements. It is also recommended that physical control should always be done to avoid laxity from the operations. Information should be timely updated in the system to avoid working with outdated information thus wrong results and it is very important to separate and define roles very clearly to eliminate cases of role conflicts during duty and function execution. When the functions were well controlled and updated performance of the entire system was enhanced.

Finally, the study recommended that the monitoring of activities was key to ensuring enhanced performance. Therefore, it recommended for job and system evaluation putting into consideration the functionality and the expectations and how to achieve results. The study also recommended that emphasis should be put on the internal audit function to ensure that it is regularly done with the aim of reconciliation and accountability to enhance results and improve performance. To complete the process, it was important to always give feedback which helped in the control process which compared the actual results against the expected results to be able to measure how far the organization is, in terms of achieving the intended results.

### **5.5 Areas for Further Research**

The results from the study pointed out several opportunities for further research;

- i. There was a need to carry out a similar study in other sub-counties to see if the results are similar.
- ii. There was a need to investigate the various control systems adopted by different Saccos.
- iii. There was also a need to establish the most appropriate system for controlling the internal functions.



## REFERENCES

- Achieng Otieno, B. B., Waiganjo, E. W., & Njeru, A. (2015). Effect of employee communication on organizational performance in Kenya's horticultural sector. *International Journal of Business Administration*, 6(2), 1-10.  
<https://doi.org/10.5430/ijba.v6n2p138>
- Aikins, Stephen. (2011). An examination of government internal audits' role in improving financial performance. *Public Finance and Management*, 11(4), 306-337.  
[https://www.researchgate.net/profile/Stephen\\_Aikins/publication/282691512\\_AN\\_examination\\_of\\_government\\_internal\\_audits'\\_role\\_in\\_improving\\_financial\\_performance/links/5618a02a08ae044edbad255e/an-examination-of-government-internal-audits-role-in-improving-financial-performance.pdf](https://www.researchgate.net/profile/Stephen_Aikins/publication/282691512_AN_examination_of_government_internal_audits'_role_in_improving_financial_performance/links/5618a02a08ae044edbad255e/an-examination-of-government-internal-audits-role-in-improving-financial-performance.pdf)
- Akintaro, A. A, & Shonubi, A. O. (2016). The impact of effective communication on organizational performance. *The International Journal of Social Sciences and Humanities Invention*, 3(3), 1-10.  
<https://valleyinternational.net/index.php/theijsshi/article/download/352/346/676>
- Al-Tamimi, A., & Al-Mazrooei, F. (2007). Banks' risk management: A comparison study of UAE national and foreign banks. *Journal of Risk Finance*, 8(1), 394-409.  
<https://valleyinternational.net/index.php/theijsshi/article/view/352>
- Amudo, A., & Inanga, E. (2009). Evaluation of Internal Control Systems: A Case Study from Uganda. *International Research Journal of Finance & Economics*, 2(7), 124-144. <https://wenku.baidu.com/view/25987b785acfa1c7aa00ccd8>
- Barra, R.A. (2010) The impact of internal controls and penalties on fraud. *Journal of Information Systems*, 24 (1), 1-21. <https://doi.org/10.2308/jis.2010.24.1.1>

- Basle (1998). *Framework for internal control systems in banking organizations: Basle Committee on Banking Supervision*. <https://www.bis.org/publ/bcbs40.pdf>
- Beasley, M., Carcello, J., Hermanson, D., & Lapides, P. (2000). Fraudulent financial reporting: Consideration of industry traits and corporate governance mechanisms. *Accounting Horizons*, 14(4), 441-454. <https://doi.org/10.2308/acch.2000.14.4.441>.
- Bett, J. C. (2017). Effects of internal control on the financial performance of processing firms in Kenya: A case of Menengai company. *Academia*, 4(1), 105-111. [https://www.academia.edu/attachments/56514556/download\\_file?st=mtu5nzm5ote4nswxmdiumty2ljxqljiw&s=swp-splash-paper-cover](https://www.academia.edu/attachments/56514556/download_file?st=mtu5nzm5ote4nswxmdiumty2ljxqljiw&s=swp-splash-paper-cover)
- Bickel, R. (2007). *Multilevel analysis for applied research: It's just regression*. Guilford.
- Boateng, G. O. (2011). *Credit risk management in financial institution: The case of Scandinaviska Enskilda Banking (SEB) Stockholm*. University of Skovde, Press.6. <https://doi.org/10.4307/2564323145000>
- Bowrin, A. R. (2004). Internal control in Trinidad and Tobago religious organizations. *Accounting Auditing & Accountability Journal*, 17(1), 121-152. <https://doi.org/10.1108/09513570410525238>
- Bryman, A. & Bell, E. (2014) *Business research methods*. Oxford university press.
- Cadez, S., & Guilding, C. (2008). An exploratory investigation of an integrated contingency model of strategic management accounting. *Accounting Organizations and Society*, 33(7-8), 836-863. <https://doi.org/10.1016/j.aos.2008.01.003>
- Chahayo, S. A., Bureti, F., Juma, M. M., & Aketch, R.A. (2013). Analysis of financial mismatch in co-operative societies: A case of Kakamega County, Kenya.

*International Journal for Management Science and Technology*, 1(5), 1-10.

