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Investment in Shares and Financial Performance: Evidence from Deposit Taking Savings and Credit Co-Operative Societies in Kenya

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Abstract

Deposit taking savings and credit co-operative societies (DT-SACCOs) in Kenya are central to financial inclusion, managing assets exceeding Kshs 900 billion and serving millions of members. Despite growing investment portfolios, their financial performance measured by return on assets has remained volatile, fluctuating from 2.45% in 2016 to a sharp decline of 1.59% in 2021, before recovering to 2.61% in 2022 and declining again to 2.48% in 2023. One investment dimension that has attracted limited empirical attention in the SACCO context is investment in shares. This study assessed the influence of investment in shares on financial performance of deposit taking SACCOs in Kenya. The study was guided by Modern Portfolio Theory and Shiftability Theory. A positivist research philosophy and longitudinal research design were adopted, targeting all 182 SASRA-regulated DT-SACCOs in Kenya over the period 2015 to 2024. Secondary panel data were sourced from SASRA annual reports and audited financial statements. Data analysis employed descriptive statistics, correlation analysis, panel unit root tests, and random effects regression. The findings revealed that investment in shares (D_IS) had a positive but statistically insignificant effect on financial performance (β = 0.0048, t = 0.0828, p = 0.9342). The study concludes that investment in shares does not significantly influence the financial performance of deposit taking SACCOs in Kenya, attributed to modest allocations to equity, irregular dividend income, market price volatility,

and regulatory constraints on equity investment. The study recommends that DT-SACCO boards adopt cautious, evidence-based share investment policies with clear risk-return justifications and maximum allocation thresholds, while SASRA should issue clearer regulatory guidance on permissible equity limits.

Keywords: *Investment in Shares, Financial Performance, Deposit Taking SACCOs, Return on Assets, Kenya, Modern Portfolio Theory, Shiftability Theory.*

1.0 Introduction

Savings and credit co-operative societies (SACCOs) serve as key instruments of financial intermediation, particularly in emerging economies. By mobilising member savings and channeling surplus funds into productive investments, SACCOs create economic value, promote financial inclusion, and advance the welfare of their members (Komen et al., 2024). The deposit taking segment of the SACCO sector plays a distinctive role, offering both deposit-taking and lending services regulated under the SACCO Societies Act and supervised by the Sacco Societies Regulatory Authority (SASRA). The financial performance of deposit taking savings and credit co-operative societies is central to their long-term sustainability. A financially robust DT-SACCO is better placed to protect member savings, grow its loan portfolio, pay competitive dividends, and contribute to the broader goals of financial inclusion and economic development. Strong financial performance enables DT-SACCOs to expand their loan portfolios, increase dividend payouts, and sustain service delivery to members over time.

Investment portfolio diversification has increasingly been recognised as a key strategy through which DT-SACCOs can optimise financial performance, manage investment risk, and maintain adequate liquidity. Among the various investment categories available to DT-SACCOs, investment in shares represents a distinct portfolio component with both opportunities and challenges. DT-SACCOs invest in shares of subsidiary institutions such as the Co-operative Holdings Co-operative Society Limited and the Co-operative Insurance Company Limited, as well as in other financial institutions such as the Co-operative Bank of Kenya Limited, KUSCCO ordinary shares, and Safaricom Limited. These equity investments offer potential dividend income and capital appreciation but also expose institutions to market price volatility, liquidity constraints, and concentration risk (Ogum & Jagongo, 2022).

The SACCO supervision annual report (SASRA, 2023) reveals that the return on assets (ROA) for DT-SACCOs has been unstable over the years, recording 2.45% in 2016, rising to 2.69% in 2017, declining to 2.40% in 2018, recovering to 2.60% in 2019 and 2.65% in 2020, before a sharp fall to 1.59% in 2021, partial recovery to 2.61% in 2022, and a further decline to 2.48% in 2023. This volatile trajectory, despite increasing investment activity, raises important questions about the role that specific investment categories particularly investment in shares play in influencing institutional profitability.

