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Effect of Financial Technology Adoption on the Financial Performance of Deposit-Taking Savings and Credit Cooperative Societies (SACCOs) in Kenya

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Abstract

Purpose: The aim of this study was to investigate the effect of financial technology adoption on the financial performance of deposit-taking savings and credit cooperative societies (SACCOs) in Kenya.

Methodology: The study adopted a desktop research methodology. Desk research refers to secondary data or that which can be collected without fieldwork. Desk research is basically involved in collecting data from existing resources hence it is often considered a low-cost technique as compared to field research, as the main cost is involved in executive's time, telephone charges and directories. Thus, the study relied on already published studies, reports and statistics. This secondary data was easily accessed through the online journals and library.

Findings: The study suggests that financial technology adoption, particularly mobile banking, digital lending, internet banking and automated financial management systems, has the potential to positively influence the financial performance of deposit-taking SACCOs in Kenya. Adoption of these technologies may enhance operational efficiency, reduce transaction costs, improve loan management and increase profitability. However, the extent of these benefits depends on effective technology implementation, institutional capacity, cybersecurity measures and members' utilization of digital financial services.

Unique Contribution to Theory, Practice and Policy: The technology organization environment framework, diffusion of innovations theory & financial intermediation theory may be used to anchor future studies on effect of financial technology adoption on the financial performance of deposit-taking savings and credit cooperative societies (SACCOs) in Kenya. The study is expected to provide practical insights that will assist SACCO managers, boards of directors and financial technology providers in making evidence-based decisions regarding digital transformation investments. The study is expected to provide empirical evidence to inform the development and improvement of policies governing financial technology adoption among deposit-taking SACCOs in Kenya.

Keywords: *Financial Technology Adoption, Financial Performance, Deposit-Taking Savings, Credit Cooperative Societies (SACCOs)*

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INTRODUCTION

Financial performance in the United States banking sector is commonly assessed through profitability, asset utilization, capital adequacy and operational efficiency. Nippani and Ling (2021) examined the performance of American banks before and after the 2007–2009 global financial crisis, using financial ratios to compare institutions of different sizes. The study, published in The Journal of Financial Research, volume 44, pages 587–606, provides evidence of how financial performance differed across banking institutions following the crisis. Its analysis demonstrates the importance of bank size and financial stability when evaluating profitability and institutional resilience over time. However, the accessible study abstract does not report the specific annual ROA or ROE percentages, so a numerical profitability trend cannot be reliably attributed to this study without examining its full results.

In Japan, financial performance reflects the ability of banks to maintain profitability despite prolonged low interest rates, narrow lending margins and changing economic conditions. World Bank banking indicators show that Japan's banking-sector ROA declined from approximately 0.184% in 2018 to 0.105% in 2019, indicating weakening profitability. The ratio subsequently improved to 0.141% in 2020 and 0.151% in 2021, although it remained below the 2018 level. These trends illustrate the challenges of sustaining returns in a mature banking environment and highlight the importance of efficient asset utilization and revenue diversification. Research by Wang (2023) examines how central bank asset purchases affected bank portfolio decisions in Japan and the United States, but because it was published after 2021, it is supplementary rather than qualifying evidence under the requested five-year publication rule.

In India, financial performance is a key measure of commercial banks' ability to generate sustainable profits while managing credit risks, operational expenses and capital requirements. Almaqtari (2019) analyzed financial performance among 69 Indian commercial banks over the ten-year period from 2008 to 2017, using ROA and ROE as profitability indicators. Their findings established that bank size, operational efficiency, leverage and asset management were important determinants of ROA, while asset quality, liquidity and asset management significantly influenced ROE. The study's sample of 69 banks over ten years provides evidence of long-term performance relationships, although the accessible abstract does not provide year-by-year profitability percentages. These findings suggest that improvements in financial performance depend on efficient resource allocation, sound credit management and effective cost control, factors that are also relevant to deposit-taking SACCOs in Kenya.

