

Credit Reference Bureau Services And Credit Risk Management Among Saccos In Nairobi City County, Kenya

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Abstract

Purpose of the Study: This study examined the influence of Credit Reference bureau services on credit risk management among deposit-taking SACCOs in Nairobi City County, Kenya. Specifically, it assessed the effects of credit data sharing, loan repayment efficiency, borrower credit ratings, and credit inquiries on credit risk management.

Problem Statement: Despite the critical role played by SACCOs in promoting financial inclusion, the sector is increasingly facing challenges related to rising non-performing loans. This raises concerns about the effectiveness of credit risk management practices, particularly the underutilization of Credit Reference Bureau (CRB) services compared to commercial banks.

Research Methodology: The study adopted a positivist research philosophy and a cross-sectional research design. The target population comprised 46 deposit-taking SACCOs licensed between 2013 and 2023. Secondary data was collected from audited financial reports and CRB databases. Data analysis involved descriptive statistics, Pearson correlation, and panel regression analysis, supported by diagnostic tests.

Results of the Study: The findings revealed that Credit Reference bureau services significantly improves credit risk management. Credit data sharing and borrower credit ratings had the strongest positive effects, while loan repayment efficiency and credit inquiries also contributed significantly.

Recommendation: The study concludes that effective integration of CRB services enhances SACCOs' ability to manage credit risk. SACCOs should strengthen credit information systems, enhance borrower assessment mechanisms, and adopt data-driven decision-making. Regulators should promote CRB adoption and enforce compliance.

Keywords: Credit Reference bureau services, credit risk management, SACCOs, CRB services, non-performing loans, liquidity

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I. Introduction

Savings and Credit Cooperative Organizations (SACCOs) are widely recognized as key institutions for advancing financial inclusion, particularly in developing economies where access to formal banking services remains limited (World Bank, 2021). In Kenya, SACCOs have become important financial intermediaries that mobilize savings and extend affordable credit to households, micro-entrepreneurs, and small businesses (SASRA, 2024). Their role is especially significant in supporting rural and informal sector economies where conventional banking penetration is low (Githinji & Ngugi, 2022). Through member-based pooling of resources, SACCOs enable access to credit at relatively lower interest rates compared to commercial financial institutions (Mwangi & Wanjiru, 2022). Globally, financial systems increasingly rely on credit information sharing mechanisms to enhance lending efficiency and reduce credit risk exposure (Djankov et al., 2020). Credit Reference Bureaus (CRBs) play a central role in this system by collecting and disseminating borrower credit histories across financial institutions (World Bank, 2021). This information helps lenders reduce information asymmetry and improve the accuracy of credit decisions (Beck et al., 2020). Empirical evidence shows that countries with well-developed credit reporting systems experience lower default rates and improved financial sector stability (Jappelli & Pagano, 2021). In developing economies, however, the adoption of Credit Reference bureau services systems remains uneven across financial institutions (IFC, 2022). While commercial banks have integrated CRB services into their

