**Liquidity and Financial Performance in SACCOs: Evidence from Kiambu County, Kenya**

# ABSTRACT

The study examined the relationship between liquidity and financial performance in Savings and Credit Cooperative Organizations (SACCOs) in Kiambu County, Kenya, a crucial sector for financial inclusion and community welfare. With the rising need for effective financial practices, the research assessed how liquidity ratios—current, quick, and cash—impact SACCO performance, particularly their financial stability and operational efficiency. The study analyzed secondary financial data obtained from financial statements of 13 SACCOs registered under the SACCO Societies Regulatory Authority (SASRA) from 2019 to 2023, employing a census sampling technique to eliminate sampling errors. Using a descriptive and causal research design, data analysis was conducted through Stata 14.0, applying descriptive statistics to summarize liquidity ratios and inferential statistics to examine their effect on SACCO performance. Findings revealed a strong correlation between liquidity ratios and SACCO financial stability, where high liquidity improved trust and operational resilience. The study emphasized the necessity for SACCOs to implement sound liquidity management policies to meet short-term obligations while ensuring long-term growth. Key recommendations included adopting policies to maintain optimal cash and quick ratios, strengthening liquidity governance, and conducting regular liquidity assessments to manage financial fluctuations. The research also suggested expanding future studies to other counties such as Nairobi, Murang’a, Nakuru, and Kisumu while incorporating additional financial solvency determinants like capital adequacy. These insights provide valuable guidance for SACCO managers, policymakers, and stakeholders in enhancing financial resilience within Kenya’s cooperative sector.

**Key Words:** *Capital Adequacy, Financial Performance, Financial Stability, Governance, Liquidity, Liquidity Ratios, Operational Efficiency.*

**1.0 INTRODUCTION**

The International Cooperative Alliance (ICA) was established in 1895 by E.V. Neale and Edward Owen Greening, inspired by the Rochdale Society of 1844. This organization played a key role in the global expansion of cooperatives. By 2014, the cooperative movement had grown significantly, with 57,000 Savings and Credit Cooperative Organizations (SACCOs) operating in 105 countries across six continents. According to (World Council of Credit Unions (WOCCU) , these financial institutions collectively managed assets worth $1.8 trillion, savings of $1.5 trillion, and a loan portfolio of $1.2 trillion. SACCOs contribute significantly to economic growth and financial inclusion by enabling members to save and borrow money, thereby improving their economic well-being. Over time, SACCOs have steadily expanded their membership, assets, and loan portfolios, exemplifying their enhanced performance. In Kenya, for instance, SACCOs have played a crucial role in the financial sector, attracting savings and offering affordable loans to members.

The performance of SACCOs varies across different countries. In the United States, credit unions, which function similarly to SACCOs, have demonstrated resilience and growth, particularly in terms of membership and total assets. The National Credit Union Administration (NCUA) has reported a consistent increase in the asset base and membership of credit unions, highlighting their robust performance. Similarly, in Canada, credit unions play a critical role in the financial sector, with Desjardins Group being one of the world's largest cooperative financial organizations, showcasing substantial growth through an extensive member base and asset management. In the Philippines, SACCOs have significantly contributed to financial inclusion, particularly in rural areas, fostering economic development.

In Africa, SACCOs have exhibited diverse performance levels across different countries. In Uganda, they have been instrumental in providing financial services to underserved communities, promoting economic opportunities and improving livelihoods. Tanzania has also seen SACCOs emerge as key players in financial inclusion and economic empowerment. Rwanda’s SACCOs, particularly the Umurenge SACCO initiative, have significantly boosted financial access in rural areas, further strengthening economic participation. In Kenya, SACCOs are vital contributors to the country's economy, mobilizing substantial deposits and assets, making them essential in a liberalized financial market. Proper liquidity management ensures that SACCOs can meet financial obligations, sustain operations, and extend loans promptly. SACCOs in Kiambu County, including Unaitas SACCO and Stima SACCO, have reported significant growth in membership, savings, and loan disbursements, reflecting their robust performance. Similarly, Mwalimu National SACCO continues to demonstrate consistent financial strength, establishing itself as one of the leading SACCOs in the region.

Liquidity management is a critical determinant of SACCOs' financial resilience; however, financial performance should not be measured solely by liquidity. While factors such as cash reserves, asset convertibility, profitability, and access to capital impact liquidity, a comprehensive assessment of SACCO performance must also consider solvency, profitability, return on investment (ROI), and return on assets (ROA). These additional financial metrics provide a broader perspective on sustainability, efficiency, and overall financial health. Although liquidity is crucial for meeting short-term obligations, focusing exclusively on it may overlook long-term stability and profitability, which are equally vital for SACCOs' financial success. Ensuring adequate liquidity allows SACCOs to provide timely loans and address unexpected financial demands. Studies highlight that optimal liquidity levels are fundamental to SACCOs' sustainability and growth, enhancing financial stability and overall performance. Effective liquidity management strategies thus play a crucial role in strengthening SACCOs, ensuring they remain competitive and resilient in the financial sector. Liquidity refers to a company’s ability to pay its bills when they are due. In the context of Savings and Credit Cooperatives (Saccos), good liquidity means having enough liquid assets or cash to meet short-term obligations. When a Sacco has high liquidity, members gain confidence in its ability to pay debts and seize investment opportunities, improving overall performance. Conversely, low liquidity weakens performance as it reduces the ability to issue loans, increases the risk of defaults, and discourages member participation. Although scholars have yet to reach a consensus on defining liquidity, it is generally understood as an organization’s ability to meet short-term obligations with available cash. Some scholars extend the definition to include solvency, referring to a financial institution’s capacity to raise capital and meet both current and future financial commitments without undue risk. Liquidity risk arises when an institution lacks sufficient funds to settle its obligations, leading to potential financial instability (George, 2019).

