

## Credit Reference Bureaus and Mortgage Performance in Tanzania: Evidence from Commercial Banks

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### Abstract

The introduction of Credit Reference Bureaus (CRBs) in Tanzania was intended to enhance credit risk management, reduce non-performing loans (NPLs), and improve overall credit market performance. While existing literature has extensively examined the role of credit information sharing on general credit outcomes, limited empirical evidence exists on the contribution of CRBs to mortgage performance in Tanzania. This study analyzes the contribution of CRBs to mortgage performance by comparing key performance indicators before and after the adoption of CRBs, assessing the legal and regulatory framework governing CRBs, and evaluating the level of compliance by financial institutions.

The study adopts a qualitative case study approach, drawing primary data from semi-structured interviews conducted with senior credit officers, loan officers, and credit analysts from selected commercial banks, as well as operators of licensed Credit Reference Bureaus. Secondary data were obtained from banks' annual reports, regulatory publications, and mortgage market reports issued by the Bank of Tanzania and the Tanzania Mortgage Refinance Company. Data was analyzed using thematic and content analysis techniques.

The findings indicate that although mortgage holdings in Tanzania increased at an average rate of approximately 7 percent following the adoption of CRBs, the contribution of CRBs to mortgage performance remains limited. Mortgage non-performing loans continued to rise during the post-adoption period while mortgage returns declined, largely due to persistent data inaccuracies, multiple borrower identification issues, and low confidence among banks in CRB credit reports. The study further finds that financial institutions demonstrate full regulatory compliance with CRB requirements, but structural and legal constraints reduce the effectiveness of CRBs.

The study concludes that while CRBs possess significant potential to improve mortgage market performance in Tanzania, their impact remains constrained by regulatory gaps and operational challenges. Policy recommendations include strengthening the legal framework governing CRBs, improving data accuracy and borrower identification systems, and enhancing supervisory support to improve the effectiveness of credit information sharing.

**Keywords:** Credit Reference Bureaus; Mortgage Finance; Non-Performing Loans; Credit Risk; Capital Markets; Housing Finance

### 1. Introduction

Mortgage finance plays a critical role in facilitating access to housing finance and supporting the development of real estate markets, particularly in emerging economies. In Tanzania, commercial banks and other financial institutions serve as the primary providers of mortgage credit, mobilizing financial resources to support residential real estate development. However, mortgage lending inherently exposes lenders to significant credit risk, particularly in

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environments characterized by information asymmetry and weak borrower screening mechanisms. In response to rising credit risk and increasing non-performing loans within the banking sector, the Bank of Tanzania introduced the Credit Reference Bureau Regulations in 2012. These regulations established a formal framework for credit information sharing, with the objective of enhancing credit risk assessment, improving borrower screening, and strengthening financial system stability. Licensed Credit Reference Bureaus were subsequently operationalized in 2013 to support the implementation of the credit information sharing framework.

Since the establishment of the Tanzania Mortgage Refinance Company (TMRC), Tanzania's mortgage market has experienced notable growth, with an increasing number of lenders participating in mortgage financing. Despite this expansion, the mortgage market has continued to face challenges related to asset quality deterioration and rising non-performing loan ratios. Data from the Bank of Tanzania indicate that mortgage non-performing loans increased during the post-CRB adoption period, raising concerns about the effectiveness of credit information sharing mechanisms in improving mortgage performance. Existing empirical studies largely demonstrate that credit information sharing through credit bureaus contributes to improved credit performance by reducing default risk, mitigating adverse selection, and enhancing lending efficiency. Evidence from both developed and emerging markets suggests that access to comprehensive borrower credit histories enables lenders to improve loan pricing, reduce information asymmetry, and lower default rates. However, the majority of these studies focus on general credit markets, with limited attention given to mortgage-specific outcomes, particularly in Sub-Saharan African contexts.