credit appraisal processes, many non-bank financial institutions such as SACCOs lag behind in full implementation (Olando et al., 2020). This gap exposes SACCOs to higher levels of credit risk due to incomplete borrower information and weak credit assessment mechanisms (Moti et al., 2021). As a result, SACCOs are more vulnerable to adverse selection and moral hazard challenges in lending operations (Stiglitz & Weiss, 2020). In Kenya, SACCOs are regulated by the Sacco Societies Regulatory Authority (SASRA), which oversees their licensing, supervision, and compliance with prudential standards (SASRA, 2024). Despite regulatory oversight, SACCOs continue to face increasing levels of non-performing loans, raising concerns about their financial sustainability (Central Bank of Kenya, 2023). Reports indicate that some SACCOs exceed acceptable thresholds of loan delinquency, which threatens their liquidity and long-term stability (SASRA, 2024). One of the key contributing factors is the inconsistent use of Credit Reference Bureau (CRB) data in credit decision-making processes (Mwangi & Wanjiru, 2022). Empirical studies suggest that Credit Reference bureau services significantly improves credit risk management by enabling financial institutions to better assess borrower creditworthiness (Kariuki & Wafula, 2023). Institutions that actively use CRB reports tend to experience lower default rates compared to those that rely solely on traditional credit assessment methods (Mugo & Njenga, 2024). Similarly, borrower credit scoring systems enhance objectivity in lending decisions by providing standardized risk profiles (Kimani & Muturi, 2023). These mechanisms reduce reliance on subjective judgment and improve loan portfolio quality (Ndungu & Wekesa, 2025). Despite these benefits, SACCOs face multiple barriers to full adoption of credit information systems (Olando et al., 2020). These challenges include limited ICT infrastructure, high implementation costs, and inadequate staff capacity to interpret credit data effectively (Githinji & Ngugi, 2022). In addition, some SACCO members perceive CRB listing as punitive, which affects borrower willingness to comply with repayment obligations (Mugo & Njenga, 2024). Such perceptions have slowed down the integration of Credit Reference bureau services mechanisms within the SACCO sector (World Bank, 2021). Given these challenges, there is a growing need to empirically examine how Credit Reference bureau services influences credit risk management in SACCOs (Mwangi & Wanjiru, 2022). Specifically, understanding the roles of credit data sharing, loan repayment efficiency, borrower credit scores, and loan default inquiries is essential for improving lending outcomes (Kariuki & Wafula, 2023). Furthermore, examining the mediating role of liquidity provides deeper insight into how financial stability interacts with credit risk systems (Ndungu & Wekesa, 2025). This study therefore seeks to address these gaps within SACCOs in Nairobi City County, Kenya (SASRA, 2024).

II. Statement Of The Problem

Savings and Credit Cooperative Organizations (SACCOs) in Kenya play a central role in advancing financial inclusion by extending affordable credit and mobilizing savings among members, particularly in low-income and rural populations (WOCCU, 2021; SASRA, 2023). Despite this critical mandate, many SACCOs continue to experience increasing levels of non-performing loans, which threaten their liquidity positions, sustainability, and overall financial stability (SASRA, 2024; World Bank, 2022). This challenge has intensified in recent years, especially as loan portfolios expand faster than the capacity of SACCOs to effectively assess and monitor borrower risk profiles (IMF, 2023). Credit risk management has therefore become a critical concern within the SACCO sector, as poor loan performance directly affects operational efficiency and member confidence (CBK, 2023; FSDA Africa, 2022). One of the key interventions introduced to strengthen credit risk management in financial institutions is the use of Credit Reference Bureau (CRB) services, which provide borrower credit histories, repayment behavior, and default records to inform lending decisions (World Bank, 2022; IFC, 2021). However, despite regulatory encouragement and availability of CRB systems in Kenya, many SACCOs have not fully integrated these services into their lending processes, resulting in continued exposure to adverse selection and moral hazard risks (SASRA, 2024; CBK, 2023). Empirical studies suggest that while commercial banks have significantly improved credit risk outcomes through CRB integration, SACCOs lag due to operational, financial, and technological constraints (IMF, 2023; FSDA Africa, 2022). This gap raises concerns regarding the effectiveness of Credit Reference bureau services, borrower credit scoring, loan repayment monitoring, and default enquiry systems in influencing credit risk management outcomes within SACCOs (World Bank, 2022; WOCCU, 2021). Methodologically, most existing studies on credit risk management in Kenya have focused on commercial banks, microfinance institutions, or general financial sector performance, leaving SACCO-specific empirical gaps, particularly within Nairobi City County where SACCO operations are highly concentrated and competitive (CBK, 2023; SASRA, 2024). Additionally, few studies have incorporated advanced statistical approaches such as panel regression and mediation analysis to examine the complex relationships between CRB services and credit risk outcomes (IMF, 2023). This limits the depth of understanding regarding how individual CRB components collectively influence SACCO financial performance and risk exposure. Conceptually, there is limited integration of theories such as Adverse Selection Theory, Moral Hazard Theory, and Information Asymmetry Theory in explaining how CRB services influence lending behavior and credit risk outcomes in SACCOs (Akerlof, 1970; Stiglitz & Weiss, 1981). Empirically, there is insufficient evidence on how Credit Reference bureau services, loan repayment efficiency, borrower credit scores, and loan default enquiries