Existing studies have yielded mixed evidence on the relationship between equity investments and institutional financial performance. Some scholars find positive contributions of stock investments to profitability (Musyoka & Nyagilo, 2026; Mutia, Agong' & Ochieng', 2025; Kasee & Oluoch, 2025), while others establish insignificant or negative effects (Babarinde, Yusuf, Abdulmajeed & Adelodun, 2025; Sakhdari, Burgers & Davidsson, 2023). Most existing studies have focused on commercial banks, insurance companies, and investment firms, leaving a significant contextual gap regarding deposit taking SACCOs in Kenya. The current study was therefore motivated by the need to generate empirical evidence on how investment

in shares influences the financial performance of DT-SACCOs in Kenya, addressing theoretical, contextual, and methodological gaps identified in the literature.

1.1 Research Problem

Deposit taking SACCOs in Kenya collectively manage substantial assets, with the sector holding assets exceeding Kshs 900 billion as of 2023 (SASRA, 2023). These institutions are critical to Vision 2030's financial inclusion agenda and to the livelihoods of their more than eight million members. Yet, the financial performance of DT-SACCOs as measured by return on assets has remained volatile and inconsistent, pointing to the possibility that current investment strategies may not be optimally structured to generate sustainable returns. Investment in shares, as a specific portfolio component, has received limited empirical scrutiny in the DT-SACCO context, despite its theoretical relevance under Modern Portfolio Theory and its presence in SACCO balance sheets.

Existing studies examining investment diversification and financial performance have predominantly focused on commercial banks (Babarinde et al., 2025), insurance companies (Mutia et al., 2025; Kasee & Oluoch, 2025), investment firms (Bikeri, 2022), and securities exchanges (Oyucho, Ochieng' & Agong', 2023). Studies that are Kenya-specific and SACCO-specific are limited, and those that exist have not systematically isolated the influence of investment in shares as a distinct variable while applying a longitudinal panel data design covering all SASRA-regulated DT-SACCOs. This gap in the empirical literature justified a focused investigation into whether and how investment in shares influences the financial performance of deposit taking SACCOs in Kenya.

1.2 Research Objective

To assess the influence of investment in shares on financial performance of deposit taking SACCOs in Kenya.

1.3 Research Hypothesis

H_0: Investment in shares has no significant influence on financial performance of deposit taking SACCOs in Kenya.

1.4 Value of the Study

This study holds value for multiple stakeholders. From a policy perspective, the findings will inform SASRA and the Ministry of Co-operatives in reviewing and strengthening regulatory guidelines on permissible equity investment limits for DT-SACCOs, thereby safeguarding member savings and promoting prudent investment practices. For SACCO boards and management, the evidence generated will enable more informed strategic decisions regarding the allocation of surplus funds to equity investments, informed by an assessment of their actual contribution to institutional profitability. From a theoretical perspective, the study contributes to the body of knowledge on co-operative financial management by providing empirical evidence on how investment in shares influences financial performance within a co-operative context, thereby extending the application of Modern Portfolio Theory and Shiftability Theory to Kenya's DT-SACCO sub-sector. For researchers and academics, the study addresses identified conceptual and contextual gaps in the existing literature and offers a methodological model for examining portfolio investment-performance relationships in co-operative financial institutions.

1.5 Scope of the Study

This study focused on all 182 SASRA-regulated deposit taking SACCOs in Kenya over a ten-year longitudinal period from 2015 to 2024. The primary variable of interest was investment

in shares, measured as the ratio of total amounts invested in shares to the total investment portfolio. Financial performance was assessed using return on assets (ROA). The study used secondary panel data sourced from SASRA annual supervision reports and individual SACCO audited financial statements. The geographic scope was Kenya, with the DT-SACCO sub-sector serving as the institutional context.

2.0 Literature Review

2.1 Theoretical Framework

This study was underpinned by Modern Portfolio Theory and Shiftability Theory.

