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Credit Risk Identification and Financial Performance of Savings and Credit Societies in Homabay County, Kenya

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Abstract

Savings and Credit Cooperative Societies (SACCOs) play an important role in savings mobilization and access to affordable credit, but Credit risk remains a challenge to their financial performance. Anchored on Asymmetric Information Theory, a correlational research design was adopted. The population comprised 300 senior managers from 75 registered SACCOs. A stratified sample of 171 managers was selected, and 143 usable questionnaires were returned, representing 83.6% response rate. Data were analyzed using descriptive statistics and simple linear regression, complemented by audited financial data for 2021–2025. Credit risk identification practices were highly implemented, although Credit Reference Bureau reports were comparatively uneven. Credit risk identification had a strong positive relationship with financial performance ($R = .678$) and explained 46.0% of its variance in financial performance. The model was significant, and the null hypothesis was rejected. The study recommends standardized borrower identification, deepening use of credit-reference, digital profiling tools, and continuous monitoring.

Keywords: credit risk identification, financial performance, SACCOs, non-performing loans.

1. INTRODUCTION

1.1 Background of the Study

Savings and Credit Cooperative Societies (SACCOs) are member-owned financial institutions through which members mobilize savings and obtain credit on mutually agreed terms. Their development significance is especially visible in regions where conventional banking services remain limited: they widen financial inclusion, support household enterprises, promote a culture of saving and provide comparatively affordable credit (ACCOSCA, 2021; International Labour Organization, 2020). Kenya has one of Africa's most active cooperative financial sectors, and SACCOs form an important part of the country's financial architecture. In Homa Bay County, the County Integrated Development Plan recognizes SACCOs as vehicles for poverty reduction, smallholder and trader financing, household income growth and economic empowerment (County Government of Homa Bay, 2023).

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The development role of SACCOs depends on financial sustainability. Loans constitute the dominant earning asset for many SACCOs, but lending also exposes member resources to the risk that a borrower will delay or fail to repay principal and interest. Credit risk can disrupt expected cash inflows, weaken liquidity, reduce earnings, erode capital and, at the most severe, threaten the safety of members' deposits. The Basel Committee on Banking Supervision (2019) therefore treats credit risk management as a central component of sound financial intermediation. For SACCOs, the first line of defense is credit risk identification: the systematic recognition and documentation of borrower, product, portfolio and economic conditions that can lead to default.

Policy concern is that prudential regulation has not eliminated portfolio-quality problems. Kenya's SACCO supervision reports show that the ratio of non-performing loans (NPLs) to gross loans remained above the commonly applied 5% benchmark over much of 2019–2024, moving from 6.15% in 2019 to 8.86% in 2021 and remaining at 8.56% in 2024 (SASRA, 2024). Persistent NPLs constrain cash available for withdrawals and new lending, increase collection and provisioning costs, and weaken returns. These effects are particularly consequential in county economies where SACCOs finance households, agriculture, trade and microenterprises.

Credit risk identification should reduce these problems by improving the information available before and after loan approval. Formal documentation, borrower background checks, use of Credit Reference Bureau (CRB) information, trained credit personnel and regular portfolio review can reveal past defaults, repayment-capacity weaknesses, concentration risks and emerging warning signals. Yet the presence of policies does not guarantee consistent use. Smaller or non-deposit-taking SACCOs may face technology, data, staffing and governance constraints. Moreover, much prior research aggregates identification, appraisal, monitoring and recovery into a broad credit-management index. Such aggregation makes it difficult to isolate whether identification itself predicts profitability, liquidity and portfolio quality.

This article addresses that gap by isolating the first objective of a wider study on credit risk management practices in Homa Bay County. The objective was to investigate the effect of credit risk identification on the financial performance of SACCOs. Financial performance was conceptualized through profitability, liquidity and loan portfolio quality, represented by Return on

Equity (ROE), Cash Adequacy Ratio (CAR) and NPL outcomes. The hypothesis tested was: H01: Credit risk identification has no significant effect on the financial performance of SACCOs in Homa Bay County, Kenya. The article contributes county-level evidence from both deposit-taking and non-deposit-taking SACCOs and links managers' assessments of identification systems with trends drawn from audited financial information.