individually and jointly affect credit risk management in SACCOs. Contextually, Nairobi City County presents a unique environment characterized by high financial competition, diverse membership bases, and rapid financial digitalization, yet it remains under-researched in SACCO credit risk literature (SASRA, 2024; World Bank, 2022). It is against this backdrop that this study seeks to examine the influence of Credit Reference Bureau services on credit risk management among SACCOs in Nairobi City County, Kenya, with a specific focus on Credit Reference bureau services, loan repayment efficiencies, borrower credit scores, loan default enquiries, and the mediating role of liquidity.

III. Research Objectives

General Objective

The general objective of this study is to examine the influence of Credit Reference Bureau (CRB) services on credit risk management among deposit-taking SACCOs in Nairobi City County, Kenya.

Specific Objectives

- i. To determine the effect of credit information exchange on credit risk management among SACCOs in Nairobi City County, Kenya
- ii. To examine the influence of loan repayment efficiency on credit risk management among SACCOs in Nairobi City County, Kenya
- iii. To assess the effect of borrower credit scores on credit risk management among SACCOs in Nairobi City County, Kenya
- iv. To explore the influence of loan default enquiries on credit risk management among SACCOs in Nairobi City County, Kenya
- v. To examine the mediating effect of liquidity on the relationship between CRB services and credit risk management among SACCOs in Nairobi City County, Kenya

IV. Research Hypotheses

H₀₁: Credit information exchange has no significant effect on credit risk management among SACCOs in Nairobi City County, Kenya

H₀₂: Loan repayment efficiency has no significant influence on credit risk management among SACCOs in Nairobi City County, Kenya

H₀₃: Borrower credit scores have no significant effect on credit risk management among SACCOs in Nairobi City County, Kenya

H₀₄: Loan default enquiries have no significant influence on credit risk management among SACCOs in Nairobi City County, Kenya

V. Theoretical Review

This study is anchored on several interrelated theories that explain credit risk behavior and the role of information sharing systems such as Credit Reference Bureaus (CRBs) in financial decision-making within SACCOs. The Adverse Selection Theory, developed by Akerlof (1970), explains the problem that arises when lenders lack sufficient information about borrowers' true risk profiles, leading to the possibility of selecting high-risk borrowers. In credit markets, borrowers often possess more private information about their repayment capacity than lenders, creating inefficiencies in lending decisions. Stiglitz and Weiss (1981) further argue that this information gap results in credit market failures, where good borrowers may be denied credit while risky borrowers gain access to funds. In the SACCO context, this challenge is particularly significant due to limited credit history tracking systems, making CRB integration essential for reducing information asymmetry and improving credit risk management outcomes (World Bank, 2022). Closely related to this is the Information Asymmetry Theory, which emphasizes the imbalance of information between borrowers and lenders in financial transactions. Stiglitz and Weiss (1981) explain that such asymmetry leads to adverse selection and inefficient credit allocation, especially where lenders cannot accurately assess borrower risk. In SACCOs, this is evident when members conceal their financial obligations or overstate repayment capacity, leading to increased loan defaults. Credit Reference Bureau services help address this challenge by providing verified borrower credit histories, repayment records, and default information, thereby enhancing transparency and improving lending decisions (CBK, 2023; IFC, 2021). This improves credit risk management by enabling SACCOs to make more informed lending decisions based on reliable data rather than incomplete borrower information. The Moral Hazard Theory also provides important insights into credit risk behavior after loan disbursement. According to Eisenhardt (1989), moral hazard occurs when borrowers change their behavior after receiving credit, often engaging in riskier financial decisions because they are not fully monitored. In SACCOs, this may manifest as intentional default, diversion of funds, or delayed repayment, particularly where monitoring systems are weak. CRB systems reduce moral hazard by increasing borrower accountability through credit tracking and default reporting mechanisms.