Liquidity risk can be categorized into two types: funding liquidity risk and market liquidity risk (Matz, 2019). Funding liquidity risk occurs when an institution cannot access enough cash or sell assets quickly enough to meet its obligations. Market liquidity risk arises when financial markets lack the depth to absorb large transactions without causing drastic price declines. While funding liquidity risk primarily affects individual institutions by limiting their ability to meet financial obligations, market liquidity risk has broader implications, influencing asset pricing and market stability. The interplay between these two risks can exacerbate financial distress, as deteriorating market liquidity can worsen funding constraints and vice versa. The ability to convert liquid assets into cash without incurring losses is crucial for financial organizations to maintain stability and avoid forced liquidation of assets. Proper liquidity management ensures that financial institutions meet their obligations while maintaining profitability. The Basel Committee (2018) defines liquidity as a financial institution’s ability to settle all cash payment commitments when due using available resources such as cash, loans, or highly liquid assets. Sound liquidity management is essential for financial institutions to meet their short-term and long-term obligations without jeopardizing their financial health. Effective liquidity management involves strategic inflows and outflows of cash to maintain sufficient reserve levels, allowing firms to meet operational expenses and financial obligations while remaining profitable (Agbada & Osuji, 2020).

The relationship between liquidity and solvency is fundamental in banking and finance. According to Goodhart (2018), banks and financial institutions can be short-term illiquid but remain solvent in the long term. However, liquidity and solvency are closely linked—banks with low liquidity are more likely to face bankruptcy, while solvent banks often have better liquidity management. To mitigate liquidity risk, financial institutions invest in advanced information systems that improve liquidity monitoring through databases, ratio calculations, and regulatory compliance reporting. Higher liquidity enables a Sacco to withstand financial uncertainties and take advantage of opportunities more effectively. Maintaining healthy liquidity levels enables SACCOs to offer competitive lending rates, which can attract more members and increase credit demand. Empirical studies suggest that adequate liquidity supports capital adequacy, mitigates default risks, and enhances financial stability (Author, Year). Conversely, low liquidity may compel SACCOs to raise interest rates to attract deposits, potentially discouraging borrowers and limiting credit access. Research indicates that liquidity directly influences a SACCO’s ability to meet obligations, expand loan portfolios, and sustain long-term growth (Author, Year). Therefore, liquidity remains a critical determinant of financial performance, impacting stability, growth potential, and member confidence.

Financial performance is a crucial metric for evaluating a firm's success, indicating how effectively a company converts its primary assets into profit. It is particularly important for comparing companies within the same industry and assessing financial markets over specific periods. Key financial performance indicators include total unit sales, operational income, cash flow from operations, and revenue. Investors and analysts frequently use financial reports to identify trends such as increasing profit margins or declining debt levels. Common financial metrics used for evaluation include return on assets (ROA), return on investments (ROI), and return on equity (ROE). The ability of SACCOs to maintain profitability and operational sustainability significantly influences member participation and investor trust. Research indicates that investors favor profitable companies, although more studies are needed to establish the link between institutional investment and SACCOs' financial performance. The World Council of Credit Unions (WOCCU) suggests using financial ratios that assess asset quality, liquidity, financial structure, return rates, and cost rates to evaluate SACCOs' financial success. Tools like Focus, which standardize financial reporting, are instrumental in enabling comparisons between institutions. Among financial performance indicators, ROA is particularly vital for SACCO management in making strategic decisions and determining competitiveness in the financial market.

Liquidity is another essential aspect of financial performance, representing a company's ability to meet short-term obligations, such as timely payment of debts. A company with higher liquidity is generally considered financially healthier, as it can handle immediate financial needs and capitalize on opportunities. A well-managed and financially stable company typically exhibits strong liquidity. Conversely, inadequate liquidity may lead to an inability to meet financial obligations, increasing the risk of insolvency and negatively affecting profitability. SACCOs often prefer utilizing cash reserves before resorting to debt financing, as issuing new debt is less desirable. Research supports the pecking order theory, where firms prioritize internal funding over external borrowing. Previous studies show a negative correlation between SACCOs' financial performance and their ability to repay loans. Extended payment periods may indicate financial distress, as less profitable enterprises tend to delay payments. However, maintaining adequate inventory levels can mitigate risks associated with price fluctuations and supply shortages, despite the potential downsides such as increased storage costs and depreciation risks.

Companies can enhance financial performance by optimizing asset utilization and reducing dependency on external funding sources. A high proportion of short-term debt relative to total debt can improve SACCOs' financial standing, as short-term financing typically incurs lower costs. Efficient working capital management minimizes reliance on expensive external capital sources, thereby reducing the cash conversion cycle and enhancing overall business efficiency. Empirical data indicate fluctuations in SACCOs' financial performance over time. For instance, ROA for SACCOs exhibited volatility between 2016 and 2020, with values ranging from 2.40% to 2.69%. Similarly, the ratio of liquid assets to total assets showed a declining trend before recovering in 2020, reflecting liquidity risk. While large-tiered SACCOs experienced significant growth from 2017 to 2020, smaller-tiered SACCOs faced a slowdown, threatening their long-term sustainability and competitiveness.

In Kenya, SACCOs play a pivotal role in economic and social transformation. According to the SACCO Societies Regulatory Authority (SASRA), deposit-taking SACCOs offer savings, credit, and cash transactions, while non-deposit-taking SACCOs operate exclusively as back-office entities. Over the past four decades, the SACCO movement has expanded significantly, with over 12,000 registered cooperative societies serving more than seven million members. SACCOs have mobilized over Ksh 200 billion in savings, representing approximately 31% of national savings. Recent empirical sources should support claims about SACCOs' contribution to the national economy and their global ranking to enhance credibility. Many SACCOs have diversified into financial services, including deposit-taking, savings accounts, debit card issuance, and domestic and international money transfers. A more incisive comparison of SACCOs with other financial institutions could highlight their unique advantages and challenges. While SACCOs provide essential financial services such as loans, deposits, and check clearance by pooling members' resources, they face liquidity risks that can constrain their ability to approve credit. Loan processing times vary from 13 to 30 days, often impacted by liquidity challenges, which should be further explained to provide a more balanced perspective. Credit approval is contingent upon verification of a borrower's repayment capacity, and leading SACCOs ensure timely loan disbursements, supported by strong financial foundations.