<https://www.semanticscholar.org/paper/%22Analysis-Of-Financial-Mismatch-In-Co-Operative-A-Bureti-Maende/139a88ebc5002f87fef9dd1c49a57151cd4f0ee3>

Cook, M. L., Chaddad, F. R., & Iliopoulos, C. (2004). Advances in cooperative theory since 1990: A review of agricultural economics literature: *Restructuring Agricultural Cooperatives*, 5(2), 65-90.

[https://www.researchgate.net/profile/constantine\\_iliopoulos3/publication/237081124\\_cook\\_m\\_l\\_chaddad\\_f\\_r\\_and\\_c\\_iliopoulos\\_2004\\_advances\\_in\\_cooperative\\_theory\\_since\\_1990\\_a\\_review\\_of\\_agricultural\\_economics\\_literature\\_in\\_gwj\\_hendrikse\\_ed\\_restructuring\\_agricultural\\_cooperatives\\_pp\\_65-90\\_/links/55eecd08aef559dc43ea54/cook-m-l-chaddad-f-r-and-c-iliopoulos-2004-advances-in-cooperative-theory-since-1990-a-review-of-agricultural-economics-literature-in-gwj-hendrikse-ed-restructuring-agricultural-cooperatives-pp.pdf](https://www.researchgate.net/profile/constantine_iliopoulos3/publication/237081124_cook_m_l_chaddad_f_r_and_c_iliopoulos_2004_advances_in_cooperative_theory_since_1990_a_review_of_agricultural_economics_literature_in_gwj_hendrikse_ed_restructuring_agricultural_cooperatives_pp_65-90_/links/55eecd08aef559dc43ea54/cook-m-l-chaddad-f-r-and-c-iliopoulos-2004-advances-in-cooperative-theory-since-1990-a-review-of-agricultural-economics-literature-in-gwj-hendrikse-ed-restructuring-agricultural-cooperatives-pp.pdf)

Cooper, D., & Schindler, P. (2011). *Business research methods* (11<sup>th</sup>ed.). McGraw Hill.

Crutchley, C., Jensen, M., & Marshall, B. (2007). Climate for scandal: Corporate environments that contribute to accounting fraud. *The Financial Review*, 42 (1), 53-73. <https://doi.org/10.1111/j.1540-6288.2007.00161.x>.

Da Silva, T. P., Leite, M., Guse, J. C., & Gollo, V. (2017). Financial and economic performance of major Brazilian credit cooperatives. *Contaduría y Administración*, 62(5), 1442–1459. <https://doi.org/10.1016/j.cya.2017.05.006>

- Demirguc-Kunt, A., & Huizinga, H. (2009). Bank activity and funding strategies: The impact on risk and return. *SSRN Electronic Journal*, 2(4), 1-10.  
<https://doi.org/10.2139/ssrn.1350235>.
- Dwivedi, O. P. (2002). The challenge of cultural diversity for good governance. *Indian Journal of Public Administration*, 48(1), 14–28.  
<https://doi.org/10.1177/0019556120020102>
- Etuk, I. C. (2011). *Evaluation of internal control system of banks in Nigeria* [PhD Dissertation, St. Clements university], Turks and Caicos Islands.  
<https://www.yumpu.com/en/document/view/4956729/by-etuk-ifiok-charles-st-clements-university>
- Ewa, U. E., & Udoayang, J. O. (2012). The impact of internal control design on banks' ability to investigate staff fraud, and life style and fraud detection in Nigeria. *International Journal of Research in Economics & Social Sciences*, 2(2), 32-43.  
<http://ijecm.co.uk/wp-content/uploads/2015/12/3128.pdf>
- Fadzil, F. H., Haron, H., & Jantan, M. (2005). Internal auditing practices and internal control system. *Managerial Auditing Journal*, 20(8), 844-866  
<https://core.ac.uk/download/pdf/11949012.pdf>
- Fatemi, A., & Fooladi, I. (2006). Credit risk management: A survey of practices. *Managerial Finance*, 32(3), 227-233.  
<https://doi.org/10.1108/03074350610646735>.
- Frazer, L. (2012). The effect of internal control on the operating activities of small restaurants. *Journal of Business & Economics Research (JBER)*, 10(6), 1-10.  
<https://doi.org/10.19030/jber.v10i6.7027>

- Fisher, L.D. (1998). Self- designing clinical trials. *Statistics in Medicine*, 17(4), 1551-1562. [https://doi.org/10.1002/\(sici\)1097-0258\(19980730\)17:14<1551::aid-sim868>3.0.co;2-e](https://doi.org/10.1002/(sici)1097-0258(19980730)17:14<1551::aid-sim868>3.0.co;2-e)
- Gatuguta, E., Kimotho, P., & Kiptoo, S. (2014). *History-and-organization-of-cooperative-development-and-marketing-sub-sector-in-kenya*. <http://www.industrialization.go.ke/images/downloads/history-and-organization-of-cooperative-development-and-marketing-sub-sector-in-kenya.pdf>
- Gisemba, P. N. (2010). *The relationship between credit risk management practices and financial performance of SACCOs in Kenya* [Master's Thesis, University of Nairobi], Nairobi, Kenya. <http://erepository.uonbi.ac.ke/bitstream/handle/11295/5799/ABSTRACT-The%20relationship%20between%20credit%20risk%20management.pdf?sequence=1>
- Goh, B. W. (2009). Audit committees, boards of directors, and remediation of material weaknesses in internal control. *Contemporary Accounting Research*, 26(2), 549-579. <https://doi.org/10.1506/car.26.2.9>
- Hanim, F., Haron, H., & Muhamad, J. (2005). Internal audit practices and internal control systems. *Managerial Auditing Journal*, 20(8), 844-866. <https://doi.org/10.1108/02686900510619683>.
- Hussaini, U., & Muhammed, U. (2018). Effect of internal control on performance of commercial banks in Nigeria: A proposed framework. *Sahel Analyst*, 16(3), 86-105. [https://www.academia.edu/attachments/58585529/download\\_file?st=MTU5NzQwNzkxNywxMDIuMTY2LjQxLjIw&s=swp-splash-header](https://www.academia.edu/attachments/58585529/download_file?st=MTU5NzQwNzkxNywxMDIuMTY2LjQxLjIw&s=swp-splash-header)