In China, financial performance reflects the capacity of banking institutions to generate profits while supporting credit expansion and managing risks within a rapidly developing financial system. Kumar and Bird (2020) examined profitability determinants in India and China, identifying credit quality, bank size and cost management as important influences on banking performance. Their findings revealed that the loan-to-deposit ratio positively influenced bank profitability in China but negatively influenced profitability in India, demonstrating differences in how financial intermediation affects performance across developing economies. The study was published online on 29 December 2020 and appeared in volume 29, issue 5, pages 371–375 of Applied Economics Letters, although the accessible abstract does not provide numerical annual ROA or ROE trends for China. The findings suggest that financial performance depends not only

on expanding lending activities but also on institutional efficiency, credit risk management and the economic environment in which financial institutions operate.

In Ghana, financial performance is assessed through profitability, asset utilization, liquidity management and the capacity of financial institutions to generate sustainable returns. World Bank banking statistics indicate that Ghana's commercial banking ROA increased from approximately 2.91% in 2018 to 3.16% in 2019 and 3.23% in 2020, before declining slightly to 3.21% in 2021. This trend indicates relatively stable profitability during the period, despite changes in economic conditions and financial-sector risks. Owusu and Alhassan (2021) examined 27 Ghanaian banks over the period 2007–2015 and established that asset-liability management influenced profitability, with domestic banks recording higher returns on assets than foreign banks during the study period. These findings highlight the importance of effective financial resource management, cost control and asset allocation in sustaining financial performance, which are also relevant considerations for deposit-taking SACCOs in Kenya.

In Kenya, financial performance is particularly important for deposit-taking SACCOs and commercial banks because these institutions mobilize savings, extend credit and support economic development. World Bank banking statistics indicate that commercial banks' ROA declined from approximately 3.04% in 2018 to 2.92% in 2019 and further to 1.36% in 2020, before recovering to 2.90% in 2021. This trend demonstrates a substantial deterioration in profitability during 2020, followed by a recovery in 2021, highlighting the sensitivity of financial institutions to economic disruptions. Teimet (2020) analyzed panel data from 42 Kenyan commercial banks covering 2009–2018 and established that interest and non-interest revenue diversification were positively associated with return on assets. These findings suggest that effective revenue management and financial innovation may support profitability, although additional SACCO-specific research is necessary to determine whether financial technology adoption produces comparable improvements in cooperative financial institutions.

Table 1 presents comparative trends in the financial performance of banking institutions in developed, developing and Sub-Saharan African economies between 2018 and 2021, using return on assets (ROA) as the key profitability indicator. The results reveal variations in profitability across countries, with Ghana recording relatively higher returns, while Japan experienced consistently lower returns. Most countries experienced fluctuations in profitability, particularly in 2020, reflecting the effects of the COVID-19 pandemic and changing economic conditions. The trends highlight the importance of operational efficiency, effective financial management and institutional resilience in sustaining financial performance.

Table 1: Comparative Trends in Financial Performance of Banking Institutions in Developed, Developing and Sub-Saharan African Economies (2018–2021)

Year	Us	Japan	India	Ghana	Kenya	China
2018	1.35	0.18	-0.12	2.91	3.04	
2019	1.29	0.11	0.16	3.16	2.92	
2020	0.72	0.14	0.66	3.23	1.36	0.85
2021		0.15	0.85	3.21	2.9	0.86

Financial technology adoption refers to the integration and utilization of digital technologies to improve financial service delivery, operational efficiency and institutional financial performance. In deposit-taking Savings and Credit Cooperative Societies (SACCOs) in Kenya, financial technology adoption can be conceptualized through four key dimensions: mobile banking, digital lending, internet banking and automated financial management systems. Mobile banking enables members to conduct transactions, access account information and make deposits or withdrawals remotely, potentially reducing transaction costs and improving financial performance (Mugo, 2019). Digital lending involves the use of electronic platforms for loan applications, credit assessment, disbursement and repayment monitoring, potentially improving loan processing efficiency and credit portfolio management (Wekesa, 2023). Internet banking facilitates online financial transactions and account management, with Ogindo and Njoka (2023) establishing a positive and statistically significant relationship between internet banking and the financial performance of deposit-taking SACCOs in Nairobi County.

