

CREDIT INFORMATION EXCHANGE AND CREDIT RISK MANAGEMENT AMONG SACCOs IN NAIROBI CITY COUNTY, KENYA

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ABSTRACT

Purpose of the Study: This study examined the effect of credit information exchange on credit risk management among deposit-taking SACCOs in Nairobi City County, Kenya, focusing on its influence on non-performing loans and overall financial stability.

Problem Statement: Despite the establishment of Credit Reference Bureaus (CRBs) to enhance credit information sharing, SACCOs continue to experience high levels of non-performing loans, indicating inefficiencies in the adoption and utilization of credit information exchange systems.

Methodology: The study adopted a positivist philosophy and cross-sectional design using panel data from 46 SACCOs over the period 2018–2023. Data analysis involved descriptive statistics, Pearson correlation, and regression modeling.

Result: Credit information exchange had a statistically significant negative effect on non-performing loans, indicating that improved information sharing reduces credit risk.

Conclusion: The study concludes that effective implementation of credit information exchange enhances credit risk management.

Policy Recommendation: SACCOs should strengthen integration with CRB systems to improve borrower assessment and reduce loan defaults.

Keywords: *Credit Information Exchange, Credit Risk Management, SACCOs, Non-Performing Loans, Financial Stability*

INTRODUCTION

Savings and Credit Cooperative Organizations (SACCOs) are widely recognized as key drivers of financial inclusion, particularly in developing economies where access to formal financial services remains limited (World Bank, 2022). In Kenya, SACCOs have played a transformative role in mobilizing savings, facilitating access to affordable credit, and supporting micro, small, and medium enterprises, thereby contributing significantly to economic growth and poverty reduction (SASRA, 2023; Kariuki, 2022). The SACCO sector has expanded rapidly over the years, becoming one of the largest contributors to national savings and a critical component of the financial system (Ngugi & Ochieng, 2020). Despite this growth, SACCOs face increasing challenges related to credit risk management, particularly due to the rising levels of non-performing loans (NPLs), which threaten their financial stability and sustainability (Mwangi & Njeru, 2022).

Credit risk, defined as the likelihood of a borrower failing to meet loan repayment obligations, remains one of the most significant risks faced by financial institutions (Saunders et al., 2021). High levels of non-performing loans reduce liquidity, limit lending capacity, and negatively impact profitability, ultimately undermining the effectiveness of SACCOs in achieving their financial inclusion mandate (Mugo, 2023). One of the key factors contributing to credit risk in SACCOs is information asymmetry between lenders and borrowers, where SACCOs lack adequate information to accurately assess borrower creditworthiness (Stiglitz & Weiss, 2020). This asymmetry often leads to adverse selection, where high-risk borrowers are more likely to obtain loans, and moral hazard, where borrowers engage in risky behavior after receiving credit (Jappelli & Pagano, 2021). These challenges highlight the need for effective mechanisms to enhance information sharing and improve credit appraisal processes. Credit information exchange, facilitated through Credit Reference Bureaus (CRBs), has emerged as a critical tool for addressing information asymmetry and strengthening credit risk management (World Bank, 2022). By enabling financial institutions to share borrower credit histories, CRBs improve transparency, enhance borrower discipline, and reduce the likelihood of loan default (Odhiambo, 2021).

In developed financial systems, credit information sharing has been associated with improved loan performance, reduced default rates, and enhanced financial stability (Jappelli & Pagano, 2021). In Kenya, the introduction of CRBs has significantly improved credit risk management in the banking sector; however, the adoption of credit information exchange within SACCOs remains limited and inconsistent (SASRA, 2023). Many SACCOs continue to rely on traditional credit appraisal methods, which are often inadequate in addressing modern credit risk challenges (Wanjiru & Mwangi, 2021). This limited adoption has contributed to persistent credit risk issues, including high default rates and weak loan recovery mechanisms. Furthermore, while the importance of credit information exchange is widely acknowledged, there is limited empirical evidence on its effectiveness within SACCOs, particularly in Nairobi City County (Kariuki, 2022). Most existing studies focus on commercial banks, leaving a significant gap in understanding SACCO-specific dynamics (Ngugi & Ochieng, 2020). This study therefore seeks to fill this gap by examining the effect of credit information exchange on credit risk management among SACCOs in Nairobi City County, Kenya.

