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Abstract

Despite prudential requirements and risk-based supervision by the SACCO Societies Regulatory Authority (SASRA), 63% of deposit-taking SACCOs (DT-SACCOs) report non-performing loans totalling KES 2.67 billion, 29% have been delicensed, and the non-performing loan (NPL) ratio in Nairobi County was 8.66% against a 5% ceiling. This study examined the effect of credit management strategies on loan performance of DT-SACCOs in Nairobi City County, Kenya. Anchored on information asymmetry theory, the study conducted a descriptive cross-sectional census of all 64 licensed DT-SACCOs, obtaining 61 usable questionnaires from credit managers (95.3%). Credit management strategies comprised loan portfolio diversification, debt collection strategies, and internal controls and policies; loan performance was measured by the NPL ratio, controlling for DT-SACCO age, capital adequacy and technology adoption. Primary data were combined with audited 2024 financial statements and analysed using descriptive statistics and multiple linear regression. All three strategies had a negative and significant effect on the NPL ratio, with debt collection the strongest predictor. Among the controls, technology adoption was negative and significant at 5% and capital adequacy at 10%. The model explained 67.8% of the variation in the NPL ratio. It concludes that credit management strategies significantly improve loan performance and no single strategy suffices alone. It recommends that DT-SACCO boards institutionalise multi-channel debt recovery, systematic diversification and documented internal controls and invest in digital credit infrastructure; that the Kenya Union of Savings and Credit Co-operatives sponsor continuous loan-officer training; and that SASRA, the Central Bank of Kenya and credit reference bureaus strengthen credit information sharing.

Keywords: *Credit management strategies, Debt collection, Internal controls, Loan performance, non-performing loans, Deposit-taking SACCOs.*

1.0 Introduction

1.1 Background of the Study

Savings and credit co-operative societies (SACCOs) are an important part of the financial sector, advancing financial inclusion and supporting socio-economic development (International Co-operative Alliance [ICA], 2022). As member-owned institutions, deposit-taking SACCOs (DT-SACCOs) mobilise savings and extend credit that households and small enterprises use to invest in education, housing, business and agriculture. Their co-operative model, built on mutual support and democratic governance, distinguishes them from profit-oriented lenders (Gachenga, Muthoni & Metto, 2025). Because loan income accounts for about 95% of total DT-SACCO revenue, the performance of the loan portfolio is one of the most important indicators of their financial health and operational efficiency (Onsongo, Miroga & Otinga, 2025).

In Kenya, total gross loans advanced by licensed DT-SACCOs reached KES 655.3 billion in 2022, a 9.84% increase on the previous year (SASRA, 2023). This growth has, however, been accompanied by rising non-performing loans (NPLs): the sector NPL ratio stood at 8.86% against a recommended 5% (Central Bank of Kenya, 2024). Weak appraisal, slow recovery and poor borrower follow-up have been identified as the main drivers (Gachini, 2021). Nairobi County hosts some of the largest and most technologically advanced DT-SACCOs in the country, yet it also records some of the highest NPL levels, with maximum NPL ratios of 10.3% among SACCOs serving small traders and informal workers (SASRA, 2023). Economic instability, job losses and inflation have further weakened borrowers' capacity to repay (Ariyo, 2023).

The consequences of weak credit management are visible in the sector. SASRA revoked the licences of B Smart Sacco and Multiple Sacco, both based in Nairobi, for weak credit oversight and non-compliance (SASRA, 2025). Afya Sacco and Medics Sacco incurred substantial write-offs arising from poor lending judgement and ineffective monitoring (SASRA, 2022), while portfolio mismanagement and weak internal controls at Metropolitan National Sacco led to insolvency and a governance inquiry (Commissioner for Co-operative Development, 2025). Sound credit appraisal, regular loan monitoring, portfolio diversification and prompt recovery are therefore widely regarded as essential to healthy loan books (SASRA, 2021; Muriithi, 2019).