Automated financial management systems involve the application of integrated digital accounting, financial reporting, transaction processing and internal control technologies to improve financial management and decision-making. These systems may enhance financial performance by minimizing processing errors, reducing administrative expenses, strengthening financial controls and improving resource allocation (Wekesa, 2023). Financial performance, the dependent variable, refers to a SACCO's ability to generate profits and efficiently utilize financial resources, commonly measured using return on assets (ROA), return on equity (ROE) and operational efficiency indicators. Empirical evidence suggests that financial technology adoption can improve SACCO financial performance, although the magnitude and statistical significance of its effects vary across technological innovations, as demonstrated by Ogindo and Njoka (2023). Consequently, the current study conceptualizes financial technology adoption as a multidimensional independent variable comprising mobile banking, digital lending, internet banking and automated financial management systems, whose individual and combined effects on financial performance will be examined (Wekesa, 2023).

Problem Statement

Deposit-taking Savings and Credit Cooperative Societies (SACCOs) play a significant role in Kenya's financial sector by mobilizing savings, providing credit and promoting financial inclusion among members. Ideally, the adoption of financial technologies such as mobile banking, digital lending, internet banking and automated financial management systems should enhance

operational efficiency, reduce transaction costs, improve loan management and increase profitability. However, despite increasing digital transformation within the SACCO sector, financial performance challenges persist. According to the Central Bank of Kenya (2025), the return on assets of the SACCO sector declined from 9.7% in 2023 to 9.2% in 2024, while non-performing loans increased from KES 44.4 billion to KES 53.1 billion over the same period. Furthermore, the ratio of non-performing loans to gross loans increased to 6.3% in 2024, indicating deterioration in asset quality. These developments raise concerns about whether investments in financial technology are translating into sustainable improvements in the financial performance of deposit-taking SACCOs in Kenya.

Empirical studies have produced mixed findings regarding the relationship between financial technology adoption and financial performance. Wekesa (2023) established that financial technology had a positive and statistically significant effect on the return on assets of deposit-taking SACCOs in Nairobi County ($\beta = 0.162$, $p = 0.001$). Similarly, Mugunyi (2022) established that financial innovations positively influenced SACCO financial performance, with service innovation demonstrating the strongest influence, followed by process innovation. However, Ogindo and Njoka (2023) established that internet banking and agency banking had positive and statistically significant effects on financial performance, whereas mobile banking and automated teller machine services had statistically insignificant effects. These contrasting findings suggest that the financial performance implications of technology adoption may vary depending on the type of technology implemented, institutional characteristics and operational conditions.

Furthermore, existing empirical studies present conceptual, contextual and geographical limitations. Wekesa (2023) examined financial technology primarily through the value of transactions conducted using fintech solutions, while Ogindo and Njoka (2023) concentrated on mobile banking, internet banking, agency banking and automated teller machines among SACCOs in Nairobi County. Although Mugunyi (2022) adopted a broader national perspective, the study conceptualized financial innovation in terms of product, service and process innovations rather than separately examining mobile banking, digital lending, internet banking and automated financial management systems. Consequently, the reviewed literature provides limited integrated evidence on the individual and combined effects of these four technological dimensions on financial performance across deposit-taking SACCOs in Kenya. This creates uncertainty regarding which financial technologies contribute most significantly to profitability and whether their adoption generates consistent financial benefits across institutions with different operational and financial characteristics.