Despite their importance, SACCOs face challenges, including competition from commercial banks. Since they primarily serve low-income individuals, SACCOs bear a significant financial burden in ensuring members' financial well-being. They reinvest collected funds to expand services and improve members' quality of life. SACCOs encourage a savings culture among members, enabling resource accumulation for economic empowerment. However, competition from established financial institutions remains a concern. SACCOs are integral to modern economies, akin to banks in their role of facilitating credit access and promoting wealth creation. Financially sound SACCOs can better serve members by offering diverse financial solutions while maintaining economic stability. Ensuring financial security requires SACCOs to effectively meet members' financial needs while safeguarding their economic interests. Success factors for SACCOs include efficient financial management, competitive service delivery, and adaptation to regulatory frameworks. Many SACCOs thrive by fostering member engagement, adopting technological innovations, and implementing sound governance structures. Addressing liquidity risks and financial sustainability challenges remains crucial for SACCOs to maintain their market position and continue supporting economic development.

**1.1 Research Problem**

Savings and Credit Cooperative (SACCO) performance is crucial for the socio-economic development of communities, particularly in Kiambu County, Kenya. High-performing SACCOs promote financial inclusion, provide affordable credit, and enhance economic stability. However, the dynamic financial landscape, marked by technological advancements and shifting economic conditions, demands effective financial management strategies, especially in liquidity management. Ensuring operational stability requires optimizing liquidity ratios such as the current ratio, quick ratio, and cash ratio. While existing studies (Ochieng & Sakwa, 2022; Kimani, 2021; Wambui, 2020) have linked liquidity management to organizational outcomes, most measure SACCO performance using general financial metrics like profitability, loan default rates, and membership growth. Few studies have examined SACCO performance through a combination of financial stability and liquidity management strategies, creating a conceptual gap that this research aims to address.

According to the Integrated Development Plan for Kiambu County (2022/2023, 2021/2022, and 2020/2021), SACCOs in the region have faced multiple challenges over the past three years, leading to suboptimal performance. Liquidity constraints, high loan default rates, limited access to capital, and inefficiencies in financial management have hindered their financial sustainability and growth. Poor liquidity management, including inadequate cash reserves and inefficient liquidity ratios, significantly affects SACCO performance and sustainability (Muthoni & Mwangi, 2022; Njoroge & Karanja, 2021). These financial, operational, and strategic shortcomings have weakened SACCOs' ability to provide timely loans and maintain stability. Moreover, limited research has explored how SACCOs in Kenya implement and leverage liquidity management strategies to enhance performance. Existing studies have predominantly focused on banking and corporate contexts, neglecting the specific challenges faced by SACCOs in Kiambu County. For instance, Ochieng and Sakwa (2022) analyzed the influence of liquidity management on Kenyan commercial banks, finding that effective liquidity management enhances operational efficiency and profitability. Kimani (2021) examined financial strategies in Kenya's microfinance sector and found that liquidity ratios positively correlate with financial performance. Wambui (2020) assessed liquidity constraints in cooperatives, emphasizing the importance of efficient liquidity ratios and financial planning. However, these studies focus on banks, microfinance institutions, and general cooperatives, limiting their applicability to SACCOs in Kiambu County. Additionally, most prior research has relied on either descriptive or cross-sectional designs. This study will employ a causal research design to establish cause-and-effect relationships between liquidity management strategies—current ratio, quick ratio, and cash ratio—and SACCO performance in Kiambu County. By addressing methodological, contextual, and conceptual gaps, this research aims to provide a deeper understanding of liquidity management's role in SACCO performance and sustainability.

**1.2 Research Objective**

This study was guided by the following general objective to: find out the relationship of liquidity and financial performance of the Saccos in Kiambu County, Kenya.

The specific objectives were to: ascertain the relationship between current ratio and performance of SACCOs in Kiambu County, Kenya, to assess the relationship between quick ratio and performance of SACCOs in Kiambu County, Kenya and to determine the relationship between cash ratio and performance of SACCOs in Kiambu County, Kenya.

**1.3 Research Hypothesis**

This study was guided by the following Research Hypothesis.

**H01**: The current ratio does not affect SACCO performance in Kiambu County, Kenya.

**Ho2**: In Kiambu County, Kenya, SACCO performance is unrelated to quick ratio.

**Ho3**: Cash ratio does not systematically affect SACCO performance in Kiambu County, Kenya.

**1.4 Justification of the Study**

This study explores the relationship between SACCO liquidity and performance in Kiambu County, Kenya. Findings will help SACCO managers enhance stewardship activities, leading to greater stability, profitability, and liquidity. Improved corporate governance will support growth, ensuring a more secure financial future for employees. A higher employment rate contributes to lower crime, better wages, and improved living conditions. Employees often develop strong loyalty to their workplaces, fostering a productive workforce. Customers will benefit from a liquid market that facilitates quick and easy loans, increasing trust in the financial system. Simplified borrowing enhances access to funds for various financial needs, from shopping to investments. This leads to higher savings, a stronger capital base, increased per capita income, and economic growth. Additionally, SACCOs’ Corporate Social Responsibility initiatives positively impact the community. Strong economic growth creates jobs, raises incomes, and enhances living standards, benefiting society as a whole.

**2.0 LITERATURE REVIEW**

***Theoretical Perspectives on Liquidity and Financial Performance***

This study is guided by several theories that outline the logical framework of the research variables, including the Liquidity Preference Theory (LPT), Capital Market Imperfections Theory (CMIT), Cash Conversion Cycle (CCC) Theory, Transaction Cost Economics (TCE) Theory, and the Resource-Based View (RBV). These theories help in understanding the liquidity management challenges faced by Savings and Credit Cooperative Organizations (SACCOs) in Kiambu County and their impact on financial performance.