Nairobi County's 64 licensed DT-SACCOs hold assets of over KES 450 billion and lend more than KES 300 billion annually, yet the county's average NPL ratio was 8.66% in 2023, well above the recommended 5%, largely because of inadequate credit management (Nabiba & Miroga, 2024; SASRA, 2025). Many institutions in the county serve borrowers in the informal sector whose incomes are irregular, which raises delinquency risk and increases the importance of well-designed credit policies (George & Sile, 2017). At the same time, a number of SACCOs operate with limited staff expertise and technology, which weakens the implementation of otherwise sound credit policies (Kamande, 2023). Strengthening governance, investing in risk management systems and complying with regulatory standards are therefore necessary for DT-SACCOs to align with industry best practice (Muriithi, 2023). This points to the need to establish the effect of specific credit management strategies on the loan performance of DT-SACCOs in Nairobi, which is the focus of this study.

DT-SACCOs are licensed and supervised by SASRA under the Sacco Societies Act No. 14 of 2008 through a risk-based approach intended to protect member savings (SASRA, 2022). Compliance has nonetheless been inconsistent: four DT-SACCOs

were delicensed in January and February 2024 because of poor loan portfolios and resulting financial distress (SASRA, 2024). Since Kenya has no deposit guarantee fund for SACCO members, the burden of protecting member savings rests heavily on the credit management practices of the institutions themselves, which is the focus of this study.

1.2 Statement of the Problem

For DT-SACCOs, loan portfolio performance is the clearest measure of institutional soundness, since credit extension is their core source of revenue (SASRA, 2023). The government, through SASRA, has put in place prudential capital and liquidity requirements, mandatory loan classification and provisioning rules, risk-based supervision, statutory reporting on loan quality and a licensing and delicensing regime (SASRA, 2021). Despite these interventions, 39% of DT-SACCOs continue to struggle to maintain healthy loan portfolios, 63% report NPLs totalling KES 2.67 billion and 29% have been delicensed (SASRA, 2024). Members' savings are therefore exposed, because no deposit guarantee fund protects them when a licence is revoked (Maina, Kiai & Kyalo, 2020). In Nairobi City County, the NPL ratio of 8.66% remains well above the recommended 5%, and several SACCOs in the county have been delicensed or placed under inquiry because of weak credit oversight (SASRA, 2025).

Previous studies have left notable gaps. Gachenga et al. (2025) and Ali and Ndede (2024) were conducted at national or other-county level and did not isolate Nairobi City County, whose DT-SACCOs differ in membership composition, competitive intensity and exposure to informal-sector borrowers. These studies also operationalised credit management broadly through appraisal and monitoring, rather than examining diversification of the loan portfolio, debt collection strategies, and internal controls and policies together as a single set of strategies. Onsongo et al. (2025), although based in Nairobi, measured performance in broad financial terms rather than through the quality of the loan portfolio. This study addresses these gaps by estimating the effect of diversification of the loan portfolio, debt collection strategies, and internal controls and policies on the non-performing loan ratio of DT-SACCOs in Nairobi City County.

1.3 Research Question

What is the effect of credit management strategies on the loan performance of deposit-taking SACCOs in Nairobi City County, Kenya?

1.4 Objective of the Study

The objective of the study was to determine the effect of credit management strategies on the loan performance of deposit-taking SACCOs in Nairobi City County, Kenya.

2.0 Literature Review

2.1 Theoretical Review: Information Asymmetry Theory

The information asymmetry theory was introduced by Akerlof (1970) and extended by Spence (1973) through signalling and by Rothschild and Stiglitz (1976) through screening. It holds that borrowers know more about their financial position and repayment capacity than lenders. This imbalance produces adverse selection, in which riskier borrowers are more likely to seek credit, and moral hazard, in which borrowers change their behaviour after receiving credit in ways that raise default risk. Modern credit markets contain these risks through credit scoring, credit reference bureaus, collateral and loan covenants. The theory has been criticised for assuming overly

rational and opportunistic borrowers and for overlooking behavioural, regulatory and institutional influences (Karanja & Wamugo, 2024; Fadun & Silwimba, 2023). It is nevertheless highly relevant to Kenyan DT-SACCOs, where many members earn informal or seasonal incomes and lack verifiable financial records, making repayment capacity difficult to assess (Gachenga et al., 2025). The theory anchors this study. Diversification of the loan portfolio limits the damage any single mis-assessed borrower group can cause; debt collection strategies detect and respond to post-disbursement behaviour before arrears become irrecoverable; and internal controls and policies, such as collateral requirements and compliance monitoring, constrain both adverse selection at appraisal and moral hazard after disbursement. Credit management strategies therefore act as mechanisms that narrow the information gap and so reduce default (Nyabwari, 2023).