Theoretical Framework

Technology–Organization–Environment (TOE) Framework

The technology organization environment framework developed by Tornatzky and Fleischer (1990). The theory explains that technological innovation adoption is influenced by three factors: technological characteristics, organizational capabilities and external environmental conditions. Its relevance to the current study lies in explaining how technological infrastructure, management support, financial resources and regulatory requirements influence financial technology adoption among deposit-taking SACCOs. The framework will help explain how these factors shape the

adoption of mobile banking, digital lending, internet banking and automated financial management systems, potentially influencing financial performance (Nkonge & Kahonge, 2018).

Diffusion of Innovations Theory

Diffusion of innovations theory was originally developed by Everett Rogers (1962). The theory explains how technological innovations spread among individuals and organizations over time. Its central concepts include relative advantage, compatibility, complexity, trialability and observability. The theory is relevant to the current study because it explains how deposit-taking SACCOs adopt financial technologies and how their perceived benefits influence adoption decisions. It will help examine whether adopting mobile banking, digital lending and internet banking contributes to improved financial performance (Hemed, 2022).

Financial Intermediation Theory

Financial intermediation theory is commonly associated with Gurley and Shaw (1960), with later contributions by Diamond (1984). The theory explains how financial institutions mobilize savings, extend credit and reduce transaction costs and information asymmetry. Its relevance to the current study lies in explaining how financial technology enhances SACCOs' intermediary functions through digital savings mobilization, automated lending and efficient financial transactions. It will provide a foundation for examining whether technology-driven improvements in financial intermediation translate into increased profitability and operational efficiency (Ogindo, 2023).

Empirical Review

Kiugu (2018) examined the effect of mobile banking on the financial performance of SACCO societies regulated by the Sacco Societies Regulatory Authority (SASRA) in Kenya. The study employed a descriptive research design and selected a random sample of 20 large and medium-sized licensed deposit-taking SACCOs operating as of December 2017. Secondary data were obtained from SASRA, the Communications Authority of Kenya and the Competition Authority of Kenya. The findings established that the annual value of mobile banking transactions had a positive and statistically significant influence on financial performance. The study further revealed that an increase in mobile banking subscribers was associated with improved financial performance, while capital adequacy, liquidity, asset quality and operational efficiency were also significant determinants of performance. The regression model explained approximately 73.69% of the variation in financial performance. The study recommended that SACCOs continue promoting mobile banking services to increase utilization and strengthen financial performance.

Kamau (2018) investigated the effect of innovative technological services on the financial performance of deposit-taking SACCOs in Nairobi City County, Kenya. The study specifically examined mobile banking, internet banking, credit and debit cards, and electronic funds transfers. A descriptive survey research design was adopted, targeting 410 management employees from SASRA-regulated SACCOs, from whom 123 respondents were selected through stratified random sampling. Primary data were collected using questionnaires, while secondary information was obtained from SACCO financial reports and related publications. Descriptive statistics and multiple regression analysis were employed to establish relationships between the variables. The findings demonstrated a positive relationship between innovative technological services and financial performance, with an R-squared value of 0.916, indicating that the technological

variables jointly explained 91.6% of the variation in financial performance within the estimated model. The findings support greater investment in digital financial services and integration of technological innovations into SACCO operations to improve efficiency and financial sustainability.

Kariuki (2019) examined the effects of technology adoption on the performance of deposit-taking SACCOs, focusing on K-Unity SACCO in Kiambu County, Kenya. The study sought to establish the influence of mobile banking, loan management systems and digitization of operations on financial performance. A descriptive research design incorporating quantitative and qualitative approaches was employed, with a census of 95 employees. Primary data were collected through structured questionnaires, while secondary financial data covering three years were used to assess return on assets and return on equity. Data were analyzed using descriptive statistics, simple linear regression and qualitative content analysis. The findings established a positive and statistically significant relationship between mobile banking and financial performance. Loan management systems also demonstrated a positive, relatively weak but statistically significant relationship with performance, while digitization of SACCO operations exhibited a relatively strong positive and statistically significant association. The results suggest that SACCOs should strengthen mobile banking platforms, modernize loan management systems and digitize their operational processes to improve financial outcomes.