1.2. Conceptual framework

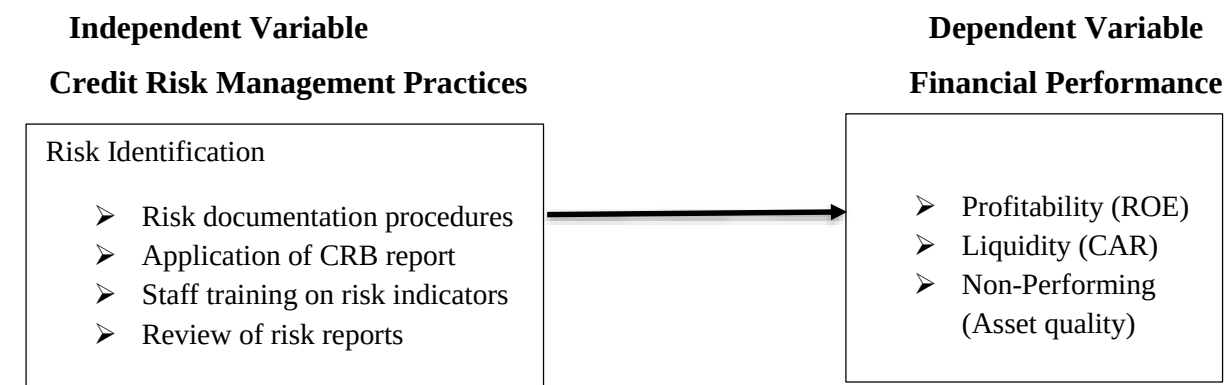


Figure 1: Expected interaction between Credit Risk management and financial performance of SACCOs

Source: Adapted from Kabugu & Wamiori (2022)

Figure 1.1 illustrates the relationship between the independent variable, Credit Risk management Practices and the dependent variable, Financial Performance of SACCOs as pointed out by the empirical works of Kabugu and Wamiori (2022). The researcher conceives risk identification as important constructs of credit risk management practices while profitability, liquidity and Non-performing Loans are considered pertinent to financial success of the SACCO.

1.3. Literature Review

1.3.1 Theoretical foundation: Asymmetric Information Theory

Asymmetric Information Theory explains lending outcomes where borrowers possess information about their intentions, capacity and risk that is not fully available to the lender. Akerlof's (1970) "market for lemons" argument demonstrates how unequal information can impair market selection. In credit markets, two problems follow. Adverse selection occurs before lending when

high-risk applicants are more likely to seek credit or misrepresent their risk characteristics. Moral hazard occurs after disbursement when borrowers take actions that increase default risk because the lender cannot perfectly observe the use of funds or changing circumstances.

Credit risk identification is an institutional response to this information imbalance. Verification of applicant information, credit-history searches, documentary evidence, client interviews and scrutiny of internal reports reduce uncertainty before approval. Periodic portfolio review extends identification beyond the application stage by detecting sector concentration, delinquency patterns and early signs of repayment stress. In a SACCO setting, where relational ties and member guarantees can substitute for conventional collateral, structured identification is particularly important because familiarity may otherwise encourage informal or inconsistent lending decisions. The theory predicts a positive relationship between identification and financial performance. Better information should reduce adverse selection and expected credit losses, preserve interest income and member equity, stabilise loan-repayment cash flows and lower the NPL ratio. Nonetheless, identification systems generate costs and do not eliminate shocks or deliberate concealment. Technology gaps, incomplete credit histories and weak enforcement can limit their effectiveness. The empirical question is therefore whether observable variation in identification practices is associated with materially better performance in the SACCO context.

1.3.2 Empirical review and research gap

Empirical studies generally associate robust credit-risk practices with improved financial outcomes, though measures and contexts differ. Lagat et al. (2013) found that credit risk management practices were important to lending portfolios among Kenyan SACCOs. Amunabi and Koori (2018) and Bwire and Omagwa (2019) similarly linked credit management to the financial performance of deposit-taking SACCOs in Nairobi. Evidence from microfinance institutions in Kampala also indicates that stronger credit risk management supports performance (Kalu et al., 2018). These studies establish the importance of managing loan risk, but their broader composite measures do not always distinguish the specific contribution of risk identification.