- Ibrahim, S., Diibuzie, G., & Abubakari, M. (2017). The impact of internal control systems on financial performance: The case of health institutions in Upper West Region of Ghana. *International Journal of Academic Research in Business and Social Sciences*, 7(4), 1-10. <https://doi.org/10.6007/IJARBS/v7-i4/2840>
- Inusah, A. M., & Abdulai, S. (2015), Assessing Internal Financial Controls of the Lands Commission of Ghana. *European Journal of Business, Economics and Accountancy*, 3(3), 51-65. <http://www.idpublications.org/>
- Institute of Internal Auditors (2013). *Annual report: Preparing for a promising future*. <https://global.theiia.org/about/about-the-iiia/Public%20Documents/IIA-2013-Annual-Report.pdf>
- International Cooperative Alliance (2005). *General Assembly Edition: Review of international co-operation*. <https://www.ica.coop/sites/default/files/publication-files/2005issue2-1287637669.pdf>
- International Labor Organization (2002). *Report of the committee of experts on the application of conventions and recommendations*. <https://www.ilo.org/public/english/standards/relm/ilc/ilc90/pdf/rep-iii-1b.pdf>
- International Monetary Fund (2007). *Monetary and capital markets department: Cooperative banks and financial stability*. <https://www.imf.org/external/pubs/ft/wp/2007/wp0702.pdf>
- Ileri, K. D., & Idowu, A. (2017). Investigation of Effectiveness of Information Technology on The Operations of the Savings and Credit Cooperative Societies in Nairobi, Kenya. *International Journal of Finance and Accounting*, 2(1), 1-18. <https://www.iprjb.org/journals/index.php/IJFA/article/view/241>

- Janvrin, D.J., Payne, E.A., Byrnes, P., Schneider, G.P., & Curtis, M. B. (2012). The updated COSO internal control—integrated framework: recommendations and opportunities for future research. *Journal of Information Systems*, 26 (2), 189–213. <https://doi.org/10.2308/isys-50255>
- Jensen, M.C., & Meckling, W, H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- John, J.M. (2011). The impact of enterprise resource planning (ERP) systems on the effectiveness of internal controls over financial reporting. *Journal of Information Systems*, 25(1), 129-157. <https://doi.org/10.2308/jis.2011.25.1.129>
- Jones, N. (2008). Corporate governance, accountability and mechanisms of accountability: An overview. *Accounting, Auditing & Accountability Journal*, 21(7), 1-10. <https://doi.org/10.1108/09513570810907401>
- Jussi, N., & Petri, S. (2004). Does agency theory provide a general framework for audit pricing. *International Journal of Auditing*, 8(2), 253-262. <https://doi.org/10.1111/j.1099-1123.2004.00094.x>
- Kakucha, W. (2009). *An evaluation of internal controls: The case of Nairobi small businesses* [Master's Thesis, United States International University], Nairobi, Kenya. <https://su-plus.strathmore.edu/handle/11071/1472>
- Kamau, P. (2014). *Managing organizational change effectively: A case study of Kenya revenue authority* [Master's Thesis, United States International University], Nairobi, Kenya. <http://erepo.usiu.ac.ke/bitstream/handle/11732/129/Patricia%20Kamau%20635016%20PDF.pdf?sequence=1&isAllowed=y>

- Kamande, E.G. (2017). *The effect of bank specific factors on financial Performance of commercial banks in Kenya* [Master's Thesis, South Eastern Kenya University], Kenya.
- [http://repository.seku.ac.ke/bitstream/handle/123456789/3057/Kamande\\_The%20effect%20of%20bank%20specific%20factors%20on%20financial%20performance%20of%20commercial%20banks%20in%20Kenya.PDF?sequence=1&isAllowed=y](http://repository.seku.ac.ke/bitstream/handle/123456789/3057/Kamande_The%20effect%20of%20bank%20specific%20factors%20on%20financial%20performance%20of%20commercial%20banks%20in%20Kenya.PDF?sequence=1&isAllowed=y)
- Kambura, M. M. (2018). *Effects of internal control systems on financial performance of Saccos in Nyeri Central Sub- County, Kenya* [Master's Thesis, Dedan Kimathi University], Nyeri, Kenya.
- <http://repository.dkut.ac.ke:8080/xmlui/handle/123456789/727>
- Kantzos, C., & Chondraki, A. (2006). *Auditing Theory and Practise II*. Stamouli, Athens.
- Karagiorgos, T., Drogalas, G., Gotzamanis, Á. And Tampakoudis, I. (2009). Internal auditing as an effective tool for corporate governance. *Journal of Business Management*, 2(1), 15-23.
- [http://www.drogalas.gr/uploads/publications/INTERNAL\\_AUDITING\\_AS\\_AN\\_EFFECTIVE\\_TOOL\\_FOR\\_CORPORATE\\_GOVERNANCE.pdf](http://www.drogalas.gr/uploads/publications/INTERNAL_AUDITING_AS_AN_EFFECTIVE_TOOL_FOR_CORPORATE_GOVERNANCE.pdf)
- Kariuki, N. W. (2017). Effect of credit risk management practices on financial performance of deposit taking savings and credit cooperatives in Kenya. *IOSR Journal of Business and Management*, 19(04), 63–69.
- <https://doi.org/10.9790/487X-1904026369>
- Kiaritha, H. W. (2015). *Determinant of the financial performance of savings and credit cooperatives in the banking sector of Kenya* [PhD Thesis, Kenyatta University],