2.2 Empirical Literature Review

Gachenga et al. (2025) studied credit management practices, firm size and financial sustainability among DT-SACCOs in Kenya using a positivist paradigm and cross-sectional survey. Robust credit management enhanced financial sustainability, particularly in larger institutions. The study was national in scope and did not examine diversification, debt collection and internal controls as distinct constructs. Onsongo et al. (2025) found that credit appraisal, collection effort, collateral and loan repayment significantly affected the financial performance of DT-SACCOs in Nairobi County, but performance was measured in broad financial terms rather than loan portfolio quality. Ali and Ndede (2024) reported a positive and significant relationship between credit management practices and the financial performance of DT-SACCOs in Marsabit County, with audit and internal controls, management competence and capital reserves standing out; the rural setting, however, limits its relevance to large urban institutions in competitive markets.

Odongo, Koori and Makori (2025) found that effective credit monitoring and appraisal reduced bad debts in microfinance institutions in Nairobi, while weak implementation of collection policies raised default. Mboe and Kavale (2023) similarly showed that credit scoring, comprehensive appraisal, borrower character and collateral assessment improved repayment among microfinance institutions in Mombasa County. Nabiba and Miroga (2024) reported that credit management practices positively influenced the loan portfolio performance of DT-SACCOs in Nairobi City County. The first two studies were confined to microfinance institutions, which operate under a different regulatory and governance regime from DT-SACCOs.

Outside Kenya, Kwashie, Baidoo and Ayesu (2022) used a random-effects model and found that elevated NPLs significantly reduced the return on assets and economic value added of Ghanaian commercial banks, while bank size, age and GDP growth had positive effects. Fidelis and Umoffong (2020) used an ex post facto design and found that the average collection period was positively related to the return on assets of listed consumer goods firms in Nigeria. Neither study addressed co-operative lenders. Overall, the literature agrees that sound credit management improves financial outcomes, but no study has examined diversification of the loan portfolio, debt collection strategies, and internal controls and policies as an integrated set and measured loan performance by the NPL ratio among urban DT-SACCOs in Nairobi City County, while controlling for institutional age, capital adequacy and technology adoption. The present study fills this gap.

3.0 Research Methodology

3.1 Research Design

The study adopted a descriptive cross-sectional survey design, which captures a population at a single point in time (Robson & McCartan, 2016). The design allowed data to be collected from many institutions and differences between segments of the population, such as SACCO tiers, to be analysed.

3.2 Theoretical Framework

The study is anchored on the information asymmetry theory, which holds that lenders hold less information about repayment capacity than borrowers do, and that credit management strategies serve as mechanisms for closing that gap. Loan performance (Y) was therefore specified as a function of the three credit management strategies, as shown in Equation 1:

$$Y = f(DLP, DCS, ICP) \quad (1)$$

where Y is loan performance, DLP is diversification of the loan portfolio, DCS is debt collection strategies and ICP is internal controls and policies.

3.3 Empirical Model Specification

Equation 1 was extended by introducing the control variables, namely age of the DT-SACCO (AGE), capital adequacy ratio (CAR) and technology adoption level (TAL), giving $Y = f(DLP, DCS, ICP, AGE, CAR, TAL)$. The multiple linear regression model estimated in the study was therefore specified as shown in Equation 2:

$$NPLR = \beta_0 + \beta_1 DLP + \beta_2 DCS + \beta_3 ICP + \beta_4 AGE + \beta_5 CAR + \beta_6 TAL + \varepsilon \quad (2)$$

where NPLR is the non-performing loan ratio, which proxies loan performance, β_0 is the intercept, β_1 to β_6 are the coefficients to be estimated and ε is the error term. Because a higher NPL ratio indicates poorer loan performance, a negative coefficient implies that a variable improves loan performance.

3.4 Measurement of Variables

Table 1 summarises the operational definitions and measurement of the study variables.