When borrowers are aware that their credit behavior is recorded and shared across institutions, they are more likely to maintain disciplined repayment behavior (FSDA Africa, 2022). This strengthens credit risk management by discouraging strategic default and promoting financial responsibility among borrowers. Credit Rationing Theory, as proposed by Stiglitz and Weiss (1981), explains how lenders restrict credit supply even when demand exists due to uncertainty about borrower risk levels. SACCOs often ration credit to minimize exposure to default risk, especially when borrower information is incomplete or unreliable. However, CRB services reduce this uncertainty by providing standardized credit scores and repayment histories, enabling SACCOs to better assess risk and allocate credit more efficiently (World Bank, 2022). This leads to improved credit allocation decisions and reduced exposure to non-performing loans, thereby strengthening overall financial stability within SACCOs. Liquidity Preference Theory, introduced by Keynes (1936), emphasizes the importance of liquidity in financial decision-making and institutional stability. It suggests that financial institutions prefer holding liquid assets to meet short-term obligations and manage uncertainty. In SACCOs, liquidity determines the ability to absorb shocks arising from loan defaults and maintain uninterrupted lending operations. IMF (2023) notes that institutions with strong liquidity positions are better able to withstand credit shocks and maintain operational efficiency. In this study, liquidity is conceptualized as a mediating factor that influences how CRB services translate into effective credit risk management outcomes, as institutions with stronger liquidity are more capable of implementing risk mitigation strategies effectively.

VI. Empirical Review

Empirical literature on Credit Reference Bureau services and credit risk management has increasingly focused on how information sharing systems influence lending decisions and financial performance in financial institutions. Studies by the World Bank (2022) and WOCCU (2021) indicate that Credit Reference bureau services significantly reduces loan default rates by improving borrower screening processes and enhancing transparency in lending decisions. These studies argue that access to comprehensive borrower credit histories allows lenders to make more informed decisions, thereby reducing the likelihood of adverse selection. In Kenya, CBK (2023) confirms that institutions utilizing CRB reports consistently experience lower levels of loan delinquency compared to those with limited or no integration of credit information systems. However, FSDA Africa (2022) observes that SACCOs face several challenges in fully adopting Credit Reference bureau services systems, including high operational costs, limited technical capacity, and resistance to data sharing practices. This partial adoption reduces the effectiveness of CRB services in mitigating credit risk. IMF (2023) further notes that while credit bureaus have significantly improved credit risk management in commercial banking sectors, their impact in cooperative financial institutions such as SACCOs remains inconsistent due to weak enforcement mechanisms and limited integration with internal loan management systems. These findings suggest that although Credit Reference bureau services has a positive effect on credit risk management, its effectiveness is highly dependent on the level of institutional adoption and system integration. Loan repayment efficiency has also been widely studied as a determinant of credit risk performance. IFC (2021) reports that financial institutions with real-time repayment monitoring systems experience improved loan recovery rates and reduced non-performing loan ratios. In the Kenyan context, CBK (2023) finds that SACCOs that have adopted digital loan tracking systems demonstrate better repayment performance compared to those relying on manual monitoring processes. However, SASRA (2024) highlights that many SACCOs still struggle with delayed repayment tracking due to fragmented information systems and poor integration with CRB databases. This limits their ability to respond promptly to emerging default risks, thereby weakening credit risk management effectiveness. Borrower credit scoring has also been identified as a key predictor of loan performance and default risk. According to the World Bank (2022), credit scoring systems provide standardized risk assessments that enhance lending decisions and improve portfolio quality. IFC (2021) supports this view by noting that institutions using credit scoring models experience more accurate risk pricing and lower default rates. In SACCOs, CBK (2023) reports that credit scoring adoption is gradually increasing, but its effectiveness is limited by insufficient borrower data and weak historical record systems. FSDA Africa (2022) further argues that incomplete data integration across SACCOs reduces the predictive accuracy of credit scoring models, thereby limiting their contribution to effective credit risk management. Loan default enquiry systems have also been shown to play an important role in improving credit discipline among borrowers. SASRA (2024) indicates that SACCOs that actively utilize default enquiry mechanisms experience lower incidences of repeat defaults, as borrowers become more cautious when their credit history is closely monitored. IMF (2023) similarly finds that default reporting systems improve repayment behavior by increasing the reputational cost of defaulting. However, CBK (2023) notes that many SACCOs do not fully utilize default enquiry systems due to concerns about data reliability and limited integration with CRB platforms. This reduces the potential effectiveness of these systems in strengthening credit risk management.