Nairobi, Kenya.

<http://ir.jkuat.ac.ke/bitstream/handle/123456789/1598/KIARITHA%2C%20HANNAH%20WAITHERA-%20PHD%20BUSINESS%20ADMINISTRATION%202015.pdf?sequence=1&isAllowed=y>

Kinney, W.R. (2000) Research opportunities in internal control quality and quality assurance auditing: *A Journal of Practice & Theory: Supplement 2000, 19(1)*, 83-90. <https://doi.org/10.2308/aud.2000.19.s-1.83>

Kibet, P. K. (2008). *A survey on the role of internal audit in promoting good corporate governance in state owned enterprises* [Master's thesis, University of Nairobi], Nairobi, Kenya. <http://erepository.uonbi.ac.ke/handle/11295/23103>

Kibui, N., & Moronge, M. (2014). Effects of credit risk management on financial performance of saccos: A case study of harambee SACCO. *International Academic Journal of Information Sciences and Project Management, 1(3)*, 157-172. [http://www.iajournals.org/articles/iajispm\\_v1\\_i3\\_157\\_172.pdf](http://www.iajournals.org/articles/iajispm_v1_i3_157_172.pdf)

Kithinji, A. M. (2010). *Credit risk management and profitability of commercial banks in Kenya* [Master's Thesis, University of Nairobi], Nairobi, Kenya. <http://erepository.uonbi.ac.ke/bitstream/handle/11295/40437/aibuma2011-submission232.pdf>

Klynveld Peat Marwick Goerdeler (2007). *The evolving role of an internal auditor: Value creation and preservation from an internal audit perspective advisory*. <https://home.kpmg/content/dam/kpmg/kz/pdf/kz-ias-evolving-role-internal-auditor-200710.pdf>

Kothari, C., & Garg, G. (2014). *Research methodology; methods and techniques* (3<sup>rd</sup>ed). New Age International.

- Kuhn, J.R., & Sutton, S.G. (2010). Continuous auditing in ERP system environments: The current state and future directions. *Journal of Information System.*, 24(1), 91-112. <https://doi.org/10.2308/jis.2010.24.1.91>
- Kiyieka, E. N., & Muturi, W. (2018). Effect of internal controls on financial performance of deposit taking saving and credit cooperative societies in Kisii county, Kenya. *International Journal of Social Sciences and Information Technology*, 4(10), 30-40.  
<https://www.ijssit.com/main/wp-content/uploads/2018/10/Effect-Of-Internal-Controls-On-Financial-Performance-Of-Deposit-Taking-SACCOs-In-Kenya.pdf>
- Kwak, S. K., & Kim, J. H. (2017). Statistical data preparation: management of missing values and outliers. *Korean journal of anesthesiology*, 70(4), 407–411.  
<https://doi.org/10.4097/kjae.2017.70.4.407>
- Lavrakas, P. J. (2008). *Encyclopedia of survey research methods*. Thousand Oaks, CA: Sage Publications, Inc. <https://doi.org/10.4135/9781412963947>
- Magara, C. (2013). Effect of internal controls on financial performance of deposit taking savings [Master’s Thesis, University of Nairobi], Nairobi, Kenya.  
[http://erepository.uonbi.ac.ke/bitstream/handle/11295/60169/Magara\\_Effect%20of%20internal%20controls%20on%20financial%20performance%20of%20deposit%20taking%20savings.pdf?sequence=3](http://erepository.uonbi.ac.ke/bitstream/handle/11295/60169/Magara_Effect%20of%20internal%20controls%20on%20financial%20performance%20of%20deposit%20taking%20savings.pdf?sequence=3)
- Mary, M., & Byaruhanga, P. J. (2014). Effects of internal control systems on financial performance of sugarcane out grower companies in Kenya. *IOSR Journal of Business and Management*, 16(12), 62–73. <https://doi.org/10.9790/487X-161216273>

