# CREDIT MANAGEMENT PRACTICES AND FINANCIAL PERFORMANCE OF DEPOSIT TAKING SAVINGS AND CREDIT CO-OPERATIVE SOCIETIES IN MARSABIT COUNTY, KENYA

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# ABSTRACT

Through the maintenance of credit risk exposure within reasonable bounds, credit management practices aim to optimize a SACCO's risk-adjusted rate of return. The level of professionalism, governance, policies and processes, and risk management that is in place, significantly impact credit management success. This topic has gained attention because DT-SACCOs in Marsabit County, Kenya have historically shown declining trends. These trends have frequently resulted in the eleven SACCOs failed as a result of noncompliance with SASRA's capital base threshold and a lack of competitive management abilities. poor credit management that prevents loans from being recovered, weak internal control systems that allow management to misappropriate funds, and infrequent audits. The study aimed to explore the effect of credit management practices on financial performance of savings and credit co-operative societies in Marsabit County, Kenya. Specifically, the investigation intends to determine the effect of internal control system and Audit, management competency and capital adequacy influence Sacco financial performance in Marsabit County, Kenya. The study was guided by Resource Based View Theory, Agency Theory and Financial Intermediation Theory. The study adopted descriptive research design. Random sampling technique was utilized. The study utilized primary and secondary data. The research used questionnaire and published article/financial reports to obtain data respectively. The sample size was selected using a stratified random sampling procedure. To produce the analysed data, SPSS version (23) was utilized. Analysis results were displayed in tables and charts, with interpretations provided in accordance with the objectives of the project and a generalization of the results. The study upheld high ethical standards by securing a survey license from the NACOSTI and guaranteeing the participant's confidentiality and anonymity. The findings revealed that correlation coefficient (R) in this model is indicating а strong positive 0.817, relationship between the predictors (internal control systems and audit, management competency, and capital adequacy) and the financial performance of DT-SACCOs. Further, the findings established that significance level (p-value) associated with the F-statistic is 0.003, which is well below the commonly accepted threshold of 0.05 which indicate that there is positive relation between credit management practices and financial performance of DT-SACCOs. The research concludes that there is a strong correlation between the effectiveness of internal controls and audits and the overall financial performance of DT-SACCOs. The managers of the SACCOs should implement regulations that promote the establishment of robust internal control systems and audit mechanisms within SACCOs. Clear guidelines should be provided to ensure that SACCOs maintain adequate controls to manage credit risks effectively. The managers of SACCOs must prioritize investing in continuous training and capacity building programs to enhance their management competency in credit risk assessment, monitoring, and recovery.

**Keywords:** Return on Equity, Management Competency, Internal Control Systems, Financial Performance and Capital Adequacy

# **INTRODUCTION**

The global evolution of Savings and Credit Cooperative Societies has improved peoples' standards of living by ensuring that community members comprehend the concepts of financial management and literacy (Ajibola et al., 2020). This has resulted in economic growth and development. SACCOS, which facilitate the easy transfer of funds from one hand to another, have been instrumental in helping to close the gap between surplus and deficit expenditure units worldwide (Ajibola et al., 2020). The majority of cooperatives worldwide are commercial enterprises (Duguid, 2017). The collaborative philosophy was developed in England in 1844 by the Rockdale pioneers, and its ideas are currently used everywhere. They offer services to manufacturers as well as consumers. They were created to fulfill economic needs that could not be satisfactorily met by conventional techniques. Economies of scale are the foundation for cooperative success. They offer a legal framework under which anyone can form self-help groups. They deliver public services and create income in ways that would otherwise be impossible without their mid-and upper-level support structures (Altman, 2017).

SACCOs are perceived as rival financial institutions to commercial banks in African nations, and members of the community give them credit because they are locally oriented and, for the most part, take the needs of the locals into consideration. In general, both formal and informal sources supply the money required to sustain economic activity (Olaoluwa, 2017). Commercial banks, financial institutions owned by the government, such as the Bank of Industry in Nigeria, and microfinance banks (BOI) are examples of formal sources. Conversely, SACCOs, friends, family, and moneylenders are examples of informal sources. The majority of The funding necessary to support economic activity originates from illegitimate channels in developing nations like Nigeria. (Mari, 2020).

The co-operative movement in Kenya began in 1908, but only white colonial settlers were allowed to join. In the modern-day Kipkelion district of Kericho County, at Lumbwa, the first cooperative society was founded. Africans were permitted to establish and join cooperatives in 1944 by colonial authorities (Gamba and Komo, 2014). At independence there were about 1000 registered cooperatives in 1963 which expanded rapidly to about 22,883 registered cooperatives societies in 2017 with a record contribution of over 45 per cent to gross domestic product (State department of cooperatives, 2017).

The Kenyan Savings and Credit Cooperative Societies subsector has been identified by the WOCCU as the one with the fastest global growth. The capacity of the organizations to service credit demands on simpler and better conditions compared to others competitors in the monetary industry is what is driving the subsector's historic expansion and increasing popularity. Academics generally agree that credit management is the cornerstone of contemporary businesses' stability and expansion. The cooperative sector in Kenya is classified as either financial or non-financial cooperatives focus on socio-economic interest of shareholders without providing financial intermediary services. They include cooperatives engaged in production,

marketing, consumer, transport and special interest groups. Financial cooperatives are cooperatives are financial intermediaries on behalf of their member's. Financial cooperatives include the Saccos, Housing cooperative and Investment cooperatives (SASRA, 2018).

Credit management is concerned with the well-being of organization by safeguarding investments and maximizing cash flows from operating activities. Credit Policies and practices ought to be strictly enforced from receipt of loan applications, granting of credit facility to clients, collection of payments that are on demand and limit the risk factors associated with non-payments (Kipkirui, 2018). Credit management's main objective is to lower the likelihood that loans would be issued with losses. Strict requirements are followed when granting loans; these requirements must address the client's information, the loan's purpose, the source of repayment, and the collateral.

In order to guarantee fair funding distribution and promote liquidity planning, effective supervision and management of the SACCO loan portfolio is made simpler by the credit management function. Credit management ought to be directed by explicitly stated policies and procedures, a strategic plan, bylaws, the cooperative act, the SACCO Regulation Act, guidelines and policies in order to attain prudence and recognized best practices. The savings, credit, and distribution of outside funding to members are the three main operational facets of a savings and credit cooperative. The creation, examination, and modification of the loan policy fall within the purview of the SACCO management committee. Its supervisory's committee is in charge of making sure that the lending rule is correctly implemented and accomplishes its objectives. Credit management refers to techniques for collecting and overseeing customer credit payments. According to Kipkirui and Omagwa (2018), these processes are the strategies used by companies to effectively manage and sustain an appropriate credit level. Credit analysis, credit reporting, credit rating, and credit classification are all included in financial management. When credit management is carried out correctly, the probability of bad debts declines along with the capital held by debtors.

Kenya's financial sector stability report of 2019 highlighted the main criteria for analysis and measuring financial performance in Sacco's as Capital available, Quality of assets, Profits/Earnings and Liquidity. The indicators are based on the principal parameters of total deposits, total assets, gross loans, allowance for loan losses and core capital. The capital adequacy indicators include total deposits and core capital to total assets; Asset quality indicators include non-performing loans ratio, non-performing loan net of provisions divided by earning assets and core capital; ROA, interest margin to gross income, cost income ratio, and operational expense to total assets are all included in the earnings rating; Liquid assets, liquid savings accounts and short-term liabilities, external borrowing to overall assets, liquidity assets to overall resources, and average loans to total deposits are examples of liquidity ratios.

A wide range of variables are used to evaluate the performance of finances. The amount of money created from the assets that are being managed is referred to as return on assets (ROA) (Ravichandran & Sharma, 2009). ROA and ROE are used by those who utilize financial statements to assess performance and foresee market structure trends. Where ROE is considered as a gauge of

a corporation's profitability as a ratio to shareholders equity. Another performance metric is bank liquidity

The Sacco industry maintained high levels of capital adequacy, enough liquidity, and an earning rating. However most Sacco's have performed dismally in terms of NPL ratio, ROA, ROE and external borrowing to total assets (SASRA, 2019). The analysis of the statements of financial performance show that on average 85.31% of the income is accounted by the interest income from loans over the years 2017 to financial year 2020. The return on assets of Sacco's reported declined by 17%, 14%, and 13% in the years 2015, 2016 and 2017 respectively. (SASRA, 2019). The study will use ROE since they measure profitability and growth of the SACCOs in Marsabit.

# **Statement of the Problem**

SACCOs are dynamic in the financial intermediation process. 48.55% of the gross national savings come from their savings (SASRA, 2018). As a result, SACCO performance is crucial to the financial sector's general stability. SACCOs are an important part of Kenyans' financial mobilization services, according to the SASRA research. The deposit taking SACCO's performance during the previous five years is concerning. In contrast to progress rates of 14.8%, 15.3%, and 14.8% over the previous few years, in link to the corresponding progress rates of 14.8%, 15.3%, and 14.8% recorded in 2016, the overall study of the performance of deposit taking SACCOs discloses a declining rate of progression in aggregate assets, gross advances, and total deposits in 2017. These figures were 12.4%, 11.3%, and 12% in that position. The provision for anticipatory loss, a useful indicator of non-performing credit collection, continued to trend upward, reaching Kshs 10.7B, a 23.4 percentage rise from the Kshs 8.6B reported in 2016. (SACCO Supervision Annual Report, 2017). In compared to 2014 and 2016, the data also shows that DTS's development performance in terms of aggregated assets, aggregate advances, and aggregate savings was poor in 2015. In additional, in the year 2020 total expense to average assets decreased from 13.21% in the year 2019 to 11.67% which is higher the recommended ratio of 5%, (SASRA, 2020).

Numerous DT SACCOs have failed to meet capital adequacy measures, comprising as core capital to total assets and core capital to total deposit liabilities, according to SASRA (2017). Low capital adequacy ratios can negatively impact the SACCO profitability, which accept deposits and must contend with the past due portfolio, as demonstrated by a study by Mugo, Muathe, and Waithaka (2018). The portfolio that was past due in 2017 and 2018 was 4.5 percent and 5.61 percent, respectively. The SACCOs financial performance in Marsabit County and their credit management strategies have not been entirely evident. Although credit management is the foundation of many SACCOs, a lot of survey has directed on financial performance instead of credit management itself. Prior to the collapse of some Saccos, Marsabit County had demonstrated a trend of diminishing performance. (Department of Cooperative in Marsabit, 2022).

