Journal of Business and Entrepreneurship

[ISSN 2958-1125]
Volume: 05 Issue: 01 | November-2026

JBE

Members' Equity and Financial Performance of Deposit-Taking SACCOs in Kenya

Authors

Edith Rotich [1]; Stella Korir [2]; Symon Kiprop [3]

Main author's email: edithjrotich@gmail.com

(1.2.) Kabarak University, Kenya; (3) Egerton University, Kenya.

Cite this article in APA

Rotich, E., Korir, S., & Kiprop, S. (2026). Members' equity and financial performance of deposit-taking SACCOs in Kenya. *Journal of business and entrepreneurship, 5*(1), 210-221. https://doi.org/10.51317/cofx8170

OPEN ACCESS

A publication of Editon Consortium Publishing (online)

Article history

Received: 2026-09-09
Accepted: 2026-10-05
Published: 2026-11-10

Scan this QR to read the paper online

Copyright: ©2026 by the author(s). This article is an Open Access article distributed under the terms and conditions of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License (CC BY-NC-SA 4.0).

Abstract

This study examined the relationship between members' equity and the financial performance of Deposit-Taking Savings and Credit Cooperative Societies (DT-SACCOs) in Kenya. Despite the role of members' equity in enhancing institutional capitalisation, its influence on financial performance, particularly in the long term, remains inadequately explored. Guided by a positivist research philosophy, the study adopted a quantitative methodology and a longitudinal research design, analysing data for the period 2010–2024. The target population comprised 165 DT-SACCOs, of which 141 with complete data were included in the sample, yielding 2,115 DT-SACCO-year observations. Data were obtained from the Sacco Societies Regulatory Authority (SASRA) supervision reports and DT-SACCOs' audited financial statements. The equity ratio served as the proxy for members' equity, whereas return on assets (ROA) was employed to assess financial performance. Data analysis involved descriptive statistics, including means and standard deviations, Pearson's correlation analysis, and a panel Autoregressive Distributed Lag (ARDL) model estimated using the Mean Group (MG) estimator. The analysis established a statistically significant positive association between members' equity and financial performance, as indicated by the correlation coefficient ($r = 0.4631$, $p < 0.001$). The panel ARDL results further indicated positive and statistically significant short-run and long-run relationships between members' equity and financial performance. These findings suggest that stronger equity positions are associated with financial performance among DT-SACCOs. The study recommends that DT-SACCO managers strengthen sustainable equity accumulation while ensuring that capital is allocated and utilised efficiently. The findings provide empirical evidence to inform financing decisions, particularly the development of strategies for sustainable equity accumulation and productive capital utilisation to enhance financial performance.

Key terms: DT-SACCOs, equity financing, financial performance, members' equity, and return on assets.

INTRODUCTION

Despite the importance of members' equity in supporting the capitalisation and financial stability of Deposit–Taking Savings and Credit Cooperative Organisations (DT-SACCOs), it remains unclear whether an increase in members' equity translates into improved financial performance. Even though a stronger equity position is expected to offer a stable financing base, reduce dependency on external borrowing and improve DT-SACCOs' resilience, its relationship with profitability may depend on how effectively the accumulated capital is allocated and utilised.

The DT-SACCOs perform an important role in the financial sector through mobilising members' savings and providing credit to individuals, businesses and organisations (Muriithi, 2024). Through a members-based ownership model and financial intermediation, DT-SACCOs provide alternative sources of financial services, especially for individuals, organisations and businesses seeking accessible credit facilities (Gachenga et al., 2025). The continued contribution of DT-SACCOs to financial inclusion of all people who cannot access formal banking services depends partly on their capacity to maintain adequate capital, manage financial risks and generate sustainable profit for their members (Kanzenge & Wekesa, 2024).

Therefore, DT-SACCOs' capacity to sustain financial intermediation and meet members' expectations relies not only on the availability of financial resources but also on the effective utilisation of these resources to produce sustainable returns.

Members' equity represents a crucial component of the capital structure of Savings and Credit Cooperative Organisations (SACCOs). Depending on their composition, capital structure may involve members' share capital, accumulated reserves and retained surpluses. According to Owor et al. (2026), a stronger equity position for DT-SACCO can provide a shield against financial losses, decrease dependency on external borrowing and support investment in operational capacity. Members' equity may also improve organisational resilience through the provision of capital which does not impose the same contractual repayment commitments as debt. Nonetheless, the relationship between equity and profitability is not essentially similar (Kazungu & Ndiege, 2020). Capital accumulation may include costs, and equity does not assure increased financial performance where resources are underutilised and poorly allocated. In this paper, members' equity is conceptualised as the financial resources accumulated or contributed by members within the DT-SACCO, including share capital, accumulated reserves and retained surpluses, as indicated in the organisation's financial statements.