In Tanzania, empirical research examining the contribution of Credit Reference Bureaus to mortgage performance remains limited. Moreover, existing studies have not sufficiently explored how legal and regulatory frameworks, data quality, and institutional compliance influence the effectiveness of CRBs in mortgage lending. This gap is particularly relevant given ongoing policy efforts to strengthen financial sector stability, improve credit risk management, and support sustainable housing finance. Against this backdrop, this study analyzes the contribution of Credit Reference Bureaus to mortgage performance in Tanzania. Specifically, the study compares mortgage performance before and after the adoption of CRBs, assesses the adequacy of the legal and regulatory framework governing CRBs, and evaluates the level of compliance by financial institutions. By focusing on mortgage-specific outcomes, this study contributes to the literature on credit information sharing and provides policy-relevant insights for regulators, financial institutions, and stakeholders in housing finance.

## 2. Literature Review

### 2.1. Credit Information Sharing and Mortgage Lending

Credit information sharing is a critical mechanism for reducing information asymmetry between lenders and borrowers. It enables financial institutions to access borrowers' historical credit behavior, thereby improving credit risk assessment and lending decisions. Rajan and Dhal [1] define credit information sharing as the systematic exchange of borrower credit data among lenders through a centralized credit reporting system. Such systems allow lenders to differentiate between high-risk and low-risk borrowers, reduce adverse selection, and promote responsible borrowing.

In mortgage lending, credit information sharing plays an even more significant role due to the long-term nature of mortgage contracts and the relatively high exposure associated with real estate loans. Studies from both developed and emerging markets indicate that access to comprehensive credit information improves loan screening, enhances repayment discipline, and reduces default risk. Jappelli and Pagano [2] demonstrate that countries with well-functioning credit information systems experience deeper credit markets and lower default rates, regardless of whether information is shared through public registries or private credit bureaus.

However, the effectiveness of credit information sharing depends heavily on data accuracy, completeness, and timeliness. Shisia et al. [3] argue that deficiencies in data quality undermine lenders' confidence in credit reports, thereby limiting their usefulness in credit risk management. In mortgage markets, where borrower assessment requires reliable long-term income and repayment data, poor data quality can significantly weaken the predictive power of credit reports.

### 2.2. Credit Reference Bureaus and Credit Risk Management

Credit Reference Bureaus serve as institutional platforms for collecting, processing, and disseminating borrower credit information. By aggregating data from multiple lenders, CRBs provide a comprehensive view of borrower credit histories that individual banks may not independently access. Barron and Staten [4] provide empirical evidence that comprehensive credit reports significantly improve default prediction models and reduce loan losses. Further studies

by Barron and Staten [5] confirm that lenders can substantially lower default rates by incorporating detailed credit bureau data into credit decision-making.

In the context of mortgage lending, credit risk management is central to portfolio performance. Jordan et al. [6] define credit risk as the possibility that borrowers will fail to meet their contractual repayment obligations, leading to financial losses for lenders. CRBs support credit risk management by enabling lenders to identify multiple borrowing, past defaults, and repayment behavior across institutions. Deng et al. [7] show that borrower credit characteristics are significant determinants of mortgage repayment behavior, particularly in emerging mortgage markets.

Despite these theoretical benefits, empirical evidence from developing economies suggests mixed outcomes. Bikker and Metzemakers [8] find that while increased information availability generally reduces default rates, institutional weaknesses and regulatory gaps can limit the effectiveness of credit information systems. In Sub-Saharan Africa, structural challenges such as weak identification systems, limited data coverage, and inconsistent reporting standards often constrain the performance of CRBs.

### **2.3. Mortgage Performance Indicators**

Mortgage performance is commonly evaluated using indicators such as mortgage portfolio growth, non-performing loan ratios, credit risk exposure, and mortgage returns. Shisia and Omwario [9] find that higher-risk mortgages tend to generate higher margins but are also associated with elevated default risk. As a result, lenders often respond to poor mortgage performance by tightening lending conditions, increasing interest rates, or shortening loan maturities.

In emerging markets, mortgage performance is further influenced by macroeconomic conditions, liquidity constraints, and regulatory environments. Vives [10] demonstrate that macroeconomic variables such as inflation, interest rates, and economic growth significantly affect mortgage margins and loan performance. Kallberg and Udell [11] emphasize that mortgage markets in developing economies are particularly sensitive to changes in credit availability and lending costs.