Olweny (2019) looked at how the Sacco's financial performance was impacted by credit management strategies in Kisumu County. According to the report, the area have adopted a variety of instruments and strategies for credit management in order to enhance their competitiveness.

Credit management has a limiting impact on Kenya's DT-SACCOs' performance and financial sustainability, according to a research by Kiai and Kyalo (2020). For DT-SACCOs in Marsabit County, the association between credit management and financial performance is still unclear. Previous research has been conducted in this area, but not much of it has been explained in the context of a SACCO. As a result, it continues to be a topic of interest for empirical study, which served as inspiration for this research and its filling of the gap. The present study have revealed that the coefficient of determination (R Square) is 0.667, meaning that approximately 66.7% of the variability in the financial performance of DT-SACCOs can be explained by the internal control systems and audit, management competency, and capital adequacy. The findings revealed that correlation coefficient (R) in this model is 0.817, indicating a strong positive relationship between the predictors (internal control systems and audit, management competency, and capital adequacy) and the financial performance of DT-SACCOs. Further, the findings established that significance level (p-value) associated with the F-statistic is 0.003, which is well below the commonly accepted threshold of 0.05 which indicate that there is positive relation between credit management practices and financial performance of DT-SACCOs. The research concludes that there is a strong correlation between the effectiveness of internal controls and audits and the overall financial performance of DT-SACCOs.

# **Research Objectives**

# **General objective**

The general objective of the research was to investigate the impact of credit management practices on financial performance of savings and credit co-operative societies in Marsabit County, Kenya.

# **Specific objectives**

The study was guided by the following specific objectives:

- i. To determine the effect of internal control system & Audit on financial performance of DT-SACCOs in Marsabit County, Kenya.
- ii. To determine the effect of management competency on financial performance of DT-SACCOs in Marsabit County, Kenya.
- iii. To establish the effect of Capital Adequacy, influence financial performance of DT-SACCOs in Marsabit County, Kenya.

# LITERATURE REVIEW

# **Theoretical Literature Review**

# **Resource-Based View Theory**

Birger Wernerfelt (1984) first presented the Resource Based View Theory, which Barney (1991) later extended and improved. Resources are any productive or economical element needed to complete a task or a way to start a business and bring about a desired result. Resources are defined by Kay (1999) as inputs into a company's production process, including cash, machinery, personnel skills, patents, funding, and skilled management. The abilities, know-how, and practical experience

of SACCO managers and leaders are included in management competency practices. From an RBV perspective, skilled management is a vital asset that helps SACCOs to effectively allocate resources, adjust to shifting market conditions, and make strategic decisions.

Critics argue that RBV is more descriptive than prescriptive. While it provides a framework for understanding how internal resources can lead to competitive advantage, it doesn't offer specific guidance on how to develop or acquire these resources. The theory's central tenet is that an organization's effective management and sound corporate governance are key components in determining the performance and sustainability of the business. The RBV demonstrates that a company's internal resource generation rather than its external environment lays the groundwork for its competitive advantage. According to this perspective, certain resources that companies own and control have the potential to create a competitive advantage and improve business performance. The theory is related in the research as it expounds how the available resources affect the financial performance. The idea that resources are the cornerstone of performance asserts the theory's applicability to the current study. The fact that resources are fundamental to an organization's ability to develop and implement successful strategies highlights the theory's applicability to the current investigation. It was demonstrated that making use of corporate resources improves the SACCOs' performance in Marsabit County.

# **Agency Theory**

Barry Mitnick and Michael C. Jensen came up with this theory, it originated in the late 1970s from the combined fields of institutional theory and economics. The relationship amongst agents and enterprise is examined by the theory. The notion's primary focus is on determining whether there are sufficient market mechanisms to enable agents to fulfill firm owners' expectations and maximize returns. According to this theory, the principle (P) gives an agent (A) authority to act as the principle's representative in business-related transactions and decision-making. It is expected of the agent to maximize returns while acting in the principle's best interests. However, agency issues do arise in this relationship, particularly if A and P have unlike aims, if P and A have different abilities when it comes to assessing A's performance, if P and A have different levels aversion to risk, and if P and A have access to different market-related information. The influence of private investors in this sector of the economy has diminished. According to Haule (2018), members of SACCOs choose the BOD to oversee the organization for them. Because of this, it can be concluded that SACCOs have a principal-agent relationship.

One of the most significant criticisms is the principal-agent problem, which is inherent in agency theory itself. The agent- principal conflict is the core issue that agency approach aims to address, but it also gives rise to several criticisms. Guevas and Fischer (2006) state that conflicts of interest between principal agents may be the primary issue in SACCOs. Because large SACCOs give agents more possibilities to maximize their own interests, these conflicts are likely to have a more detrimental effect.

The theory was significant because it suggests that in order to improve performance, SACCOs should have more agencies. In order to maximize profits, the theory examines whether there are sufficient market mechanisms to enable the agents to work toward the objective and vision of the business owners. According to the hypothesis, difficulties could arise if the SACCOs and their alternate distribution channels are not coordinated.

# **Financial Intermediation Theory**

This is the anchor theory, which Diamond (1984) put forth. The notion is essential to the financial intermediation process because it helps banks, in particular, to mitigate the information asymmetry that exists between lenders and borrowers. As a result, lenders are able to provide borrowers with credit-worthy information thanks to their ongoing contact. Lenders are highly motivated to assess and appraise credit for individuals who need it when information is available. According to contemporary views, the financial intermediation industry is largely dependent on economic flaws that date back to the 1970s (Jappelli & Pagano, 2016). The intermediaries' capacity to reduce transaction and information costs resulting from asymmetries is what makes them viable (Tripe, 2017).

The primary critique leveled at the flaw in the financial intermediation hypothesis is that it ignores the role that lenders play in risk management. According to Wensveen (2016), credit risk is not regarded as a significant factor in the monetary sector, and the concept of involvement costs is emphasized. To comprehend the difficulties facing the financial industry, they recommended further advancements in the theory of financial intermediation.

The theory is helpful in analysing how well DT-SACCOs perform since they use contemporary credit technology to analyse a diversity of risk features, containing the effective gathering of personal information and the treatment, screening, and monitoring of borrowers. Financial middlemen help in reducing the transaction costs that arise from knowledge asymmetry. Thus, they are essential to the efficient operation of the financial markets. The hypothesis helps explain the connection between risk management tactics and performance.

# **Empirical Literature Review**

This part presents the previous similar cases carried out showing the impact of Internal Control Systems and Audit, Capital Adequacy and Management Competency on financial Performance of SACCOs from international, regional and local.

#### **Internal Control Systems and Audit on Financial Performance**

A robust internal control system reduces the risk of financial misconduct, through prevent and detect fraudulent activities which can negatively impact financial performance. A well-structured internal control system and audit process can add value to the organization beyond financial considerations by promoting good governance, ethical behavior, and long-term sustainability. In Kisumu, Nyakundi, Nyamita, and Tinega (2014) looked into how internal control systems affected small and medium-sized enterprises' financial performance. They specifically evaluated

the association among investment and internal control systems determined how much an entrepreneur knew about internal control systems and how it affected their financial performance. Using straightforward random sampling methods that were stratified, the sample was chosen from the study population. The research methodology for the cross-sectional design was modified and equally qualitative and quantitative techniques were applied in the investigation. Both primary and secondary data were used in the study. Although secondary data was gathered from the finance accounts of the sampled businesses, through interviews and structured questionnaires, primary data was acquired. To analyze the data, inferential statistics and descriptive statistics were utilized. The findings of the survey were displayed using tables, graphs, charts, and percentages. The study clearly showed that internal control systems are associated with a notable shift in financial performance. The outcome of the investigation indicate that internal control systems significantly affect small and medium-sized businesses' financial performance. Contextual gap: the subsequent a cross-sectional survey design was adopted, while the ongoing research utilized a descriptive research design.

Wesley (2023) investigated the effect of internal control mechanisms on Kenya's third-tier licensed commercial banks' financial performance. Management conducts internal control assessments to evaluate the effectiveness of the control and identify areas for potential modification. Because descriptive statistics can identify and quantify the causes and effects of relationships between variables, a descriptive design methodology was chosen for this investigation. The target demographic comprised of Kenya's twenty-one licensed tier three commercial banks. Basing on regression model statistical results, financial performance and internal controls of Kenya's third-tier banks are significantly correlated. With a significance level of less than 5% for each independent variable, it is clear indicates there is a substantial statistical correlation among these variables and third-tier commercial banks' financial performance. Financial performance is determined by how well and efficiently internal controls are applied, holding all other factors constant. Given that the focus of this study will be SACCO performance in Marsabit, but the previous investigation was restricted to Commercial Banks, the study's conclusions would cannot be applied to the current study.

Ngari, (2017) looked at the topic on how Kenyan microfinance institutions' financial performance was affected by their internal control system. Internal auditors, senior accountants, and five more accounting department employees made up the sample of 21 microfinance institutions from a population of 53. The investigation utilized a descriptive and diagnostic survey methodology. The case sample was chosen using basic random sampling procedures and stratified sampling. Employees of the institutions were given structured interviews in addition to questionnaires to collect primary qualitative data. Tables and charts were used to record, alter, and evaluate the data. According to the study, financial performance and internal control systems are favorably correlated. The investigation found that there was an effect on financial performance through the application of internal controls and accounting process phases and it recommended appropriate handling of job rotation, division of labor, and job descriptions. The present investigation will focus on the SACCO's performance in Marsabit and will use a descriptive research methodology, generating a

contextual gap. This research was narrowed to micro finance institutions in Kenya and used both diagnostic and descriptive case designs.

#### **Management Competency and Financial Performance**

Competent management is essential for making strategic decisions, effectively allocating resources, and ensuring the efficient operation of the business. Competent management is responsible for shaping the organization's strategic direction, managing risks, optimizing operations, and making sound financial decisions. Strong leadership and management practices are critical for achieving and maintaining financial success.