Financial performance is an important issue facing DT-SACCOs in Kenya because their capacity to sustain lending, maintain adequate liquidity and provide returns to members depends on the efficient management of financial resources (Hillow & Gatauwa, 2026). The Sacco Societies Regulatory Authority (SASRA) annual supervision report for the year 2023 showed that the aggregate Return on Assets (ROA) for DT-SACCO decreased from 2.61 per cent in the year 2022 to 2.47 per cent in the year 2023. In the same period, the core capital to total assets ratio declined from 16.36 per cent to 16.07 per cent, while institutional capital to total assets decreased from 9.58 per cent to 9.11 per cent (SASRA, 2024).

Despite these capital adequacy ratios being above their respective regulatory requirements, their decrease, together with the decline in return on assets, raised questions concerning the relationship between institutional capitalisation and financial performance. This provided a basis for exploring whether increased members' equity was related to the financial performance of DT-SACCOs in Kenya.

Empirical research studies have investigated capital structure (members' equity) and financial performance in various sector contexts, with a number of these studies recording a positive relationship between equity financing, capital adequacy and profitability of financial institutions (Achieng et al., 2018; Suleiman et al., 2022; Almanaseer, 2024). Despite these studies providing evidence on the relationship between equity financing and financial performance, their results come from diverse institutional settings, regulatory environments and ownership structures. Thus, the results cannot be directly generalised to DT-SACCOs, whose equity structure and financial arrangements vary from those

of commercial banks and listed companies. Research undertaken among cooperative societies has also factored in the significance of capitalisation for financial sustainability and resilience in the sector (Segovia-Vargas et al., 2023). For instance, in Ecuador, Segovia-Vargas et al. (2023) investigated the role of SACCOs in strengthening sustainable finance, showing the contribution of financial inclusion and sustainable financial intermediation.

In Tanzania, Kazungu and Ndiege (2020) established a positive relationship between capital structure and the financial performance of SACCOs. Despite these studies showing the importance of capital structure and cooperative financing, they left an empirical and contextual gap regarding the relationship between members' equity and the financial performance of DT-SACCOs. Studies conducted in Kenya have investigated capital adequacy and financial intermediation among DT-SACCOs (Birisi et al., 2024; Muriithi, 2024). Research by Birisi et al. (2024) found that capital adequacy had a significant negative relationship with non – performing loans, implying that stronger capital adequacy resulted in enhanced financial stability among SACCOs. Muriithi (2024) established that the regulatory framework played a significant role in the promotion of transparency and accountability among DT-SACCOs.

Furthermore, Gachenga et al. (2025) established that SACCO size significantly moderated the relationship between financial decision practices and financial sustainability among DT-SACCOs. Despite these studies demonstrating the significance of capital adequacy, regulation and financing decisions to DT-SACCO stability and sustainability, they did not examine the short- and long–run relationship between members' equity and financial performance.

Moreover, the use of static analytical and cross-sectional research methodologies in previous studies may limit analysis of how the relationship between members' equity and financial performance evolves over time. The relationship may reflect both short–run variations and long–run associations, which cannot always be effectively captured through single-period examination. Therefore, a longitudinal research design using a panel approach offers an opportunity to analyse the relationship across DT-SACCOs and over a period of time.

This study sought to examine the relationship between members' equity and the financial performance of DT-SACCOs in Kenya.

Hypothesis

The null hypothesis stated that:

H_0: Members' equity does not have a statistically significant relationship with the financial performance of Deposit-Taking SACCOs in Kenya.

LITERATURE REVIEW

Empirical literature largely supports the proposition that members' equity contributes positively to financial performance across a wide range of organisational and institutional contexts. Globally, studies consistently demonstrate that strong equity positions enhance profitability, improve financial stability, and strengthen an institution's capacity to withstand operational and financial shocks. Almanaseer (2024) found that firms with stronger equity financing achieved superior financial performance due to improved capital adequacy and reduced dependence on external borrowing. Similarly, Suleiman et al. (2022) observed that increased capitalisation through equity strengthened institutional resilience and lowered financing costs, which subsequently improved profitability.

Beyond profitability, stronger equity positions have also been associated with enhanced institutional sustainability and risk absorption capacity. Segovia-Vargas et al. (2023), in their study of savings and credit cooperatives in Ecuador, established that well-capitalised cooperative institutions were better positioned to sustain financial performance while simultaneously pursuing broader developmental objectives. Whereas the data from investor-owned institutions indicate the contribution of equity financing to financial performance through decreased financial risks and costs of borrowing, data from SACCOs offer a diverse perspective by highlighting member ownership, capital accumulation and institutional stability. Collectively, these findings demonstrate that equity financing goes beyond profitability to include institutional resilience, financial autonomy and long-term sustainability.

Evidence from Kenya also points to a positive relationship between equity financing and financial

performance. Yator and Gitagia (2023) reported that organisations with stronger equity bases achieved superior financial outcomes because equity enhanced operational flexibility and enabled institutions to finance investment opportunities internally. Likewise, Achieng et al. (2018) found that firms with higher equity levels experienced improved profitability due to lower financial risk exposure and reduced reliance on debt financing. The findings suggest that equity financing not only reduces vulnerability to external financing pressures but also enhances strategic decision-making by allowing organisations greater control over resource allocation.