Within the identification stage, the literature emphasizes borrower information, credit history and institutional preparedness. Issack and Mutswenje (2022) identify information gathering and credit-

risk controls as relevant to financial outcomes in Kenyan microfinance institutions. Michael et al. (2019), as reviewed in the thesis, associate borrower screening and related identification practices with lower NPL accumulation in Kenyan SACCOs. Evidence from commercial banks suggests just as other financial institutions also suggest that credit appraisal and information systems improve asset quality and performance, although differences in regulation, capitalization and client profiles limit direct transfer to county-based SACCOs.

Liquidity provides an important pathway. When borrowers default, expected inflows are interrupted, reducing funds available to satisfy withdrawals and finance new loans. Better identification can prevent high-risk exposures and allow for earlier intervention. Profitability is affected through fewer loan losses, lower recovery costs and more stable interest income. Portfolio quality improves when likely defaulters and risk concentrations are recognized early. However, stringent identification can also increase transaction time and cost or exclude members with thin credit files. The quality and proportionality of identification—not mere procedural intensity—therefore matters.

Three gaps motivated the present analysis. First, much of the Kenyan evidence concentrates on regulated deposit-taking SACCOs in major urban counties, while Homa Bay contains both deposit-taking and non-deposit-taking institutions serving a distinct rural and small-enterprise economy. Second, studies frequently combine identification with assessment, monitoring and recovery, obscuring its independent explanatory power. Third, perception-based evidence is often not contextualized using objective financial indicators. This study isolates credit risk identification and interprets its survey relationship alongside ROE, CAR and NPL trends from audited statements.

2. Research Methodology

2.1 Design, Population and Sampling

The study adopted a quantitative correlational research design because the purpose was to estimate the direction, strength and significance of the relationship between credit risk identification and financial performance without manipulating institutional practices. The target population comprised 300 senior managers in 75 registered SACCOs operating in Homa Bay County. The

targeted roles were credit managers, finance managers and general managers because these officers are directly involved in lending decisions, risk oversight and financial stewardship.

The population was stratified by managerial category. Proportionate allocation was followed by simple random selection within the strata. Yamane's sample-size formula, at a 5% precision level, produced a target sample of 171 respondents: 85 credit managers, 43 finance managers and 43 general managers. A total of 143 valid questionnaires were returned, equivalent to an 83.6% response rate. Returned questionnaires comprised 67 credit managers, 37 finance managers and 39 general managers. The institutional distribution was nearly balanced between deposit-taking SACCOs (69; 48.3%) and non-deposit-taking SACCOs (74; 51.7%).

2.2 Measurement and Data Collection

Primary data were obtained using a structured five-point Likert questionnaire ranging from 1 (strongly disagree) to 5 (strongly agree). Credit risk identification was measured using four practices: formal documentation before loan disbursement, consistent use of CRB reports, staff training in identifying risk indicators and regular management review of internal portfolio reports. Financial performance was measured through items addressing profitability/ROE, liquidity/CAR and NPL outcomes. Secondary data were extracted from participating SACCOs' audited financial statements for 2021–2025 using a structured protocol. The financial indicators were ROE (net income after tax divided by members' equity), CAR (cash, cash equivalents and marketable securities divided by current liabilities) and the NPL ratio (gross NPLs divided by the gross loan portfolio).

Content validity was assessed through review by university subject experts. Internal consistency met conventional thresholds: Cronbach's alpha was .856 for the credit risk management scale, .722 for financial performance and .884 for the overall instrument. Research authorization was obtained from the university and the National Commission for Science, Technology and Innovation (NACOSTI). Participation was voluntary; respondents were informed of the study purpose, confidentiality protections and their right to withdraw.

2.3 Data Analysis and Model Specification

Frequencies, percentages, means and standard deviations summarized the implementation of identification practices. Pearson's R described the bivariate relationship, while simple linear regression tested the hypothesis at the 5% significance level. The model was specified as $FP = \beta_0 + \beta_1 CRI + \epsilon$, where FP is the composite financial-performance score, CRI is the credit-risk-identification score, β_0 is the intercept, β_1 is the regression coefficient and ϵ is the error term. The analysis was conducted using SPSS Version 27. The secondary financial indicators were used descriptively to contextualize—not independently establish causality for—the survey relationship.