Table 1: Description and Measurement of Variables

Variable	Type	Definition	How to Measure
Loan performance (NPLR)	Dependent	The repayment quality of the DT-SACCO's loan book, measured by the share of the gross loan portfolio that is non-performing.	$NPLR = (\text{Total non-performing loans} \div \text{total gross loans}) \times 100$
Diversification of loan portfolio (DLP)	Independent	The spread of lending across different loan products and member categories to reduce concentration risk.	Composite score of 8 questionnaire items on a 5-point Likert scale
Debt collection strategies (DCS)	Independent	The systematic approach to recovering overdue loans, including enforcement methods and timelines.	Composite score of 8 questionnaire items on a 5-point Likert scale
Internal controls and policies (ICP)	Independent	Governance frameworks and mechanisms that prevent fraud and ensure compliance in lending.	Composite score of 7 questionnaire items on a 5-point Likert scale
Age of the DT-SACCO (AGE)	Control	Duration since registration of the DT-SACCO.	Actual number of years since registration
Capital adequacy ratio (CAR)	Control	The DT-SACCO's financial stability buffer.	$CAR = \text{Total equity} \div \text{total assets}$
Technology adoption level (TAL)	Control	The extent to which digital tools are used in operations.	Composite score of 8 questionnaire items on a 5-point Likert scale

Source: Author's description and measurement (2026)

3.5 Target Population, Sampling and Data

The study was conducted in Nairobi City County, which has an estimated population of about 5.5 million (Kenya National Bureau of Statistics [KNBS], 2022) and the highest concentration of DT-SACCO outlets in Kenya, comprising 41 head offices and 23 branch networks (SASRA, 2022). The target population was all 64 licensed DT-SACCOs in the county. A census was adopted, and credit managers were purposively selected as respondents because of their direct involvement in daily credit decisions. Primary data were collected using a self-administered five-section questionnaire anchored on a five-point Likert scale. Secondary data on non-performing loans, gross loans, total assets, total equity and year of registration were drawn from the audited financial statements of the institutions and published regulatory reports for the financial year 2024.

3.6 Pilot Study, Reliability and Validity

A pilot study was conducted with six credit managers from DT-SACCOs in Kiambu County, about 10% of the target population, in line with pilot-sizing guidance (Connelly, 2008; Hertzog, 2008). Pilot participants were excluded from the main study. Reliability was assessed using Cronbach's alpha (Cronbach, 1951), with a threshold of 0.7. Content validity was established through review by the university supervisor and practising finance and credit managers, whose comments were used to reword ambiguous items and remove duplicates. Construct validity was supported by deriving each item from the operational definitions in Table 1 (Alavi, Biros & Cleary, 2024).

3.7 Diagnostic Tests and Data Analysis

Before interpreting the regression results, the models were tested for normality of residuals (Shapiro-Wilk test), heteroscedasticity (Breusch-Pagan test), multicollinearity (variance inflation factor, with VIF below 5 acceptable; Hair, Black, Babin & Anderson, 2019) and autocorrelation (Durbin-Watson statistic, with values between 1.5 and 2.5 acceptable) (Field, 2018; Gujarati & Porter, 2009). Data were analysed in SPSS using descriptive statistics and multiple linear regression. Authorisation was obtained from the National Commission for Science, Technology and Innovation (NACOSTI) and Kenyatta University, participation was voluntary and based on informed consent, and institutional names were replaced with codes to protect confidentiality.

4.0 Results and Discussion

4.1 Response Rate and Reliability

Questionnaires were distributed to credit managers in all 64 DT-SACCOs and all were returned. Three were discarded because of missing responses on key constructs, leaving 61 usable questionnaires, an effective response rate of 95.3%. This exceeds the 70% generally considered adequate for survey research (Mugenda & Mugenda, 2003). As Table 2 shows, all constructs recorded Cronbach's alpha values above 0.8, confirming that the instrument was reliable.

Table 2: Reliability Test Results

Construct	No. of Items	Cronbach's Alpha
Diversification of Loan Portfolio	8	0.831
Debt Collection Strategies	8	0.847
Internal Controls and Policies	7	0.819
Technology Adoption Level	8	0.838

Source: Field Data (2026)

4.2 Background Information of Respondents

Of the 61 respondents, 62.3% were male and 37.7% female, reflecting the higher share of men in senior SACCO management observed by Gachenga et al. (2025). Most held at least a first degree: 47.5% had an undergraduate degree, 34.4% a postgraduate degree, 6.6% a doctorate and 11.5% a certificate or diploma. About two-thirds (67.2%) held professional qualifications, mainly CPA (32.8%) and ACCA (18.0%). The largest group (36.1%) had 6–10 years of SACCO experience, followed by 11–15 years (27.9%), over 15 years (16.4%) and five years or less (19.7%). Respondents were credit managers (42.6%), finance officers (27.9%), operations managers (18.0%) and chief

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executive officers (11.5%), all directly involved in credit decisions. In terms of institutional age, 32.8% of the SACCOs were licensed before 2010, 27.9% in 2010–2014, 26.2% in 2015–2019 and 13.1% from 2020 onwards. The respondents were therefore well qualified to provide informed responses.