The equity-performance relationship appears to be influenced by institutional structure, governance arrangements, and financing objectives. Whereas commercial banks and investor-owned firms often benefit from strong capitalisation through enhanced market confidence and regulatory compliance, cooperative institutions derive additional benefits from member ownership and internal capital accumulation. Birisi et al. (2024) found that capital adequacy significantly contributes to financial stability among DT-SACCOs in Kenya, implying that stronger equity positions improve institutional resilience and risk absorption capacity. Similarly, Muriithi (2024) observed that well-capitalised DT-SACCOs demonstrate superior financial intermediation efficiency because they are less constrained by liquidity pressures and financing uncertainties.

However, Achieng et al. (2018) noted that the contribution of equity to performance depends largely on how effectively institutions utilise internally generated resources. Thus, equity financing does not operate uniformly across institutions but is shaped by governance quality, resource allocation decisions, institutional objectives, and the broader operating environment.

A further theme emerging from the literature concerns the source and composition of equity financing. Existing studies indicate that internally generated equity, particularly retained earnings, reserves, and member contributions, contributes more significantly to sustainable performance than externally sourced capital. Yator and Gitagia (2023) argue that internally generated equity enhances financial autonomy and reduces exposure to financing risks associated with external obligations. Similarly, Achieng et al. (2018) observed that institutions relying on internally accumulated capital enjoy greater strategic flexibility and stronger control over financing decisions. Nevertheless, Hillow and Gatauwa (2026) argue that external equity injections may also support organisational performance through improved governance structures, expanded investment capacity, and enhanced institutional credibility. These differing perspectives suggest that the impact of equity financing cannot be evaluated solely based on the quantity of capital available but must also consider the source, quality, and utilisation of that capital. The findings collectively support the Pecking Order Theory, which proposes that organisations generally prefer internally generated funds because they minimise information asymmetry, reduce financing costs, and lessen dependence on external financiers (Myers & Majluf, 1984). Though Pecking Order theory describes organisational preference for internally generated financing, its proposition demands consideration within the cooperative ownership model, where members' contributions and accumulated reserves comprise significant sources of institutional equity.

Findings from empirical studies have shown that equity financing can support financial performance through enhanced capitalisation, enhanced institutional resilience and reduced financial risk. But the significance of this relationship differs across organisational environments, financing arrangements and methodological designs. Despite previous studies exploring equity financing, capital adequacy and financial performance from various sectors, inadequate empirical focus has been undertaken on the relationship between members' equity and the financial performance of DT-SACCOs in Kenya. Moreover, differences in equity measurement and the use of analytical methods which may not sufficiently capture short-run and long-run relationships leave an empirical gap that this paper sought to fill.

METHODOLOGY

This study adopted a positivist research philosophy, quantitative methodology and longitudinal panel research design to examine the relationship between members' equity and the financial performance of DT-SACCOs in Kenya over 2010–2024. Positivism was

appropriate because the study used objectively verifiable financial data. The target population comprised 165 SASRA-registered DT-SACCOs. A census approach was adopted; however, only 141 had complete data for all 15 years. The remaining 24 were excluded, resulting in a balanced panel of 2,115 institution-year observations.

Data were obtained from audited financial statements and SASRA supervision reports, supplemented where necessary by statements requested from DT-SACCOs. A structured extraction template was used. Data were screened, cross-checked against original records and standardised to ensure accuracy, completeness, consistency and comparability across institutions and years.

Financial performance was measured through Return on Assets (ROA) values, and members' equity was measured using equity ratio values. Return on Assets was computed as net income divided by total assets, whereas the equity ratio was calculated as members' equity divided by total assets. The two indicators were expressed in percentages using the following formula.

$$ROA_{it} = \frac{NI_{it}}{TA_{it}} X100$$

$$ER_{it} = \frac{ME_{it}}{TA_{it}} X100$$

Where:
NI represented net income,
ME represented members' equity, and
TA represented total assets for institution *i* in year *t*.

The descriptive statistics showed that the mean ROA was 0.043946 (nearly 4.39%), while the mean equity ratio was 0.14955 (nearly 14.96%) over the 15-year study period.

Data were analysed using descriptive statistics, correlation analysis and panel econometric methods to investigate the relationship between members' equity and the financial performance of DT-SACCOs. As indicated in the measurement variables section above, financial performance was measured using ROA, while members' equity was measured using the equity ratio. Descriptive statistics (mean and standard deviation) were calculated to summarise the study variables.

Pearson's product-moment correlation analysis was employed to establish the magnitude and direction of the association between members' equity and financial performance. The presence of multicollinearity among the explanatory variables was examined using the Variance Inflation Factor (VIF) test. The resulting values ranged from 1.47 to 5.69, indicating that multicollinearity was not a concern in the estimated model. The Pesaran cross-sectional dependence test produced a value of -0.362 (p=0.7171), showing no statistically significant cross–sectional dependence. Hence, the Levin – Lin – Chu (LLC) first-generation panel unit root test was used to assess the stationarity properties of the variables. Level output showed that ROA, equity ratio and inflation were stationary at the level.