Mutendereza, (2022) conducted a research which intended to assess the connection among the financial performance of Small Medium and Exchange on R and T Enterprise in the Ugandan district of Pallisa and management competency. The managerial competencies that R and T Enterprise's accountants, staff, and clients encountered assisted as the impetus for the investigation. Questionnaires and an interview guide were utilized to collect information, which revealed a dense correlation among financial performance and managerial competency. The case utilized a sample of 39 participants beyond the 48 respondents that were the target population. Self-administered, closed-ended questionnaires were utilized to gather field information. Through SPSS, descriptive statistics (percentages and frequencies) were utilized to evaluate the information. Following that, the outcomes were displayed as tables. According to the study's findings, management competence and financial success are positively correlated, so managers who want to increase their financial performance should be able to hire competent employees. Geographical gap: Given that the research was conducted in Kenya and Uganda has distinct economic and geographic limits, its conclusions is cannot applied to a study conducted in Kenya.

Tsuma and Mose (2023) how key competences of employees affect commercial banks' success in the city of Nairobi. The research's specific the intention was to discover how management competency affected commercial banks' performance. The investigation employed a descriptive research design. 39 Kenyan commercial banks were included in the analytical unit. Additionally, the population was sampled by using a stratified random sampling technique by dividing it into three categories. 171 respondents, divided into senior, middle, and lower-level officers, comprising the study's sample size. The principal tool utilized to collect information was the questionnaire. With the aid of the Statistical Package for the Social Sciences V.25, both qualitative and quantitative methodologies were utilized to examine the data. The investigation results were displayed using charts, figures, and tables. Multiple regression analysis and the Pearson correlation coefficient were used to examine inferential information. The research investigation concluded that the performance of the commercial banks in Nairobi City County was suggestively and favorably impacted by team competence. There is a scope gap because the research was carried in Nairobi City County and the recent study was carried in Marsabit.

Ssekakubo, Ndiwalana & Lwanga (2014) intended to investigate the connection between financial success of SACCOs in Ugandan and managerial skill. An approach to quantitative research was

adopted. Using questionnaires, data were gathered from cooperative societies, savings banks, and credit unions in the Busoga region of eastern Uganda. Regression analysis, descriptive and correlation were applied in the data analysis. The outcomes show that managerial competency and financial performance are positively correlated. The results also show that managerial skill and corporate governance alone cannot explain the differences in the financial results of Uganda SACCOs. This suggests that the model's result is trustworthy. Geographical gap, this study was conducted to SACCOs in Uganda hence the study results cannot be generalized to a research done to SACCOs in Kenya due to variation in economic and geographical boundaries between the two Countries.

# **Capital Adequacy and Financial Performance**

Capital Adequacy provides stability, encourages prudent risk management, enhances creditworthiness, and allows institutions to adapt to market conditions which ultimately contribute to long-term financial success and sustainability. Maintaining the right balance between risk and capital is crucial for optimizing financial performance while meeting regulatory requirements. Agbeja, Adelakun, and Olufemi (2015) looked into the connection among capital bank sufficiency and profitability. They also looked at the influence of advances and loans on bank profitability along considering the connection between the capital adequacy ratio and banks' exposure to credit risk. The survey used case studies of five particular commercial banks and secondary data spanning five years of financial statements. The survey targeted population was drawn only from five selected commercial banks in the Nigeria were used. Banks with larger equity capital are thought to be safer, and this perception can be converted into higher profitability, according to the (+VE) significant link amongst bank profitability and capital adequacy. An institution that has a greater capital ratio will be more profitable. Contextual gap: the previous study only looked at bank profitability; the current study concentrated on SACCO performance in Marsabit.

A study by Nyabaga and Wepukhulu (2020) looked at how listed Kenya's commercial banks in performed in relation to capital adequacy. The study's particular focus was on Kenya's listed commercial banks. Research designs for the study were explanatory and descriptive. The study's eleven (11) mentioned commercial banks were its target population. Between 2014 and 2018, the 11 listed banks on the Nairobi Stock Exchange were the subject of a census survey conducted by the research. The study made use of secondary information sources, such as publicly available statements of financial statement and income statements, which provided information on ROA, supplemental capital, and core capital. The information was gathered using a data collecting sheet, and both inferential and descriptive were used in the review process. The extent of association between the research's variables was described using regression analysis. Over the preceding five years, the average core capital of Kenya's listed commercial banks has steadily increased, basing to the results. The research established that financial performance is significantly impacted by capital adequacy. The recent investigation will focus on the performance of SACCOs in Marsabit and employed a descriptive research strategy; therefore, the study findings cannot be extrapolated to the recent study. This study was restricted to Commercial Banks and used both descriptive and explanatory research designs.

A study by Ntoiti and Jagongo (2021) established the effect of capital adequacy. Regression analysis was applied to describe the degree of association amongst the research variables. The conclusion portrays that throughout the preceding five years, Kenya's listed commercial banks' average core capital has risen consistently. The investigation concluded that financial performance is significantly impacted by capital adequacy. The ongoing research focused on the SACCOs performance of in Marsabit and employed a descriptive research strategy; therefore, the study findings cannot be extrapolated to the current study. This investigation was restricted to Commercial Banks and used both descriptive and explanatory research designs. 2011 was the official conclusion of the four-year period, after which the Act would be fully implemented. After analyzing pertinent secondary data, conclusions regarding the connections between capital sufficiency and DT-Sacco success in Kenya were drawn. The data included a longitudinal component because it included time series and cross-sectional features. A ten-year period was split into two segments; the period before SASRA's basic capital requirements were fully implemented, which ran from 2007 to 2011, and the post-full implementation of SASRA core capital needed period, which ran from 2012 to 2016 in order to eliminate bias. Basing on the case conclusions, capital sufficiency had an impact on DT-Saccos' performance. The research was specified to DT SACCOs in the whole Country Kenya while the present research outlined influence of capital adequacy in overall SACCO performance in Marsabit.

# **Conceptual Framework**

The framework shows the association among variables. The independent variables include internal control system & audit, management competency and capital adequacy. Dependent variable is the financial performance of SACCOs.

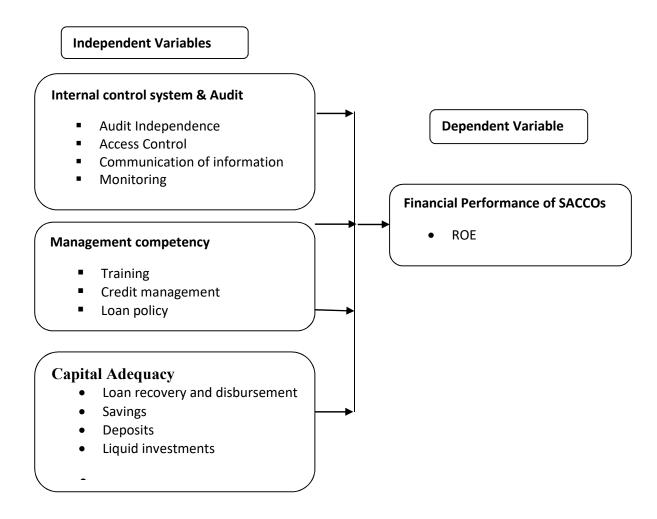


Figure 1: Conceptual Framework

#### **RESEARCH METHODOLOGY**

The study adopted descriptive research design. Random sampling technique was utilized. The study utilized primary and secondary data. The seven SACCOs in Marsabit formed the population and the unit of study. This categorizes the 360 respondents (senior management level, Middle management level and Members) in SACCO that the researcher targeted. The research used questionnaire and published article/financial reports to obtain data respectively. The sample size was selected using a stratified random sampling procedure. To produce the analyzed data, SPSS version (23) was utilized. Analysis results were displayed in tables and charts, with interpretations provided in accordance with the objectives of the project and a generalization of the results. The study upheld high ethical standards by securing a survey license from the NACOSTI and guaranteeing the participant's confidentiality and anonymity.

#### **RESULTS AND DISCUSSION**

#### **Response Rate**

The researcher administered 108 questionnaires to the selected respondents. However, 94 questionnaires were dully filled and returned to the researcher. This gave a response rate of 87.0% which is deemed sufficient for the study. This correlates with Juma, Otuya and Kibati (2018) recommendation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. This indicates that the response rate from this study was excellent. The findings are as shown in Table 4.1. *Table 4.1 Response Rate* 

| Response Rate | Frequency | Percentage |  |
|---------------|-----------|------------|--|
| Response      | 94        | 87.0       |  |
| Non-Response  | 14        | 13.0       |  |
| Total         | 108       | 100        |  |

#### Source: Field Data (2024)

#### **Gender of the Respondents**

The research aimed to explore the gender distribution of the participants. The respondents were therefore required to indicate their gender by ticking against the option of either male or female. Table 4.2 shows the summary of findings of the gender distribution in deposit-taking SACCOs.

| Gender | Frequency | Percentage | Percentage |  |
|--------|-----------|------------|------------|--|
| Male   | 56        | 59.6       |            |  |
| Female | 38        | 40.4       |            |  |
| Total  | 94        | 100        |            |  |

Source: Field Data (2024)

#### **Working Experience**

Working experience of individuals involved in this type of research would likely involve collaborating with DT-SACCOs, collecting and analysing financial data, identifying key performance indicators related to credit management, and developing recommendations to improve financial performance. The respondents were requested to indicate their number of years they have worked in the management of SACCOs. The findings were as shown in Table 4.3.