4.3 Descriptive Statistics

Table 3 summarises respondents' agreement with statements on each construct, measured on a scale of 1 (strongly disagree) to 5 (strongly agree).

Table 3: Summary of Descriptive Statistics for the Study Constructs

Construct	Mean	Std. Dev.	Highest-rated item (mean)	Lowest-rated item (mean)
Diversification of Loan Portfolio	3.95	0.612	Limiting exposure to high-risk loan categories (4.12)	Regularly reviewing and expanding loan offerings (3.74)
Debt Collection Strategies	4.07	0.587	Timely follow-up on late payments (4.21)	Continuous training of loan officers on credit risk (3.89)
Internal Controls and Policies	4.01	0.603	Internal controls contribute to financial stability (4.19)	Regular updating of internal controls (3.84)
Technology Adoption Level	3.90	0.641	Technology reduces loan processing time (4.09)	Automated credit scoring in loan approval (3.62)

Source: Field Data (2026)

Debt collection strategies had the highest composite mean (4.07). Respondents strongly agreed that timely follow-up on late payments had improved recovery and that multiple channels, including SMS reminders, phone calls, field visits, guarantor activation and legal notices, were in use. The lowest-rated item concerned continuous training of loan officers, suggesting that capacity building is inconsistent across institutions. Internal controls and policies (mean 4.01) were also well established, with strict collateral requirements, restructuring guidelines, regular audits and compliance monitoring in place, although internal controls were not updated with equal frequency in all SACCOs. Diversification of the loan portfolio (mean 3.95) was widely practised, particularly as a means of limiting exposure to high-risk categories, but product innovation varied. Technology adoption (mean 3.90) was moderate to high, yet automated credit scoring recorded the lowest score of any item (3.62), indicating that advanced digital appraisal tools remain unevenly adopted across tiers. Across all constructs, the relatively small standard deviations point to consistent perceptions among respondents.

4.4 Loan Performance by SACCO Tier

Loan performance was measured by the NPL ratio, computed from audited financial statements for the year ended 31 December 2024. Table 4 presents the results by SACCO tier.

Table 4: Loan Performance by SACCO Tier

SACCO Tier (by Total Assets)	N	Mean NPLR (%)	Std. Dev.
Large tier (above KES 5 billion)	14	5.43	1.84
Mid-tier (KES 1–5 billion)	27	8.11	2.76
Small tier (below KES 1 billion)	20	12.87	3.94
Overall	61	8.66	3.21

Source: Audited Financial Statements (2024); Author's Computation

The overall mean NPL ratio of 8.66% matches the Nairobi County average reported by SASRA (2025) and is well above the recommended 5%. Large-tier SACCOs recorded the lowest ratio (5.43%), though still slightly above the threshold, while mid-tier (8.11%) and small-tier (12.87%) institutions performed progressively worse. The wide variation in NPL ratios across institutions provides the variation in loan performance that the regression analysis seeks to explain.

4.5 Diagnostic Test Results

Table 5 summarises the diagnostic tests, and Table 6 reports the multicollinearity results.

Table 5: Normality, Heteroscedasticity and Autocorrelation Tests

Test	Statistic	p-value	Decision
Shapiro-Wilk (normality)	$W = 0.973$	0.218	Residuals normally distributed
Breusch-Pagan (heteroscedasticity)	$\chi^2 = 8.43$	0.209	Homoscedastic residuals
Durbin-Watson (autocorrelation)	1.947	–	No autocorrelation

Source: Author's Computation (2026)

Table 6: Multicollinearity Test Results

Variable	Tolerance	VIF	Decision
Diversification of Loan Portfolio	0.546	1.832	Acceptable
Debt Collection Strategies	0.497	2.014	Acceptable
Internal Controls and Policies	0.514	1.946	Acceptable
Age of DT-SACCO	0.759	1.317	Acceptable
Capital Adequacy Ratio	0.641	1.561	Acceptable
Technology Adoption Level	0.572	1.748	Acceptable