The panel Autoregressive Distributed Lag (ARDL) model was employed to examine both short-run and long-run relationships among the study variables. Its suitability stems from its ability to accommodate explanatory variables integrated of order zero, I (0), and order one, I (1), provided that none is integrated of order two, I (2). The ARDL allows for the inclusion of lagged dependent and explanatory variables to account for dynamic adjustments in financial performance. Moreover, the mean Group (MG) estimator accommodates heterogeneity in the short–run and long–run coefficients across institutions, indicating that DT-SACCOs may vary in their financial structures and responses to changes in members' equity. This was relevant to the 141 cross–sectional units included in the study. Given the 15-year time period, the model specification and lag structure were kept parsimonious to avoid excessive parameter estimation relative to the available time observations.

The general panel ARDL model was specified as:

$$ROA_{it} = f(ER_{it}, CR_{it})$$

Its error-correction representation is expressed as:

$$\Delta ROA_{it} = \emptyset_i \left[ROA_{it,t-1} \beta_{1i} ER_{i,t-1} - \beta'_{2i} C_{i,t-1} \right] + \sum_{j=1}^{p_i - 1} \lambda_{ij} \Delta ROA_{i,t-j}$$

Where:

ROA_{it} represents financial performance, the dependent variable.

ER_{it} represents members' equity ratio, the principal independent variable.

CR_{it} represents the vector of control variables included in the estimated model.

Δ denotes the first-difference operator.

$\emptyset_i$ represents the error-correction coefficient, indicating the speed of adjustment towards long-run equilibrium.

β_{1i} represents the long-run coefficient of members' equity.

λ_{ij}, δ_{ij} *and* γ'_{ij} represent the short-run dynamic coefficients.

p_i and q_i denote the selected lag orders.

ε_{it} represents the error term.

Lagged level coefficients indicate long-run relationships, while differenced variables capture short-run adjustments. A negative, significant error-correction coefficient indicates convergence towards long-run equilibrium.

The Hausman test (χ^2 = 27.79, df = 4, $p < 0.001$) supported the Mean Group estimator over the Pooled Mean Group estimator. Significance was assessed at 5 per cent.

Data came from public reports and audited statements, supplemented by requests. Direct access required prior DT-SACCO management permission.

FINDINGS AND DISCUSSION

Trend Analysis

This section examines how the study variables changed over the period 2010 to 2024. The trend analysis describes the direction and pattern of change in each variable before the regression results are presented, and it helps to identify unusual periods, such as the COVID-19 pandemic, that may influence the later estimates. The trends are based on yearly means across DT-SACCOs.

Trend in Financial Performance (ROA) of DT – SACCOs

Figure 1 shows the mean return on assets (ROA) among DT-SACCOs in Kenya.