- Mawanda, A. (2008). *Effects of internal control systems on financial performance in an institution of higher learning in Uganda*. Cengage Learning EMEA
- Ministry of Co-operative Development and Marketing (2010). *A national strategic plan 2012/2013-2016/2017 for savings and credit societies*  
<https://www.kuscco.com/index.php/downloads/routedownload/gouvernement-bills-docs/draft-national-cooperative-development-policy>
- Ministry of Finance and the Ministry of Co-operative Development and Marketing (2010). *Kenya financial sector stability report 2010*.  
[https://www.centralbank.go.ke/uploads/financial\\_sector\\_stability/616134959\\_Kenya%20Financial%20Sector%20Stability%20Report%202010.pdf](https://www.centralbank.go.ke/uploads/financial_sector_stability/616134959_Kenya%20Financial%20Sector%20Stability%20Report%202010.pdf)
- Mugenda, O.M. and Mugenda, A.G. (2003) *Research Methods, Quantitative and Qualitative Approaches*. ACT.
- Mutange, S., & Datche, D. E. (2016). Effects of internal control on credit business performance of savings and credit co-operative society: A case study of Mombasa teachers SACCO limited. *International Journal of Research in Economics & Social Science*, 4 (2), 1-10.  
[https://www.academia.edu/attachments/57773406/download\\_file?st=MTYwMzI5Nzc2OCwxNTQuMTIyLjE2NC4xNg%3D%3D&s=swp-splash-paper-cover](https://www.academia.edu/attachments/57773406/download_file?st=MTYwMzI5Nzc2OCwxNTQuMTIyLjE2NC4xNg%3D%3D&s=swp-splash-paper-cover)
- Muthusi, D. M. (2017). Internal controls and financial performance of commercial banks in Kenya [Master's Thesis, Kenyatta university], Nairobi, Kenya. <https://ir-library.ku.ac.ke/bitstream/handle/123456789/18078/Internal%20controls%20and%20financial.....pdf?sequence=1>

- Mwachiro, D. B. (2013). Effects of internal controls on revenue collection: A case of Kenya revenue authority [Master's Thesis, University of Nairobi], Nairobi, Kenya.  
<https://pdfs.semanticscholar.org/4019/44dc57a164c945ac5550d7552bff593cdd85.pdf>
- Mwakimasinde, M., Odhiambo, A., & Byaruhanga, John. (2014). Effects of Internal Control Systems on Financial Performance of Sugarcane out grower companies in Kenya. *IOSR Journal of Business and Management*, 16(1), 62-73.  
<https://doi.org/10.9790/487X-161216273>.
- Ndegwa, H. (2011). *Adoption and Utilization of ICTs by Savings and Credit Cooperative Societies in Kenya*, [Master's Thesis, Moi University], Eldoret, Kenya.  
<http://ir.mu.ac.ke:8080/xmlui/bitstream/handle/123456789/554/Ndegwa%20Hellen%20Mukiri%202011.pdf?sequence=1&isAllowed=y>
- Ngugi, K. M. (2011). *A survey of internal control systems among the listed private companies and the public sector companies in Kenya* [Master's Thesis, University of Nairobi], Nairobi, Kenya.  
[http://erepository.uonbi.ac.ke/bitstream/handle/11295/12867/Ngugi\\_A%20survey%20of%20internal%20control%20systems%20among%20the%20listed%20private%20companies%20and%20the%20public%20sector%20companies%20in%20Kenya.pdf?sequence=1](http://erepository.uonbi.ac.ke/bitstream/handle/11295/12867/Ngugi_A%20survey%20of%20internal%20control%20systems%20among%20the%20listed%20private%20companies%20and%20the%20public%20sector%20companies%20in%20Kenya.pdf?sequence=1)
- Njoki, N. Z. (2015). *The effect of internal controls on the financial performance of manufacturing firms in Kenya* [Master's Thesis, University of Nairobi], Nairobi, Kenya.  
[http://erepository.uonbi.ac.ke/bitstream/handle/11295/93890/Ndembu\\_The%20Eff](http://erepository.uonbi.ac.ke/bitstream/handle/11295/93890/Ndembu_The%20Eff)

ect%20Of%20Internal%20Controls%20On%20The%20Financial....pdf?sequence=2&isAllowed=y

- Nkuru, F. N. (2015). Factors affecting growth of saccos within the agricultural sector in Kenya: a case of Meru farmers saccos. *Global Journal of Commerce & Management Perspective*, 4(1), 34-45. <https://www.longdom.org/articles/factors-affecting-growth-of-saccos-within-the-agricultural-sector-in-kenya-a-case-of-meru-farmers-saccos.pdf>
- Ntongo, V. (2012). *Internal controls, financial accountability and service delivery in private health providers of Kampala district* [Master's Thesis, Makerere University], Kampala, Uganda.  
<http://makir.mak.ac.ug/bitstream/handle/10570/2047/Ntongo%20final%20dissertation.pdf?sequence=1&isAllowed=y>
- Olatunji, B. O., & Wolitzky-Taylor, K. B. (2009). Anxiety sensitivity and the anxiety disorders: A meta-analytic review and synthesis. *Psychological Bulletin*, 135(6), 974–999. <https://doi.org/10.1037/a0017428>
- Ondieki, N. M. (2013). *Effect of internal audit on financial performance of commercial banks in Kenya* [Master's Thesis, University of Nairobi], Nairobi, Kenya.  
<http://erepository.uonbi.ac.ke/bitstream/handle/11295/59308/Effect+Of+Internal+Audit+On+Financial+Performance+Of+Commercial+Banks+In+Kenya.pdf?sequence=3>
- Ondieki, A., Okioga, C., Okwena, D. K., & Onsase, A. (2011). *Assessment of the effect of external financing on financial performance of savings and credit cooperatives in Kisii Central District, Kenya.*

[https://pdfs.semanticscholar.org/05ab/d3f7de39626f3eeb15e3b69881331fd5e8cd.pdf?\\_ga=2.79807955.592712360.1597394786-199641240.1584249034](https://pdfs.semanticscholar.org/05ab/d3f7de39626f3eeb15e3b69881331fd5e8cd.pdf?_ga=2.79807955.592712360.1597394786-199641240.1584249034)

Onyango, C. (2018). *Effect of capital adequacy on the financial performance of deposit taking savings and credit societies in Meru County, Kenya* [Master's Thesis, University of Nairobi], Nairobi, Kenya.