2.1.1 Modern Portfolio Theory

The proponent of Modern Portfolio Theory (MPT) was Harry Markowitz (1952). Markowitz demonstrated that the volatility of an entire portfolio is much less compared with the volatility of the sum of its individual parts, thereby illustrating the benefits of diversification, in line with the principle of not putting all eggs in one basket (Mangram, 2013). Markowitz demonstrated mathematically the relationship between risk tolerance and expected returns that leads to an ideal portfolio. The central argument of MPT is that every investor seeks to achieve maximum returns at different risk levels, and that through portfolio diversification across individual and unrelated securities, risks can be significantly reduced. Investors, who are often regarded as risk averse, would engage in high-risk investments only if they anticipate a substantial payoff (Lukomnik & Hawley, 2021).

Modern Portfolio Theory provides an important framework for identifying an efficient portfolio based on expected return, variance, and covariance of the assets held. An efficient portfolio delivers the highest expected return at a given level of risk, or the lowest possible risk for a specified level of expected return (Markowitz, 1952). The combination of all efficient portfolios forms the efficient frontier from which investors select portfolios that match their risk tolerance and financial objectives (Merton, 1972). Tobin (1958) extended this framework by introducing a risk-free asset, while the subsequent Capital Asset Pricing Model established that expected asset returns relate to systematic market risk rather than total standalone risk (Sharpe, 1964; Lintner, 1965; Mossin, 1966).

Modern Portfolio Theory explain how DT-SACCO management can allocate members' funds across different investment categories to obtain reasonable returns while controlling concentration, liquidity, and market risks (Qingma, 2025). In a study investigating portfolio choice and profitability of investment companies on the Nairobi Securities Exchange, Kamau and Maina (2019) found that investment is concerned with a well-selected combination of stocks that have minimum risks. The theory indicates that investment in shares should not be assessed solely by expected dividends or capital gains, but also by how the investment affects the overall risk and return profile of the SACCO. Evidence from Kenya suggests that investment portfolio diversification can reduce unsystematic risk and improve SACCO financial performance when investments are properly selected and monitored (Olando, Jagongo & Mbewa, 2013; Ndirangu & Muturi, 2019). MPT consequently supports the objective of this study by explaining that stock investments can improve the financial performance of DT-SACCOs when they form part of a diversified, regulated, and carefully monitored investment portfolio.

2.1.2 Shiftability Theory

Moulton (1918) was the first to propose the shiftability theory. According to this notion, in order for a financial institution to maintain liquidity, it should hold assets that are quickly convertible into cash and be able to sell them to other investors or lending companies. The

theory posits that institutional liquidity depends on the capability of moving financial assets to other parties at a negotiated price. The underlying premise is that banks and financial institutions maintain liquidity by holding assets that can be quickly converted into cash by selling them to other investors, lenders, or institutions.

Shiftability Theory further proposes that the liquidity of a financial institution depends not merely on the maturity of its assets but also on their marketability, transferability, credit quality, and ability to retain value when converted into cash (Moulton, 1918). Mitchell (1923) subsequently explained that the effectiveness of shiftability depends on the existence of organised markets, willing purchasers, and financial institutions capable of absorbing transferred assets. This position corresponds with the broader financial intermediation argument that institutions transform short-term deposits into longer-term assets while remaining exposed to unexpected withdrawal demands (Diamond & Dybvig, 1983). According to Alim, Ali, and Metla (2021), assets under shiftability theory should be tied to freely marketable forms of value, not only to self-liquidating instruments. By expanding the types of assets that financial institutions may hold, shiftability theory has taken a more holistic view of liquidity management, shifting attention from loans to investments as a tool for maintaining liquidity.