VII. Conceptual Framework

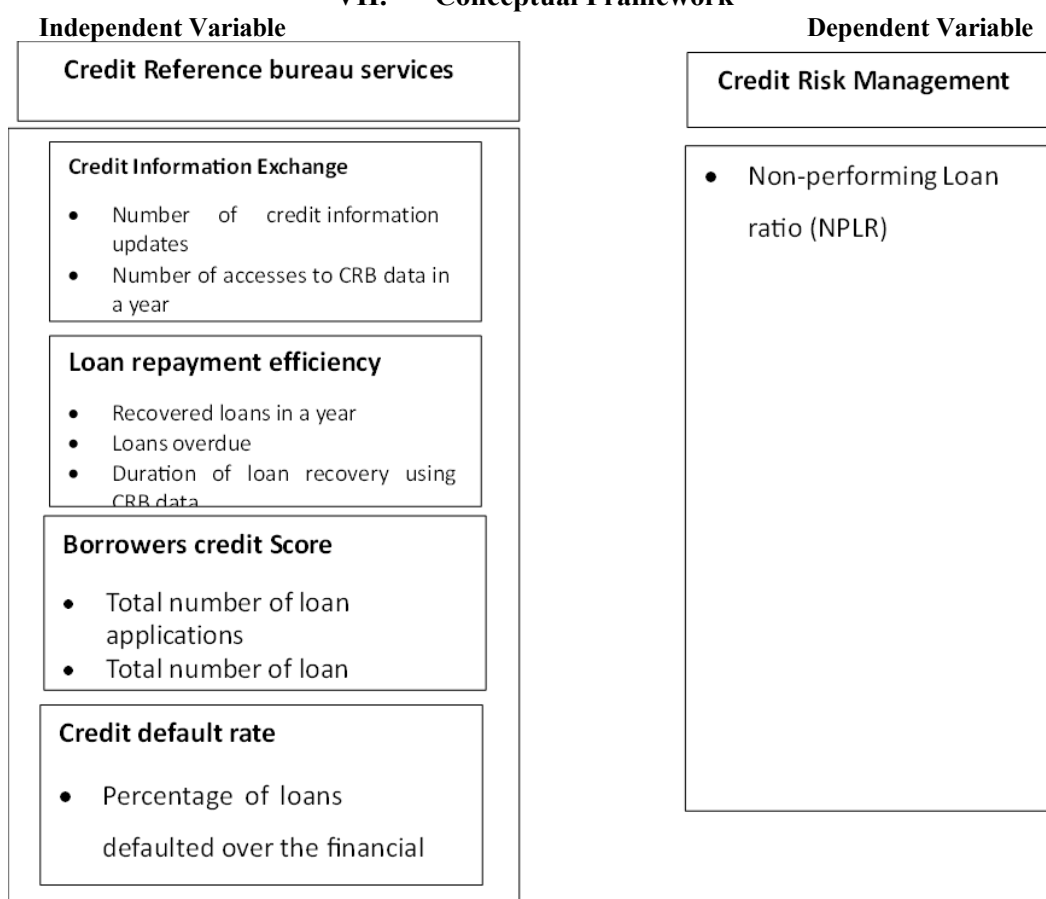


Figure 2.1 Conceptual Framework
Source: Research (2024)