[http://erepository.uonbi.ac.ke:8080/bitstream/handle/11295/105724/Onyango\\_Effect%20Of%20Capital%20Adequacy%20On%20The%20Financial%20Performance%20Of%20Deposit%20Taking%20Savings%20And%20Credit%20Societies%20In%20Meru%20County%2C%20Kenya.pdf?sequence=1&isAllowed=y](http://erepository.uonbi.ac.ke:8080/bitstream/handle/11295/105724/Onyango_Effect%20Of%20Capital%20Adequacy%20On%20The%20Financial%20Performance%20Of%20Deposit%20Taking%20Savings%20And%20Credit%20Societies%20In%20Meru%20County%2C%20Kenya.pdf?sequence=1&isAllowed=y)

Pandey, I.M (2002). *Is there seasonality in the sensex monthly returns.*

[https://www.researchgate.net/profile/I\\_M\\_Pandey/publication/5113463\\_Is\\_There\\_Seasonality\\_in\\_the\\_Sensex\\_Monthly\\_Returns/links/54ff0a390cf2741b69f20adc/Is-There-Seasonality-in-the-Sensex-Monthly>Returns.pdf](https://www.researchgate.net/profile/I_M_Pandey/publication/5113463_Is_There_Seasonality_in_the_Sensex_Monthly_Returns/links/54ff0a390cf2741b69f20adc/Is-There-Seasonality-in-the-Sensex-Monthly>Returns.pdf)

Pollet, I. (2009) Co-operatives in Africa: The age of reconstruction: Synthesis of a survey in nine African Countries. *CoopAFRICA Working Paper No. 7*, International Labour Organization, Dar es Salaam.

Ratcliffe, T.A., & Landes, C. E. (2009). *Understanding internal control and internal control services*. <https://www.journalofaccountancy.com/issues/2009/sep/white-paper-understanding-internal-control-and-internal-control-services.html>

Reffett, A. (2007). *Can identifying and investigating fraud risks increase auditors' liability*. University of Illinois

Rezaee, Z. (2002). *Financial statement fraud: Prevention and detection*. Wiley.

- Rezaee, Z., Elam, R., & Sharbatoghlie, A. (2001). Continuous auditing: The audit of the future. *Managerial Auditing Journal*, 16(13), 150-158.  
<https://doi.org/10.1108/02686900110385605>.
- Rittenberg, L.E., & Schwieger, B.J. (2001). *Auditing: Concepts for a changing environment* (3rd Ed.). South-western college pub
- Sacco Societies Regulatory Authority (2018). *The SACCO Annual Supervision Report 2018*. <https://www.sasra.go.ke/index.php/news-updates/notices/113-the-sacco-annual-supervision-report-2018>
- Sacco Societies Regulatory Authority (2010). *The SACCO Annual Supervision Report 2010*. <https://www.sasra.go.ke/index.php/news-updates/notices/113-the-sacco-annual-supervision-report-2010>
- Saidu, B. M., & Zabedah S. S. (2013). The relationship between audit experience and internal audit effectiveness in the public sector organizations. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 3(3), 329-339. <https://ideas.repec.org/a/hur/ijaraf/v3y2013i3p329-339.html>
- Salkind, N., J. (2014). *Statistics for people who think they hate statistics*. Sage.
- Shabri, S. M., Saad, R. A. J., & Bakar, A. A. (2016). The effects of internal control systems on cooperative's profitability: A case of Koperasi ABC Berhad. *International Review of Management and Marketing*, 6(8), 240-245.  
[https://www.researchgate.net/profile/Ram\\_Al\\_Jaffri\\_Saad/publication/312376682\\_The\\_Effects\\_of\\_Internal\\_Control\\_Systems\\_on\\_Cooperative's\\_Profitability\\_A\\_Case\\_of\\_Koperasi\\_ABC\\_Berhad/links/587c57b708ae9a860fe9c567/The-Effects-of-](https://www.researchgate.net/profile/Ram_Al_Jaffri_Saad/publication/312376682_The_Effects_of_Internal_Control_Systems_on_Cooperative's_Profitability_A_Case_of_Koperasi_ABC_Berhad/links/587c57b708ae9a860fe9c567/The-Effects-of-)

Internal-Control-Systems-on-Cooperatives-Profitability-A-Case-of-Koperasi-ABC-Berhad.pdf

- Simiyu, M. P., Clive, M., & Musiega, M. (2016). Influence of operational risk on financial performance of deposit taking savings and credit co-operatives in Kakamega County. *International Journal of Management and Commerce Innovations*, 4(2), 509-51. <https://doi.org/10.47604/ijfa.583>
- Spira, L.F., & Page, M. (2003). Risk management: The reinvention of internal control and the changing role of internal audit. *Accounting, Auditing & Accountability Journal*, 16(4), 640-661. <https://doi.org/10.1108/09513570310492335>
- Stewart, J.D., & Kent, P. (2006). The use of internal audit by Australian companies. *Managerial Auditing Journal*, 21(1), 81-101. <https://doi.org/10.1108/02686900610634775>
- Theofanis, K., George, D., & Nikolaos, G. (2011). Evaluation of the effectiveness of internal audit in Greek hotel business. *International Journal of Economic Sciences and Applied Research (IJESAR)*, 4(1), 19-34. <https://ideas.repec.org/a/tei/journal/v4y2011i1p19-34.html>
- Theophanous, C., Modjtahedi, B., Batech, M., Marlin, D., Luong, T., & Fong, D. (2011). Myopia prevalence and risk factors in children. *Clinical Ophthalmolog*, 12 (1), 1581-1587. <https://doi.org/10.2147/OPHTH.S164641>.
- Verschoor, C. C. (2002). Corporate performance is closely linked to a strong ethical commitment. *Business and Society Review*, 104 (4), 407-415. <https://doi.org/10.1111/0045-3609.00074>