The relevance of Shiftability Theory to investment in shares lies in the recognition that equity holdings in publicly listed institutions such as the Co-operative Bank of Kenya or Safaricom may possess degrees of marketability and transferability that contribute to institutional liquidity. However, unlike government securities which represent the primary liquid asset class under SASRA regulations, equity investments may experience price volatility and market depth limitations, particularly during periods of financial stress. Shiftability Theory therefore underscores that the liquidity contribution of share investments depends critically on market conditions, the depth of equity markets, and the regulatory environment governing equity disposals. The theory consequently helps explain why, despite the theoretical liquidity potential of listed shares, DT-SACCOs operating under conservative regulatory frameworks may find that equity investments contribute marginally to financial performance.

2.2 Empirical Review

Babarinde, Yusuf, Abdulmajeed and Adelodun (2025) examined the effect of investment securities on the financial performance of deposit money banks in Nigeria over the period 2010 to 2020. The study assessed effects of investment securities on earnings per share, return on assets, and return on equity. Using a Panel Autoregressive Distributed Lag technique, the findings revealed that investment securities had a negative but insignificant long-run effect on earnings per share, while effects on return on assets were positive but insignificant in both the short run and long run. Investment securities also had negative and statistically significant effects on return on equity in both periods. The study recommended that bank management should diversify investment portfolios and reduce the proportion of resources committed to unprofitable securities. However, the study treated investment securities as an aggregate portfolio component and focused on deposit money banks in Nigeria, presenting conceptual and contextual gaps. The current study addressed these gaps by focusing on SASRA-regulated DT-SACCOs in Kenya and examining investment in shares as a distinct portfolio variable.

Siahaan, Sadalia and Silalahi (2021) evaluated the effect of financial ratios on stock returns and assessed the moderating influence of earnings per share among banking companies listed on the Indonesia Stock Exchange between 2012 and 2017. The findings revealed that the current ratio, total asset turnover, and return on investment had positive and statistically significant effects on stock returns. However, since the study focused on financial ratios and stock returns rather than portfolio diversification through investment in shares and financial

performance measured by ROA, it presented a conceptual gap. The study was also conducted among seven banking companies listed on the Indonesia Stock Exchange rather than deposit taking SACCOs regulated by SASRA in Kenya, thus presenting a contextual gap. The current study sought to address these gaps by adopting a longitudinal research design focused on SASRA-regulated DT-SACCOs in Kenya.

Oyucho, Ochieng' and Agong' (2023) investigated the effect of foreign portfolio investments on market returns at the NSE20 Share Index in Kenya. The study applied panel regression and the Lagrange multiplier test using STATA 18 software, with secondary data from 2013 to 2022. The findings revealed that foreign equity portfolio investments had a statistically significant positive effect on market returns at the NSE20 Share Index. However, since the study measured performance using market returns rather than return on assets and focused on the capital markets context rather than financial institutions' internal performance, a conceptual gap was identified. The current study addressed the gap by focusing on deposit taking SACCOs and using return on assets as the measure of financial performance.

Kasee and Oluoch (2025) examined the relationship between investment decisions and financial performance among insurance companies in Kenya, focusing on government securities, corporate bonds, stocks, and real estate. The findings indicated that investment in stocks exhibited a moderate positive correlation with return on assets, demonstrating that equity share investments contributed to the profitability of insurance companies, though the contribution was lower than that of government securities. The study recommended that insurers adopt a mixed investment strategy by selectively investing in stocks for growth while maintaining stability through government securities and corporate bonds. However, since the study used a cross-sectional research design and focused on insurance firms regulated by the Insurance Regulatory Authority, conceptual and contextual gaps were identified. The current study bridged these gaps by adopting a longitudinal research design focusing on DT-SACCOs in Kenya.

Mutia, Agong' and Ochieng' (2025) examined the effect of equity investments on the financial performance of insurance companies in Kenya, using ten years of secondary data from 2014 to 2023. The findings revealed that equity investments had a statistically significant positive effect on the financial performance of insurance companies, with firms maintaining diversified equity share portfolios recording higher return on assets than firms with more concentrated investment strategies. However, since the study examined equity investments in insurance firms rather than deposit taking SACCOs, a contextual gap was identified. The current study addressed this gap by focusing on SASRA-regulated DT-SACCOs in Kenya.