Source: Author's Computation (2026)

The Shapiro-Wilk p-value (0.218) and the Breusch-Pagan p-value (0.209) both exceeded 0.05, so the hypotheses of normal and homoscedastic residuals were not

rejected and robust standard errors were not required. The Durbin-Watson statistic of 1.947 lay within the 1.5–2.5 range, indicating no first-order autocorrelation. VIF values ranged from 1.317 to 2.014, well below 5, showing that multicollinearity was not a concern. The models therefore satisfied the assumptions of ordinary least squares estimation.

4.6 Regression Results and Discussion

The objective of the study was to determine the effect of credit management strategies on the loan performance of DT-SACCOs in Nairobi City County. Table 7 presents the estimates of Equation 2.

Table 7: Regression Results for the Effect of Credit Management Strategies on Loan Performance

Variable	Coefficient	Std. Error	t-stat	p-value
Constant	9.214	1.342	6.866	0.000
Diversification of Loan Portfolio	−0.631***	0.197	−3.203	0.003
Debt Collection Strategies	−0.724***	0.184	−3.935	0.001
Internal Controls and Policies	−0.583***	0.201	−2.900	0.007
Age of DT-SACCO	−0.048	0.034	−1.382	0.173
Capital Adequacy Ratio	−0.312*	0.176	−1.771	0.081
Technology Adoption Level	−0.417**	0.158	−2.639	0.012
R-squared	0.714			
Adjusted R-squared	0.678			
F-statistic	19.782			0.000

Dependent variable: NPLR. *** significant at 1%; ** at 5%; * at 10%. Source: Author's Computation (2026)

The adjusted R-squared of 0.678 indicates that the model explained 67.8% of the variation in the NPL ratio, and the F-statistic (19.782, $p = 0.000$) confirms that the explanatory variables were jointly significant.

Diversification of loan portfolio. The coefficient was negative and significant at the 1% level ($\beta = -0.631$, $p = 0.003$). Holding other factors constant, a one-unit increase in portfolio diversification was associated with a 0.631 percentage-point fall in the NPL ratio. Consistent with the information asymmetry theory, spreading lending across products and member categories limits the damage that any single adverse selection event can do to the portfolio. The finding agrees with Gachenga et al. (2023), who found that diversified portfolios reduce concentrated default risk among Kenyan DT-SACCOs, and with Nabiba and Miroga (2024), who reported a similar effect among DT-SACCOs in Nairobi.

Debt collection strategies. This coefficient was negative, significant at the 1% level and the largest in magnitude ($\beta = -0.724$, $p = 0.001$), making debt collection the strongest predictor of loan performance. A one-unit improvement in collection strategies was associated with a 0.724 percentage-point fall in the NPL ratio. Timely, multi-channel recovery catches delinquency early, before arrears become irrecoverable, which is especially valuable where borrowers are mobile and incomes informal. The

result supports George and Sile (2017) and Onsongo et al. (2025), who linked structured recovery and consistent follow-up to lower NPL levels.

Internal controls and policies. The coefficient was negative and significant at the 1% level ($\beta = -0.583$, $p = 0.007$). Collateral requirements, restructuring guidelines, regular audits and compliance monitoring constrain moral hazard after disbursement and limit discretionary lending. This is consistent with Ali and Ndede (2024), who found that strong internal controls and audit procedures improved DT-SACCO performance, and with Gatimu (2022), who identified internal control systems as key to reducing NPLs.

Control variables. Technology adoption was negative and significant at the 5% level ($\beta = -0.417$, $p = 0.012$), indicating that core banking systems, real-time monitoring and digital appraisal improve the accuracy and timeliness of credit decisions, in line with Karanja and Wamugo (2024) and FSD (2021). The capital adequacy ratio was negative and significant at the 10% level ($\beta = -0.312$, $p = 0.081$), indicating that stronger capital buffers absorb credit losses and support prudent lending, consistent with Maina et al. (2020). SACCO age was not significant ($p = 0.173$), implying that years of operation do not on their own determine loan portfolio quality.