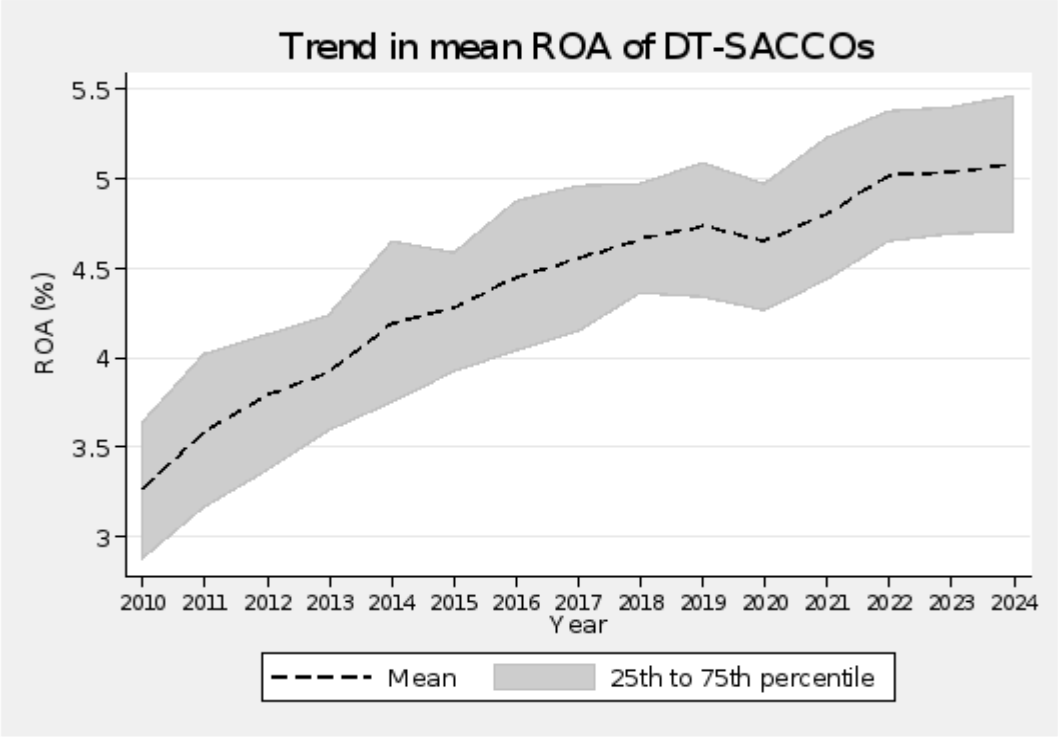

Figure 1: Trend in Mean ROA of DT-SACCOs, 2010 - 2024

Results show that ROA rose from about 3.3 per cent in 2010 to about 5.1 per cent in 2024, an increase of roughly 1.8 percentage points. The increase was strongest between 2010 and 2014, when the mean rose from about 3.3 per cent to about 4.2 per cent, and it continued at a slower pace to about 4.7 per cent in 2019. The shaded area, which spans the 25th to the 75th percentile, moved upwards together with the mean. The lower quartile rose from about 2.9 per cent in 2010 to about 4.7 per cent in 2024, so that by 2024 even DT-SACCOs in the lower quartile earned more than the average institution did in 2010. The improvement was therefore broad-based and did not come from a few high performers alone. The width of the band stayed fairly constant at about 0.7 to 0.9 percentage points, which indicates that profitability differences between DT-SACCOs remained modest throughout the period.

The only clear interruption occurred in 2020, when mean ROA fell slightly from about 4.7 per cent in 2019 to about 4.65 per cent. The upper and lower quartiles also dipped that year, which suggests that the decline was shared across DT-SACCOs and not caused by a few institutions. This period coincided with the COVID-19 pandemic, during which Kenya's real GDP declined by 0.3 per cent, as documented by the Kenya National Bureau of Statistics (KNBS, 2021). Liquidity pressure is one channel through which such conditions can reduce SACCO performance (Otwoko & Maina, 2021).

The decline was small and short-lived, however. Mean ROA recovered to about 4.8 per cent in 2021, exceeded its pre-pandemic level in 2022 at about 5.0 per cent, and remained close to that level in 2023 and 2024.

Trend for Equity Ratio

Figure 2 shows the mean members' equity ratio of DT-SACCOs.

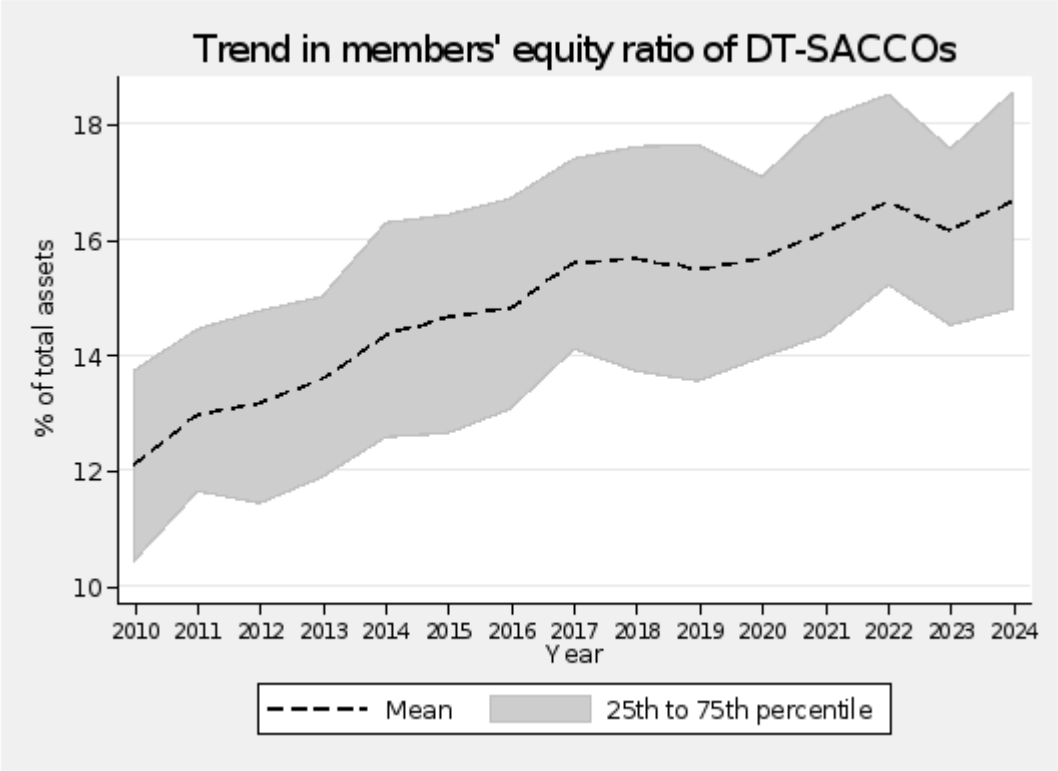

Figure 2: Trend in Members' Equity Ratio of DT-SACCOs, 2010 – 2024

The equity ratio rose from about 12.1 per cent of total assets in 2010 to about 16.7 per cent in 2024, an increase of about 4.6 per centage points over the period. The ratio rose in 12 of the 14 year-to-year changes, which indicates that equity grew faster than total assets in most years. The increase was strongest

between 2010 and 2017, when the mean climbed from about 12.1 per cent to about 15.6 per cent, and it continued at a slower pace afterwards. The only declines were small, in 2019 (from about 15.7% to 15.5%) and in 2023 (from about 16.6% to 16.2%), and in each case the ratio recovered the following year. The overall pattern is therefore one of steady capital accumulation with only minor interruptions.