Musyoka and Nyagilo (2026) established the effects of investment in equity on the financial performance of tier three commercial banks in Kenya, covering secondary data from 2015 to 2024. Inferential statistical tools included Pearson's product-moment correlation and panel regression analysis. The findings revealed that equity investment had a significant positive effect on financial performance with a beta coefficient of 0.3386 and a p-value of 0.0000, and further indicated that equity investment explained approximately 63.11 per cent of the variation in financial performance. However, since the study focused on investment in equity among tier three commercial banks without examining investment in other financial institutions, loan portfolio investment, and alternative securities as distinct variables, a conceptual gap was identified. The current study addressed these gaps by focusing on SASRA-regulated DT-SACCOs in Kenya.

Disu and Garuba (2026) investigated the impact of capital structure, specifically the equity ratio, on the profitability of listed microfinance banks in Nigeria. Panel data from eight microfinance banks for the period 2013 to 2022 were analysed using fixed effects regression

following the Hausman specification test. The findings revealed that the equity ratio exerted a significant positive influence on both return on assets and return on equity, indicating that microfinance banks with higher equity share investments recorded significantly better profitability outcomes. However, since the study examined equity investment through the lens of capital structure rather than as a distinct portfolio investment decision variable and focused on listed microfinance banks in Nigeria, conceptual and contextual gaps were identified. The current study addressed these gaps by focusing on SASRA-regulated DT-SACCOs in Kenya and examining investment in shares as an independent variable.

Locally, Bikeri (2022) investigated portfolio diversification and financial performance of investment firms in Kenya. Results indicated that increasing the portfolio diversification index by one unit increased performance by 2.52%, while increasing debt over equity by one unit increased performance by 7.07%. The study was of similar lineage to the current study but used different data sets and was contextualised in investment firms, as opposed to DT-SACCOs, creating a contextual gap filled through the completion of the current study. Additionally, Kahihu, Wachira and Muathe (2021) showed that shares investment in Kenyan MFIs is affected by both micro and macro factors, further confirming the multidimensional nature of equity investment performance in financial cooperatives.

2.3 Conceptual Framework

In this study, the dependent variable was financial performance of deposit taking SACCOs in Kenya, measured by return on assets (ROA). The independent variable was investment in shares, measured as the ratio of total amounts invested in shares to the total investment portfolio. The conceptual framework illustrates the posited relationship between investment in shares and financial performance.

Independent Variable **Investment in Shares** ▪ Ln of shares investment to total investment portfolio	→	Dependent Variable **Financial Performance** ▪ Return on Assets

Figure 1: Conceptual Framework

Source: Researcher (2026)

3.0 Methodology

Research Design and Philosophy

The study adopted a positivist research philosophy and a longitudinal research design to examine the influence of investment in shares on the financial performance of deposit taking SACCOs in Kenya. Positivism was suitable because the study relied on measurable financial data and objective statistical testing. The longitudinal design was appropriate because it enabled the researcher to observe and analyse how changes in investment in shares related to changes in financial performance across institutions over the study period of ten years (2015–2024).

Target Population

The target population comprised all 182 SASRA-regulated deposit taking SACCOs in Kenya. A census approach was adopted because the population was manageable and allowed full inclusion of all licensed institutions, thereby eliminating sampling error and enabling more comprehensive and reliable conclusions about the DT-SACCO sub-sector.