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| Response       | Frequency | Percentage | Percentage |  |
|----------------|-----------|------------|------------|--|
| Below 5 years  | 11        | 11.7%      |            |  |
| 5 – 10 years   | 49        | 52.1%      |            |  |
| 11 – 15 years  | 28        | 29.8%      |            |  |
| Above 15 years | 6         | 6.4%       |            |  |
| Total          | 94        | 100        |            |  |

#### Table 4.3 Working Experience

# Source: Field Data (2024)

# **Position in the SACCO**

The study also determined the position held by the respondent in the SACCO. The data regarding positions in the study was coded and presented in form of frequencies. Table 4.4 provides a summary of findings from the analysis.

| Job position           | Frequency | Percentage |
|------------------------|-----------|------------|
| Financial clerks       | 29        | 30.9%      |
| Credit officers        | 28        | 29.8%      |
| Internal audit officer | 17        | 18.1       |
| Managing directors     | 13        | 13.8%      |
| Audit manager          | 7         | 7.4%       |
| Total                  | 94        | 100        |

Table 4.4 Respondents' Job Position

Source: Field Data (2024)

**Descriptive statistics** 

#### Internal Control System and Audit, and Financial Performance

The first objective of the study was to determine the effect of internal control system and Audit on financial performance of DT-SACCOs in Marsabit County, Kenya. Respondents were asked to rate their level of agreement with each statement about the internal control system and audit, and how it affects the financial performance of DT-SACCOs on a scale of 1 to 5, with 1 (strongly disagree), 2 (disagree), 3 (moderate agree), 4 (agree), and 5 (strongly agree). The results were presented in Table 4.6.

| Statements   | n  | Mean | Std. Dev |
|--|----|------|----------|
| The internal audit team operates independently from other departments.                 | 94 | 3.67 | 0.761    |
| The organization has effective mechanisms for ongoing monitoring of internal controls. | 94 | 3.60 | 0.756    |
| The organization has effective measures in place to prevent unauthorized access.       | 94 | 3.64 | 0.714    |
| Information necessary for decision-making is timely and accurately communicated.       | 94 | 3.56 | 0.679    |
| There are regular reviews and evaluations of the internal control system.              | 94 | 3.58 | 0.683    |
| Access to sensitive information is properly controlled and monitored.                  | 94 | 3.49 | 0.669    |
| The organization maintains open channels for reporting issues and concerns.            | 94 | 3.55 | 0.672    |
| Average scores   |    | 3.58 | 0.705    |

Source: Field Data (2024)

The findings presented in Table 4.6 offer valuable insights into the internal control systems and audit practices within deposit-taking Savings and Credit Cooperative Societies (SACCOs) in Kenya. The mean and standard deviation values indicate the levels of agreement among respondents regarding various aspects of internal control and audit effectiveness, underscoring key areas of strength and potential improvement. A significant majority of respondents agreed that internal audit teams operate independently from other departments, reflected in a mean of 3.67 and a standard deviation of 0.761. This high level of agreement suggests that internal audit teams in these SACCOs are widely perceived as functioning autonomously. The independence of the internal audit team is crucial for ensuring unbiased and objective evaluations of the organization's internal controls and financial practices, as emphasized by Kinyua (2016). This independence enables auditors to effectively identify and address weaknesses in control systems, enhancing the overall financial performance of the SACCOs. Such independence has also been supported by scholars like Alleyne and Howard (2005), who argue that an independent internal audit function is integral to good governance and risk management frameworks.

The consensus among participants regarding the effectiveness of ongoing monitoring mechanisms, with a mean of 3.60 and a standard deviation of 0.756, is particularly noteworthy. Ongoing monitoring is vital for the timely detection and correction of control weaknesses, which can mitigate financial losses and improve operational efficiency (Mwangi, 2021). This robust monitoring not only helps maintain the effectiveness of internal controls but also aligns with the findings of Hermanson and Rittenberg (2003), who assert that continuous monitoring is essential for adapting to changing operational environments and sustaining effective governance practices.

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Respondents also expressed a strong agreement regarding the effectiveness of measures to prevent unauthorized access, as evidenced by a mean of 3.64 and a standard deviation of 0.714. Effective access controls are critical for protecting the organization's assets and sensitive data. As highlighted by Njeri (2019), these controls can significantly reduce the risk of fraud and data breaches, which could have devastating financial and reputational repercussions for SACCOs. This is in line with work by Peltier (2005), who noted that comprehensive security measures are paramount for organizations seeking to safeguard crucial information.

Furthermore, the results revealed that respondents generally agree on the timely and accurate communication of information necessary for decision-making, reflected in a mean of 3.56 and a standard deviation of 0.679. While this demonstrates a positive perception, the variability in responses suggests that there may be opportunities for enhancement. Timely and accurate communication is indispensable for informed decision-making, with far-reaching implications for financial performance (Owino, 2017). Scholars such as Van der Merwe (2015) have emphasized that facilitating access to reliable information is essential for decision-makers to make sound strategic choices that can bolster an organization's financial health.

The agreement regarding the regularity of reviews and evaluations of the internal control system, with a mean of 3.58 and a standard deviation of 0.683, points to a practice that contributes to the ongoing effectiveness of these systems. Regular evaluations play an essential role in identifying areas for improvement and ensuring that internal controls remain robust (Muriithi, 2018). This process of continuous improvement aligns with the perspectives of scholars like COSO (Committee of Sponsoring Organizations of the Treadway Commission), who advocate for periodic reviews as an integral part of an effective internal control framework.

Most participants also conveyed that access to sensitive information is properly controlled and monitored, reflected by a mean of 3.49 and a standard deviation of 0.669. This moderate agreement level, combined with a low standard deviation, suggests consistent perceptions regarding the control and monitoring of sensitive information. Proper handling of this information is critical for maintaining confidentiality, integrity, and availability (Kariuki, 2019). This mirrors findings from Neuman (2014), who emphasized the significance of rigorous access controls in preserving vital data against unauthorized exposure.

Lastly, the favourable perception regarding the existence of open channels for reporting issues and concerns, with a mean of 3.55 and a standard deviation of 0.672, underscores the importance of transparency within the organization. Open reporting channels facilitate a culture of accountability, empowering employees to report issues without fear of reprisal. This proactive approach to addressing problems aligns with Muturi's (2020) assertion that such openness can significantly reduce the risk of financial mismanagement, ultimately enhancing overall performance. Scholars like Kaplan and Norton (2001) also stress the necessity of creating an environment conducive to open communication for fostering successful internal control systems.

#### **Management Competency and Financial performance**

The objective two was to determine the effect of management competency on financial performance of DT-SACCOs in Marsabit County, Kenya. Respondents were asked to rate their level of agreement with each statement about the management competency and how it affects the financial performance of DT-SACCOs on a scale of 1 to 5 where 1 (strongly disagree), 2 (disagree), 3 (moderate agree), 4 (agree), 5 (strongly agree). The means and standard deviations were developed. The results were presented in Table 4.7.

 Table 4.3 Descriptive Statistics for Management Competency

| n  | Mean                                   | Std. Dev  |
|----|--|---|
| 94 | 3.63                                   | 0.674   |
| 94 | 3.54                                   | 0.651   |
| 94 | 3.58                                   | 0.657   |
| 94 | 3.62                                   | 0.670   |
| 94 | 3.47                                   | 0.646   |
| 94 | 3.65                                   | 0.667   |
| 94 | 3.67                                   | 0.685   |
|    | 3.59                                   | 0.664   |
|    | 94<br>94<br>94<br>94<br>94<br>94<br>94 | 94       3.63         94       3.54         94       3.58         94       3.62         94       3.47         94       3.65         94       3.67 |

Source: Field Data (2024)

The responses presented in Table 4.7 provide significant insights into management competency within deposit-taking Savings and Credit Cooperative Societies (SACCOs) in Kenya. The mean and standard deviation values highlight the respondents' agreement levels on various aspects of management adeptness, which are critical to the effective functioning of these organizations. A majority of the participants agreed that managers regularly review and update loan policies to align with current best practices, as indicated by a mean of 3.63 and a standard deviation of 0.674. This finding reflects a proactive stance by management in ensuring that loan policies remain relevant, competitive, and compliant with regulatory standards. Regular updates to loan policies are essential for SACCOs to adapt to shifting market conditions and evolving regulatory frameworks. This proactive approach not only mitigates risks associated with outdated policies but also bolsters the financial performance of SACCOs by maintaining a robust loan management framework, as noted by Ombongi and Long (2018). The importance of dynamic policy management has been echoed by other scholars, such as Tushabomwe and Anaya (2022), who emphasize that organizations must regularly align their policies with industry best practices to foster resilience and sustainability.

Respondents also expressed agreement regarding the clarity of communication surrounding loan policies, with a mean of 3.54 and a standard deviation of 0.651. Clear communication of policies is fundamental for ensuring all staff members understand their roles and responsibilities, which, in

turn, promotes consistency in policy application. This enhances efficiency and effectiveness in loan management processes. Effective communication is a critical competency within management, fostering transparency and accountability. In SACCOs, such competencies contribute to superior loan portfolio performance, resulting in improved financial outcomes (Muriuki, 2016). This perspective aligns with the findings of Bakar and Ahmad (2020) who demonstrate that effective communication is linked to improved job satisfaction and performance.

Participants further agreed that managers demonstrate a clear vision and direction for their teams, supported by a mean of 3.58 and a standard deviation of 0.657. A clear vision from management is crucial for aligning the efforts of staff with the strategic goals of the organization. This visionary leadership not only motivates and guides employees but also enhances performance and productivity in the face of challenges inherent in the dynamic financial environment of SACCOs. Scholars such as Ndungu and Njeru (2014) assert that managers who effectively communicate a clear vision can inspire their teams to strive for improved financial performance and growth, confirming the findings of Kabiru and Muturi (2022), who highlight the importance of visionary leadership in organizational success.

Moreover, participants agreed that managers address conflicts fairly and impartially, indicated by a mean of 3.62 and a standard deviation of 0.670. Effective conflict resolution is critical to maintaining team cohesion and morale, as constructive handling of disputes can prevent disruptions to team performance. Fair and impartial conflict management is essential for fostering a harmonious workplace, which is crucial for the effective operation of SACCOs. Kimani (2023) underscores the significance of conflict resolution skills in maintaining a cooperative work environment. This assertion is supported by the works of Mwangi and Mutua (2020), who posited that effective conflict management techniques could lead to more productive teams and better organizational outcomes.

The results also indicate that the majority of respondents believe that managers foster a collaborative and harmonious work environment, as reflected in a mean of 3.47 and a standard deviation of 0.646. A collaborative environment is valuable for leveraging the collective skills and knowledge of team members, facilitating innovative solutions and improved performance. Fostering collaboration within SACCOs enhances teamwork and service delivery, ultimately contributing to better financial performance, as noted by Mwangi and Kihoro (2016). This perspective is echoed in the literature, with studies by Ssekakubo, Ndiwalana and Lwanga (2014) emphasizing that collaboration is a key driver of high performance in organizations.

Additionally, participants agreed that managers effectively manage the organization's credit policies, indicated by a mean of 3.65 and a standard deviation of 0.667. Effective credit management is vital for SACCOs, as it directly impacts their financial stability and growth trajectories. Proper management of credit policies ensures minimized credit risks and maximized loan recovery rates. Njuguna and Wepukhulu (2015) argue that sound credit management practices are essential for the sustainability and profitability of SACCOs, confirming that maintaining

healthy loan portfolios is crucial in reducing default likelihood. This aligns with the ideas of Tsuma and Mose (2023), who highlight that effective credit management strategies are fundamental for ensuring organizational resilience.

