

Impact of Cost of Credit on Financial Institutions' Sustainability: A Systematic Review From Global to Local

Paul Gesimba¹ & Joseph Akaka Madara²

¹ Head of the Department of Leadership Studies, School of Business and Leadership Studies, St. Paul's University, Limuru, Kenya

² Head of Business Development, St Almasi Financial Services, Nairobi, Kenya

Correspondence: Joseph Akaka Madara, Head of Business Development, St Almasi Financial Services, Nairobi, Kenya

Received: March 22, 2026

Accepted: April 20, 2026

Published: April 30, 2026

doi: 10.65343/tpss.v2i1.91

URL: <https://doi.org/10.65343/tpss.v2i1.91>

Abstract

This systematic literature review explores the complex relationship between credit pricing, financial institution sustainability, and borrower outcomes with a specific focus on micro, small, and medium-sized enterprises (MSMEs). Spanning global, regional, and local contexts, the review synthesizes evidence on how interest rates, fees, and risk-based pricing influence bank profitability, asset quality, and long-term resilience. Simultaneously, it examines how credit costs affect access to finance, repayment behavior, and enterprise growth. The review integrates key theoretical frameworks including the Loanable Funds Theory, Credit Rationing, and Entrepreneurship Innovation Theory with empirical insights. It offers policy and operational recommendations aimed at balancing credit affordability with institutional stability. The findings underscore the importance of context-sensitive pricing strategies, operational efficiency, and inclusive policy measures to foster sustainable and equitable credit markets, especially in emerging economies.

Keywords: credit pricing, financial sustainability, inclusive finance, micro-small-and-medium enterprises, microfinance

1. Introduction

Pricing of credit is not merely a technical exercise within financial institutions; it is a core strategic function that lies at the heart of financial intermediation across banking, microfinance, and other credit-providing institutions. In my assessment, credit pricing represents the principal mechanism through which institutions operationalize their understanding of funding structures, risk exposure, operational efficiency, regulatory compliance, and strategic positioning within the market. Through interest rates, fees, commissions, and risk premiums, lenders translate abstract balance sheet constraints and macro-financial conditions into concrete lending decisions that shape borrower access, loan performance, and portfolio outcomes (Beck & Demirgüç-Kunt, 2006; Mishkin, 2019). In practice, these pricing choices exert a powerful influence not only on borrower behavior and repayment capacity but also on the overall efficiency and stability of the financial system.

From an institutional standpoint, I observe that higher borrowing costs often serve as a defensive and stabilizing instrument, particularly in environments characterized by elevated credit risk, weak information infrastructure, and macroeconomic volatility conditions that typify many emerging and frontier markets. Appropriately calibrated interest margins and risk-based pricing structures can enhance profitability, preserve net interest margins, and provide buffers against loan losses, thereby supporting institutional sustainability (Casu et al., 2022; Saunders & Cornett, 2021). Industry practice demonstrates that, in the absence of robust credit information systems or effective collateral enforcement mechanisms, lenders frequently rely on pricing as a substitute for imperfect risk mitigation tools. However, when pricing becomes excessively conservative or extractive, it risks undermining the developmental role of financial intermediation by excluding productive borrowers from formal credit markets.

This tension is most pronounced in the case of micro, small, and medium enterprises (MSMEs), which I regard as the critical transmission channel between financial systems and the real economy. MSMEs typically operate with limited collateral, volatile cash flows, and thin credit histories, making them particularly sensitive to changes in the cost of credit. While risk-based pricing is rational from an institutional perspective, persistent high interest rates and ancillary charges can constrain MSME access to finance, suppress investment, and elevate default risk ironically weakening, rather than strengthening, portfolio quality over the medium term (Stiglitz & Weiss, 1981; World Bank, 2020). Thus, the institutional pursuit of sustainability through pricing must be carefully balanced

against borrower affordability and long-term portfolio performance.