3. Results

3.1 Implementation of credit risk identification practices

Table 1: Descriptive statistics for credit risk identification practices

Identification practice	N	Agree + strongly agree (%)	Mean	SD
Formal documentation before disbursement	143	79.7	4.30	.79
Consistent use of CRB reports	143	65.8	3.68	1.41
Staff trained to identify risk indicators	143	89.5	4.50	.68
Regular review of internal portfolio reports	143	88.8	4.39	.68
Overall credit risk identification	143	78.3	4.22	.65

The overall mean of 4.22 (SD = .65) indicates that respondents generally perceived credit risk identification to be institutionalized. Staff training recorded the highest mean (M = 4.50, SD = .68), followed by review of internal reports (M = 4.39, SD = .68) and formal documentation before disbursement (M = 4.30, SD = .79). These results lead to strong internal preparedness and an emphasis on repeatable procedures. Training helps personnel interpret borrower information and recognize warning indicators, while portfolio reports enable management to move beyond individual applications and identify emerging concentrations or delinquency patterns.

CRB use was the weakest and most variable practice ($M = 3.68$, $SD = 1.41$). Although 65.8% agreed or strongly agreed that their SACCO consistently used CRB reports, the relatively large dispersion shows uneven implementation. This may reflect differences in SACCO type, digital capacity, cost, member data quality or the extent to which formal credit histories are available. The finding is practically important: the information benefit predicted by Asymmetric Information Theory is reduced where external credit histories are used inconsistently. At the same time, CRB information should complement—not replace—income verification, member knowledge and assessment of current repayment capacity, particularly for members with thin formal credit files.

3.2 Regression results

Table 2: Simple regression of financial performance on credit risk identification

Statistic	Value
R	.678
R squared	.460
Adjusted R squared	.456
Standard error of estimate	.35325
F statistic (df = 1, 141)	120.189
Model p-value	< .001

Table 3: Regression coefficients

Variable	B	SE	Beta	t	p
Constant	2.083	.194	—	10.734	< .001
Credit risk identification	.498	.045	.678	10.963	< .001

Credit risk identification was strongly and positively related to financial performance ($R = .678$). The coefficient of determination shows that identification alone explained 46.0% of the observed variance in the composite performance score. The small difference between R squared (.460) and adjusted R squared (.456) suggests limited shrinkage in explanatory power after adjustment for

sample size and number of predictors. The ANOVA result confirms that the model improved prediction over an intercept-only model, $F(1, 141) = 120.189, p < .001$.

The unstandardized coefficient was positive ($B = .498, SE = .045$). Thus, a one-unit increase in the credit-risk-identification score was associated with an estimated .498-unit increase in the financial-performance score. The standardized coefficient ($\beta = .678$) and t statistic ($10.963, p < .001$) show a sizeable and statistically reliable association. The null hypothesis that credit risk identification has no significant effect on financial performance was therefore rejected. Because the design was correlational and the measures were collected at one point in time, “effect” should be interpreted as predictive association rather than definitive causal identification.

4. Discussion

The positive result is consistent with the theoretical proposition that reducing information asymmetry improves lending outcomes. Formal borrower documentation, trained staff, CRB searches and management review make hidden risk more observable. Better visibility reduces adverse selection before disbursement and supports early intervention when portfolio conditions deteriorate. For SACCOs, these mechanisms preserve repayment cash flows, reduce credit losses and release management time and resources that would otherwise be absorbed by recovery efforts. The finding also aligns with Kenyan evidence that credit risk management contributes to SACCO lending and financial performance (Amunabi & Koori, 2018; Bwire & Omagwa, 2019; Lagat et al., 2013). It supports findings from East African microfinance institutions that structured credit controls are associated with stronger outcomes (Kalu et al., 2018). The present study adds specificity by showing that the identification stage, examined on its own, accounts for a substantial share of performance variation across both deposit-taking and non-deposit-taking SACCOs in a county setting.