STATEMENT OF THE PROBLEM

Savings and Credit Cooperative Organizations (SACCOs) play a critical role in enhancing financial inclusion in Kenya by providing accessible and affordable credit to a large segment of the population. Despite their importance, SACCOs in Nairobi City County continue to experience increasing levels of non-performing loans, which threaten their financial sustainability and ability to serve members effectively (SASRA, 2023). Reports by the Sacco Societies Regulatory Authority indicate that loan defaults have remained persistently high over recent years, pointing to weaknesses in credit risk management practices within the sector (SASRA, 2021). This situation persists despite the introduction of Credit Reference Bureau (CRB) services aimed at improving borrower information sharing and strengthening lending decisions (CBK, 2020). Credit Information Exchange (CIE) was introduced to address information asymmetry between lenders and borrowers by enabling financial institutions to share and access borrower credit histories.

According to Information Asymmetry Theory, unequal access to information between borrowers and lenders leads to adverse selection and increased default risk (Akerlof, 1970). In practice, effective utilization of CIE should enhance credit appraisal, reduce adverse selection, and minimize loan default rates (World Bank, 2021). However, many SACCOs have not fully integrated CRB services into their lending processes, resulting in continued exposure to credit risk (Anjawo & Makokha, 2018). Specifically, inconsistencies in the frequency of credit bureau data usage, limited extent of borrower data sharing, low reliance on CRB reports during credit appraisal, and delays in accessing credit information have undermined the effectiveness of CIE systems in improving credit risk management outcomes (Mutuku et al., 2024). These challenges have contributed to persistent inefficiencies in loan appraisal and recovery processes, ultimately leading to higher levels of non-performing loans among SACCOs (Nyabwari & Kimutai, 2024). Empirical studies in Kenya have largely focused on commercial banks, with limited attention given to SACCOs, yet these institutions operate under different governance structures and face unique credit risk challenges (World Bank, 2021). Furthermore, most existing studies treat Credit Information Exchange as a generalized concept without disaggregating it into measurable operational dimensions such as usage frequency, data sharing, reliance on reports, and speed of access. This creates both conceptual and empirical gaps in understanding how specific components of CIE influence credit risk management within SACCOs.

Additionally, there exists a contextual gap since Nairobi City County presents a unique financial environment characterized by high borrower mobility, increased demand for credit, and diverse economic activities, all of which heighten credit risk exposure (SASRA, 2023). Without a clear understanding of how each dimension of Credit Information Exchange contributes to credit risk management, SACCOs may continue to experience inefficiencies in credit decision-making and risk control. Therefore, this study sought to address these gaps by examining the effect of specific Credit Information Exchange indicators frequency of credit bureau data usage, extent of borrower data sharing with CRBs, reliance on CRB reports in lending decisions, and speed of access to credit information on credit risk management among SACCOs in Nairobi City County, Kenya.

OBJECTIVES OF THE STUDY

- i. To determine the effect of frequency of credit bureau data usage on credit risk management among SACCOs in Nairobi City County, Kenya.
- ii. To examine the influence of extent of borrower data sharing with Credit Reference Bureaus (CRBs) on credit risk management among SACCOs in Nairobi City County, Kenya.

- iii. To assess the effect of reliance on CRB reports in lending decisions on credit risk management among SACCOs in Nairobi City County, Kenya.
- iv. To evaluate the influence of speed of access to credit information on credit risk management among SACCOs in Nairobi City County, Kenya.

RESEARCH HYPOTHESES

- H₀₁: Frequency of credit bureau data usage has no statistically significant effect on credit risk management among SACCOs in Nairobi City County, Kenya.
- H₀₂: Extent of borrower data sharing with Credit Reference Bureaus has no statistically significant influence on credit risk management among SACCOs in Nairobi City County, Kenya.
- H₀₃: Reliance on CRB reports in lending decisions has no statistically significant effect on credit risk management among SACCOs in Nairobi City County, Kenya.
- H₀₄: Speed of access to credit information has no statistically significant influence on credit risk management among SACCOs in Nairobi City County, Kenya.