The shaded area, which shows the range between the 25th and 75th percentiles, moved upwards together with the mean. The lower quartile rose from about 10.4 per cent in 2010 to about 14.8 per cent in 2024, so that by the end of the period DT-SACCOs in the lower quartile held more equity relative to their assets than the average institution did in 2010. This indicates that the improvement in capitalisation was broad-based and did not come from a few well-capitalised institutions alone. At the same time, the band remained wide throughout the period, at about 3 to 4 per centage points in most years. DT-SACCOs therefore continued to differ noticeably in their levels of capitalisation, which may reflect differences in membership growth, retained surpluses, and dividend decisions between institutions.

The steady rise in equity is consistent with the view that DT-SACCOs build capital mainly from internal sources, such as member contributions and retained surpluses. The rise in equity coincides with the fall in external debt, which suggests that internally generated capital replaced part of the borrowing that DT-SACCOs relied on in 2010. The equity ratio was also little affected in 2020, rising slightly from about 15.5 per cent in 2019 to about 15.7 per cent. Equity therefore appears to have been a relatively stable part of the financing structure when other sources were under pressure.

Descriptive Characteristics of Members' Equity and Financial Performance

The descriptive analysis covered 2,115 institution-year observations. The mean ROA was 4.39 per cent (SD=0.70), ranging from 2.38 per cent to 5.84 per cent. This shows relatively moderate variation in profitability, with significant variations in organisation size, asset utilisation, cost structures and operational efficiency. The mean equity ratio of 14.96 per cent (SD=2.42) shows that members' equity financed nearly 15 per cent of the sampled (141) DT-SACCOs' total assets, indicating a modest level of equity capitalisation. The variation in equity ratios (8.67 – 19.81) reflects differences in membership contributions, retained earnings and institutional growth, offering a basis for investigating the relationship between members' equity and financial performance.

Table 1: Descriptive Statistics for Members' Equity and Financial Performance

Variable	Obs	Mean	Std. Dev	Min	Max
ROA	2115	0.043946	0.006955	0.023759	0.058425
Equity_Ratio	2115	0.149055	0.024187	0.086721	0.198102

Source: Study Data (2010 – 2024)

The descriptive findings indicate that equity represented a substantial component of the sampled institutions' assets, although the equity ratio varied across institution-year observations. ROA also varied across the sample, suggesting differences in financial performance over the study period.

Correlation Between Members' Equity and Financial Performance

Pearson's correlation analysis was employed to establish the magnitude and direction of the association between the equity ratio and DT-SACCOs' financial performance, measured by return on assets (ROA

Table 2: Correlation Between Members' Equity and Return on Assets

	ROA	Equity_Ratio
ROA	1	
Equity_Ratio	0.4631 (0.000)	1
Sig.	0.000	

Source: Study Data (2010 – 2024)

The analysis revealed a moderate positive correlation between members' equity and financial performance ($r = 0.4631$), which was statistically significant ($p < 0.001$). This indicates a statistically significant positive association between members' equity and financial performance of DT-SACCOs in Kenya. DT-SACCOs with higher equity ratios appeared to have higher ROA.

Panel ARDL Results for Members' Equity and Financial Performance

The Mean Group (MG) estimator was selected for estimating the panel ARDL model because it was found to be more appropriate than the Pooled Mean Group (PMG) estimator. The MG estimator permits both short-run and long-run coefficients to vary across DT-SACCOs and is therefore suitable when heterogeneity exists across institutions (Pesaran, Shin & Smith, 1999; Hausman, 1978). The Hausman specification test ($\chi^2 = 27.79$, $df = 4$, $p < 0.001$) supported the selection of the MG estimator over the PMG estimator, indicating that the assumption of homogeneous long-run coefficients under PMG was not supported. The model was estimated to investigate the short-run and long-run relationship between members' equity and the financial performance of DT-SACCOs in Kenya. The results are presented in Table 3.