The result is economically plausible across the three dimensions of performance. Profitability improves when fewer loans migrate into arrears and expected interest is realised. Liquidity improves when scheduled repayments generate predictable cash inflows for withdrawals and new lending. Portfolio quality improves when likely defaulters, repayment stress and concentrations are identified before they become losses. Descriptive audited-financial data were consistent with

this interpretation: average ROE rose from 8.7% in 2021 to 15.1% in 2025, CAR increased from 12.4% to 17.3%, and the NPL ratio declined from 9.8% to 4.6%. These trends cannot be attributed solely to identification because other management practices and economic conditions have also changed, but they provide objective context consistent with the positive survey relationship.

The 54.0% variance not explained by the simple model is equally important. SACCO performance also depends on credit assessment quality, post-disbursement monitoring, recovery systems, governance, operational efficiency, capital adequacy, technology, pricing and macroeconomic conditions. Identification generates information; performance gains follow only when that information is converted into sound approval, pricing, monitoring and mitigation decisions. Accordingly, SACCOs should avoid treating a CRB check or documentation checklist as a complete risk-management system.

The comparatively low and dispersed CRB-use score identifies the most immediate implementation gap. Sector-wide access to credit information can strengthen identification, but indiscriminate automation may exclude informal-sector members whose viable cash flows are not well represented in conventional records. Proportionate systems should combine CRB history with verified cash-flow information, member transaction behavior, guarantor quality and sector-specific risks. Boards should also test whether identification tools improve approval quality, NPL migration and collection outcomes rather than merely confirming procedural compliance.

4.1 Conclusions and Recommendations

The study concludes that credit risk identification is a significant positive predictor of the financial performance of SACCOs in Homa Bay County. Identification practices explained 46.0% performance variation, and the model and coefficient were statistically significant. SACCOs with stronger formal documentation, better-trained staff, more regular portfolio review and more consistent borrower screening, were more likely to report stronger profitability, liquidity and loan portfolio quality. The finding supports Asymmetric Information Theory: mechanisms that narrow the information gap between borrower and lender improve the quality of credit decisions and protect member resources.

SACCO boards and management should standardize minimum borrower-identification procedures across products and branches. These should include verification of identity and income or cash flow, documented credit histories, sector and concentration checks, and clear escalation of warning indicators. Staff training should be continuous and competency-based, with attention to interpreting—not merely collecting information. Management should review portfolio dashboards regularly and connect identified risks to approval limits, pricing, monitoring intensity and provisioning decisions.

CRB information and digital customer profiling should be expanded responsibly. SACCOs should document when and how external credit information is used, maintain data-quality and privacy controls, and provide a review mechanism for inaccurate or incomplete records. For members with limited formal histories, alternative evidence such as transaction patterns and verified enterprise cash flows should be used transparently to avoid unnecessary financial exclusion.

SASRA, county cooperative authorities and sector training institutions, should promote standardized identification guidance that is proportionate to SACCO size and type. Supervisory reviews should examine the effectiveness of identification systems through outcomes such as vintage default rates, roll rates and NPL ratios, not only the existence of policies. Shared training and affordable technology infrastructure would help smaller SACCOs close implementation gaps. Future research should employ longitudinal designs, distinguish deposit-taking from non-deposit-taking SACCOs, and test whether technology, governance or credit assessment mediates the relationship identified in this study.

4.2. Study Limitations

The cross-sectional correlational design does not establish temporal causality. Primary measures relied on managerial perceptions and may be affected by social-desirability or common-method bias, although audited financial trends provided contextual corroboration. The study was limited to Homa Bay County, so generalization to SACCOs operating under different economic and institutional conditions should be cautious. Further, the financial-performance construct combined profitability, liquidity and portfolio-quality perceptions; future studies should estimate separate panel models for ROE, CAR and NPL ratios using institution-level observations.

4.3. Ethical Considerations and Data Availability

The study received research authorization from Tom Mboya University and was licensed by NACOSTI. Participation was voluntary and based on informed consent. Responses and institutional information were treated confidentially and reported in aggregate. The underlying survey and audited institutional data contain confidential organizational information and are therefore not publicly deposited. An anonymized data extract may be made available by the corresponding author upon reasonable request, subject to ethical and institutional restrictions.

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