VIII. Research Methodology

This study adopted a positivist research philosophy, which assumed that social phenomena could be measured objectively through quantitative methods and statistical analysis, making it appropriate for examining the relationship between Credit Reference Bureau (CRB) services and credit risk management among SACCOs (Saunders et al., 2019; Creswell & Creswell, 2018). A descriptive cross-sectional research design was used to capture data at a single point in time, allowing the researcher to examine the existing relationships among Credit Reference bureau services, loan repayment efficiency, borrower credit scores, loan default enquiries, liquidity, and credit risk management outcomes without manipulating variables (Kothari, 2019; Cooper & Schindler, 2021). The target population comprised all 46 deposit-taking SACCOs licensed by SASRA operating within Nairobi City County, Kenya, which were selected due to their active engagement in regulated financial intermediation and exposure to credit risk challenges (SASRA, 2024; CBK, 2023). The study utilized secondary data obtained from audited financial statements, SASRA supervisory reports, and Credit Reference Bureau databases, which ensured reliability and objectivity of the data collected (World Bank, 2022; IMF, 2023). A structured data extraction sheet was used to collect quantitative data on non-performing loans, repayment trends, liquidity ratios, credit scores, and default records across SACCOs. Data analysis was conducted using Statistical Package for Social Sciences (SPSS) version 27, where both descriptive statistics such as means, standard deviations, and percentages, and inferential statistics including Pearson correlation, multiple regression analysis, and mediation analysis were applied to determine the strength and direction of relationships among variables (Field, 2020; Hair et al., 2021). Diagnostic tests such as multicollinearity, heteroscedasticity, and normality tests were carried out to ensure the validity and robustness of the regression model (Gujarati & Porter, 2020). The mediating effect of liquidity was tested using regression-based mediation analysis to determine whether liquidity strengthened or weakened the relationship between CRB services and credit risk management (Hayes, 2022). Ethical considerations were observed throughout the study by ensuring confidentiality, proper data handling, and authorization from relevant SACCO regulatory bodies before data collection was undertaken (Creswell & Creswell, 2018).

IX. Results And Discussions

The results of the study indicate that the panel data analysis conducted on 46 Deposit-Taking SACCOs over the period 2018–2023 provided robust evidence on the determinants of non-performing loans (NPL) within the SACCO sector in Nairobi City County. The diagnostic tests confirmed that the data met the necessary assumptions for regression analysis, as the normality tests showed that all variables had skewness and kurtosis values within acceptable thresholds, indicating that the data was approximately normally distributed and suitable for parametric analysis. The multicollinearity test further confirmed that there was no serious correlation among the independent variables, as all Variance Inflation Factor (VIF) values were below the critical threshold of 10, suggesting that the regression coefficients were stable and free from distortion. Additionally, the heteroskedasticity test using the Breusch–Pagan approach revealed a p-value greater than 0.05, indicating that the model did not suffer from heteroskedasticity and that the variance of error terms was constant across observations. The Durbin–Watson statistic of 1.98 further confirmed the absence of autocorrelation, meaning that the residuals were independent and the regression model was statistically reliable for inference. The descriptive statistics revealed that the average non-performing loans ratio among SACCOs was 0.23, indicating that approximately 23% of loan portfolios were non-performing, although significant variation existed across institutions, with some SACCOs recording no defaults while others experienced very high levels of credit risk. Credit Reference bureau services recorded moderate adoption levels with considerable variation, suggesting that while some SACCOs had fully integrated CRB systems, others were still in the early stages of adoption. Loan repayment efficiency averaged 0.69, showing that SACCOs were able to recover about 69% of issued loans, although repayment performance varied widely, reflecting differences in credit monitoring systems. Borrowers' credit scores were relatively high and stable across SACCOs, indicating fairly uniform borrower risk profiles. The credit default rate averaged 0.14, although variability across SACCOs showed that some institutions were significantly more exposed to default risk than others. Liquidity levels were moderate, indicating that SACCOs had sufficient but uneven financial buffers to manage credit shocks, while firm size variation suggested the presence of both small and large SACCOs in the sample, allowing for meaningful comparative analysis. Correlation analysis showed that Credit Reference bureau services had a negative and significant relationship with non-performing loans, indicating that increased use of credit data reduces default levels by improving borrower screening and reducing information asymmetry. Loan repayment efficiency also showed a strong negative relationship with non-performing loans, confirming that SACCOs with effective loan recovery systems experience lower credit risk exposure. Borrowers' credit scores were similarly negatively related to non-performing loans, indicating that higher borrower creditworthiness leads to improved loan performance and reduced default risk. In contrast, credit default rate showed a strong positive relationship with non-performing loans, confirming that higher default behavior directly increases credit risk exposure within SACCOs. Liquidity was also negatively related to non-performing loans, indicating that SACCOs with stronger liquidity positions are better able to absorb shocks and manage loan defaults effectively. The regression results further demonstrated that the model had strong explanatory power, with an R-squared value of 0.64, indicating that 64% of the variation in non-performing loans was explained by Credit Reference bureau services, loan repayment efficiency, borrowers' credit scores, and credit default rates. The overall model was statistically significant, confirming that the combined effect of the explanatory variables significantly influences non-performing loans. Individually, Credit Reference bureau services had a significant negative effect on non-performing loans, indicating that greater use of credit bureau data reduces loan defaults by improving credit assessment processes. Loan repayment efficiency also had a strong and significant negative effect, making it one of the most important determinants of credit risk management, as effective repayment systems directly reduce arrears and default levels. Borrowers' credit score showed a significant negative effect, confirming that better creditworthiness among borrowers leads to improved loan performance and reduced risk exposure. Credit default rate had a strong and significant positive effect on non-performing loans, confirming that increased default behavior is a key driver of credit risk in SACCOs. Overall, the findings demonstrate that Credit Reference bureau services systems, repayment efficiency, borrower credit quality, and default monitoring are critical determinants of credit risk outcomes among SACCOs in Nairobi City County, and that strengthening these areas significantly improves credit risk management and reduces non-performing loans across institutions.