5.0 Summary

The study examined the effect of credit management strategies on the loan performance of DT-SACCOs in Nairobi City County. Using a census of 64 licensed DT-SACCOs, with 61 usable responses, and audited financial data for 2024, it established that the three strategies were widely practised, with composite means of 4.07 for debt collection strategies, 4.01 for internal controls and policies and 3.95 for diversification of the loan portfolio on a five-point scale. Item scores nevertheless ranged from 4.21 for timely follow-up on late payments to 3.74 for regular review and expansion of loan products and 3.62 for automated credit scoring, showing that some practices were applied less consistently than others. The mean NPL ratio was 8.66%, ranging from 5.43% in large-tier to 12.87% in small-tier institutions.

The regression results showed that all three strategies had negative and significant effects on the NPL ratio at the 1% level. Debt collection strategies had the largest effect ($\beta = -0.724$), followed by diversification of the loan portfolio ($\beta = -0.631$) and internal controls and policies ($\beta = -0.583$). Among the control variables, technology adoption was negative and significant at the 5% level, capital adequacy was negative and significant at the 10% level, and SACCO age was not significant at any conventional level. Together, the variables explained 67.8% of the variation in loan performance.

6.0 Conclusion

The study concludes that credit management strategies significantly improve the loan performance of DT-SACCOs in Nairobi City County. Diversification of the loan portfolio, debt collection strategies, and internal controls and policies all lower the NPL ratio, with disciplined debt recovery having the greatest impact. Because all three were significant together, no single strategy is sufficient; a combined approach of spreading risk, enforcing recovery and monitoring compliance is required. These results support the information asymmetry theory, which holds that credit management mechanisms reduce adverse selection and moral hazard.

Among the control variables, the study concludes that the technology adoption level significantly improves loan performance, since institutions using core banking systems,

automated monitoring and digital appraisal tools recorded lower NPL ratios, and that the capital adequacy ratio also reduces the NPL ratio, although at a lower level of significance. The age of the DT-SACCO had no significant effect, so what a DT-SACCO does in managing credit matters more than how long it has been in operation.

7.0 Recommendations

7.1 Policy Recommendations

Since debt collection strategies had the strongest effect on the NPL ratio, boards and management of DT-SACCOs, through their credit committees, should institutionalise multi-channel recovery that combines automated payment reminders, phone follow-up, field visits for chronic defaulters, guarantor activation and escalation to legal action. This will help institutions to detect delinquency early, before accounts deteriorate into losses written off against member funds.

DT-SACCOs, in partnership with the Kenya Union of Savings and Credit Co-operatives (KUSCCO), should treat continuous training of loan officers in credit appraisal and recovery as a core institutional investment rather than a discretionary cost. This recommendation follows from the finding that debt collection strategies had the largest and most significant effect on the NPL ratio ($\beta = -0.724$, $p = 0.001$), while continuous training of loan officers on credit risk assessment recorded the lowest mean (3.89) of all the items measuring that construct. Structured training will support uniform application of recovery procedures across institutions and improve the quality of appraisal at the lending point.

Given the significant effect of portfolio diversification, boards should regularly review loan products to serve formal employees, small business operators and informal-sector workers, and establish product review committees to monitor concentration risk. In view of the significant effect of internal controls, DT-SACCOs, under SASRA supervision, should document collateral assessment guidelines, provide structured restructuring for members in genuine distress and maintain regular internal audit and compliance cycles. Working with the Central Bank of Kenya and licensed credit reference bureaus, they should also strengthen the sharing of borrower credit information within the co-operative sector to curb serial default.

Because technology adoption significantly reduced NPLs, DT-SACCOs should invest in core banking systems, automated loan monitoring and digital credit appraisal in place of manual processes. In addition, the Nairobi City County Government's co-operative development department, together with the Ministry of Co-operatives and Micro, Small and Medium Enterprises (MSME) Development, should expand member education on responsible borrowing and the collective cost of default.

7.2 Areas for Further Research

This study used cross-sectional data from Nairobi City County. Future studies should extend the analysis to other counties, such as Mombasa, Kisumu, Nakuru and Uasin Gishu, where economic conditions and membership profiles differ, and should adopt longitudinal designs to assess the stability of these relationships over time and through regulatory and macroeconomic changes. Further research should also examine newer credit management tools, such as mobile disbursement platforms and machine-learning credit scoring, and investigate whether institutional characteristics such as firm size condition the effect of credit management strategies on loan performance.

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