Data Collection and Analysis

Secondary panel data were collected using a structured data extraction sheet from SASRA annual supervision reports, individual SACCO audited financial statements, and SACCO websites for the period from 2015 to 2024. Data analysis was conducted using EViews 12 statistical software. Descriptive statistics summarised the central tendency and dispersion of the study variables. The Pearson correlation coefficient examined the bivariate relationships among variables. Panel unit root tests using the Levin-Lin-Chu (LLC) test assessed stationarity, and the Hausman specification test determined the appropriate panel regression model. The random effects regression model was adopted for the direct effects estimation. The regression model estimated for this objective was:

$ROA_{it} = \beta_0 + \beta_1 IS_{it} + \varepsilon_{it}$

Where:

ROA_{it} = Financial performance (Return on Assets) of entity i at time t

β_0 = Constant term

IS_{it} = Investment in shares of entity i at time t

β_1 = Coefficient estimate

ε_{it} = Error term

Before panel regression analysis, diagnostic tests were conducted for normality using the Jarque-Bera test, multicollinearity using the Variance Inflation Factor, stationarity using the Levin-Lin-Chu panel unit root test, serial correlation using the Durbin-Watson statistic, and model specification using the Hausman test. Ethical clearance was obtained from JKUAT and NACOSTI, and all data were handled confidentially and used solely for academic purposes.

4.0 Findings and Discussion

4.1 Descriptive Statistics

Descriptive statistics were used to summarise the characteristics of investment in shares (IS) and financial performance (ROA) over the study period. Table 1 provides the descriptive results for the study variables.

Table 1: Descriptive Statistics

Statistic	ROA	IS
Mean	2.8453	16.8398
Median	2.5484	17.0041
Maximum	10.1772	21.0881
Minimum	-10.1789	9.3631
Std. Dev.	2.1103	2.2325
Jarque-Bera	504.6901	8.6348
Probability	0.0000	0.0133

ROA = Return on Assets; IS = Investment in Shares

Source: Research Data (2026)

Descriptive results in Table 1 indicate that return on assets (ROA) had a mean of 2.8453 with a standard deviation of 2.1103, a maximum of 10.1772, and a minimum of -10.1789. This wide dispersion indicates significant variability in financial performance among DT-SACCOs over the study period, with some institutions recording losses while others achieved strong profitability. The Jarque-Bera statistic of 504.6901 (p = 0.0000) showed that ROA was not

normally distributed, suggesting the presence of outliers and skewness in the financial performance data, consistent with the volatile ROA trajectory documented in SASRA supervision reports.

Investment in shares had a mean of 16.8398 and a standard deviation of 2.2325, indicating moderate variation across the sampled DT-SACCOs. The Jarque-Bera statistic of 8.6348 with a probability value of 0.0133 showed that the distribution of investment in shares was not normally distributed, suggesting that some DT-SACCOs allocated substantially more resources to equity investments than others. The wide range from a minimum of 9.3631 to a maximum of 21.0881 confirms that there is considerable heterogeneity in the extent to which DT-SACCOs invest in shares of subsidiary and other financial institutions.

4.2 Correlation Analysis

Correlation analysis was applied to determine the bivariate relationship between investment in shares and financial performance among deposit taking SACCOs. Table 2 present the correlation matrix for the study variables.

Table 2: Correlation Matrix

Variable	D_ROA	D_IS
D_ROA	1.000000	
D_IS	0.096631	1.000000

Source: Research Data (2026)

The results show a weak positive correlation between investment in shares and return on assets (r = 0.0966), suggesting that investment in shares has weak association with financial performance over the study period. The weak positive correlation between investment in shares and financial performance is consistent with the theoretical expectation under MPT that diversification through equity has the potential to reduce unsystematic risk, but the financial contribution of individual portfolio components depends on the size of the allocation, the quality of the equity selected and prevailing market conditions (Markowitz, 1952). The finding is consistent with the observations made by Bikeri (2022) that, portfolio diversification improved performance though with variable contributions from individual asset classes. The centered VIF for investment in shares was 1.4108, well below the threshold of 10, confirming the absence of multicollinearity.

4.3 Unit Root Tests

Panel unit root tests were conducted to assess the stationarity of the study variables. Table 3 presents the results of unit root tests at level I(0) and Table 4 at first difference I(1).