Table 3: Mean Group (MG) ARDL Results for Members' Equity and Financial Performance

Variable	Coefficient	Std. Error	z-statistic	P-value
Long-Run Coefficients	Long-Run Coefficients	Long-Run Coefficients		
Equity Ratio	0.0296	0.0117	2.54	0.011
Short-Run Coefficients	Short-Run Coefficients	Short-Run Coefficients		
Error Correction Term (ECT)	-1.1844	0.0327	-36.2	0.000
ΔEquity Ratio	0.0233	0.0104	2.25	0.0244
Constant	0.0564	0.0124	4.53	0.000

Source: Study Data (2010 – 2024)

The MG estimates indicated a positive relationship between members' equity and financial performance in both the short run and long run. The long-run coefficient for the equity ratio was 0.0296, with a standard error of 0.0117, a z-statistic of 2.54 and a p-value of 0.011. The short-run coefficient on the change in the equity ratio was 0.0233, with a standard error of 0.0104, a z-statistic of 2.25 and a p-value of 0.0244. Both coefficients were positive and statistically significant at the 5 per cent level, indicating that an

increase in the equity ratio was associated with an improvement in ROA in both the short run and long run. The error correction term exhibited a negative and statistically significant coefficient (ECT = −1.1844, SE = 0.0327, z = −36.2, p < 0.001), suggesting that deviations from the long-run equilibrium are corrected through adjustment towards equilibrium following short-run disturbances. However, its absolute magnitude, which exceeds one, suggests possible overshooting during the adjustment process.

Hypothesis Testing

The null hypothesis stated that:

H_0: Members' equity does not have a statistically significant relationship with the financial performance of Deposit-Taking SACCOs in Kenya.

The panel ARDL results presented in Table 3 indicated that members' equity had a positive and statistically significant long-run relationship with financial performance (β = 0.0296, z = 2.54, p = 0.011). Accordingly, the null hypothesis was rejected at the 5 per cent level of significance, establishing that members' equity has a statistically significant positive long-run association with the financial performance of DT-SACCOs in Kenya. Similarly, the short-run coefficient was positive and statistically significant (β = 0.0233, z = 2.25, p = 0.0244). Consequently, the null hypothesis was rejected, confirming a statistically significant positive short-run association between members' equity and the financial performance of DT-SACCOs. Overall, the findings established a positive and statistically significant relationship between members' equity and the financial performance of DT-SACCOs in Kenya across both short-run and long-run periods.

Discussion

The findings revealed that members' equity positively and significantly influenced financial performance in the long run (β = 0.0296, p = 0.011). This implies that DT-SACCOs maintaining higher equity levels are more likely to record improved financial performance than institutions that depend predominantly on external sources of financing. Members' equity strengthens capitalisation, improves institutional stability, and provides a sustainable financing base that supports operational and strategic activities. Adequate equity may also reduce reliance on external borrowing, support investments in service delivery and improve the ability to respond to unexpected financial pressures. The results of the study are consistent with Almanaseer (2024), and Suleiman et al. (2022) established that stronger equity capitalisation resulted in improved financial performance and financial stability. The findings also support the Pecking Order Theory (Myers & Majluf, 1984), which highlights the preference for internally generated funds over external financing. But higher equity does not always guarantee improved profitability, because its contribution to ROA depends on efficient utilisation in income-generating activities; underutilised equity may increase the asset base without proportionately increasing net income. The findings therefore underscore the importance of both adequate equity capitalisation and effective financial resource utilisation in DT-SACCOs.

The results indicated that members' equity was positively and significantly associated with financial performance over the long term (β = 0.0296, p = 0.011). This suggests that DT-SACCOs with stronger equity positions tended to achieve better financial performance through improved capitalisation, reduced dependence on external borrowing and lower financing costs. Members' contributions, accumulated reserves and retained surpluses provide relatively stable financing that can support lending activities, investment and institutional resilience.

CONCLUSION AND RECOMMENDATIONS

Conclusion: This study investigated the relationship between members' equity and the financial performance of DT-SACCOs in Kenya using 15-year longitudinal panel data covering the period 2010 - 2024. Descriptive analysis revealed an upward trend in the mean equity ratio throughout the study period, accompanied by an improvement in average financial performance, as reflected by return on assets (ROA).

The Karl Pearson correlation analysis established the existence of a moderate positive association between equity and the financial performance of DT-SACCOs. Further, MG panel ARDL outcomes showed that the results were statistically significant, with positive short-run and long-run equity coefficients resulting in the rejection of the null hypothesis. This study concludes that stronger equity positions are

associated with better financial performance of DT-SACCOs in Kenya. The study contributes to the empirical evidence on the role of members' equity and the financial performance of DT-SACCOs and the larger cooperative financial institution sector.

Recommendations: Based on the findings of the study, the following recommendations are made to various stakeholders for policy, action and theory. Firstly, DT-SACCOs management boards need to strengthen sustainable equity accumulation by developing appropriate strategies for increasing members' equity through sustainable member contributions, prudent retention of surpluses and sound capital planning, subject to relevant governance and regulatory requirements by SASRA.

Secondly, the study suggests that DT-SACCO management should improve utilisation of equity by making sure that accumulated equity supports productive lending, appropriate investments, effective service delivery and prudent risk management rather than remaining under-utilised.

Thirdly, the study recommends that DT-SACCOs' management boards and SASRA should strengthen regulatory and institutional monitoring of equity ratios together with ROA, loan portfolio quality, liquidity and other relevant financial indicators to aid informed capital distribution decisions.