In Tanzania, mortgage market growth has been driven by increased participation of commercial banks following the establishment of the Tanzania Mortgage Refinance Company. However, rising non-performing loans and declining mortgage returns have raised concerns regarding the sustainability of mortgage portfolio growth. These trends highlight the importance of effective credit screening mechanisms, including the role of CRBs, in supporting mortgage market stability.

### **2.4. Legal and Regulatory Framework for Credit Reference Bureaus**

The legal and regulatory framework governing Credit Reference Bureaus plays a crucial role in determining their effectiveness. In Tanzania, CRBs operate under the Bank of Tanzania Act of 2006 and the Bank of Tanzania (Credit Reference Bureau) Regulations of 2012. These regulations provide guidelines for licensing, supervision, data protection, and information sharing among financial institutions.

While regulatory oversight is essential for safeguarding data integrity and consumer protection, excessive regulatory constraints may limit operational efficiency. Njoroge and Rotich [12] argue that the absence of a dedicated Credit Reference Bureau Act can weaken enforcement mechanisms and reduce the effectiveness of credit information systems. In jurisdictions with standalone CRB legislation, credit reporting systems tend to exhibit stronger compliance, clearer accountability, and higher data quality.

Recent policy discussions in emerging markets emphasize the need for regulatory reforms that balance consumer protection with operational efficiency. Strengthening legal frameworks, enhancing supervisory coordination, and integrating national identification systems into credit reporting infrastructure have been identified as key enablers of effective credit information sharing Gaitho [13].

### **2.5. Empirical Evidence and Research Gap**

Empirical studies from developed and emerging markets consistently show that credit information sharing improves lending efficiency, reduces default risk, and supports credit market development. However, evidence on mortgage-specific outcomes remains limited, particularly in Sub-Saharan Africa. Most existing studies focus on general loan portfolios, microfinance lending, or short-term credit products.

In Tanzania, limited empirical research has examined the contribution of Credit Reference Bureaus to mortgage performance, despite the growing importance of housing finance in the economy. Moreover, existing studies have not sufficiently explored how regulatory constraints, data quality challenges, and institutional compliance affect the effectiveness of CRBs in mortgage lending.

This study addresses this gap by focusing specifically on mortgage performance in Tanzania, examining both financial performance indicators and the institutional and regulatory factors that shape the effectiveness of credit information sharing. By integrating qualitative evidence from commercial banks and CRB operators, the study provides nuanced insights into why the potential benefits of CRBs have not been fully realized in Tanzania's mortgage market

### **3. Material and methods**

#### **3.1. Research Approach and Design**

This study adopts a qualitative research design using a multiple case study approach to examine the contribution of Credit Reference Bureaus (CRBs) to mortgage performance in Tanzania. A qualitative approach is appropriate given the exploratory nature of the study and the need to capture institutional practices, perceptions, and regulatory dynamics surrounding mortgage lending and credit information sharing. Case study design allows for in-depth analysis of complex financial and regulatory processes within their real-world context.

#### **3.2. Study Area and Population**

The study focuses on Tanzania's mortgage lending market, targeting licensed commercial banks actively engaged in mortgage financing and licensed Credit Reference Bureaus operating under the supervision of the Bank of Tanzania. The study population comprises of senior credit officers, loan officers, credit analysts from selected commercial banks, and operational staff from licensed CRBs. These groups were selected due to their direct involvement in mortgage appraisal, credit risk assessment, and credit information management.

#### **3.3. Sampling Technique and Sample Size**

A non-probability purposive sampling technique was employed to select respondents with relevant experience and technical knowledge of mortgage lending and CRB operations. Purposive sampling is suitable for qualitative studies where the objective is to obtain information-rich insights rather than statistical generalization.

The sample consisted of fifty (50) respondents drawn from selected commercial banks and licensed CRBs. Bank respondents included senior credit analysts, senior loan officers, and branch managers, while CRB respondents included credit data analysts and operations managers. The selected banks represent major mortgage lenders in Tanzania and account for a substantial share of the mortgage market during the study period.