From the perspective of credit consumers, especially MSMEs, the cost of credit is a determinant of firm survival and growth, not merely a financing condition. My reading of the empirical literature aligns strongly with industry experience: elevated lending costs reduce entrepreneurial entry, delay capital investment, limit productivity-enhancing upgrades, and compress operating margins, particularly in emerging and developing economies where equity markets, venture capital, and long-term debt instruments remain underdeveloped (Beck, Demirgüç-Kunt, & Maksimovic, 2005; Ayyagari et al., 2017). In such contexts, credit pricing actively shapes economic structure by determining which firms expand, stagnate, or exit the market. The cost of credit therefore functions as both a financial and a developmental variable, with implications that extend well beyond individual loan contracts.

Against this backdrop, this review systematically synthesizes the extant scholarly literature on the relationship between the cost of credit and the sustainability of financial institutions across global, regional, and local contexts. I place particular emphasis on how credit pricing strategies influence institutional resilience, asset quality, and profitability, while simultaneously affecting access to finance, performance, and sustainability among MSMEs and other business borrowers. By integrating evidence across diverse financial systems and levels of analysis, the review advances a nuanced understanding of how credit pricing can be designed and governed in ways that reconcile institutional sustainability with inclusive economic development. In doing so, it contributes to both academic discourse and policy-relevant debates on the evolving role of financial institutions in emerging markets.

1.1 Review Objective

To examine the impact of Cost of Credit on Financial Institutions' Sustainability.

2. Methodology

This study employed a systematic literature review (SLR) to synthesize empirical and theoretical evidence on the relationship between the cost of credit, financial institution sustainability, and MSME outcomes. The review was conducted in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure transparency, consistency, and replicability.

A comprehensive search was undertaken across Scopus, Web of Science, EconLit, and Google Scholar, using combinations of keywords related to credit pricing, interest rates, institutional sustainability, MSMEs, and emerging markets. The search was restricted to peer-reviewed English-language publications published between 2006 to 2025. Studies were included if they examined credit cost dynamics and their effects on financial institutions (e.g., profitability, portfolio quality) and/or borrower outcomes (e.g., access, performance, repayment behavior).

The selection process followed PRISMA's four-stage approach identification, screening, eligibility, and inclusion with duplicates removed and relevance assessed through title, abstract, and full-text screening. A structured quality appraisal was applied to evaluate methodological rigor and analytical robustness.

Data were extracted using a standardized template and synthesized thematically due to heterogeneity in study designs and outcome measures. The synthesis emphasized patterns, contextual differences, and institutional moderators, particularly in emerging market and Sub-Saharan African settings. This approach enabled an integrated assessment of how credit pricing shapes both institutional sustainability and MSME financial outcomes

3. Results

3.1 Conceptualizing Credit Pricing and Financial Sustainability

3.1.1 Defining Cost of Credit

Pricing of credit should not be misconstrued as a purely technical or mechanical function within financial institutions. Rather, it constitutes a core strategic lever at the heart of financial intermediation across banking, microfinance, and other credit-providing institutions. Credit pricing is the principal mechanism through which institutions translate their cost of funds, risk appetite, operational efficiency, regulatory obligations, and competitive positioning into concrete lending decisions. Through interest rates, fees, commissions, and risk premiums, lenders convert balance-sheet constraints and macro-financial conditions into borrower-facing terms that shape access to finance, repayment behavior, and portfolio performance (Beck & Demirgüç-Kunt, 2006; Mishkin, 2019). In practice, these pricing decisions exert first-order effects not only on individual borrowers but also on the allocative efficiency, depth, and stability of the financial system.

From an institutional perspective, higher borrowing costs often function as risk-buffering and stabilizing instruments, particularly in environments characterized by elevated default risk, weak credit information infrastructure, limited collateral enforceability, and macroeconomic conditions prevalent across many emerging and frontier markets. Properly calibrated interest margins and risk-based pricing frameworks can enhance profitability, preserve net interest margins, and strengthen resilience against credit losses, thereby supporting

institutional sustainability (Casu et al., 2022; Saunders & Cornett, 2021). Industry practice indicates that where non-price risk mitigation tools are underdeveloped, institutions rely heavily on pricing mechanisms to compensate for uncertainty. However, excessively conservative or extractive pricing strategies can undermine the developmental function of financial intermediation by rationing credit away from otherwise viable borrowers.