- Wainaina, S.W. (2011). *An evaluation of the internal control function: The case of Kenya polytechnic university college* [Master's Thesis, University of Nairobi], Kenya.  
<http://erepository.uonbi.ac.ke/bitstream/handle/11295/11009/An%20evaluation%20of%20the%20internal%20control%20function%3AThe%20case%20of%20Kenya%20Polytechnic%20University%20College.pdf?sequence=4&isAllowed=y>
- Wanemba, M. A. (2010). *Strategies applied by commercial banks in Kenya to combat fraud* [Doctoral dissertation, University of Nairobi], Nairobi, Kenya.  
[http://erepository.uonbi.ac.ke/bitstream/handle/11295/5903/Wanemba\\_Strategies%20applied%20by%20commercial%20banks%20in%20Kenya%20to%20combat%20ofraud.pdf?sequence=1](http://erepository.uonbi.ac.ke/bitstream/handle/11295/5903/Wanemba_Strategies%20applied%20by%20commercial%20banks%20in%20Kenya%20to%20combat%20ofraud.pdf?sequence=1)
- Wanjohi, J.G. (2013). *The effect of financial risk management on the financial performance of commercial banks in Kenya* [Master's Thesis, University of Nairobi], Kenya.  
<http://chss.uonbi.ac.ke/sites/default/files/chss/JOEL%20GITHINJI%20WANJOHI%20D63-73163-2012.pdf>
- Wanyama, F.O. (2009). *Cooperatives for African development: Lessons from experience*.  
<https://social.un.org/coopsyear/documents/Wanyamacooperativesforafricandevlopment.pdf>
- Weber, L. (2009). *Marketing to the social web: How Digital Customer Communities Build Your Business*, (2nd ed.). John Wiley & Sons
- Whittington, R., & Pany, K. (2004). *Principles of auditing and other assurance services*. McGrawHill/Irwin.

- Williams, B. R., Ponesse, J.S., & Schachar, R.J., & Logan, G.D. (1999). Development of inhibitory control across the life span. *Developmental Psychology*, 35(1), 205-213. [http://scholar.google.com/scholar\\_url?url=http://www.psy.vanderbilt.edu/faculty/logan/SchacharLogan\\_etal\\_1999\\_DevPsy.pdf&hl=en&sa=X&scisig=AAGBfm3jjKE0p14JPLmzaRR3zVC11jMm5Q&nossl=1&oi=scholar](http://scholar.google.com/scholar_url?url=http://www.psy.vanderbilt.edu/faculty/logan/SchacharLogan_etal_1999_DevPsy.pdf&hl=en&sa=X&scisig=AAGBfm3jjKE0p14JPLmzaRR3zVC11jMm5Q&nossl=1&oi=scholar)
- Woods, M. (2009). A contingency theory perspective on the risk management control system within Birmingham City Council. *Management & Accounting. Resolution*, 20(1), 69-81. <http://isiarticles.com/bundles/Article/pre/pdf/16613.pdf>
- World Council of Credit Unions (2009). *Credit unions worldwide statistical report*. [https://www.woccu.org/documents/2009\\_Statistical\\_Report](https://www.woccu.org/documents/2009_Statistical_Report)
- World Council of Credit Unions (2008). *Credit unions worldwide statistical report*. [https://www.woccu.org/documents/2008\\_Statistical\\_Report](https://www.woccu.org/documents/2008_Statistical_Report)
- Yogo, G.O., Marangu, W.N., Kiongera, F.N., & Okaka, D.O. (2016). Analyzing effect of internal financing on financial performance of savings and credit: Co-operative Societies in Kakamega County, Kenya. *European Journal of Business and Management*, 8(1) 12-23. <https://iiste.org/Journals/index.php/EJBM/article/view/33190/34088>
- Zohrabi, M. (2013). Mixed method research: Instruments, validity, reliability and reporting findings. *Theory and Practice in Language Studies*, 3(1), 254-262. <http://dx.doi.org/10.4304/tpls.3.2.254-262>

## APPENDICES

### **Appendix I: Cover Letter to the Respondent**

Ann Kinya Nyumoo

Kenya Methodist University

School of Business and Economics

Department of Business Administration

P O B ox 267 – 60200

MERU.

Dear Sir/Madam

#### **RE: LETTER OF TRANSMITTAL OF DATA COLLECTION INSTRUMENTS.**

I am a student at Kenya Methodist University pursuing a Master's Degree in Business Administration specializing in Finance. As a compulsory requirement, I am expected to carry out a research on effect of Internal Controls on Financial Performance of Sacco Banks in Meru County. This will assist organizations realize the importance of leadership development and how this can contribute organizational success.