Finally, respondents demonstrated agreement regarding the criticality of proper assessment and mitigation of credit risk, with a mean of 3.67 and a standard deviation of 0.685. This competency is essential for safeguarding the organization against potential losses resulting from loan defaults. Effective credit risk assessment and management are foundational to maintaining the financial health of SACCOs, allowing them to deliver financial services in a sustainable and profitable manner (Wambui, 2018). The findings resonate with the conclusions drawn by Mutendereza (2022), who highlight that robust credit risk management is essential for the overall stability and performance of financial institutions.

#### **Capital Adequacy and Financial Performance**

The objective three was to establish the effect of capital adequacy on financial performance of DT-SACCOs in Marsabit County, Kenya. Respondents were asked to rate their level of agreement with each statement about the capital adequacy and how it affects the financial performance of DT-SACCOs on a scale of 1 to 5 where 1 (strongly disagree), 2 (disagree), 3 (moderate agree), 4 (agree), 5 (strongly agree). The means and standard deviations were developed. The results were presented in Table 4.8.

| Statements  | n  | Mean | Std. Dev |
|---|----|------|----------|
| The loan disbursement process is efficient and timely.                  | 94 | 3.61 | 0.683    |
| The organization maintains a low level of non-performing loans.         | 94 | 3.59 | 0.671    |
| The organization has effective procedures in place for loan recovery.   | 94 | 3.57 | 0.668    |
| The organization has a strong track record of recovering overdue loans. | 94 | 3.76 | 0.697    |
| The organization offers attractive savings products to its customer     | 94 | 3.63 | 0.686    |
| The organization maintains an adequate level of liquid investments.     | 94 | 3.53 | 0.657    |
| There is a stable and growing base of customer deposits.                | 94 | 3.59 | 0.664    |
| The organization effectively manages its deposit portfolio.             | 94 | 3.67 | 0.691    |
| Average scores  |    | 3.62 | 0.677    |

Table 4.4 Descriptive statistics on Capital Adequacy

Source: Field Data (2024)

The results presented in Table 4.8 established that majority of the respondents agreed that loan disbursement process is efficient and timely (mean = 3.61; standard deviation = 0.683). This suggests a relatively high level of agreement among respondents, indicating that the loan disbursement processes in these SACCOs are perceived to be efficient and timely. Efficient loan disbursement is critical for meeting the financial needs of members promptly, which in turn can enhance customer satisfaction and loyalty (Kinyua, 2016). Timely disbursement ensures that members utilize the funds for their intended purposes without unnecessary delays, thereby supporting their financial well-being and contributing to the SACCO's overall performance.

Most participants agreed that organization maintains a low level of non-performing loans (mean = 3.59; standard deviation = 0.671). This indicates a strong consensus on the effectiveness of the organization's strategies in maintaining a low level of non-performing loans (NPLs). Low levels of NPLs are crucial for the financial stability of SACCOs as they reflect the organization's ability to manage credit risk effectively. By maintaining a low NPL ratio, SACCOs ensure a steady stream of income from loan repayments, which supports their liquidity and profitability (Mwangi, 2021). Also, the respondents agreed that organization has effective procedures in place for loan recovery (mean = 3.57; standard deviation = 0.668). This suggests a high level of agreement on the effectiveness of loan recovery procedures. Effective loan recovery procedures are essential for mitigating the impact of defaulted loans on the SACCO's financial health. By implementing robust recovery strategies, SACCOs can reduce the incidence of bad debts and improve their overall financial performance (Njeri, 2019).

The participants agreed that organization has a strong track record of recovering overdue loans (mean = 3.76; standard deviation = 0.697). This points to a generally positive perception of the organization's success in recovering overdue loans. A strong track record in loan recovery indicates the effectiveness of the SACCO's credit management practices and their ability to enforce loan agreements. This not only enhances the SACCO's financial stability but also boosts investor and member confidence (Owino, 2017).

Most respondents agreed that organization offers attractive savings products to its customers (mean = 3.63; standard deviation = 0.686). This indicates a high level of agreement on the attractiveness of the savings products offered by the SACCOs. Attractive savings products are vital for attracting and retaining members, which in turn supports the SACCO's capital base and liquidity. By offering competitive interest rates and flexible savings options, SACCOs encourage more members to save, thereby enhancing their financial performance (Muriithi, 2018).

The respondents agreed that organization maintains an adequate level of liquid investments (mean = 3.53; standard deviation = 0.657). This suggests a moderate agreement on the adequacy of the organization's liquid investments. Maintaining adequate liquid investments is essential for ensuring that the SACCO meet its short-term obligations and manage liquidity risk effectively. Liquid investments provide a buffer against unexpected financial demands and support the SACCO's operational stability (Kariuki, 2019).

Most participants agreed that there is a stable and growing base of customer deposits (mean = 3.59; standard deviation = 0.664). This indicates a strong consensus on the stability and growth of the customer deposit base. A stable and growing deposit base is a key indicator of a SACCO's financial health and member confidence. It ensures that the SACCO has a reliable source of funds to support its lending activities and other financial operations (Muturi, 2020).

Furthermore, most respondents agreed that organization effectively manages its deposit portfolio (mean = 3.67; standard deviation = 0.691). This reflects a generally positive view of the organization's ability to manage its deposit portfolio effectively. Effective management of the deposit portfolio involves optimizing the use of deposited funds to generate income while maintaining liquidity and minimizing risk. By balancing these factors, SACCOs enhance their financial performance and provide better returns to their members (Njoroge, 2021).

# **Financial Performance of Deposit-Taking SACCOs**

The respondents were asked to indicate their agreement level with each statement related to financial performance of Deposit-Taking SACCOs on a scale of 1 to 5 where 1 (strongly disagree), 2 (disagree), 3 (moderate agree), 4 (agree), 5 (strongly agree). The means and standard deviations were developed. The results were presented in Table 4.9.

| Statements   | n  | Mean | Std. Dev |
|--|----|------|----------|
| Proper creditworthiness evaluation of borrowers helps SACCOs in minimizing default rates.  | 94 | 3.42 | 0.638    |
| Continuous monitoring of issued loans ensures that SACCOs identify potential issues early and take corrective measures.                  | 94 | 3.53 | 0.648    |
| Efficient debt recovery procedures improve cash flow and financial performance.  | 94 | 3.47 | 0.643    |
| Adherence to regulatory requirements ensures SACCOs operate within legal frameworks, reducing risks and improving financial performance. | 94 | 3.49 | 0.647    |
| Well-defined credit policies provide a framework for consistent<br>and fair lending practices, enhancing financial outcomes.             | 94 | 3.57 | 0.654    |
| Average scores   |    | 3.50 | 0.646    |

# Table 4.5 Descriptive statistics on Financial Performance of Deposit-Taking SACCOs

Source: Field Data (2024)

The results presented in Table 4.9 established that majority of the respondents agreed that roper creditworthiness evaluation of borrowers helps SACCOs in minimizing default rates (mean = 3.42; standard deviation = 0.638). This suggests a moderate level of agreement among respondents, indicating that proper creditworthiness evaluation is recognized as essential in minimizing default rates. Evaluating borrowers' creditworthiness is a critical step in the lending process that helps

identify potential risks and avoid lending to individuals or entities that may default on their loans. Effective credit evaluation involves assessing the borrower's financial stability, credit history, and ability to repay the loan (Kinyua, 2016). By minimizing default rates through proper credit evaluation, SACCOs can enhance their financial performance by reducing the incidence of bad debts and improving loan recovery rates.

The respondents agreed that continuous monitoring of issued loans ensures that SACCOs identify potential issues early and take corrective measures (mean = 3.53; standard deviation = 0.648). This indicates a high level of agreement on the importance of continuous loan monitoring. Continuous monitoring involves regularly reviewing loan accounts to ensure that repayments are being made as agreed and identifying any signs of potential default or financial distress early (Mwangi, 2021). By identifying issues early, SACCOs take corrective actions, such as renegotiating loan terms or providing additional support to borrowers, to prevent defaults and protect their financial interests. Most respondents agreed that efficient debt recovery procedures improve cash flow and financial performance (mean = 3.47; standard deviation = 0.643). This suggests a strong consensus on the positive impact of efficient debt recovery procedures on financial performance. Efficient debt recovery procedures are repaid promptly, which in turn improves cash flow and financial stability. Effective debt recovery involves timely follow-ups with delinquent borrowers, using legal means if necessary, and implementing strategies to recover outstanding debts (Njeri, 2019). Improved cash flow from efficient debt recovery allows SACCOs to reinvest funds into their operations and provide better services to their members.

Furthermore, the participants agreed that adherence to regulatory requirements ensures SACCOs operate within legal frameworks, reducing risks and improving financial performance (mean = 3.49; standard deviation = 0.647). This points to a generally positive perception of the importance of regulatory compliance. Adherence to regulatory requirements is crucial for SACCOs as it ensures they operate within the legal frameworks established by regulatory authorities. Compliance reduces risks associated with legal penalties and reputational damage, which can adversely affect financial performance (Owino, 2017). By following regulations, SACCOs enhance their credibility, attract more members, and improve their overall financial health.

Also, the respondents agreed that well-defined credit policies provide a framework for consistent and fair lending practices, enhancing financial outcomes (mean = 3.57; standard deviation = 0.654). This indicates a high level of agreement on the value of well-defined credit policies. Well-defined credit policies establish clear guidelines for evaluating loan applications, setting interest rates, and managing credit risk. These policies ensure consistency and fairness in lending practices, which enhance member trust and satisfaction (Muriithi, 2018). Consistent and fair lending practices also reduce the likelihood of disputes and defaults, thereby improving the financial performance of SACCOs.

# **Inferential Analysis**

Inferential analysis plays a vital role in understanding relationships between variables and predicting outcomes based on these relationships. In this context, correlation analysis and regression analysis are two statistical methods that often go hand-in-hand to provide deeper insights into the data.

#### **Correlation Results**

Correlation analysis examines the strength and direction of the linear relationship between two quantitative variables. This relationship is quantified using a correlation coefficient, typically represented by Pearson's r, which ranges from -1 to +1. A value of +1 indicates a perfect positive correlation, -1 indicates a perfect negative correlation, and 0 indicates no correlation. To show the relationships, the Pearson product moment correlation coefficient was utilized. There was a correlation between the composite means of the independent variables and the composite means of financial performance of DT-SACCOs. The findings are shown in Table 4.10.