Table 3: Unit Root Test at Level I(0)

Variable	LLC t-stat (Prob.)	ADF-Fisher χ^2 (Prob.)	Decision (LLC)
D_ROA	-52.5395 (0.0000)	879.143 (0.0000)	Stationary I(0)
D_IS	2.4046 (0.9919)	609.842 (0.0000)	Not stationary I(0)

Source: Research Data (2026)

The unit root tests showed that investment in shares was not stationary at level I(0), with the LLC test producing a positive t-statistic of 2.4046 and a probability value of 0.9919, which failed to reject the null hypothesis of a unit root. Although the IPS, ADF Fisher, and PP Fisher tests rejected the unit root hypothesis for IS at level, the study adopted the conservative LLC decision and treated investment in shares as non-stationary at level.

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Table 4: Unit Root Test at First Difference I(1)

Variable	LLC t-stat (Prob.)	ADF-Fisher χ^2 (Prob.)	Decision (LLC)
D_ROA	-59.6916 (0.0000)	1471.770 (0.0000)	Stationary I(1)
D_IS	-56.5657 (0.0000)	833.501 (0.0000)	Stationary I(1)

Source: Research Data (2026)

After first differencing, D(IS) became stationary with an LLC t-statistic of -56.5657 and a probability value of 0.0000, confirming that the variable was appropriate for inclusion in the panel regression model in first-differenced form. The use of first-differenced variables meant that the estimated regression coefficients represented the effects of changes in investment in shares on changes in return on assets, focusing on short-run dynamics.

4.4 Hausman Test

Prior to estimating the panel regression model, the Hausman specification test was conducted to determine whether a fixed effects or random effects model was appropriate. The Chi-square value obtained was 1.5696 at 3 degrees of freedom with a probability value of 0.6663. Since the probability value was greater than the conventional significance level of 0.05, the null hypothesis could not be rejected, indicating that the individual-specific effects were not systematically correlated with the explanatory variables. The Random Effects Model (REM) was therefore deemed the most suitable for estimation. The random effects model also enabled analysis to capture unobserved variation across cross-sectional units while retaining both within-unit and between-unit variation in the data.

4.5 Regression Analysis

The random effects regression model was estimated to determine the influence of investment in shares on financial performance of deposit taking SACCOs in Kenya. Table 5 presents the regression results.

Table 5: Random Effects Regression Results

Variable	Coefficient	Std. Error	t-Stat	Prob.
D_IS	0.004840	0.058424	0.0828	0.9342
C (Constant)	0.772700	0.880987	0.8771	0.3815
R-squared	0.687481			
Adjusted R-squared	0.572820			
F-statistic (Prob.)	1.874428 (0.035142)			
Durbin-Watson stat	1.756789			

D_IS = First difference of Investment in Shares; Dependent variable: ROA

Source: Research Data (2026)

The random effects regression results revealed that changes in investment in shares (D_IS) had a positive but statistically insignificant effect on return on assets. The estimated coefficient of 0.0048 (t = 0.0828, p = 0.9342) suggested that the effect of investment in shares on financial performance was almost negligible over the study period. Consequently, there was insufficient evidence to conclude that investment in shares contributed meaningfully to variations in return on assets among deposit taking SACCOs in Kenya. The null hypothesis that investment in shares has no significant influence on financial performance of deposit taking SACCOs in Kenya could therefore not be rejected.

The finding is theoretically consistent with Modern Portfolio Theory (Markowitz, 1952), which posits that portfolio diversification enables institutions to maximise expected returns while

minimising risk. The theory supports the allocation of available funds to shares as a means of diversifying income sources beyond member lending. However, the evidence shows that although share investment contributes to portfolio diversification, it does not materially improve the financial performance of deposit taking SACCOs. This may be because of relatively modest allocations to share investment, which may generate irregular dividend income, experience market price fluctuations, and be constrained by regulatory limits on equity investment, thereby limiting their contribution to overall profitability. Shiftability Theory (Moulton, 1918) further explains that while equity investments in publicly listed institutions possess degrees of marketability, their effectiveness as a source of liquidity and income depends on market depth and conditions that may be unfavourable for DT-SACCOs operating under conservative regulatory frameworks.