The Liquidity Preference Theory (LPT), developed by John Maynard Keynes in 1936, explains the relationship between money, employment, and interest rates. According to this theory, investors prefer holding cash or marketable securities over illiquid assets due to potential losses incurred during the conversion process. LPT suggests that investors demand higher interest rates for long-term assets due to their increased risk levels (Akenga, 2017). The theory advances through three motives: transactions, speculation, and precautionary measures, all of which require liquidity. The transaction motive implies that individuals require money to manage their daily expenses, with those experiencing longer gaps between income sources needing more liquidity. The precautionary motive highlights the importance of holding liquid resources for emergencies, where individuals with higher risk tolerance require more liquidity to handle unforeseen situations (Tahir & Anuar, 2019). The speculative motive states that investment opportunities drive the demand for liquidity, as investors tend to hold cash to take advantage of profitable ventures (Sitienei & Memba, 2016). Critics argue that investors can hold both bonds and risk-free cash, contrary to Keynes' assertion (Murray, 2008). Several scholars have applied LPT to study working capital management (WCM) and profitability. For example, Akenga (2017) examined liquidity and financial performance (FP) of firms listed on the Nairobi Securities Exchange (NSE), while Njoroge (2015) analyzed liquidity's impact on the financial performance of NSE-listed construction firms. This theory is relevant in explaining liquidity challenges faced by SACCOs in Kiambu County due to increased cash demand.

The Capital Market Imperfections Theory (CMIT), proposed by Dimitri Vayanos and Wang Jiang in 2010, explains how transaction costs, participation barriers, imperfect competition, funding restrictions, asymmetric information, and search costs contribute to illiquidity. This theory identifies six key market imperfections, including the nature of illiquidity, its measurement, and its impact on expected returns. Advocates argue that it provides a broad framework for understanding liquidity challenges in both efficient and inefficient markets. The theory is relevant to this study as it suggests that SACCOs face liquidity issues due to market imperfections such as transaction expenses and information disparities. Kashif et al. (2017) and Okumu (2018) applied CMIT to examine how capital market imperfections influence cash flow sensitivity to investment decisions among listed firms. Understanding and mitigating these imperfections could be crucial for SACCOs in maintaining solvency and profitability.

The Cash Conversion Cycle (CCC) Theory, initially proposed by Jordan in 2003 but discussed in academic literature for over two decades, measures the time between a company's cash outflows for purchases and cash inflows from customer payments. CCC can be analyzed as a static metric using quick and current ratios from balance sheets or as a dynamic measure of business operations, covering the entire process from raw material procurement to cash receipts from accounts receivable (Sakyi, 2019). Cash, rather than profits, finances SACCOs, making CCC a crucial determinant of liquidity (Attari, 2022; Muthiani, 2021). CCC helps assess how long investments remain in production before converting into cash flows. Studies on WCM have relied on CCC to understand cash flow management in businesses. Mwangi (2023) examined WCM and FP in 18 NSE-listed manufacturing firms using CCC Theory. Findings indicated that CCC duration significantly influences SACCO performance. A longer CCC can indicate higher sales due to lenient credit policies but may negatively impact profitability by tying up cash in accounts receivable. Conversely, a shorter CCC enhances SACCOs' net present value by allowing quicker reinvestment of cash inflows, leading to improved financial performance.

The Transaction Cost Economics (TCE) Theory, first introduced by Ronald Coase in 1937 and later expanded by Oliver Williamson, examines expenses incurred in executing financial transactions. Transaction costs include time and effort spent searching for information, negotiating terms, and enforcing contracts. For SACCOs to maintain liquidity, they must manage these costs effectively (Stickney, et al, 2023). TCE Theory applies to SACCOs as they operate in imperfect markets where transaction costs impact liquidity. This study explores whether SACCOs' liquidity challenges stem from transaction costs related to inefficient markets. Reducing transaction costs is crucial for SACCOs to enhance liquidity and financial sustainability. The Resource-Based View (RBV) Theory provides a framework for analyzing SACCO performance based on the organization's internal resources and capabilities. RBV asserts that firms achieve competitive advantage through unique, scarce, and inimitable resources (Barney, 2021). Financial resources, particularly liquidity ratios, play a critical role in SACCO success and sustainability. SACCOs with strong liquidity positions—reflected in their current, quick, and cash ratios—are better equipped to manage short-term liabilities and operational needs. Such institutions can efficiently meet member withdrawals, invest in profitable ventures, and sustain operations, enhancing their financial performance (Barney, 2021). SACCOs with high liquidity levels gain trust and confidence from members, leading to increased deposits and participation (Wernerfelt, 2019). Applying RBV Theory to SACCOs indicates that those effectively managing liquidity can leverage financial resources to achieve superior performance, withstand economic shocks, and capitalize on investment opportunities. Strategic liquidity management ensures long-term financial stability and growth (Penrose, 2017). Thus, RBV supports the notion that SACCOs' performance in Kiambu County is highly dependent on liquidity management.

***Empirical Review***

Liquidity ratios are useful in assessing short-term financial stability, but they fail to capture the broader performance and growth dynamics of SACCOs in Kiambu County, Kenya. Growth metrics such as asset expansion, membership increase, and revenue generation provide a more comprehensive evaluation of SACCOs' sustainability and operational success (Wanjiru, 2023). Without these indicators, an incomplete analysis of SACCOs' financial health is likely (Mwangi, 2022). Growth metrics reflect long-term viability, as an increase in membership and assets indicates the SACCO’s ability to attract and retain members, thereby enhancing financial stability (Gikonyo, 2023). Relying solely on liquidity ratios may lead to misleading conclusions about SACCOs’ sustainability and effectiveness (Kariuki & Muriuki, 2023). A balanced performance assessment should integrate growth indicators with liquidity measures to provide a holistic perspective on SACCOs’ performance in Kiambu County.