X. Conclusions

Based on the findings of the study, it is concluded that Credit Reference bureau services plays a significant role in reducing non-performing loans among deposit-taking SACCOs in Nairobi City County by improving borrower screening, enhancing transparency, and reducing information asymmetry in lending decisions. SACCOs that actively utilize credit reference bureau systems are more effective in identifying high-risk borrowers and preventing loan defaults before disbursement. The study further concludes that loan repayment efficiency is a critical determinant of credit risk management, as SACCOs with strong loan monitoring, follow-up mechanisms, and structured recovery systems record significantly lower levels of non-performing loans

compared to those with weak repayment enforcement systems. In addition, borrowers' credit scores were found to be an important predictor of credit performance, indicating that SACCOs that incorporate credit scoring systems into their lending decisions are better positioned to manage risk and improve loan portfolio quality. The study also concludes that credit default rates have a strong positive effect on non-performing loans, meaning that poor repayment behavior among borrowers significantly increases credit risk exposure within SACCOs. Furthermore, liquidity was found to play a key supporting role in credit risk management by enabling SACCOs to absorb financial shocks, sustain lending operations, and manage loan defaults more effectively. Overall, the study concludes that Credit Reference bureau services, repayment efficiency, credit scoring, default monitoring, and liquidity jointly explain a significant proportion of variations in non-performing loans, confirming that effective credit risk management in SACCOs is largely dependent on the integration of CRB services and sound financial management practices.

XI. Recommendations

The study recommends that SACCOs in Nairobi City County should fully integrate Credit Reference bureau services systems into their lending processes to enhance borrower risk profiling and reduce exposure to high-risk clients. SACCO management should ensure that all loan applicants are subjected to mandatory CRB checks before credit approval to minimize default risks and strengthen credit decision-making processes. It is also recommended that SACCOs invest in strengthening loan repayment efficiency by adopting modern loan tracking systems, improving follow-up mechanisms, and enforcing strict repayment schedules to reduce arrears and improve portfolio performance. Further, SACCOs should enhance the use of borrowers' credit scores by integrating external credit scoring systems with internal evaluation models to ensure more accurate assessment of borrower creditworthiness. The study recommends that regulatory bodies such as SASRA should strengthen guidelines on CRB usage to ensure uniform adoption across all SACCOs and enhance compliance in credit risk management practices. Additionally, SACCOs should strengthen liquidity management strategies by maintaining adequate liquidity buffers, improving cash flow planning, and diversifying income sources to enhance financial stability and resilience against credit shocks. Finally, policymakers should support capacity-building programs aimed at improving SACCO staff competencies in credit risk analysis, data interpretation, and digital credit management systems to enhance overall sector performance.

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