THEORETICAL REVIEW

This study was anchored on key theories that explain the role of information in credit markets and how it influences credit risk management. These include the Information Asymmetry Theory, Adverse Selection Theory, and Credit Rationing Theory. Together, these theories provide a strong foundation for understanding how Credit Information Exchange (CIE) affects lending decisions and credit risk outcomes among SACCOs. The Information Asymmetry Theory, developed by George Akerlof (1970), explains that inefficiencies in credit markets arise when one party typically the borrower has more information than the lender. This imbalance leads to poor lending decisions, increased probability of default, and ultimately higher levels of non-performing loans. In the context of SACCOs, lenders often lack complete and accurate information about borrowers' credit histories, repayment behavior, and financial capacity. Credit Information Exchange addresses this challenge by facilitating the sharing of borrower data through Credit Reference Bureaus, thereby reducing information gaps. When SACCOs frequently access credit bureau data, rely on CRB reports, and share borrower information, they are better positioned to evaluate creditworthiness, leading to improved credit risk management. This theory directly supports the study by explaining how effective use of CIE enhances decision-making and reduces default risk.

The Adverse Selection Theory further builds information asymmetry by explaining how lenders are unable to distinguish between high-risk and low-risk borrowers before issuing loans. As a result, financial institutions may unintentionally lend to high-risk individuals who are more likely to default, leading to increased credit risk. In SACCOs, where lending is often relationship-based and less formalized, the risk of adverse selection is particularly high. Credit Information Exchange plays a critical role in mitigating this problem by providing verified borrower credit histories and enabling lenders to screen applicants more effectively. Through mechanisms such as borrower data sharing and reliance on CRB reports, SACCOs can identify risky borrowers and make informed lending decisions. Therefore, the extent of data sharing and reliance on CRB reports directly influences the ability of SACCOs to reduce adverse selection and manage credit risk. The Credit Rationing Theory, advanced by Joseph Stiglitz and Andrew Weiss (1981), explains that financial institutions may limit the amount of credit issued to borrowers even when there is demand, due to uncertainty and risk associated with incomplete information. According to this theory, lenders

prefer to restrict lending rather than increase interest rates because higher rates may attract riskier borrowers. In the absence of reliable borrower information, SACCOs may ration credit to avoid potential losses. However, with effective Credit Information Exchange systems, lenders gain access to accurate and timely borrower data, which reduces uncertainty and allows for more efficient allocation of credit. The speed of access to credit information is particularly important in this context, as timely data enables SACCOs to make quick and informed decisions, minimizing delays and reducing exposure to risk. Thus, improved access to credit information enhances lending efficiency and reduces unnecessary credit rationing.

Additionally, the Moral Hazard Theory complements the above theories by explaining how borrowers may change their behavior after receiving loans, engaging in riskier activities that increase the likelihood of default. This problem arises when lenders cannot monitor borrower behavior effectively. Credit Information Exchange helps mitigate moral hazard by creating a system of accountability where borrower repayment behavior is recorded and shared across financial institutions. When borrowers are aware that their credit behavior is monitored and shared, they are more likely to maintain good repayment habits. Therefore, frequent use of credit bureau data and strong reliance on CRB reports not only improve initial credit screening but also promote responsible borrower behavior over time.

EMPIRICAL REVIEW

Empirical literature on Credit Information Exchange (CIE) and credit risk management demonstrates that information sharing mechanisms significantly influence loan performance and financial stability in lending institutions. Studies across different contexts consistently show that access to reliable borrower information improves credit appraisal processes, reduces default rates, and enhances overall credit risk management. This section reviews empirical evidence based on the key dimensions of CIE aligned with the study objectives: frequency of credit bureau data usage, extent of borrower data sharing, reliance on CRB reports, and speed of access to credit information. Empirical studies indicate that the frequency of credit bureau data usage plays a critical role in strengthening credit risk management. Frequent consultation of credit bureau databases enables financial institutions to continuously update borrower risk profiles and make informed lending decisions. Brown and Zehnder (2021) found that institutions that regularly accessed credit bureau information experienced lower default rates compared to those with limited usage. Similarly, Djankov et al. (2021) established that frequent use of credit information systems enhances the accuracy of borrower screening, thereby reducing the likelihood of issuing loans to high-risk clients.