Neglecting growth metrics in performance evaluations obscures key trends and emerging issues within SACCOs. Expanding loan portfolios and branch networks can signal market penetration and operational efficiency, crucial indicators of a SACCO’s capacity to scale and meet member needs (Omwoyo, 2024). Without growth data, analyses may overlook how SACCOs adapt to market changes, thus missing important success factors (Njeri, 2023). Growth metrics like profitability trends and member satisfaction contextualize liquidity ratios and their implications for financial performance (Ochieng & Kamau, 2023). A SACCO experiencing rapid growth but facing liquidity challenges may risk financial strain, while one with stable liquidity and strong growth may demonstrate effective financial management (Wambui, 2023). Thus, a comprehensive assessment should combine liquidity analysis with growth metrics for a well-rounded evaluation of SACCOs' financial health.

Studies on liquidity ratios and financial performance highlight varying impacts across different financial institutions. Tsai (2022) investigated Taiwanese banking standards and found that high asset quality enhances bank performance, suggesting that banks should prioritize asset management. Similarly, Nyabate (2015) examined liquidity effects on NSE-listed commercial banks, revealing a negative correlation between liquidity and profitability. These studies focus on commercial banks, whereas the present research examines SACCOs in Kiambu County. Ferrouhi (2019) studied Moroccan banks and identified asset quality as a primary performance driver, a finding that may hold relevance for Kenyan SACCOs. Cheruiyot (2018) found a positive relationship between asset quality and commercial bank profitability in Kenya, emphasizing expense management for financial success. While these studies focus on banks, the current research shifts the focus to SACCO liquidity and financial performance in Kiambu County.

Several studies have investigated the impact of liquidity ratios on SACCO performance. Kimani (2023) examined Nairobi County SACCOs and found that a higher Current Ratio correlates with better financial performance, suggesting that effective liquidity management is crucial for SACCOs' financial health. Mwangi (2023) analyzed SACCO financial metrics in Kiambu County and reported that a high Current Ratio enhances financial stability by ensuring short-term obligations are met. Wanjiru (2024) studied SACCOs in Mombasa County and found similar results, emphasizing the need for SACCOs to maintain an optimal Current Ratio. While these studies focused on the Current Ratio, the present research expands the scope to examine liquidity’s overall impact on Kiambu County SACCOs. Research on the Quick Ratio and financial performance provides additional insights. Njeri (2014) examined Kenya’s deposit-taking microfinance institutions, using 2009–2013 data, and found a positive correlation between the liquid ratio and financial performance. Kristian and Yovin (2019) analyzed Indonesian government and private banks and identified operational efficiency, NIM, and NPL as significant factors influencing performance. However, their study did not examine SACCO liquidity, which the present study aims to address. Gweyi, et al (2018) investigated liquidity risk in deposit-taking SACCOs in Kenya and found that liquidity risk negatively affects financial performance. The study recommended strengthening financial resources to mitigate liquidity risks. While their study covered all DT-SACCOs in Kenya, the current research focuses specifically on Kiambu County SACCOs.

Other studies also provide valuable insights into liquidity management. Song’e (2015) examined liquidity management in Nairobi County DT-SACCOs and found a positive correlation between liquidity risk management, operational efficiency, and financial performance. Muriithi and Waweru (2017) analyzed liquidity risk in Kenyan commercial banks and reported that liquidity risk negatively impacts financial performance. Using panel data methods, the study revealed that liquidity coverage and net stable funding ratio were key indicators of financial health. While these studies focus on broader financial institutions, the present research narrows its focus to SACCOs in Kiambu County to explore liquidity’s impact on their financial performance. Njenga (2023) examined Nairobi County SACCOs’ Quick Ratio and found that a higher Quick Ratio correlates with improved financial stability. The study recommended that SACCOs monitor their Quick Ratios to maintain financial health. While these findings align with existing literature, the present research extends the discussion to Kiambu County SACCOs, integrating multiple liquidity measures for a comprehensive analysis. By incorporating findings from various financial institutions and applying them to SACCOs, this study aims to provide a nuanced understanding of liquidity’s role in SACCO performance.

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**3.0 METHODOLOGY**

This study employs a causal research design to establish cause-and-effect relationships between variables, particularly examining how liquidity affects the financial performance of SACCOs in Kiambu County. Causal research is effective in answering "where," "how," "why," and "what" questions by identifying the relationship between two or more variables (Mugenda & Mugenda, 2021). A similar approach was used by Endah et al. (2018) to investigate liquidity risk and bank profitability in Indonesia.

The target population consists of all 13 SACCOs registered under the Sacco Societies Regulatory Authority (SASRA) in Kiambu County. These include Tai, Unaitas, K-Unity, Afya, Acumen, Dimkes, Fariji, GDC, NRC, Wanandege, Mentor, Ndege Chai, and Maisha Bora (SASRA, 2019). Given the manageable number of SACCOs, the study will use a census approach instead of sampling. A census ensures complete data collection from all units, avoiding sampling bias and increasing the accuracy and reliability of findings. By including all SACCOs, the study will reflect the true financial performance trends without the risk of underrepresentation.

Data collection will rely on secondary sources, including SACCOs’ financial statements from websites and SASRA records. The study will assess financial performance using indicators such as total assets, net income, current liabilities, net profit, net assets, current ratio, interest income, investment ratio, current deposits, and return on assets. Secondary data is advantageous as it provides a historical perspective, saves time and resources, and ensures reliability due to regulatory oversight. Since SACCOs publish standardized financial reports, secondary data allows for consistent comparisons across institutions. This comprehensive approach ensures that the study’s conclusions are based on thorough and verifiable financial data, strengthening its validity and relevance. The study ensures validity by having experts in financial analysis and SACCO performance review the data collection tools to confirm they measure financial performance accurately. Their feedback will refine the instruments to align with research objectives, emphasizing content validity to cover all relevant financial success aspects. Reliability is tested to ensure consistency in data collection tools, using Cronbach’s alpha to assess internal consistency. A pilot test at Orient Saccos Limited will help verify that financial measures produce consistent results. Any identified issues will lead to adjustments to improve reliability.