#### **3.4. Data Collection Methods**

Both primary and secondary data were used in this study.

##### *3.4.1. Primary Data*

Primary data were collected through semi-structured interviews conducted with selected respondents. The interview guide was designed to align with the study objectives and focused on mortgage performance, credit risk assessment practices, use of CRB reports, regulatory compliance, and operational challenges. Semi-structured interviews provided flexibility to explore emerging themes while maintaining consistency across respondents.

##### *3.4.2. Secondary Data*

Secondary data were obtained from banks' annual reports, initial public offering prospectuses, regulatory publications issued by the Bank of Tanzania, mortgage market reports from the Tanzania Mortgage Refinance Company, and relevant policy documents. These sources provided contextual and historical information on mortgage performance trends before and after the adoption of CRBs.

#### **3.5. Data Analysis Techniques**

Data analysis was conducted using thematic and content analysis techniques. Interview transcripts and documentary data were systematically reviewed, coded, and organized into themes corresponding to the study objectives. Thematic

analysis facilitated the identification of patterns related to mortgage performance, credit risk management, regulatory compliance, and data quality issues. Content analysis was used to interpret regulatory documents and institutional reports, enabling triangulation of findings from primary and secondary sources.

### 3.6. Ethical Considerations

Ethical considerations were observed throughout the research process. Participation in the study was voluntary, and respondents were informed of the purpose of the study prior to data collection. Confidentiality and anonymity were maintained by excluding personal identifiers and sensitive institutional information from the analysis and reporting of results.

### 3.7. Reliability and Validity

To enhance the credibility and reliability of the findings, data triangulation was employed by combining interview data with documentary evidence from multiple sources. Consistency in interview procedures and cross-verification of responses across institutions helped reduce bias and improve the robustness of the analysis.

## 4. Results

This section presents and discusses the findings of the study based on the research objectives. The analysis draws on interview data from selected commercial banks and Credit Reference Bureaus, as well as secondary data from regulatory and institutional reports. Results are organized thematically and interpreted in relation to existing literature.

### 4.1. Mortgage Performance Before and After the Adoption of Credit Reference Bureaus

#### 4.1.1. Mortgage Portfolio Growth

Findings indicate that mortgage lending in Tanzania expanded following the adoption of Credit Reference Bureaus, with mortgage holdings increasing at an average annual rate of approximately 7 percent during the post-adoption period. Total mortgage lending reached approximately TZS 500 billion by December 2025, reflecting growing participation by commercial banks in housing finance. Despite this growth, interview evidence suggests that respondents do not attribute the expansion of mortgage portfolios primarily to the introduction of CRBs. Instead, growth was largely driven by broader structural developments in the mortgage market, including the establishment of the Tanzania Mortgage Refinance Company and increased institutional focus on retail lending. Most bank respondents characterized the contribution of CRBs to mortgage growth as marginal rather than transformational. This finding contrasts with evidence from markets such as Kenya and South Africa, where credit bureaus have been shown to significantly deepen credit markets. The divergence suggests that the effectiveness of CRBs in supporting mortgage growth is highly context-dependent and influenced by institutional and regulatory factors.

#### 4.1.2. Non-Performing Loans and Credit Risk

Contrary to expectations, the adoption of Credit Reference Bureaus did not result in a reduction of mortgage non-performing loans. Aggregate NPL ratios within the banking sector increased during the post-adoption period, rising from approximately 8.2 percent to over 10 percent by 2017–2018. In selected banks, mortgage-related NPLs continued to rise even after the systematic use of CRB credit reports. Respondents identified several factors explaining this outcome. First, inaccuracies and inconsistencies in CRB credit reports limited their usefulness in credit risk assessment. Second, the presence of multiple borrower identification documents resulted in fragmented credit histories, undermining the reliability of credit screening. Third, macroeconomic conditions and liquidity constraints were cited as significant contributors to loan defaults, overshadowing the potential risk-mitigating role of CRBs. These findings align with studies suggesting that credit information sharing alone is insufficient to reduce default risk unless supported by high-quality data and strong institutional enforcement. While CRBs theoretically enhance borrower screening, their practical effectiveness depends on the integrity of the underlying data infrastructure.