# Table 4.6 Pearson Correlational Analysis ResultsCorrelations

|                                     |                      | performance of | Internal control<br>system and<br>audit | -    | Capital<br>adequacy |
|-------------------------------------|----------------------|----------------|---|------|---------------------|
| Financial                           | Pearson Correlation  | 1              | .421*                                   | .364 | .392                |
| performance of DT<br>SACCOs         | -Sig. (2-tailed)     |                | .021                                    | .040 | .035                |
| 5, (000)                            | Ν                    | 94             | 94                                      | 94   | 94                  |
|                                     | Pearson Correlation  | .421*          | 1                                       | .016 | .025                |
| Internal contro<br>system and audit | l<br>Sig. (2-tailed) | .021           |   | .765 | .628                |
|                                     | Ν                    | 94             | 94                                      | 94   | 94                  |
|                                     | Pearson Correlation  | .364           | .016                                    | 1    | .049                |
| Management<br>competency            | Sig. (2-tailed)      | .040           | .765                                    |      | .350                |
|                                     | Ν                    | 94             | 94                                      | 94   | 94                  |
|                                     | Pearson Correlation  | .392           | .025                                    | .049 | 1                   |
| Capital adequacy                    | Sig. (2-tailed)      | .035           | .628                                    | .350 |                     |
|                                     | Ν                    | 94             | 94                                      | 94   | 94                  |

\*. Correlation is significant at the 0.05 level (2-tailed).

The findings presented in Table 4.10 revealed that the correlation between the financial performance of DT-SACCOs and their internal control system and audit practices is moderate and positive (Pearson's r = 0.421, p = 0.021). This implies that DT-SACCOs with well-established internal control systems and rigorous audits are more likely to experience improved financial outcomes. Effective internal controls and audits can reduce the risk of fraud, ensure compliance with regulations, and improve overall operational efficiency, leading to better financial performance (Ofori, 2019).

The correlation between financial performance and management competency is also moderate and positive (Pearson's r = 0.364, p = 0.040). This suggests that higher management competency is associated with better financial performance. Competent management can implement strategic decisions, efficiently allocate resources, and respond effectively to market changes, all of which contribute to improved financial outcomes. This underscores the importance of investing in management training and development to enhance the overall performance of DT-SACCOs (Mutunga, 2021).

Further, the findings established that there is a moderate positive correlation (Pearson's r = 0.392, p = 0.035) between financial performance and capital adequacy. Adequate capital reserves are crucial for absorbing shocks and ensuring the stability of financial institutions. DT-SACCOs with sufficient capital are better positioned to manage risks and sustain operations during economic downturns. This finding highlights the importance of prudent financial management and maintaining adequate capital buffers to support financial performance (Kamau, 2020).

# **Regression Analysis**

Regression analysis extends correlation analysis by enabling the examination of the relationship between a dependent variable (outcome) and one or more independent variables (predictors). It provides a method for predicting the value of the dependent variable based on the values of the independent variables.

# **Diagnostic Test Results**

Diagnostic test analysis plays a crucial role in the evaluation of the performance and reliability of statistical models, particularly in the context of inferential statistics. The tests done and the results are as shown in the subsequent sections

# **Normality Test**

The assumption of normality of residuals was tested using Kolmogorov-Smirnov tests. According to Field (2017), the Kolmogorov-Smirnov test is more suitable for large sample sizes greater than 50 the Kolmogorov-Smirnov test. The results for both tests are displayed in Table 4.14.

| Table 4.7 Tests of Normality      | Kolmogorov-Smirnov |    |      |
|-----------------------------------|--------------------|----|------|
| Variables                         | Statistic          | df | Sig. |
| Financial performance of DT-SACCO | .136               | 94 | .207 |
| Internal control system and audit | .125               | 94 | .218 |
| Management competency             | .163               | 94 | .212 |
| Capital adequacy                  | .142               | 94 | .202 |

Table 4.7 Tests of Normality

#### Source: Field Data (2024)

The test results presented in Table 4.14 show the Kolmogorov-Smirnov statistics along with degrees of freedom (df) and significance levels (Sig.) for each variable. For the financial performance of DT-SACCOs, the statistic is 0.136 with a p-value of 0.207. Internal control systems and audit present a statistic of 0.125 and a p-value of 0.218. Management competency has a statistic of 0.163 and a p-value of 0.212, while capital adequacy shows a statistic of 0.142 with a significance level of 0.202. In general, a significance level (p-value) greater than 0.05 indicates that the null hypothesis (that the data is normally distributed) cannot be rejected. All aforementioned variables yield p-values above this threshold, suggesting that the data distributions are sufficiently close to normality.

#### **Multicollinearity**

A multi-collinearity test was utilized. Values more than 0.2 for Tolerance and VIF values below 10 for VIF mean showed that there was no multicollinearity. Results are exhibited in Table 4.15. *Table 4.8 Multicollinearity Test Using Tolerance and VIF* 

|                                   | Collinearity Statist | ics   |  |
|-----------------------------------|----------------------|-------|--|
| Variable                          | Tolerance            | VIF   |  |
| Internal Control System and Audit | 0.924                | 1.263 |  |
| Management Competency             | 0.971                | 1.427 |  |
| Capital Adequacy                  | 0.927                | 1.453 |  |

Source: Field Data (2024)

Table 4.15 presents the results of the multicollinearity test conducted using Tolerance and Variance Inflation Factor (VIF) statistics. The Tolerance values for the variables range between 0.924 for internal control system and audit, 0.971 for management competency, and 0.927 for capital

adequacy. Generally, a Tolerance value below 0.1 suggests high multicollinearity. However, since all observed Tolerance values exceed this threshold, it indicates that there is no significant issue with multicollinearity among these independent variables.

The corresponding VIF values, calculated as the inverse of Tolerance, are equally encouraging: 1.263 for internal control system and audit, 1.427 for management competency, and 1.453 for capital adequacy. A common rule of thumb is that VIF values exceeding 5 or 10 indicate problematic multicollinearity. The VIF results reveal that all values are well below the 5 thresholds, further confirming the absence of multicollinearity among the predictor variables.

#### Heteroscedasticity

Heteroscedasticity test was done by using Breusch-Pagan /Cook-Weisberg test. Threshold of p-value less than 0.05 was utilized. Table 4.16 refers.

Table 4.9 Heteroscedasticity Results

| Breusch-Pagan / Cook-Weisberg test for heteroscer             | lasticity |        |  |  |  |
|---|-----------|--------|--|--|--|
| Ho: Constant variance   |           |        |  |  |  |
| Variable: Fitted values of financial performance of DT-SACCOs |           |        |  |  |  |
| chi <sup>2</sup> (1)  | =         | 0.43   |  |  |  |
| Prob > chi <sup>2</sup>                                       | =         | 0.5241 |  |  |  |

#### Source: Field Data (2024)

The results in Table 4.16 indicate that a chi-squared statistic of chi<sup>2</sup> (1) = 0.43, with a corresponding p-value of Prob > chi<sup>2</sup> = 0.5241. These findings are critical as they suggest that the null hypothesis of constant variance cannot be rejected. The p-value of 0.5241 is well above the conventional threshold of 0.05, indicating no evidence of heteroscedasticity within the model. This suggests that the variance of the residuals is stable across different levels of financial performance, which supports the reliability of the regression findings.

The findings of Model Summary, ANOVA and Regression coefficients were as shown in subsequent sections.

#### **Model Summary**

The Model Summary is a crucial component often found in statistical analyses, particularly in regression models. It provides a concise overview of the model's performance and key statistics, allowing researchers and analysts to assess how well the model fits the data. Typically, this summary includes essential metrics such as R-squared, adjusted R-squared, standard error of the estimate, and significance levels for the overall model. Each of these elements serves a specific purpose in understanding the model's efficacy. The findings of Model Summary as shown in Table 4.11

| Model | R     | R Square | Adjusted R Square | Std. Error of the Estimate |  |
|-------|-------|----------|-------------------|----------------------------|--|
| 1     | 0.817 | 0.667    | 0.652             | 0.118                      |  |

a. Predictors: (Constant), Internal Control System and Audit, Management Competency, and Capital

Adequacy

#### b. Dependent Variable: Financial performance of DT-SACCOs

#### Source: Field Data (2024)

The findings presented in Table 4.11 that correlation coefficient (R) in this model is 0.817, indicating a strong positive relationship between the predictors (internal control systems and audit, management competency, and capital adequacy) and the financial performance of DT-SACCOs. A high R value suggests that improvements in these predictors are strongly associated with better financial performance of the SACCOs. The coefficient of determination (R Square) is 0.667, meaning that approximately 66.7% of the variability in the financial performance of DT-SACCOs can be explained by the internal control systems and audit, management competency, and capital adequacy. This high R Square value indicates that the model has a good fit and that the predictors collectively provide a substantial explanation for variations in financial performance. Effective credit management practices, robust internal controls, and competent management mitigate risks and enhance financial stability and performance.

#### ANOVA

An ANOVA was conducted at 95% level of significant, the findings of F <sub>Calculated</sub> and F <sub>Critical</sub> are as shown in Table 4.12.

| Model      | SS    | df | MS    | F    | Significance |
|------------|-------|----|-------|------|--------------|
| Regression | 19.28 | 3  | .284  | 19.7 | 0.003ª       |
| Residual   | 46.35 | 91 | 1.271 |      |              |
| Total      | 65.63 | 94 |       |      |              |

a. Predictors: (Constant), Internal Control System and Audit, Management Competency, and Capital

Adequacy

#### b. Dependent Variable: Financial performance of DT-SACCOs

Source: Field Data (2024)

The findings presented in Table 4.12 indicate that sum of squares for the regression (SS Regression) is 19.28, which represents the variation in financial performance that can be explained by the predictors in the model. This indicates that a substantial portion of the total variance in financial performance is attributable to the internal control systems and audit, management competency, and capital adequacy. The significance level (p-value) associated with the F-statistic is 0.003, which is well below the commonly accepted threshold of 0.05. This indicates that the predictors internal control systems and audit, management competency, and capital systems and audit, management competency, and capital systems and audit, management competency, and capital adequacy collectively have a statistically significant impact on the financial performance of DT-SACCOs.