This tension is most acute in the case of micro, small, and medium enterprises (MSMEs), which constitute the primary transmission channel between financial systems and the real economy. MSMEs typically operate under structural constraints including limited collateral, volatile cash flows, informality, and thin credit histories that render them particularly sensitive to changes in the cost of credit. While risk-based pricing is institutionally rational, persistently high interest rates and cumulative loan charges can suppress investment, weaken cash-flow resilience, and elevate default risk over time outcomes that ultimately compromise, rather than enhance, portfolio quality (Stiglitz & Weiss, 1981; World Bank, 2020). Consequently, institutional sustainability pursued through pricing must be evaluated not only in static profitability terms but also in relation to borrower viability and long-term portfolio performance.

From the perspective of credit consumers, especially MSMEs the cost of credit represents a determinant of firm survival, productivity, and growth trajectories, rather than a mere contractual condition. Empirical evidence consistently demonstrates that elevated lending costs dampen entrepreneurial entry, delay capital formation, constrain productivity-enhancing investments, and compress operating margins, particularly in emerging and developing economies where alternative financing channels such as equity markets, venture capital, and long-tenor debt remain shallow or inaccessible (Beck, Demirgüç-Kunt, & Maksimovic, 2005; Ayyagari et al., 2017). In such contexts, credit pricing actively shapes economic structure by influencing which firms expand, stagnate, or exit the market. The cost of credit therefore functions simultaneously as a financial variable and a developmental instrument, with implications extending far beyond individual loan transactions.

Against this backdrop, this review systematically synthesizes the extant scholarly literature on the relationship between the cost of credit and the sustainability of financial institutions across global, regional, and local contexts. Particular emphasis is placed on how credit pricing strategies affect institutional resilience, asset quality, and profitability, while simultaneously shaping access to finance, firm performance, and sustainability among MSMEs and other business borrowers. By integrating evidence across diverse financial systems and levels of analysis, the review advances a nuanced understanding of how credit pricing can be structured, governed, and regulated to reconcile institutional sustainability with inclusive economic development. In doing so, it contributes to academic scholarships as well as policy and industry debates on the evolving role of financial institutions in emerging markets.

3.1.2 Financial Sustainability of Credit Institutions

Financial sustainability, in my assessment as a development and finance practitioner and scholar, denotes the capacity of a financial institution to sustain its core operations, meet its financial obligations, and absorb both internal and external shocks while remaining profitable over the long term. Within credit-providing institutions particularly commercial banks and microfinance institutions (MFIs) financial sustainability is best understood as a multidimensional construct encompassing profitability, solvency, liquidity, and operational resilience (Saunders & Cornett, 2021; Casu et al., 2022). Collectively, these dimensions reflect an institution's ability to balance financial performance with prudent risk management across economic and credit cycles, especially in volatile emerging-market environments.

From my experience and analysis, profitability remains a necessary, though not sufficient, pillar of sustainability for credit institutions. It is commonly assessed through indicators such as net interest margins, return on assets, and return on equity. Net interest margins, in particular, provide a direct link between credit pricing decisions and institutional financial performance, as they capture the spread between interest income generated from lending activities and the cost of funds (Mishkin, 2019). However, sustained profitability that is achieved through aggressive pricing, excessive leverage, or lax underwriting standards is inherently fragile. In practice, such strategies often mask underlying vulnerabilities that surface during economic downturns, undermining long-term institutional resilience.

Asset quality represents, in my view, the most critical transmission channel through which credit pricing affects institutional sustainability. Non-performing loan (NPL) ratios remain a widely used proxy for portfolio health, as elevated NPL levels erode earnings through provisioning requirements, weaken capital buffers, and ultimately threaten solvency (Beck & Demirgüç-Kunt, 2006). Credit pricing strategies that fail to adequately reflect borrower risk, sectoral exposure, or macroeconomic conditions tend to exacerbate default rates over time. Conversely, pricing that is excessively conservative can suppress credit demand among viable borrowers, leading to suboptimal portfolio diversification and reduced developmental impact. Effective pricing therefore requires a dynamic balance between risk sensitivity and market inclusion.