I humbly request that you spare a few minutes of your schedule to complete the attached questionnaire. The questions seek your opinions regarding your organization's internal controls and financial performance. There are no right or wrong answers; I only need your honest opinion. Your anonymity is assured and the information you will provide will remain confidential.

Thank you for your participation in this study. Much appreciation for your cooperation and contribution in this study.

Yours faithfully,

Ann Kinya Nyumoo

## Appendix II: Questionnaire

You are invited to participate in the above-mentioned research project. The survey should only take 10 – 15 minutes to complete. To ensure confidentiality of all responses, you are not obliged to provide your name. The information you give in response to this survey will be purely used for academic purpose.

### 1. Respondent's Highest Educational Qualification

- i) Certificate/Diploma [ ]
- ii) Undergraduate degree [ ]
- iii) Master's degree [ ]
- iv) Doctorate [ ]
- v) PhD [ ]

### 2. Time spent in the bank

- i) Less than 6 months [ ]
- ii) 6 months-1 year [ ]
- iii) 1-2 years [ ]
- iv) 2-3 years [ ]
- v) 3-4 years [ ]
- vi) More than 4 years [ ]

### 3. How frequent does your Sacco bank review its internal control systems?

- i) After 5 years [ ]
- ii) Annually [ ]
- iii) Half-yearly [ ]
- iv) When need arises [ ]

4. In your opinion, does your bank's system of internal controls sufficiently and effectively contribute to revenue generation? How does your role support it?

.....  
.....

.....  
 .....  
 5. i) Are the systems of internal controls referred to in 4 above functioning as they are intended to?

a) Yes ( )

b) No ( )

ii)

Explain

.....  
 .....  
 .....  
 .....

6. How would you generally rate the internal control system in your organization in relation to revenue generation?

a) Very ineffective ( )

b) Ineffective ( )

c) Uncertain ( )

d) Effective ( )

e) Very effective ( )

**SECTION B: INTERNAL CONTROLS**

7. Please rank the following statements in each area of internal control system indicating the extent to which each is applicable in your organization. Use a five point Likert scale where 1 = strongly disagree and 5= strongly agree.

<b>Communication</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
i) Any omissions detected is communicated to the right party					
ii) All data communicated is captured well					

iii) There is clear flow of information in the organization					
iv) The system Implementation process is well communicated					
<b>RISK ASSESSMENT</b>					
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
i) There is a risk identification policy					
ii) There is a risk analysis policy					
iii) There is a risk management department in my organization					
<b>CONTROL ACTIVITIES</b>					
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
i) There are policies governing the control systems					
ii) Reviews on the system is regularly done					
iii) Physical monitoring on the systems is regularly done					
iv) Information is processed efficiently					
v) Duties are well separated as per the roles					
<b>MONITORING</b>					
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
i) Evaluations of the quality of internal controls is done on a regular basis.					
ii) Internal audit is done on regular intervals					
iii) Feedback reports are given regularly					

## SECTION C: FINANCIAL PERFORMANCE

Kindly provide information on your Sacco Bank for the period of Five (5) years (2014-2018).

i) What was the total Capital expenditure for the period 2014-2018?

Total Cost of acquisitions. \_\_\_\_\_

Total Proceeds from disposal. \_\_\_\_\_

ii) What was the total value of purchases of goods, materials and other services over this period? \_\_\_\_\_

iii) What is the approximate value of buildings, machinery & equipment?

Total value of owned assets \_\_\_\_\_

Total value of leased buildings \_\_\_\_\_






What was the total profit over the period? \_\_\_\_\_

## Appendix III: Introduction Letter





**Appendix III: Research Permit**

 <b>REPUBLIC OF KENYA</b>	 <b>NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY &amp; INNOVATION</b>
RefNo: <b>910585</b>	Date of Issue: <b>04/June/2020</b>
<b>RESEARCH LICENSE</b>	
	
<b>This is to Certify that Ms. ANN KINYA NYUMOO of Kenya Methodist University, has been licensed to conduct research in Meru on the topic: EFFECTS OF INTERNAL CONTROLS ON THE FINANCIAL PERFORMANCE OF SACCO'S IN MERU COUNTY. for the period ending : 04/June/2021.</b>	
License No: <b>NACOSTI/P/20/5111</b>	
<b>910585</b> Applicant Identification Number	 Director General <b>NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY &amp; INNOVATION</b>
	Verification QR Code 
<b>NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.</b>	

### **Appendix III: List of Sacco Banks**

1. Capital Sacco Society Ltd
2. Centenary Sacco Society Ltd
3. County Sacco Society Ltd
4. Transnational Sacco Society Ltd
5. Solution Sacco
6. Unaitas Sacco Society Ltd
7. Yetu Sacco Society Ltd
8. Imenti Sacco Society Ltd
9. Kathera Rural Sacco Society Ltd
10. Nyambene Arimi Sacco Society Ltd
11. Equity Sacco Society Ltd
12. Stima Sacco Society Ltd
13. Chai Sacco Society Ltd
14. Remu Sacco Society Ltd
15. Times U Sacco Society Ltd
16. Ukulima Sacco Society Ltd
17. Jamii Sacco Society Ltd
18. Kenya Police Sacco
19. Winas Sacco Society Ltd
20. Meru Central Sacco Society Ltd
21. Milimani Sacco Society Ltd
22. Afya Sacco Society Ltd
23. Maua Methodist Sacco Society Ltd
24. Harambee Sacco Society Ltd