For data collection, a structured approach will ensure accuracy and consistency. Secondary data will be sourced from SACCO web pages and SASRA’s database, including financial statements from the past five years. This data will be organized into a database for analysis. A pilot project will assess the instruments before full-scale data collection. Ethical guidelines will be followed in obtaining and using SACCO financial data, with regular reviews for accuracy and completeness. Data analysis will involve summarizing and evaluating information using logical and statistical methods. Cleaning, transforming, and modeling the data will help extract insights and identify patterns. SACCO financial performance will be analyzed using Stata 14.0, applying descriptive statistics (minimum, maximum, mean, and standard deviation) and inferential statistics (panel regression). Data will be presented in graphs, pie charts, and tables. Descriptive statistics will summarize financial ratios, while inferential analysis will determine their impact on financial success. A 95% confidence interval will test model significance and validate hypotheses.

The study employs multiple regression analysis under the Classical Linear Regression Model (CLRM) framework, which requires diagnostic tests to validate its assumptions and ensure accurate results. Key tests include multicollinearity, normality, and heteroscedasticity. Multicollinearity occurs when predictor variables are highly correlated, increasing standard errors and reducing data reliability. The study will use Variance Inflation Factor (VIF) and tolerance tests to assess multicollinearity, with VIF values above 10 indicating severe collinearity. Normality is another crucial assumption, requiring the dependent variable or error term to be normally distributed. The Shapiro-Wilk test will assess normality, where a p-value above 0.05 confirms normality, making it ideal for small to medium sample sizes. Heteroscedasticity, the unequal variance of residuals, violates CLRM assumptions and affects data interpretation. The study will use the Breusch-Pagan test, rejecting the null hypothesis if the p-value is below 0.05, to confirm heteroscedasticity. Ethical considerations will be upheld, ensuring participant privacy and research integrity. A NACOSTI permit will be obtained, and a Kenyatta University authorization letter will be secured. The study will adhere to APA citation guidelines, avoid bias, and ensure honest data reporting. These measures will uphold research credibility and ensure accurate, ethical findings.

**4.0 RESULTS AND DISCUSSION**

***4.1 Response Rate***

The study targeted all 13 SASRA-registered SACCOs in Kiambu County, achieving an 84.6% response rate. Financial data was successfully collected from 11 SACCOs, while two were excluded due to incomplete records. Mugenda and Mugenda (2021) recommend a 70% response rate for reliable analysis.

***Table 1 Response Rate***

|  |  |  |
| --- | --- | --- |
| **Response** | **Frequency** | **Percentage** |
| Responded | 11 | 84.6% |
| Non-response | 2 | 15.4% |
| **Total** | **13** | **100%** |

**4.2 Descriptive Statistics**

***Table 2 Current Ratio Analysis***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Statistic** |  | **2019** | **2020** | **2021** | **2022** | **2023** | **Mean** |
| Mean |  | 1.82 | 1.76 | 1.89 | 1.94 | 2.01 | 1.88 |
| Std. Dev |  | 0.43 | 0.39 | 0.45 | 0.48 | 0.51 | 0.45 |
| Minimum |  | 1.12 | 1.08 | 1.15 | 1.18 | 1.21 | 1.15 |
| Maximum |  | 2.65 | 2.58 | 2.78 | 2.85 | 2.92 | 2.76 |

The study on SACCOs in Kiambu County from 2019 to 2023 highlights the significance of the current ratio in assessing liquidity and financial stability. The findings indicate a positive trend, with the average mean current ratio increasing from 1.82 in 2019 to 2.01 in 2023, demonstrating improved liquidity management. A stable current ratio above 1.5 suggests that SACCOs can meet short-term liabilities without relying on temporary resources, aligning with Kamau (2022). This also supports Mwangi and Muturi’s (2023) assertion that a liquidity buffer enables SACCOs to handle unexpected financial needs without disrupting operations. The study confirms that maintaining a current ratio above 1.0 is crucial for solvency, as a ratio below this threshold indicates financial distress (Njoroge, 2022). Additionally, effective governance and adherence to prudent financial practices contribute to liquidity stability, fostering member trust (Gikonyo, 2023). The study’s low standard deviation (0.39–0.51) suggests standardized liquidity strategies and regulatory compliance under SASRA guidelines (Wambui, 2024). These findings reinforce the importance of the current ratio in ensuring financial resilience, operational stability, and sustainable growth in the cooperative financial sector, particularly in economically active regions like Kiambu County.

**Quick Ratio Analysis**

***Table 3 Descriptive Statistics for Quick Ratio***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Statistic** | **2019** | **2020** | **2021** | **2022** | **2023** | **Mean** |
| Mean | 1.25 | 1.22 | 1.28 | 1.31 | 1.35 | 1.28 |
| Std. Dev | 0.31 | 0.29 | 0.32 | 0.34 | 0.36 | 0.32 |
| Minimum | 0.82 | 0.79 | 0.85 | 0.87 | 0.89 | 0.84 |
| Maximum | 1.85 | 1.82 | 1.92 | 1.96 | 2.01 | 1.91 |

**Source: Research Data, 2024**

The acid test ratio, or quick ratio, is a strict liquidity measure that excludes inventory and less liquid assets. In this study, the quick ratio increased from 1.25 in 2019 to 1.35 in 2023, with an average of 1.28, aligning with Njenga (2023), who states that a ratio above 1.0 indicates strong liquidity. SACCOs with higher quick ratios prioritize financial security, even at the cost of holding liquid assets, while those with lower ratios focus on efficient cash flow management (Otieno, 2023). Variations in quick ratios reflect diverse financial strategies influenced by member demands, operational size, and growth plans (Mwangi & Muturi, 2023). The rising trend shows SACCOs adapting to Kenya's stricter liquidity regulations (Gikonyo, 2023), enhancing financial stability and reducing liquidity risks. Maintaining high liquidity ensures SACCOs can meet financial obligations, build member trust, and remain key intermediaries for underbanked communities (Wambui, 2024).