Capital adequacy further underpins financial sustainability by ensuring that institutions maintain sufficient buffers to absorb unexpected losses and comply with regulatory requirements. In my assessment, regulatory capital frameworks such as the Basel accords interact directly with lending behavior and pricing structures. Higher capital requirements, while essential for systemic stability, increase the cost of intermediation and exert upward pressure on lending rates, particularly in markets where funding costs are already elevated (Casu et al., 2022). This reinforces the importance of disciplined cost management and efficient pricing models that explicitly account for funding costs, operational expenses, and risk exposure without unduly constraining credit supply.

Overall, financial sustainability in credit institutions emerges from the careful calibration of credit pricing strategies that balance revenue generation with risk containment and regulatory compliance. From a development finance perspective, I contend that pricing of credit should not be viewed solely as a revenue-maximization mechanism, but as a strategic governance tool through which institutions safeguard long-term viability while supporting stable and inclusive financial intermediation. When pricing frameworks are aligned with institutional capacity, borrower realities, and regulatory expectations, they enhance not only institutional sustainability but also the broader developmental contribution of the financial sector.

3.2 International Evidence on Loan Pricing and Institutional Stability

Extant international scholarship demonstrates that loan pricing practices are deeply embedded within broader credit market structures and regulatory regimes, with far-reaching implications for the long-term stability of financial institutions. Regulatory frameworks, market concentration, funding conditions, and institutional efficiency collectively shape how credit is priced and how risks and returns are distributed across financial systems (Casu et al., 2022; Saunders & Cornett, 2021). Within this context, loan pricing operates not merely as a micro-level contractual outcome between lenders and borrowers, but as a macro-level coordination mechanism that influences financial sector depth, resilience, and systemic stability.

Evidence from both advanced and emerging economies indicates that credit market deregulation and financial liberalization are frequently associated with downward pressure on lending rates, driven by heightened competition, operational efficiencies, and expanded availability of loanable funds (Ashraf & Shen, 2019). Lower lending rates can enhance credit access for households and firms particularly in underserved segments thereby supporting financial inclusion, investment, and economic activity. However, the implications for lender sustainability are more complex, as intensified competition may compress net interest margins and alter institutional incentives, potentially encouraging riskier lending behavior in pursuit of profitability.

A growing body of empirical research further suggests that while liberalized credit markets can improve allocative efficiency, they may simultaneously expose financial institutions to elevated credit and systemic risks when liberalization is not accompanied by robust prudential regulation and effective risk management frameworks (Casu et al., 2022). In contexts characterized by weak supervisory capacity, limited credit information systems, or underdeveloped legal and enforcement mechanisms, aggressive loan pricing strategies following deregulation have been linked to deteriorating asset quality, rising non-performing loans, and increased vulnerability to financial shocks.

Consequently, international evidence highlights a persistent trade-off between affordability and institutional stability in credit pricing. Sustainable loan pricing within liberalized markets requires careful calibration in which competitive pressures are leveraged to enhance access and efficiency without eroding risk-adjusted returns, capital adequacy, or long-term institutional viability. This balance remains central to contemporary policy debates on the optimal design of credit market regulation and its role in safeguarding financial system stability across diverse institutional and developmental contexts (Ashraf & Shen, 2019).

3.2.1 Risk-Based Pricing and Profitability

Risk-based pricing, whereby lending rates and credit terms are differentiated according to the assessed risk profile of individual borrowers, has become a defining feature of modern credit markets. In my scholarly assessment, this evolution reflects not only advances in credit risk modeling and data analytics, but also tightening regulatory expectations that require financial institutions to align pricing more closely with default probabilities, loss given default, and capital allocation requirements (Saunders & Cornett, 2021; Casu et al., 2022). By internalizing borrower-specific risk characteristics into loan pricing, institutions seek to enhance risk-adjusted returns while preserving portfolio integrity and regulatory compliance.