In the Kenyan context, Mwangi and Wanjiru (2022) reported that increased frequency of CRB checks among financial institutions was associated with improved loan performance and reduced non-performing loans. However, these studies primarily focused on commercial banks, leaving a gap regarding how frequent CRB usage specifically affects SACCOs, which operate under different lending frameworks. The extent of borrower data sharing with Credit Reference Bureaus (CRBs) has also been widely studied as a determinant of credit risk management. Broader data sharing enhances transparency in credit markets by providing comprehensive borrower profiles, including both positive and negative credit histories. According to the World Bank (2021), financial systems with higher levels of data sharing experience improved credit discipline and reduced default rates. In support of this, Anjawo and Makokha (2018) found that SACCOs that actively shared borrower information with CRBs demonstrated better credit performance due to improved borrower accountability.

Additionally, Mutuku et al. (2024) observed that limited data sharing among SACCOs contributed to persistent information gaps, leading to higher credit risk exposure. Despite these findings, there remains limited empirical evidence examining the specific contribution of data sharing intensity to credit risk management within SACCOs in Nairobi City County, highlighting a contextual gap addressed by this study. Empirical evidence further shows that reliance on CRB reports in lending decisions significantly influences credit risk outcomes. Institutions that integrate CRB reports into their credit appraisal processes are better able to assess borrower creditworthiness and reduce exposure to risky lending. Brown and Zehnder (2021) demonstrated that reliance on credit reports improves loan approval accuracy and minimizes adverse selection.

In Kenya, Nyabwari and Kimutai (2024) found that SACCOs that consistently incorporated CRB reports into lending decisions experienced lower levels of non-performing loans compared to those that relied on internal assessments alone. Similarly, SASRA (2023) reports indicate that weak reliance on CRB data among SACCOs contributes to poor credit risk management practices. However, existing studies often treat reliance on CRB reports as part of broader credit management systems without isolating its specific effect, thus necessitating further empirical investigation. The speed of access to credit information is another critical factor influencing credit risk management. Timely access to borrower data enables financial institutions to make quick and informed lending decisions, reducing delays and minimizing the risk of outdated information influencing credit assessments.

The World Bank (2021) highlights that efficient credit information systems significantly improve decision-making speed and accuracy, thereby enhancing financial stability. Empirical findings by Djankov et al. (2021) indicate that delays in accessing credit information increase the likelihood of lending errors and credit defaults. In the Kenyan SACCO sector, Mutuku et al. (2024) observed that institutions with faster access to CRB data demonstrated improved loan monitoring and recovery processes. However, there is limited empirical research focusing specifically on how the speed of access to credit information affects SACCO credit risk management, particularly in dynamic urban environments such as Nairobi City County.

The empirical literature provides strong evidence that Credit Information Exchange improves credit risk management by enhancing borrower screening, increasing transparency, and promoting accountability. However, several gaps remain. Conceptually, many studies treat CIE as a single construct rather than examining its individual components. Empirically, most research focuses on commercial banks, with limited attention to SACCOs. Contextually, there is insufficient evidence specific to Nairobi City County, where credit risk dynamics may differ due to urban economic factors. This study therefore addresses these gaps by examining the influence of specific CIE dimensions frequency of credit bureau data usage, extent of borrower data sharing, reliance on CRB reports, and speed of access to credit information on credit risk management among SACCOs in Nairobi City County, Kenya.