Fourthly, DT-SACCOs and SASRA need to strengthen their institutional regulatory and monitoring through assessment of financial performance and capital adequacy together, noting that capital strength may not guarantee profitability. With respect to future studies, it is recommended that they verify the dynamic model specification, investigate differences across SACCO categories and evaluate whether financial innovation or operational efficiency changes the relationship between members' equity and financial performance.

REFERENCES

Achieng, B. O., Muturi, W., & Wanjare, J. (2018). Effect of equity financing options on financial performance of non-financial firms listed at the Nairobi Securities Exchange, Kenya. *Applied Economics and Finance, 5*(4), 160–173. https://ideas.repec.org/a/rfa/aefjnl/v5y2018i4p160-173.html

Almanaseer, S. (2024). The impact of equity financing on financial performance: Evidence from Jordan. *Foundations of Management, 16*(1), 157–176. https://doi.org/10.2478/fman-2024-0010

Birisi, H. B., Omagwa, J., & Musau, S. (2024). The link between capital adequacy and financial stability: Evidence from deposit-taking savings and credit co-operative societies in Kenya. *Journal of Finance and Accounting, 8*(6), 1–15. https://doi.org/10.53819/81018102t4268

Gachenga, J., Muthoni, D. K., & Metto, W. K. (2025). Financing decision practices, size of savings and credit cooperative organisation (SACCO) and financial sustainability of deposit-taking savings and credit co-operative societies in Kenya. *Journal of Accounting, Finance and Auditing Studies, 11*(3), 130–139. https://doi.org/10.56578/jafas110301

Hausman, J. A. (1978). Specification tests in econometrics. *Econometrica, 46*(6), 1251–1271. https://doi.org/10.2307/1913827

Hillow, S. J., & Gatauwa, J. M. (2026). Financial restructuring and performance of deposit-taking SACCOs in Kiambu County, Kenya. *International Academic Journal of Economics and Finance, 5*(3), 392–413. https://www.iajournals.org/articles/iajef_v5_i3_392_413.pdf

Kanzenge, S., & Wekesa, M. W. (2024). Financial regulations and financial performance: A case of deposit-taking savings and credit cooperative societies in Mombasa County, Kenya. *The Strategic Journal of Business & Change Management, 11*(4), 662–680. http://dx.doi.org/10.61426/sjbcm.v11i4.3110

Kenya National Bureau of Statistics. (2021). *Economic survey 2021*. https://www.knbs.or.ke/wp-content/uploads/2021/09/Economic-Survey-2021.pdf

Muriithi, P. K. (2024). *Regulatory framework and financial intermediation efficiency of deposit-taking savings and credit cooperative societies in Kenya* [Doctoral dissertation, Jomo Kenyatta University of Agriculture and Technology]. JKUAT Institutional Repository. https://ir.jkuat.ac.ke/handle/123456789/1282

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics, 13*(2), 187–221. https://doi.org/10.1016/0304-405X(84)90023-0

Ndiege, O. B., & Kazungu, I. (2020). Capital structure and performance of savings and credit cooperative societies in Tanzania. *East African Journal of Social and Applied Sciences,* 2(1), 38–48. http://41.59.211.104:8080/xmlui/handle/123456789/223

Otwoko, B. E., & Maina, K. (2021). Effect of liquidity risk on the financial performance of deposit-taking savings and credit cooperative organisations (SACCOs) in Kenya. *International Journal of Research in Business and Social Science, 10*(2), 203–211. https://doi.org/10.20525/ijrbs.v10i2.1056

Owor, J., Namisango, S., & Kyagulanyi, R. (2026). Digital capability, knowledge capital, and governance in East African SACCOs: A systematic review of drivers of financial inclusion. *East African Journal of Business and Economics,* 9(1), 475–488. https://doi.org/10.37284/eajbe.9.1.4709

Pesaran, M. H., Shin, Y., & Smith, R. P. (1999). Pooled mean group estimation of dynamic heterogeneous panels. *Journal of the American Statistical Association,* 94(446), 621–634. https://doi.org/10.1080/01621459.1999.10474156

SASRA. (2024). *Sacco supervision annual report, 2023*. https://www.sasra.go.ke/download/sacco-supervision-annual-report-2023/

Segovia-Vargas, M. J., Miranda-García, I. M., & Oquendo-Torres, F. A. (2023). Sustainable finance: The role of savings and credit cooperatives in Ecuador. *Annals of Public and Cooperative Economics,* 94(3), 951–980. https://doi.org/10.1111/apce.12428

Suleiman, U., Popoola, A., & Yahaya, O. A. (2022). Equity financing and financial performance of listed deposit money banks in Nigeria. *International Journal of Research in Innovation and Social Science,* 6(12), 618–624. https://rsisinternational.org/journals/ijriss/Digital-Library/volume-6-issue-12/619-624.pdf

https://rsisinternational.org/journals/i...

Yator, J., & Gitagia, F. (2023). Effect of equity financing on the financial performance of manufacturing firms listed on the Nairobi Securities Exchange. *International Academic Journal of Economics and Finance,* 3(9), 426–436. https://www.iajournals.org/articles/iajef_v3_i9_426_436.pdf