From an institutional perspective, I observe that risk-based pricing contributes positively to profitability by protecting net interest margins and strengthening the alignment between expected returns and underlying credit risk. When pricing is appropriately calibrated, it enables lenders to compensate for higher expected losses, elevated monitoring costs, and capital charges associated with riskier borrower segments. This, in turn, supports income stability and financial sustainability across the credit cycle. Empirical evidence supports this view, indicating that institutions with well-developed risk-based pricing frameworks tend to exhibit greater earnings resilience and

improved capacity to withstand adverse macroeconomic conditions (Mutinda & Kamau, 2023).

However, the distributive implications of risk-based pricing warrant critical scrutiny. In my assessment, borrower segments characterized by limited credit histories, informational opacity, or volatile cash flows are disproportionately affected by higher risk premiums. Small and medium-sized enterprises (SMEs) frequently fall within this category, resulting in elevated borrowing costs that can constrain access to finance, suppress investment, and weaken growth trajectories (Stiglitz & Weiss, 1981). In such contexts, risk-based pricing while economically rational and institutionally defensible may inadvertently reinforce financial exclusion and entrench structural disadvantages faced by smaller and younger firms.

The literature therefore points to a persistent tension between profitability and inclusivity in the application of risk-based pricing. While the approach enhances institutional performance and risk management, its broader developmental consequences depend critically on the presence of complementary mechanisms. In my view, instruments such as credit guarantee schemes, the strategic use of alternative data, relationship lending models, and targeted regulatory incentives play a pivotal role in mitigating informational asymmetries and reducing excessive risk premiums for otherwise viable but underserved borrowers (Mutinda & Kamau, 2023). Without such mitigating frameworks, risk-based pricing risks prioritizing short-term financial stability at the expense of long-term financial inclusion and enterprise development.

3.2.2 Integrating ESG into Risk-Based Pricing Frameworks

The increasing incorporation of environmental, social, and governance (ESG) considerations into lending decisions represents a natural extension of risk-based pricing frameworks rather than a conceptual departure from them. Traditional risk-based pricing differentiates loan terms according to borrower-specific default risk, loss given default, and capital intensity. ESG integration deepens this approach by broadening the risk lens to capture structural, long-horizon, and non-financial risks that materially affect borrower solvency and portfolio performance but may not be immediately visible in conventional financial ratios.

Within modern credit markets, ESG factors increasingly function as forward-looking risk indicators embedded within pricing models. Environmental exposure such as climate transition risks, carbon intensity, or vulnerability to physical climate events affects asset values, operating costs, and long-term cash-flow stability. Social risks, including labor practices, health and safety standards, and community relations, influence operational continuity and reputational risk. Governance quality remains particularly central to credit outcomes, as weak oversight, opaque ownership structures, and poor internal controls are strongly correlated with default risk and earnings volatility. Integrating these dimensions into risk-based pricing allows lenders to refine probability-of-default estimates and adjust risk premiums, accordingly, thereby strengthening risk-adjusted returns.

From an institutional perspective, ESG-informed risk-based pricing reinforces profitability and financial sustainability by improving the alignment between expected returns and long-term risk exposure. By pricing ESG risks explicitly, lenders can mitigate the accumulation of latent portfolio risks that may crystallize during regulatory shifts, environmental shocks, or reputational crises. Empirical evidence from markets with advanced risk management frameworks indicates that institutions incorporating ESG variables into pricing models exhibit greater income stability and enhanced resilience to adverse macroeconomic and regulatory conditions, consistent with findings in the broader risk-based pricing literature (Casu et al., 2022; Saunders & Cornett, 2021).