Mugo (2019) conducted an empirical investigation to establish the effect of mobile banking services on the financial performance of deposit-taking SACCOs in Kenya. The study was motivated by the increasing adoption of mobile technologies among financial institutions and the need to determine whether these innovations translated into improved financial outcomes. The research adopted descriptive and explanatory research designs using a quantitative approach. A sample of 86 deposit-taking SACCOs was selected through simple random sampling from a population of 110 SACCOs licensed by SASRA as of December 2011. The study examined mobile banking as a technological innovation intended to address operational inefficiencies, high transaction costs and limitations in financial service delivery. The published abstract identifies the research design and scope but does not report the specific regression results or final recommendations. Consequently, the study provides a useful methodological foundation for investigating mobile banking adoption, although its detailed empirical conclusions require examination of the full article before they can be reported reliably.

Shabiha and Otinga (2020) examined the influence of electronic banking service management on the financial performance of deposit-taking SACCOs in Nairobi County, Kenya. The study specifically investigated phone banking services, digitized financial communication services, electronic savings mobilization and online lending services. A descriptive survey research design was adopted, targeting senior management employees of deposit-taking SACCOs in Nairobi County. The sample size was determined using Yamane's formula, while respondents were selected through simple random sampling. Primary data were collected using structured questionnaires and analyzed through descriptive and inferential statistical techniques using SPSS version 24. The findings revealed that all four electronic banking service management dimensions significantly influenced the financial performance of deposit-taking SACCOs. The results suggest that SACCO management should strengthen electronic banking infrastructure, expand online lending services,

improve digital communication and promote electronic savings mobilization to enhance financial performance.

Ndungu (2021) investigated the influence of information and communication technology adoption on the performance of deposit-taking SACCOs in Kiambu County, Kenya. The study sought to determine the effects of mobile banking, agency banking and automated teller machines, alongside the role of data security policies and controls in SACCO operations. The research assessed technology adoption and institutional performance, including service accessibility, income generation and business continuity. The findings established that mobile banking improved SACCO performance by enabling members to access financial services remotely, while agency banking expanded income-generating opportunities and reduced dependence on physical branches. The study further established that data security policies were important for business continuity and that ICT adoption explained approximately 56.7% of the variation in SACCO performance within the study model. The researcher recommended that deposit-taking SACCOs increase investment in ICT innovations, regularly upgrade technological systems to meet changing market requirements and utilize data analytics to customize financial products and communication services for members.

Waari (2019) examined the influence of mobile banking services on the financial performance of deposit-taking SACCOs in Meru County, Kenya. The study aimed to determine whether mobile banking adoption was associated with improved financial performance and organizational growth. A descriptive research design was employed, with questionnaire data collected from top management representatives of 11 deposit-taking SACCOs. The research developed a conceptual framework integrating technology adoption and organizational performance to investigate the relationship between mobile financial services and institutional outcomes. The findings established a positive and statistically significant relationship between mobile banking services and the financial performance of deposit-taking SACCOs. The results support the recommendation that SACCOs strengthen mobile banking capabilities, promote members' utilization of digital financial services and incorporate mobile banking into their broader financial management strategies. Although the journal issue is designated 2019, its website records online publication in June 2023; this distinction should be considered when applying a strict publication-date cutoff.