# **Regression Coefficients**

In order to establish the individual influence of independent variables on dependent variables, the researcher conducted regression analysis. The findings are as shown in Table 4.13. *Table 4.12 Regression Coefficients* 

| Multiple Regression Analysis      |                |               |              |       |      |  |  |  |  |
|-----------------------------------|----------------|---------------|--------------|-------|------|--|--|--|--|
| Variables                         | Unstandardized |               | Standardized | t     | Sig. |  |  |  |  |
|                                   | Coefficients   |               | Coefficients |       |      |  |  |  |  |
|                                   | β              | Std.<br>Error | Beta         |       |      |  |  |  |  |
| (Constant)                        | 3.484          | 0.314         |              | 1.248 | .004 |  |  |  |  |
| Internal Control System and Audit | 0.347          | 0.0127        | 0.135        | 1.216 | .006 |  |  |  |  |
| Management Competency             | 0.286          | 0.0132        | 0.128        | 1.143 | .003 |  |  |  |  |
| Capital Adequacy                  | 0.273          | 0.0126        | 0.131        | 1.159 | .005 |  |  |  |  |

Source: Field Data (2024)

The researcher conducted a multiple regression analysis in order to determine the relationship between credit management practices and financial performance of deposit taking SACCOs. As per the SPSS generated table, the equation  $(Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon)$  becomes:

Y=3.484+0.347X1+0.286X2+ 0.273X3

Where Y = Financial performance of DT-SACCOs

X<sub>1</sub> = Internal Control System and Audit

 $X_2 = Management Competency$ 

 $X_3 = Capital Adequacy$ 

Internal Control System and Audit ( $\beta = 0.347$ , t = 1.216, p = .006): This coefficient suggests that for every one-unit increase in the effectiveness of internal control systems and audit, the financial performance of DT-SACCOs increases by 0.347 units, holding other factors constant. The t-value for internal control systems and audit is 1.216, with a p-value of 0.006, indicating that it is a statistically significant predictor of financial performance. This low p-value suggests a strong association between effective internal controls and enhanced financial performance. This finding aligns with Kinyua (2016), who emphasizes the integral role of robust internal controls in fostering financial stability. Kinyua argues that effective internal control systems not only help in preventing fraud but also ensure the accuracy of financial reporting and enhance operational efficiency. Moreover, scholars such as Muladi and Syarif (2018) assert that independent audits reinforce the effectiveness of internal controls by providing an additional layer of oversight, thereby increasing stakeholder confidence in the financial practices of DT-SACCOs.

Management Competency ( $\beta = 0.286$ , t = 1.143, p = .003): This coefficient indicates that a oneunit increase in management competency leads to a 0.286-unit increase in financial performance, holding other factors constant. The t-value for management competency is 1.143, with a p-value of 0.003, confirming its statistical significance. This conclusion supports Mwangi (2021), who asserts that competent management is essential for strategic decision-making, effective resource allocation, and risk management. The ability of skilled managers to develop and implement policies that enhance loan recovery rates and minimize defaults is critical for maintaining the financial health of SACCOs. Additionally, a study by Ndungu and Njuguna (2020) reinforces this perspective, demonstrating that strong management leadership directly correlates with improved organizational performance and resilience in financially challenging environments.

Capital Adequacy ( $\beta = 0.273$ , t = 1.159, p = .005): This coefficient implies that a one-unit increase in capital adequacy results in a 0.273-unit increase in financial performance, holding other factors constant. The t-value for capital adequacy is 1.159, with a p-value of 0.005, indicating that it is also a statistically significant predictor of financial performance. Njeri (2019) highlights the significance of effective capital management in supporting the growth and sustainability of SACCOs. By maintaining sufficient capital levels, SACCOs can navigate adverse economic conditions more effectively, ensuring long-term viability. Additionally, the importance of capital adequacy as a cornerstone of financial health is echoed in the research by Ouma and Were (2017), who found that organizations with robust capital bases are better positioned to expand their services and enhance their market presence.

# CONCLUSION

#### Internal Control System and Audit and Financial Performance

The first objective of the study was to determine the effect of internal control system and Audit on financial performance of DT-SACCOs in Marsabit County, Kenya. The findings revealed that there is positive and significant coefficient for internal control systems and audit, and financial performance of DT-SACCOs as indicated by Pearson's r = 0.421, p = 0.021. This implies that DT-SACCOs with well-established internal control systems and rigorous audits are more likely to experience improved financial outcomes. Effective internal controls and audits reduces the risk of fraud, ensure compliance with regulations, and improve overall operational efficiency, leading to better financial performance. The research concludes that there is a strong correlation between the effectiveness of internal controls and audits and the overall financial performance of DT-SACCOs.

SACCOs with robust internal control systems were better equipped to identify and mitigate credit risks, minimize instances of fraud or mismanagement, and ensure the accuracy and reliability of financial reporting. Furthermore, regular audits were found to enhance transparency, accountability, and trust among members, investors, and regulators, ultimately contributing to improved financial performance within the SACCO sector.

#### **Management Competency and Financial Performance**

The second objective of the study was to determine the effect of management competency on financial performance of DT-SACCOs in Marsabit County, Kenya. The findings from objective two show that competent management there is positive correlation management competency and financial performance of DT-SACCOs as indicated by Pearson's r = 0.364, p = 0.040. This suggests that SACCOs with competent and well-trained management teams were more adept at assessing credit risks, making informed lending decisions, and implementing effective risk mitigation strategies. Further, the findings established that there is positive significant between management competency and financial performance of DT-SACCOs. Conclusion, the study highlighted the importance of management competency in driving the financial performance of deposit-taking SACCOs in Kenya. The DT-SACCOs with competent and well-trained management teams demonstrated a higher level of proficiency in credit risk assessment, lending decision-making, and risk mitigation strategies implementation. Managers who possessed a deep understanding of credit management practices were able to navigate challenges such as loan delinquencies and defaults more effectively, leading to better financial outcomes for their respective SACCOs.

# **Capital Adequacy and Financial Performance**

The third objective of the study was to establish the effect of Capital Adequacy, influence financial performance of DT-SACCOs in Marsabit County, Kenya. The findings established that there is statistical significant between capital adequacy and financial performance of DT-SACCOs as indicated by Pearson's r = 0.392, p = 0.035. Adequate capital reserves are crucial for absorbing shocks and ensuring the stability of financial institutions. DT-SACCOs with sufficient capital are better positioned to manage risks and sustain operations during economic downturns. Additionally, the study emphasized the significant impact of capital adequacy on the financial performance of deposit-taking SACCOs in Kenya. SACCOs with adequate capital reserves proved to be more resilient to external economic shocks, fluctuations in interest rates, and unforeseen events that could potentially affect their operations. Strong capital adequacy ratios not only instilled confidence in depositors and investors but also provided SACCOs with the necessary flexibility to expand their lending activities prudently and sustainably.

# **Recommendation of the Study**

From the findings, the following recommendations were made;

i. Firstly, policymakers should prioritize the development of a regulatory framework that emphasizes best practices in credit risk management. This could include mandatory training programs for DT-SACCO management and staff on effective credit assessment techniques, risk mitigation strategies, and financial literacy. Through equipping these institutions with the necessary skills and knowledge, their ability to manage credit effectively will be significantly enhanced.

ii. Secondly, it is crucial to establish a centralized credit information bureau that facilitate the sharing of credit histories among financial institutions. Such a system would enable DT-SACCOs to make more informed lending decisions, ultimately reducing the incidence of loan defaults. Policymakers should also consider incentivizing the adoption of technology within DT-SACCOs to streamline credit management processes, such as automated loan processing systems and digital record-keeping. This would not only boost efficiency but also enhance transparency, thereby building trust among members.

# REFERENCES

- Agbeja, O., Adelakun, O. J., & Olufemi, F. I. (2015). Capital adequacy ratio and bank profitability in Nigeria: A linear approach. *International Journal of Novel Research in Marketing Management and Economics*, 2(3), 91-99.
- Alila and Obado (1990). Co-operative credit: The Kenyan SACCOs in a historical and development perspective. Working paper no. 474, Nairobi: Institute for Development Studies, University of Nairobi.
- Al-Tamimi (2010). Factors Influencing Performance of the UAE Islamic and Conventional National Banks (2010). Global Journal of Business Research, Vol. 4, No. 2
- Amidu (2006). Determinants of capital structure of banks in Ghana: an empirical approach. Barney J. (2007). Gaining and Sustaining Competitive Advantage. New Jersey: Prentice Hall Person.
- Anania, P., Gikuri, A., & Hall, J. N. (2015). SACCOS and members" expectations: Factors affecting SACCOS capacity to meet members" expectations. In *a Paper Presented to the Co-operative Research Workshop held on 24th March*.
- Bakar, R., & Ahmad, K. (2020). The impact of managerial competencies on the financial performance of cooperative societies in Malaysia. *International Journal of Business and Society*, 21(1), 43-57. <u>https://doi.org/10.33736/ijbs.3260.2020</u>
- Basel committee (2000). Principles for the. Management of Credit Risk. Basel Committee on Banking Supervision. Basel.
- Bibby and Shaw (2005). *Making a Difference: Co-operative Solutions to Global Poverty Volume* 4 of Co-operative College paper. Author, Milford Bateman.
- Borg and Gall (2003). *Educational Research:* An Introduction, 7th Edition. M. D. Gall, University of Oregon.
- Brown, J., & Gray, T. (2019). Management skills and financial success in credit unions: A case study of small-scale DT-SACCOs in Uganda. *Journal of Cooperative Studies*, 11(2), 75-92.