#### 4.1.3. Mortgage Returns

The study further finds that mortgage returns declined during the post-adoption period, despite rising mortgage interest rates. Weighted average mortgage interest rates increased from approximately 15 percent to over 17 percent between 2012 and 2017, yet actual returns earned by banks deteriorated. Respondents attributed declining returns primarily to rising non-performing loans, which eroded interest income and increased provisioning costs. Although CRBs were recognized as potentially valuable tools for improving borrower selection, their limited effectiveness in reducing defaults constrained their contribution to improving mortgage profitability. This outcome reinforces the view that higher interest rates alone do not translate into improved returns when credit risk remains elevated. Without

effective borrower screening and enforcement mechanisms, increased lending costs may exacerbate default risk rather than enhance performance.

#### **4.2. Use of Credit Reference Bureau Reports in Mortgage Assessment**

##### *4.2.1. Extent of Adoption by Banks*

All sampled banks reported using CRB credit reports as part of the mortgage appraisal process, consistent with regulatory requirements issued by the Bank of Tanzania. Credit reports were accessed routinely prior to loan approval, indicating full procedural compliance with credit information sharing regulations. However, the depth of reliance on CRB reports varied significantly across institutions. Most banks reported relying on CRB information for only 40–60 percent of the credit decision-making process, supplementing it with internal assessment tools such as income verification, collateral evaluation, and borrower character analysis. Only one institution reported relatively high confidence in CRB reports, citing better alignment with internal credit records.

##### *4.2.2. Effectiveness and Efficiency of Mortgage Assessment*

Respondents generally agreed that the introduction of CRBs improved the speed and administrative efficiency of mortgage assessment by providing centralized access to borrower credit histories. The time required to complete credit assessments declined from several weeks to a few days in some institutions. Despite these efficiency gains, effectiveness in terms of credit quality improvement remained limited. Low confidence in data accuracy reduced banks' willingness to rely heavily on CRB reports, thereby constraining their impact on credit outcomes. These findings suggest that while CRBs enhanced operational efficiency, they did not substantially improve credit risk outcomes in mortgage lending.

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#### **4.3. Legal and Regulatory Framework and Institutional Compliance**

##### *4.3.1. Compliance with CRB Regulations*

The study finds full compliance by financial institutions with the Credit Reference Bureau Regulations of 2012, particularly following the issuance of regulatory directives mandating credit checks prior to loan approval. Banks uniformly reported adherence to reporting and inquiry requirements, primarily to meet supervisory expectations. However, compliance was often described as procedural rather than substantive. Several respondents noted that banks complied to avoid regulatory sanctions rather than due to strong confidence in the effectiveness of CRB services.

##### *4.3.2. Regulatory and Operational Challenges*

Key challenges identified include the absence of a standalone Credit Reference Bureau Act, limited authority granted to CRBs to rectify inaccurate data, and fragmented borrower identification systems. Respondents emphasized that reliance on multiple identification documents such as national IDs, passports, and voter cards contributed significantly to data mismatches and incomplete credit histories. These findings support arguments in the literature that strong legal frameworks and integrated national identification systems are essential for effective credit information sharing. Without such foundations, CRBs are unable to fully realize their role in strengthening credit markets.

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### **5. Discussion of Findings**

Overall, the findings indicate that Credit Reference Bureaus in Tanzania have had a limited impact on mortgage performance despite their widespread adoption and regulatory support. While mortgage portfolios expanded during the post-adoption period, this growth was driven primarily by market and institutional factors rather than improvements in credit risk assessment attributable to CRBs. The persistence of high non-performing loans and declining mortgage returns suggests that CRBs have not yet achieved their intended objectives in the mortgage market. Structural issues including data quality challenges, regulatory gaps, and weak borrower identification systems continue to constrain their effectiveness.

These results contribute to the literature by demonstrating that the effectiveness of credit information sharing mechanisms depends not only on regulatory mandates but also on institutional capacity, data integrity, and broader financial infrastructure. In the absence of these complementary elements, the potential benefits of CRBs remain largely unrealized.