METHODOLOGY

This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low-cost advantage as compared to field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

FINDINGS

The results were analyzed into various research gap categories that is conceptual, contextual and methodological gaps

Conceptual Research Gap

The reviewed empirical studies reveal a conceptual gap concerning the comprehensive examination of financial technology adoption and its effect on the financial performance of

deposit-taking SACCOs in Kenya. Kiugu (2018), Mugo (2019) and Waari (2019) primarily focused on mobile banking, thereby limiting their examination of other financial technology innovations that may influence financial performance. Although Kamau (2018) investigated mobile banking, internet banking, credit and debit cards, and electronic funds transfers, the study did not explicitly examine digital lending and automated financial management systems as distinct dimensions of financial technology adoption. Similarly, Kariuki (2019) examined mobile banking, loan management systems and operational digitization, while Shabiha and Otinga (2020) investigated electronic banking services, including online lending, without explicitly integrating automated financial management systems into their conceptual framework. Ndungu (2021) concentrated on mobile banking, agency banking and automated teller machines, with additional consideration of data security policies. Consequently, the reviewed studies do not provide a unified examination of mobile banking, digital lending, internet banking and automated financial management systems as four distinct dimensions of financial technology adoption. The current study seeks to address this conceptual gap by examining the individual and combined effects of these four financial technology dimensions on the financial performance of deposit-taking SACCOs in Kenya.

Contextual Research Gap

The reviewed studies reveal a contextual gap relating to differences in institutional characteristics, technological capabilities and operational environments among deposit-taking SACCOs in Kenya. Kiugu (2018) concentrated on large and medium-sized licensed SACCOs, potentially limiting the applicability of the findings to smaller institutions with different financial and technological capacities. Kariuki (2019) focused exclusively on K-Unity SACCO, whose organizational structure, technological infrastructure and financial resources may differ from those of other deposit-taking SACCOs. Similarly, Kamau (2018) and Shabiha and Otinga (2020) examined SACCOs operating within Nairobi County, where access to digital infrastructure and financial technology services may differ from that experienced by SACCOs operating in other institutional and economic environments. Although Mugo (2019) examined deposit-taking SACCOs in Kenya, the study concentrated on mobile banking rather than the broader financial technology environment. Furthermore, Ndungu (2021) emphasized ICT adoption and organizational performance, including service accessibility and business continuity, rather than exclusively examining financial performance indicators. These differences demonstrate the need for research that considers financial technology adoption within the broader institutional context of deposit-taking SACCOs, including variations in organizational size, technological readiness, financial resources and operational capacity. The current study seeks to address this contextual gap by examining financial technology adoption across deposit-taking SACCOs with varying institutional characteristics and assessing its relationship with financial performance using indicators such as return on assets and return on equity.

Geographical Research Gap

The reviewed empirical studies reveal a geographical gap arising from the concentration of several investigations within specific counties and individual SACCOs in Kenya. Kamau (2018) and Shabiha and Otinga (2020) conducted their studies in Nairobi County, while Kariuki (2019) and Ndungu (2021) focused on SACCOs in Kiambu County. Similarly, Waari (2019) examined

deposit-taking SACCOs in Meru County, involving only 11 institutions. These geographical concentrations may limit the generalizability of the findings because SACCOs operating in different regions of Kenya may experience variations in digital infrastructure, internet connectivity, financial inclusion, technological literacy and access to financial technology services. Although Kiugu (2018) and Mugo (2019) examined SASRA-regulated SACCOs in Kenya, their studies focused primarily on mobile banking and therefore did not establish the geographical distribution of the effects associated with multiple financial technology innovations. Consequently, the existing county-specific evidence may not adequately capture differences in financial technology adoption and financial performance across the wider SACCO sector.

CONCLUSION AND RECOMMENDATIONS

Conclusions

The study on the effect of financial technology adoption on the financial performance of deposit-taking Savings and Credit Cooperative Societies (SACCOs) in Kenya highlights the importance of digital transformation in enhancing the efficiency, competitiveness and financial sustainability of cooperative financial institutions. Financial technologies, including mobile banking, digital lending, internet banking and automated financial management systems, have the potential to improve service delivery, reduce operational costs, strengthen financial management and enhance profitability. However, the extent to which these technologies contribute to financial performance depends on their effective implementation, institutional capacity, cybersecurity measures and members' willingness to utilize digital financial services. The study is expected to provide empirical evidence on the relationship between financial technology adoption and financial performance, thereby contributing to existing theoretical knowledge, managerial decision-making and financial sector policy development. Ultimately, the study emphasizes the need for deposit-taking SACCOs in Kenya to adopt a strategic, secure and sustainable approach to financial technology integration to strengthen their long-term financial performance and competitiveness in an increasingly digital financial environment.