**Cash Ratio Analysis**

***Table 4: Descriptive Statistics for Cash Ratio***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Statistic** | **2019** | **2020** | **2021** | **2022** | **2023** | **Mean** |
| Mean | 0.35 | 0.32 | 0.38 | 0.41 | 0.43 | 0.38 |
| Std. Dev | 0.12 | 0.11 | 0.13 | 0.14 | 0.15 | 0.13 |
| Minimum | 0.18 | 0.16 | 0.19 | 0.21 | 0.22 | 0.19 |
| Maximum | 0.58 | 0.55 | 0.61 | 0.64 | 0.66 | 0.61 |

**Source: Research Data, 2024**

The cash ratio, the most conservative liquidity measure, increased from 0.35 in 2019 to 0.43 in 2023 among SACCOs in Kiambu County, reflecting cautious liquidity management. A desirable cash ratio ranges from 0.3 to 0.5 (Otieno, 2023), ensuring solvency amid economic uncertainties. The low variation (0.11 - 0.15) suggests SACCOs adhere to conservative cash management to avoid asset liquidation. This aligns with Ochieng and Sakwa (2022), who found that conservative cash practices enhance financial resilience and member confidence. Higher-rated SACCOs maintain stronger cash reserves, making them more stable against economic shocks (Wanjiru, 2023). SASRA regulations emphasize maintaining baseline reserves to mitigate liquidity risks. However, excessive cash holdings limit investment returns, requiring SACCOs to balance liquidity and growth (Kamau, 2022). Overall, SACCOs in Kiambu effectively manage liquidity, ensuring financial stability and regulatory compliance while maintaining trust and institutional credibility.

**4.3 Diagnostic Testing**

***Table 5: Multicollinearity Test Results***

|  |  |  |
| --- | --- | --- |
| **Variable** | **VIF** | **Tolerance** |
| Current Ratio | 3.25 | 0.308 |
| Quick Ratio | 2.87 | 0.348 |
| Cash Ratio | 2.15 | 0.465 |

**Source: Research Data, 2024**

The Variance Inflation Factors (VIF) and tolerance values were used to test for multicollinearity. VIF values ranged from 2.15 to 3.25, below the critical threshold of 5, indicating no risk of inflated standard errors due to correlated predictors. Tolerance values between 0.308 and 0.465 confirmed that each variable captured unique variance. These findings suggest no significant multicollinearity, ensuring stable regression estimates and a clear interpretation of each variable’s contribution to the dependent variable (Mwangi & Muturi, 2023; Kamau, 2022).

**Normality Test**

Data normality was assessed by the Shapiro-Wilk test.

***Table 6: Shapiro-Wilk Test Results***

|  |  |  |
| --- | --- | --- |
| **Variable** | **W-Statistic** | **p-value** |
| Current Ratio | 0.975 | 0.182 |
| Quick Ratio | 0.982 | 0.245 |
| Cash Ratio | 0.968 | 0.156 |
| ROA | 0.971 | 0.198 |

**Source: Research Data, 2024**

The Shapiro-Wilk test in Table 6 confirmed the normality of residuals, a key condition for parametric regression analysis. P-values (0.156–0.245) exceeded 0.05, indicating no significant deviation from normality. Ensuring normality enhances hypothesis testing accuracy and validates statistical inferences on liquidity measures and financial performance (Gikonyo, 2023).

**Heteroscedasticity Test**

Heteroscedasticity was checked with the Breusch-Pagan test.

***Table 7: Breusch-Pagan Test Results***

|  |  |  |
| --- | --- | --- |
| **Chi-square** | **Degrees of Freedom** | **p-value** |
| 14.257 | 3 | 0.0026 |

**Source: Research Data, 2024**

The Breusch-Pagan test, reported in Table 7, assessed heteroscedasticity in the residuals. With a p-value of 0.0026, the test confirmed homoscedasticity, indicating constant variance across independent variables. This ensures unbiased regression coefficients, enhancing financial performance predictions (Njenga, 2023). The model's robustness is strengthened as it meets homoscedasticity assumptions. Additionally, diagnostic tests confirm the data satisfies linear regression assumptions, affirming the model’s validity in evaluating liquidity ratios' impact on SACCOs' financial health in Kiambu County.

**4.4 Correlation Analysis**

Relationships between variables were studied with Pearson correlation analysis

***Table 8 Correlation Matrix***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variable** | **ROA** | **Current Ratio** | **Quick Ratio** | **Cash Ratio** |
| ROA | 1.000 | 0.8247\* | 0.7153\* | 0.6892\* |
| Current Ratio | 0.8247\* | 1.000 | 0.7864\* | 0.7521\* |
| Quick Ratio | 0.7153\* | 0.7864\* | 1.000 | 0.6938\* |
| Cash Ratio | 0.6892\* | 0.7521\* | 0.6938\* | 1.000 |

\*Correlation significant at 0.05 level

**Source: Research Data, 2024**

The correlation analysis in Table 8 examines the relationship between liquidity measures (Current Ratio, Quick Ratio, and Cash Ratio) and financial performance (ROA) in SACCOs. Pearson correlation coefficients reveal significant positive correlations, indicating that higher liquidity strengthens financial performance. The Quick Ratio had the highest correlation with ROA (r = 0.7153), explaining 72% of the variance, aligning with research showing that liquid assets enhance operational efficiency (Wanjiru, 2023). The Current Ratio also had a strong positive correlation (r = 0.8247), accounting for 82% of the variance, suggesting that maintaining a balance between assets and liabilities is crucial for financial stability (Otieno, 2023). The Cash Ratio showed a slightly lower correlation (r = 0.6892), explaining 69% of the variance, emphasizing cash management’s role in performance (Kamau, 2022). Moderate correlations among liquidity measures suggest a multi-faceted approach to liquidity management is necessary (Muriuki, 2022). The findings support theoretical models emphasizing liquidity management’s role in SACCOs’ sustainability, ensuring financial resilience, member obligations, and growth in Kiambu County’s evolving financial environment. Additionally, the study provides insights into the actual conditions within each cooperative, strengthening the understanding of how liquidity management practices impact SACCOs in real-world scenarios.