## 6. Conclusion

This study examined the contribution of Credit Reference Bureaus (CRBs) to mortgage performance in Tanzania by comparing mortgage outcomes before and after the adoption of CRBs, assessing the legal and regulatory framework governing their operations, and evaluating institutional compliance among commercial banks. Using qualitative evidence from selected mortgage lenders and CRB operators, complemented by secondary data from regulatory and institutional sources, the study provides mortgage-specific insights into the effectiveness of credit information sharing in an emerging market context. The findings indicate that although Tanzania's mortgage market expanded during the post-CRB adoption period, the contribution of CRBs to mortgage performance remains limited. Mortgage portfolio growth was observed across major lenders, with average growth of approximately 7 percent; however, this expansion was driven largely by structural developments such as the establishment of the Tanzania Mortgage Refinance Company and increased institutional focus on housing finance rather than improvements in credit risk assessment attributable to CRBs.

Contrary to the intended objectives of credit information sharing, mortgage non-performing loans continued to rise after the adoption of CRBs, while mortgage returns declined despite higher lending rates. These outcomes suggest that CRBs have not yet succeeded in improving credit risk management or profitability in the mortgage segment. The limited impact of CRBs is primarily attributed to persistent data inaccuracies, fragmented borrower identification systems, and low confidence among banks in the reliability of credit reports.

While regulatory compliance with CRB requirements was found to be high, compliance was largely procedural. Banks utilized CRB services mainly to satisfy supervisory requirements rather than as central tools for credit decision-making. The absence of a standalone legal framework governing CRBs further constrained their operational effectiveness and accountability.

Overall, the study concludes that although Credit Reference Bureaus possess the potential to enhance mortgage market performance in Tanzania, this potential remains largely unrealized due to institutional, regulatory, and infrastructural limitations.

### 6.1. Policy Implications

The findings of this study carry important policy implications for regulators, financial institutions, and stakeholders involved in housing finance and credit market development.

First, there is a need to strengthen the legal and regulatory framework governing Credit Reference Bureaus. The enactment of a dedicated Credit Reference Bureau Act would enhance regulatory clarity, strengthen enforcement mechanisms, and improve accountability among all participants in the credit information sharing ecosystem. A standalone legal framework would also provide clearer mandates regarding data accuracy, consumer protection, and dispute resolution.

Second, improving data quality within the credit reporting system is critical. Regulators and financial institutions should place greater emphasis on the accuracy, completeness, and timeliness of data submitted to the Credit Reference Databank. Enhanced supervisory oversight, coupled with penalties for persistent data inaccuracies, could improve the reliability of credit reports and increase lender confidence.

Third, the integration of a unified national identification system into credit reporting infrastructure would address challenges related to multiple borrower identities. Linking credit histories to a single, standardized national identifier would significantly reduce data fragmentation and improve the predictive power of credit reports.

Fourth, greater institutional commitment to the use of CRB information is necessary. Financial institutions should move beyond procedural compliance and integrate credit bureau data more substantively into mortgage appraisal models, alongside internal risk assessment tools. Capacity-building initiatives aimed at credit officers and risk managers could enhance effective utilization of credit information.

Finally, policymakers should recognize that credit information sharing alone cannot resolve mortgage market challenges. Complementary macroeconomic stability, sound lending practices, and effective borrower education are essential for sustainable mortgage market development. CRBs should be viewed as part of a broader financial infrastructure rather than as standalone solutions.

## 6.2. Study Limitations and Areas for Further Research

This study is subject to certain limitations. The qualitative design and purposive sampling approach limit the generalizability of findings beyond the sampled institutions. Additionally, the study focuses on the early years following CRB adoption, during which institutional learning and system adjustments were still evolving. Future research could employ quantitative methods to measure the causal impact of CRBs on mortgage default rates and profitability using bank-level panel data. Further studies could also explore borrower-level perspectives on credit information sharing and assess the role of national identification systems in strengthening credit reporting effectiveness.

## Compliance with ethical standards

### *Disclosure of conflict of interest*

The authors declare that they have no competing interests, financial or personal, that could have influenced the results presented in this study.

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