Recommendations

Theory

The study is expected to contribute to existing financial technology and organizational performance theories by integrating the Technology–Organization–Environment Framework, Resource-Based View and Diffusion of Innovations Theory to explain the relationship between financial technology adoption and financial performance among deposit-taking SACCOs in Kenya. Its theoretical uniqueness lies in extending these frameworks beyond conventional commercial banking institutions to member-owned cooperative financial institutions, whose governance structures, financial objectives and operational characteristics differ from those of commercial banks. By examining mobile banking, digital lending, internet banking and automated financial management systems as distinct technological capabilities, the study could provide a more comprehensive understanding of how technology adoption relates to profitability and operational efficiency. The findings could also contribute to refining theoretical explanations of how institutional characteristics influence the financial outcomes of technological innovation within cooperative financial institutions.

Practice

The study is expected to provide practical insights that will assist SACCO managers, boards of directors and financial technology providers in making evidence-based decisions regarding digital transformation investments. Its unique practical contribution lies in providing an empirical basis for developing a financial technology investment prioritization framework that identifies which technological innovations are most strongly associated with improved financial performance. By examining the individual contributions of mobile banking, digital lending, internet banking and automated financial management systems, the study could enable SACCOs to allocate limited financial resources toward technologies with greater potential to improve profitability, reduce operational costs, strengthen loan management and enhance service delivery. Additionally, the findings could guide financial technology providers in developing affordable, scalable and secure digital solutions tailored to the operational needs of deposit-taking SACCOs in Kenya.

Policy

The study is expected to provide empirical evidence to inform the development and improvement of policies governing financial technology adoption among deposit-taking SACCOs in Kenya. Its unique policy contribution lies in providing a foundation for a risk-based financial technology governance framework that balances technological innovation, financial sustainability, cybersecurity, consumer protection and regulatory compliance within the cooperative financial sector. The findings could assist the Sacco Societies Regulatory Authority (SASRA) in refining supervisory guidelines on digital financial services, technology-related risks and operational resilience, while informing the Ministry responsible for cooperatives on policies supporting digital infrastructure development and technological capacity building. Furthermore, the study could provide insights relevant to the Central Bank of Kenya and the Office of the Data Protection Commissioner in areas involving digital financial inclusion, payment systems and protection of members' financial information. Ultimately, the findings could support the formulation of evidence-based policies that promote responsible digital transformation and strengthen the financial sustainability of deposit-taking SACCOs in Kenya.

REFERENCES

Almaqtari, F. A., Al-Homaidi, E. A., Tabash, M. I., & Farhan, N. H. (2019). The determinants of profitability of Indian commercial banks: A panel data approach. International Journal of Finance & Economics, 24(1), 168–185. https://doi.org/10.1002/ijfe.1655

Central Bank of Kenya. (2025). Financial sector stability report 2024. https://www.centralbank.go.ke/uploads/financial_sector_stability/1556846189_FSR%202024%20Sept.%20Final%202025.pdf

Doku, J. N., Kpekpena, F. A., & Boateng, P. Y. (2019). Capital structure and bank performance: Empirical evidence from Ghana. African Development Review, 31(1), 15–27. https://doi.org/10.1111/1467-8268.12360

Federal Deposit Insurance Corporation. (2020). Quarterly banking profile: Fourth quarter 2019. https://www.fdic.gov/news/press-releases/2020/pr20018.html

Federal Deposit Insurance Corporation. (2021). FDIC-insured institutions reported net income of $59.9 billion in fourth quarter 2020. https://www.fdic.gov/news/press-releases/2021/pr21012.html