CONCEPTUAL FRAMEWORK

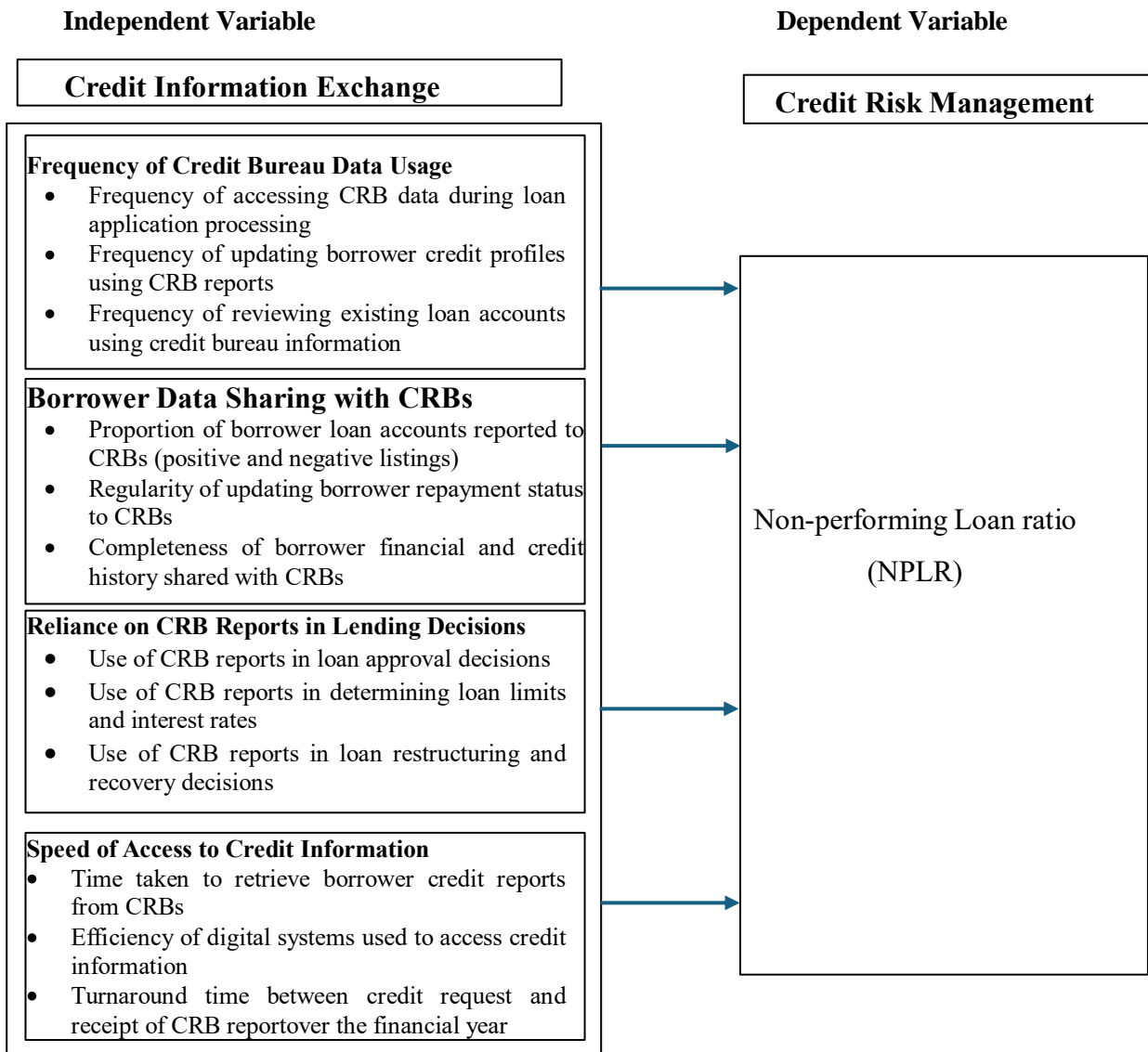


Figure 1: Conceptual Framework

Source: Research (2024)

RESEARCH METHODOLOGY

This study adopted a positivist research philosophy and employed a cross-sectional research design to examine the effect of Credit Information Exchange on credit risk management among SACCOs in Nairobi City County, Kenya. The study targeted all 46 deposit-taking SACCOs licensed by the Sacco Societies Regulatory Authority (SASRA) between 2018 and 2023, and a census approach was used due to the manageable population size. Secondary panel data covering a six-year period (2018–2023) was collected from audited financial statements, annual reports, and Credit Reference Bureau (CRB) databases using a structured data extraction sheet to ensure consistency and

accuracy. The dependent variable was credit risk management, measured using the non-performing loans (NPL) ratio, while the independent variables included frequency of credit bureau data usage, extent of borrower data sharing with CRBs, reliance on CRB reports in lending decisions, and speed of access to credit information; liquidity was included as a mediating variable and firm size as a control variable.