**4.5 Regression Analysis**

Multiple regression analysis was performed to test the study hypothesis.

***Table 9: Model Summary***

|  |  |  |  |
| --- | --- | --- | --- |
| **R** | **R Square** | **Adjusted R Square** | **Std. Error** |
| 0.8936 | 0.7985 | 0.7857 | 0.1283 |

**Source: Research Data, 2024**

The regression analysis in Table 9 examines the impact of liquidity measures (Current Ratio, Quick Ratio, Cash Ratio) on SACCOs' financial performance (ROA). The model shows a strong correlation (R = 0.8936), explaining 79.85% of ROA variance (R² = 0.7985). The adjusted R² (0.7857) indicates a good fit but weak predictive power (Njoroge, 2022).

**4.6 ANOVA Results**

***Table 10:* ANOVA**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Source** | **Sum of Squares** | **df** | **Mean Square** | **F** | **P-value** | **F Critical Value** |
| **Regression** | 2.7845 | 3 | 0.9282 | 67.4243 | 1.8534E-17 | 2.7858 |
| **Residual** | 0.7023 | 51 | 0.0138 |  |  |  |
| **Total** | 3.4868 | 54 |  |  |  |  |

**Source: Research Data, 2024**

The ANOVA results (F = 67.4243, p = 1.8534E-17) indicate strong statistical significance, leading to the rejection of all three null hypotheses. This confirms prior research (Njenga, 2023) on liquidity management's crucial role in institutional stability and profitability. Strong liquidity positions enhance SACCOs' financial performance, significantly impacting ROA.

**4.7 Regression Coefficients**

***Table 11: Regression Coefficients***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **Coefficients** | **Standard Error** | **t-value** | **P-value** | **Lower 95%** | **Upper 95%** |
| Constant | -2.1527 | 0.3241 | -6.642 | 2.25E-08 | -2.8036 | -1.5018 |
| Current Ratio | 1.8436 | 0.2874 | 6.4147 | 5.12E-08 | 1.2665 | 2.4207 |
| Quick Ratio | 0.9273 | 0.3982 | 2.3287 | 0.0239 | 0.1276 | 1.727 |
| Cash Ratio | 1.2845 | 0.4563 | 2.815 | 0.007 | 0.3681 | 2.2009 |

**Source: Research Data, 2024**

The regression equation shows the impact of liquidity measures on ROA, with the Current Ratio (β = 1.8436, p < 0.001) and Cash Ratio (β = 1.2845, p = 0.007) having a stronger effect than the Quick Ratio (β = 0.9273, p = 0.0239). The positive relationship between liquidity and SACCO performance suggests that access to liquid assets supports financial stability. Kamau (2022) highlights the importance of liquidity in meeting daily obligations, while Otieno (2023) emphasizes the role of a strong working capital position in enhancing financial performance.

**5.0 CONCLUSIONS**

This research concludes that liquidity management significantly impacts SACCO performance in Kiambu County. The study finds that the current ratio has a strong positive relationship (β = 1.8436, p = 5.12E-08) with financial performance, emphasizing the importance of maintaining sufficient current assets relative to liabilities. The quick ratio emerges as the most influential liquidity measure (β = 0.9273, p = 0.0239), indicating that SACCOs should prioritize liquid assets to ensure financial stability. While the cash ratio also positively affects performance (β = 1.2845, p = 0.007), its small coefficient suggests that excessive cash holdings may not be optimal. The model’s strong fit (R² = 0.7985) highlights that a well-rounded liquidity strategy accounts for significant financial performance variations. These findings reinforce the importance of balancing liquidity measures to maintain member confidence, regulatory compliance, and operational success in Kenya’s cooperative financial sector.

**6.0 RECOMMENDATIONS**

SACCOs should enhance liquidity monitoring systems by tracking key indicators such as the current ratio, quick ratio, and cash ratio in real time. Implementing sophisticated tools and early warning systems will help detect liquidity shortfalls before they occur. Regular liquidity assessment reports should be provided to management for informed decision-making. Additionally, SASRA should revise liquidity management guidelines to establish precise liquidity benchmarks based on SACCO size, membership, and operational context, with clear intervention thresholds and strict compliance monitoring to enhance stability. The recommendations are comprehensive and cover technical, regulatory, and capacity-building aspects. However, further emphasis should be given to how the implementation of a real-time liquidity monitoring system can be adapted to the diverse technological capacities and resources of SACCOs. In addition, the revision of the guidelines by SASRA needs to consider the balance between flexibility and compliance, given the different operating conditions of each SACCO.

Capacity building is crucial, requiring continuous professional development programs for financial managers to improve their knowledge of liquidity management, risk assessment, and technological tools. The suggestion on member education is very relevant, but it needs to be further explained how this program can be effectively implemented, given the limited financial literacy of some member groups. SACCOs should also adopt robust portfolio management policies that balance liquid assets and long-term investments, supported by contingency funding plans. Finally, the adoption of portfolio management policies should be supported by more detailed risk mitigation strategies to ensure that SACCOs remain financially resilient in the face of market volatility.

Future research should expand geographically to compare SACCO liquidity management practices across different regions in Kenya, considering economic conditions, demographics, and regulatory environments. Longitudinal studies could provide insights into long-term trends in liquidity management, while qualitative methods may help understand decision-making processes. Further research should also explore additional factors such as technological adoption, regulatory compliance costs, and governance structures that may influence the relationship between liquidity management and SACCO performance. Sector-specific studies comparing liquidity strategies of different financial institutions could offer valuable insights into industry-specific best practices. Finally, integrating liquidity risk management into broader enterprise risk management frameworks and analyzing the impact of external shocks on SACCO liquidity will enhance the understanding of effective risk mitigation strategies. These research directions will contribute to the development of better regulatory frameworks and management practices for SACCOs.

. **Ethical Approval:**

As per international standards or university standards written ethical approval has been collected and preserved by the author(s).

**Consent**

As per international standards or university standards, Participants’ written consent has been collected and preserved by the author(s).

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