Kamau, J. (2018). Innovative technological services and financial performance of deposit taking savings and credit cooperatives in Nairobi City County, Kenya [Research project, Kenyatta University]. University repository

Kariuki, L. W. (2019). Effects of adoption of technology on performance of deposit taking SACCO's: A case of K-Unity Sacco, Kiambu County [Research project, United States International University-Africa]. University repository

Kiugu, S. K. (2018). Effect of mobile banking on the financial performance of SACCO societies regulated by the Sacco Societies Regulatory Authority in Kenya [Research project, University of Nairobi]. University repository

Kumar, V., & Bird, R. (2022). Factors influencing the profitability of banks in India and China. Applied Economics Letters, 29(5), 371–375. https://doi.org/10.1080/13504851.2020.1869153

Mugo, D. M. (2019). An empirical investigation on the effect of mobile banking services on financial performance of deposit-taking SACCOs in Kenya. International Journal of Applied Business and Information Systems, 3(1), 28–39. https://doi.org/10.31763/ijabis.v3i1.225

Mugo, D. M. (2019). An empirical investigation on the effect of mobile banking services on financial performance of deposit-taking SACCOs in Kenya. International Journal of Applied Business and Information Systems, 3(1), 28–39. https://doi.org/10.31763/ijabis.v3i1.225

Mugunyi, G. M. (2022). Effect of financial innovation on financial performance of deposit taking savings and credit cooperative societies in Kenya [Research project, KCA University]. https://repository.kcau.ac.ke/handle/123456789/351

Ndungu, J. W. (2021). Information communication technology adoption and performance of deposit taking savings and credit co-operative societies in Kiambu County, Kenya [Research project, Kenyatta University]. University repository

Nippani, S., & Ling, R. (2021). Bank size and performance: An analysis of the industry in the United States in the post-financial-crisis era. The Journal of Financial Research, 44, 587–606. https://doi.org/10.1111/jfir.12255

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. https://doi.org/10.70619/vol3iss2pp45-56

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. https://doi.org/10.70619/vol3iss2pp45-56

Owusu, F. B., & Alhassan, A. L. (2021). Asset-liability management and bank profitability: Statistical cost accounting analysis from an emerging market. International Journal of Finance & Economics, 26(1), 1488–1502. https://doi.org/10.1002/ijfe.1860

Shabiha, E. A., & Otinga, H. (2020). Influence of electronic banking service management on financial performance of deposit taking SACCOs in Nairobi County. The Strategic Journal of Business & Change Management, 7(3). Journal article

Statistical data sources

Teimet, P., Lishenga, J., Mwangi, I., & Elly, D. (2020). The effect of revenue diversification on return on assets of commercial banks in Kenya. DBA Africa Management Review, 10(3). https://doi.org/10.66563/2z6tcz45

Waari, D. (2019). Influence of mobile banking services on the financial performance of deposit taking savings and credit co-operatives in Meru County, Kenya. Journal of Environmental Sustainability Advancement Research, 5. Journal article (online publication 2023)

Wang, L. (2023). Central bank asset purchases, banks' risky security holdings and profitability: Macro and micro evidence from Japan and the U.S. International Review of Economics & Finance, 87, 347–364. https://doi.org/10.1016/j.iref.2023.04.022

Wekesa, J. M. (2023). Effect of financial technology on financial performance of deposit-taking savings and credit cooperative societies in Nairobi County, Kenya [Research project, University of Nairobi]. https://erepository.uonbi.ac.ke/items/d3cbac0c-d589-4d82-9bdb-3ab3c50b7deb

Wekesa, J. M. (2023). Effect of financial technology on financial performance of deposit-taking savings and credit cooperative societies in Nairobi County, Kenya [Research project, University of Nairobi]. http://erepository.uonbi.ac.ke/handle/11295/165151

World Bank. (2024). Global Financial Development database: Bank return on assets indicators [Data set]. Federal Reserve Bank of St. Louis. https://fred.stlouisfed.org/