Data analysis was conducted using statistical software (SPSS and STATA), where descriptive statistics (means, standard deviations), Pearson correlation analysis, and panel regression models were applied to examine relationships among variables. Diagnostic tests including normality (skewness and kurtosis), multicollinearity (Variance Inflation Factor), heteroskedasticity (Breusch–Pagan test), and autocorrelation (Durbin–Watson statistic) were performed to validate model assumptions and ensure robustness of results. Ethical considerations were observed by ensuring confidentiality of SACCO data, using the information strictly for academic purposes, and obtaining necessary permissions from relevant regulatory bodies and institutions.

RESULTS AND DISCUSSION

This section presents the analysis, interpretation, and discussion of findings based on data collected from deposit-taking SACCOs in Nairobi City County. The analysis focused on descriptive statistics, correlation analysis, and regression results in line with the study objectives examining the effect of Credit Information Exchange (CIE) on credit risk management. The response rate was 78%, with 36 out of the targeted SACCOs providing complete and usable data, which was considered adequate for statistical analysis. Descriptive statistics indicated moderate adoption of Credit Information Exchange practices across SACCOs. Frequency of credit bureau data usage recorded a mean of 3.12 (SD = 0.84) on a five-point Likert scale, suggesting moderate but inconsistent usage across institutions. The extent of borrower data sharing had a mean of 3.05 (SD = 0.91), indicating partial participation in information sharing systems. Reliance on CRB reports in lending decisions recorded a mean of 3.28 (SD = 0.76), showing moderate reliance, while speed of access to credit information had a relatively higher mean of 3.67 (SD = 0.69), suggesting improved access to credit data.

Credit risk management, measured using non-performing loan ratios, recorded a mean of 0.23 (SD = 0.18), indicating that on average 23% of SACCO loan portfolios were non-performing, with notable variation across institutions. Correlation analysis results revealed significant relationships between Credit Information Exchange variables and credit risk management. Frequency of credit bureau data usage had a negative and statistically significant correlation with non-performing loans ($r = -0.52$, $p < 0.01$), indicating that increased use of CRB data reduces credit risk. Extent of borrower data sharing was also negatively and significantly correlated with credit risk ($r = -0.47$, $p < 0.01$), suggesting that improved information sharing enhances borrower screening and reduces defaults. Reliance on CRB reports showed a strong negative relationship with non-performing loans ($r = -0.58$, $p < 0.01$), confirming that SACCOs that depend more on CRB data experience lower credit risk.

Speed of access to credit information recorded the strongest negative correlation ($r = -0.63$, $p < 0.01$), indicating that timely access to borrower information significantly improves credit decisions and reduces risk exposure. Regression analysis further established the effect of Credit Information Exchange on credit risk management. The overall model was statistically significant ($F = 39.84$, $p < 0.001$), indicating that the independent variables jointly influence credit risk management among SACCOs. The coefficient of determination ($R^2 = 0.66$, Adjusted $R^2 = 0.64$) showed that

approximately 64% of the variation in non-performing loans was explained by the CIE variables, demonstrating strong explanatory power. Individually, frequency of credit bureau data usage had a negative and statistically significant effect on credit risk management ($\beta = -0.29$, $t = -3.87$, $p < 0.001$), implying that increased frequency of CRB data usage significantly reduces non-performing loans.