- Brudney (1985). Strategic investment decision-making: Complexities, politics and processes. Journal of Management Studies, 28(4), July: 395-415.
- Brudney, V. (1985), corporate governance, agency costs, and the rhetoric of contract. Columbia Law Review.
- Bryman and Bell (2007). Business Research Methods
- Burns and Grove (2007). Understanding nursing research building an evidence Practice. 4<sup>th</sup> Edition, Saunders Elsevier, St. Louis. 71
- C. W.Mungai, M.Muturi (2017). Effects of Financial Performance of SACCOs in Kenya case study of Kisii county'' ISSN 2412-0294.
- Chijoriga (1997). Application of credit scoring and financial distress prediction models to commercial Banks lending: the case of Tanzania
- Clifford Rossi (2014). A Risk Professional's Survival Guide: Applied Best Practices in Risk Management
- Cooper and Schindler (2006). Business Research Methods: 12th Edition.
- Damanpour (1996). Organizational Complexity and Innovation: Developing and Testing Multiple Contingency Models. Management Science 42(5):693-716.
- Dash and Das (2010). *Analysis of the Indian Banking Industry*.
- Duncan, Njeru, Florence and Tirimba (2015). *Effect of Cash Management on Financial Performance of Deposit Taking SACCOs in Mount Kenya Region - published at:* "International Journal of Scientific and Research Publications (IJSRP), Volume 5.
- Gamba and Komo (2012). The Role of Lending Design on Sustainable Competitive Advantage among Deposit Taking SACCO's in Kenya. Strategic Journal of Business & Change Management Gibson (2003). Participation Shifts: Order and Differentiation in Group Conversation. Social Forces, June 2003, 81(4):1335-1381.
- Gisemba (2010). The Relationship between Credit Risk Management Practices and Financial Performance of SACCOs in Kenya.
- Guevas and Fischer (2006). Cooperative Financial Institutions: Issues in Governance, Regulation, and Supervision. World Bank Working Paper No. 82. Washington, DC: World Bank.
- Gugler (2003). International Journal of Industrial Organization, 2003, vol. 21, issue 5, 625-653.
   Gugler, K., Mueller, D.C., Yurtoglu, B.B. (2003). The impact of corporate governance on investment returns in developed and developing countries. The Economic Journal.
- Hafeez and Attiya (2009). "Concept of break even analysis and Bank profitability a case study" The Indian Journal of Commerce, Vol. 53, No.182. PP.53-59.

Harrison, J. S., O'Neill, H. M., & Hoskisson, R. E. (2000). Acquisition strategy and target

*resistance*: A theory of countervailing effects of pre-merger bidding and post-merger integration. In C. Cooper & A. Gregory (Eds.), Advances in mergers and acquisitions. 72

- Haule (2011). Jung's Theory of Personality: A Modern Reappraisal.
- Jensen M, Meckling W (1976). *Theory of the Firm: Managerial Behaviour, Agency Costs, and Ownership Structure.* Journal of Financial Economics.
- Kabiru, J. N., & Muturi, W. (2022). Management competency and its influence on the financial performance of savings and credit cooperative organizations in Kenya. *Journal of Financial* and Economic Policy, 14(3), 233-249. <u>https://doi.org/10.1108/JFEP-10-2021-0187</u>
- Kamau, J. (2020). Capital Adequacy and Financial Performance of Savings and Credit Cooperative Societies. *International Journal of Financial Studies*, 8(3), 56-67.
- Kamau, S. I. (2015). Effect of credit management practices on financial performance of savings and credit cooperative societies in the Hospitality Industry in Nairobi (Doctoral dissertation, University of Nairobi).
- Karagu and Okibo (2014). Financial Factors Influencing Performance of Savings and Credit Co-Operative Organization in Kenya.
- Kariuki, S. M. (2019). The Relationship Between Internal Control Systems and Financial Performance in Public Sector Organizations in Kenya. *International Journal of Scientific* and Research Publications, 9(3), 150-159.
- Kay (1999). Caleb Ayiku's "A Dance with Success." Book Review, Kim Journal, (July 2009). Kibera (1996). "The Role of the Cooperative Movement in Kenya's Socioeconomic Development." Journal of Business Administration, University of Dhaka, 1995; 21(1&2):101-114.
- Kimani, J. (2023). The impact of conflict management on organizational effectiveness. International Journal of Research in Management, 3(3), 65-72.
- Kinyua, J. M. (2016). Internal Control Systems and Financial Performance of SACCOs in Kenya. Journal of Finance and Accounting, 4(1), 15-26.
- Kipkirui, E., & Omagwa, J. (2018). Credit management practices and financial performance of microfinance institutions in Nairobi central business district, Kenya. *International Journal* of Scientific and Education Research, 2(4), 64-80.
- Kombo (2006). *Understanding Management Research*: An Introduction to Epistemology. London: Sage Publications.
- Kothari (2004). Research Methodology Methods and Techniques. 2nd Edition, New Age International Publishers, New Delhi.
- Kothari and Garg (2014). Research Methodology, Third Edition, New. Age International Publishers, New Delhi.

- Kraaijenbrink (2010). The Resource-Based View: A Review and Assessment of Its Critiques. Journal of Management 2010 36: 349.
- Lamberson (1995). "Changes in Working Capital of Small Firms in Relation to Changes in Economic Activity", American Journal of Business, Vol. 10
- Ligthelm (2002). Market research: a guide to planning, methodology and evaluation. 3rd edition.
- Maina, J. N., Kiai, R. M., & Kyalo, T. N. (2020). Credit Management Practice, SACCO Size and Financial Sustainability of Deposit Taking Saving and Credit Co-Operatives in Kenya.
- Makori (2013). Global Advanced Research Journal of Educational Research and Review 2.
- Mallin (2004). Trustees, Institutional Investors and Ultimate Beneficiaries.
- Martin (2012). Is the emphasis of capital budgeting theory misplaced? Journal of Business and Finance Accounting, 2(1).
- McCracken (2007). *Developing Traditional Supervisors into Leaders;* Supervising in the New Organization, Strategic Leadership Centre, Nairobi.
- Miller (2003). The International Co-operative Movement. Manchester Universities Press
- Muriithi, J. G. (2018). Effect of Internal Control Systems on Financial Performance of Commercial Banks in Kenya. *International Journal of Economics, Commerce and Management, 6*(2), 502-519.
- Mutendereza, A. (2022). *The relationship between managerial competence and financial performance* (Doctoral dissertation, Busitema University.).
- Mutunga, M. (2021). Management Competency and Financial Performance of SACCOs. *Journal* of Business and Finance Management, 9(1), 123-134.
- Muturi, E. (2020). Internal Controls and Financial Performance of Microfinance Institutions in Kenya. *Journal of Financial Risk Management*, 9(2), 137-145.
- Mwangi, L. W. (2021). The Impact of Internal Control Systems on Financial Performance of Private Hospitals in Nairobi. *Journal of Business and Management, 16*(4), 70-76.
- Mwangi, S. K., & Mutua, F. (2020). Impact of managerial capabilities on financial outcomes of SACCOs in emerging markets. *Journal of Cooperative Finance and Development*, 15(2), 89-106.
- Ngari, G. M. (2017). The effect of internal controls on financial performance of microfinance institutions in Kenya. International Academic Journal of Economics and Finance, 2(3), 112-140
- Njanike (2009). Impact of Credit Risk Management on Banks Performance: European Journal of Business and Management

- Njeri, R. G. (2019). Effect of Internal Controls on the Financial Performance of Manufacturing Firms in Kenya. *European Journal of Business and Management*, 7(5), 65-74.
- Njoroge, P. (2021). Credit Risk Management Practices and Financial Performance of Commercial Banks in Kenya. *Journal of Finance and Banking Studies*, 10(3), 85-94.
- Ntoiti, R., & Jagongo, A. (2021). Non-Performing Loans and Financial Stability of Deposit Taking Saccos Regulated by SASRA. *International Journal of Finance and Accounting*, 6(2), 29-39.
- Nyabaga, R. M. I., & Wepukhulu, J. M. (2020). Effect of firm characteristics on financial performance of listed commercial banks in Kenya. *International Journal of Economics and Financial Issues*, 10(3), 255.
- Nyakundi, D. O., Nyamita, M. O. & Tinega, T. M. (2014). Effect of internal control systems on financial performance of small and medium scale business enterprises in Kisumu City, Kenya. International Journal of Social Sciences and Entrepreneurship, 1 (11),719-734.
- Ofori, G. (2019). The Impact of Internal Controls on Financial Performance of Microfinance Institutions. *African Journal of Accounting, Auditing, and Finance*, 5(2), 89-101.
- Ogindo, E. A. ., & Njoka, C. . (2023). Digital Transformation and Financial Performance of Deposit-Taking Savings and Credit Co-Operatives in Nairobi City County, Kenya. *Journal of Finance and Accounting*, 3(2), 45–56. Retrieved from <u>https://edinburgjournals.org/journals/index.php/journal-of-finance-and accountin/article/view/172</u>
- OLWENY, M. A. (2019). Effect of credit management practices on financial performance of savings and credit co-operative societies in Kisumu county (Doctoral dissertation, Maseno University).
- Onchangwa and Memba (2012). The Effect of Lending on the Financial Performance of Savings and Credit Cooperative Societies in Nairobi County.
- Owino (2011). *Factors Affecting Performance of Insurance Brokers*, a Case Study for Methodist Insurance Brokers Limited, a research project for the award of an Executive MBA degree by JKUAT University, Nairobi.
- Owino, D. A. (2017). Internal Controls and Financial Performance of Telecommunication Companies in Kenya. *International Journal of Current Aspects in Finance (IJCAF)*, 6(2), 58-64.
- Rodriguez and Mejia (2012). *Strategic management: formulation, implementation, and control.* Ross and Barry M. Mitnick (2013). *Co-operative Management, A philosophy for Business, New Harmony Press, UK.*
- Sarker, M. 2005. *CAMELS and banks performance evaluation*: the way forward, Working Paper Series, retrieved from SSRN: http://ssrn.abstract=11 on 13th August 2014.

- Shejero (2016). A Situation-based Decision-Making Process, The ICFAI Journal of Organization Behaviour, July, Vol.IV, No. 3, 19-25.
- Siedlecki, S. L. (2020). Understanding descriptive research designs and methods. Clinical Nurse Specialist, 34(1), 8-12.
- Ssekakubo, Ndiwalana and Lwanga (2014). Managerial Competency and the Financial Performance of Savings, Credit and Cooperative Societies in Uganda. 74
- Tsuma, D. V., & Mose, T. (2023). Employee core competencies and performance of commercial banks in Nairobi City County, Kenya. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, 7(1).
- Waiguru (2010). Co-operating out of Poverty, The renaissance of the African Co-operative Movement, ILO Co-op-Africa.
- Waithaka (2013). Principles for Corporate Governance in Kenya and Sample Code of Best Practice for Corporate Governance, Nairobi, Kenya.
- Wesley, O. (2023). The Effects Of Internal Control Systems On The Financial Performance Of Third Tier Licenced Commercial Banks In Kenya. *European Academic Journal*, 2(001).
- Wheelen and Hunger (2002). Strategic Management and Business Policy.
- Wierma (1995). Investigating aspects of the capital budgeting process used in the evaluation of investment.
- Yegon (2004). Strategy Paper on the Role of Co-operatives in Promoting Poverty Reduction.