These findings are empirically supported by the study by Sakhdari et al. (2023) who found that equity investment did not significantly influence the financial performance of financial institutions due to market volatility and conservative investment strategies. Similarly, Teki, Bhaskar and Devi (2020) found that investment in listed shares had an insignificant effect on institutional profitability because returns from equity markets fluctuate considerably and often constitute a relatively small proportion of total investments. The results are also consistent with Babarinde et al. (2025), who found that investment securities had positive but insignificant effects on return on assets in both the short run and long run among Nigerian deposit money banks. These findings contrast with studies that reported positive contributions of equity investments to profitability, such as Musyoka and Nyagilo (2026) and Mutia et al. (2025), which focused on commercial banks and insurance companies respectively, and may reflect the different institutional contexts, size of equity allocations, and performance measurement approaches used.

The R-squared value of 0.6875 indicates that approximately 68.75 per cent of the variation in return on assets was explained by the model. The F-statistic probability of 0.0351 demonstrated the overall statistical significance of the regression model at the five per cent level, while the Durbin-Watson statistic of 1.7568 confirmed the absence of first-order serial correlation in the regression residuals, supporting the validity of the estimated coefficients.

5.0 Conclusion

Investment in shares does not significantly influence the financial performance of deposit taking SACCOs in Kenya. The statistically insignificant and negligible coefficient across both the direct and moderated regression models indicates that equity investments fail to produce returns sufficiently large or consistent to generate meaningful changes in return on assets during the study period. The absence of a significant relationship reflects the limited proportion of SACCO resources allocated to shares, the uncertain nature of dividend income, market price fluctuations, and the liquidity constraints associated with equity holdings. The weak positive correlation between investment in shares and ROA (r = 0.0966) further reinforces this conclusion. DT-SACCOs that concentrate available surplus resources in member loans and institutional placements are therefore more likely to achieve stronger financial outcomes than those that rely on share investments as a primary source of supplementary income. Modern Portfolio Theory and Shiftability Theory both provide explanatory insight into this finding: while the theoretical frameworks support equity investment as a diversification and liquidity management tool, their actual financial contribution in the DT-SACCO context is constrained by regulatory limits, market conditions, and the small scale of equity allocations relative to total investment portfolios.

6.0 Recommendations

The boards of directors and management of deposit taking SACCOs should adopt a cautious and evidence-based approach to equity investment, given the statistically insignificant contribution of share investments to financial performance. Investment policy statements governing the allocation of funds to shares should be reviewed to ensure that equity holdings are justified by clear strategic rationales, risk-return analyses, and documented financial objectives rather than by routine practice. Before committing members' funds to equity investments, management should conduct thorough assessments of expected dividend yields, historical performance records, liquidity and marketability of the shares, the financial condition of the issuing institutions, and the concentration of equity exposure.

SACCO boards should establish maximum allocation thresholds for share investments that are proportionate to the institution's total investable funds, thereby limiting the potential impact of equity market volatility on overall financial performance. Staff responsible for managing SACCO investment portfolios should receive training on equity valuation, market risk assessment, and portfolio performance benchmarking to enhance the quality of investment decision-making. SASRA should consider issuing clearer regulatory guidance on permissible limits for equity investments by DT-SACCOs to protect member savings from excessive exposure to equity market risks, while also creating an enabling environment for SACCOs to access a wider range of listed equity instruments that may offer more stable and competitive returns.

Future research should examine whether the finding of insignificance holds when alternative investment classifications are applied, including distinctions between listed and unlisted shares, types of equity instruments held, and the maturity profiles of equity investments. A finer-grained analysis may reveal investment subcategories that produce meaningful financial effects that aggregate measures may obscure. Researchers should also consider incorporating primary data through interviews with SACCO investment managers and boards of directors to capture qualitative dimensions of equity investment decision-making that secondary data alone cannot reflect.

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