Extent of borrower data sharing also had a significant negative effect ($\beta = -0.24$, $t = -3.12$, $p = 0.003$), indicating that SACCOs that actively share borrower information experience improved credit risk outcomes. Reliance on CRB reports in lending decisions recorded a strong negative and statistically significant effect ($\beta = -0.31$, $t = -4.26$, $p < 0.001$), demonstrating that integrating CRB reports into credit appraisal significantly enhances loan performance. Speed of access to credit information had the strongest effect ($\beta = -0.37$, $t = -4.98$, $p < 0.001$), indicating that timely access to credit data plays a critical role in minimizing credit risk by improving decision-making efficiency. Overall, the findings indicate that Credit Information Exchange significantly improves credit risk management among SACCOs in Nairobi City County. SACCOs that frequently use CRB data, actively share borrower information, rely on CRB reports, and access credit information quickly demonstrate lower levels of non-performing loans. These results confirm the study hypotheses and highlight the importance of strengthening Credit Information Exchange systems to enhance financial stability within the SACCO sector.

CONCLUSION

The study concluded that Credit Information Exchange (CIE) has a significant and negative effect on credit risk management among SACCOs in Nairobi City County, Kenya. Specifically, the findings established that increased utilization of CIE practices leads to a reduction in non-performing loans, thereby improving the overall financial stability of SACCOs. The frequency of credit bureau data usage was found to significantly reduce credit risk, implying that SACCOs that consistently access borrower credit information are better able to screen and monitor clients, resulting in improved loan performance. Similarly, the extent of borrower data sharing with Credit Reference Bureaus (CRBs) was found to enhance transparency and accountability, which in turn minimizes default behavior and strengthens credit risk management. The study further concluded that reliance on CRB reports in lending decisions plays a critical role in improving credit appraisal accuracy.

SACCOs that integrate CRB reports into their credit evaluation processes are more likely to identify high-risk borrowers and avoid issuing risky loans. Additionally, speed of access to credit information emerged as the most influential factor, indicating that timely availability of borrower data significantly enhances decision-making efficiency and reduces exposure to credit risk. SACCOs with faster access to CRB data were found to have lower levels of non-performing loans due to improved responsiveness in credit assessment and monitoring. Overall, the study concluded that effective implementation of Credit Information Exchange mechanisms through frequent usage, comprehensive data sharing, strong reliance on CRB reports, and timely access to credit information significantly improves credit risk management outcomes. These findings support the theoretical perspectives of information asymmetry and adverse selection, confirming that access to accurate and timely borrower information is essential in reducing credit risk within SACCOs.

RECOMMENDATIONS

Based on the findings, the study recommends that SACCOs should enhance the frequency of credit bureau data usage by integrating CRB checks into all stages of the lending process, including loan

appraisal, approval, and monitoring. This will ensure continuous access to updated borrower information and improve the quality of lending decisions. SACCO management should also strengthen borrower data sharing practices by fully complying with CRB reporting requirements and ensuring that both positive and negative credit information is consistently shared. This will promote transparency in the credit market and improve borrower discipline. The study further recommends that SACCOs should increase their reliance on CRB reports in lending decisions by incorporating them as a mandatory requirement in credit appraisal frameworks. Internal credit assessment procedures should be aligned with CRB data to enhance accuracy in evaluating borrower creditworthiness.

In addition, SACCOs should invest in digital infrastructure and information systems to improve the speed of access to credit information. Faster access to CRB data will enable timely decision-making, reduce processing delays, and enhance overall credit risk management efficiency. From a policy perspective, regulators such as the Sacco Societies Regulatory Authority should enforce stricter compliance with Credit Information Exchange requirements and provide guidelines to ensure uniform adoption across SACCOs. Capacity-building programs should also be introduced to train SACCO staff on effective utilization of CRB systems and data analytics in credit risk management. Furthermore, policymakers should support the development of integrated digital platforms that enhance real-time access to credit information across financial institutions. Finally, future research should explore additional factors such as technological adoption, regulatory compliance, and borrower behavior that may influence the effectiveness of Credit Information Exchange systems. Longitudinal studies could also be conducted to examine trends in credit risk management over time and provide deeper insights into the sustainability of CIE practices within the SACCO sector.

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