However, integrating ESG into risk-based pricing also amplifies the distributive challenges previously identified in conventional risk-based frameworks. Borrowers with limited disclosure capacity, informal governance structures, or constrained resources to invest in ESG compliance—particularly SMEs may face higher risk premiums not because of inherently unsustainable operations, but due to informational opacity and measurement limitations. This dynamic mirrors earlier concerns in risk-based pricing, where imperfect information leads to conservative pricing and potential credit rationing (Stiglitz & Weiss, 1981). Without appropriate safeguards, ESG-adjusted pricing risks reinforcing exclusionary outcomes under the guise of sustainability. The literature therefore underscores the importance of proportionate and adaptive ESG integration within risk-based pricing systems. Rather than imposing uniform ESG risk premiums, effective frameworks combine pricing incentives with developmental instruments such as credit guarantees, technical assistance, blended finance structures, and the use of alternative data to better capture firm-level practices. Relationship lending and sector-specific ESG benchmarks can further reduce excessive risk premiums for viable but underserved borrowers, aligning sustainability objectives with inclusive credit provision.

In this integrated framework, ESG does not operate as an external constraint on lending behavior, but as a strategic refinement of risk-based pricing that enhances long-term portfolio quality while supporting sustainable development goals. When calibrated to institutional capacity and borrower realities, ESG-informed pricing strengthens financial resilience without undermining access to credit. Conversely, when applied rigidly or without supporting infrastructure, it risks elevating borrowing costs and weakening the developmental role of financial

intermediation particularly in emerging and resource-constrained economies.

3.3 Regional Evidence: Sub-Saharan Africa

Empirical evidence from Sub-Saharan Africa (SSA) consistently indicates that high lending rates and elevated overall credit costs impose significant constraints on both the scale and quality of financial institutions' loan portfolios. The literature reveals that steep borrowing costs suppress credit demand, particularly among micro, small, and medium-sized enterprises (MSMEs) and informal enterprises, thereby limiting portfolio expansion for banks and microfinance institutions (MFIs). At the same time, elevated interest rates exacerbate borrowers' debt servicing burdens, heightening default risk and contributing to the deterioration of portfolio quality (Future Business Journal, 2025). These findings illuminate the dual challenge faced by lenders in the region: the need to price credit appropriately in line with risk and operational costs while mitigating the adverse effects of high costs on portfolio performance.

Further evidence underscores the critical role of credit risk in shaping the financial sustainability of MFIs across SSA. For instance, Marimira and Gumel (2025) demonstrate that persistent loan defaults and high non-performing loan (NPL) ratios exert a statistically significant negative effect on institutional profitability and long-term sustainability. Despite the widespread implementation of risk mitigation strategies—such as group lending models and enhanced monitoring continued high default levels erode profit margins and undermine operational stability in many institutions.

Taken together, these studies suggest that elevated credit costs in SSA are both a symptom and a driver of structural vulnerabilities within regional financial systems, including limited borrower information, weak collateral frameworks, and macroeconomic volatility. The literature therefore points to the necessity of context-specific approaches to credit pricing and risk management, which can enhance institutional sustainability without deepening credit exclusion or compromising portfolio quality (Future Business Journal, 2025; Marimira & Gumel, 2025).

3.3.1 East Africa

Empirical studies from East Africa, with particular focus on Rwanda, highlight the pivotal influence of institutional cost structures on credit pricing within microfinance banks. Evidence consistently indicates that operational expenses including cash handling, loan appraisal, credit administration, and monitoring exert a substantial upward effect on lending rates in the microfinance sector (Kabeho & Kengere, 2024). These cost pressures are especially pronounced in microfinance institutions due to the combination of small loan sizes, high transaction intensity, and the geographically dispersed nature of their client base.

The literature reveals a strong positive correlation between operational costs and interest rate levels, reflecting an inherent tension within microfinance systems: institutions must balance the imperative of financial sustainability with the need to maintain affordable credit for low-income and small enterprise borrowers. Elevated operational costs often translate into higher interest rates and fees for clients, which may restrict access to credit and exacerbate financial exclusion. Conversely, insufficient cost recovery threatens institutional profitability and long-term viability (Kabeho & Kengere, 2024).

From a systematic review perspective, these findings underscore the structural and operational constraints that define the microfinance landscape in East Africa. They also point to the potential of efficiency-enhancing interventions such as digitalization, streamlined credit processes, and alternative delivery channels to reduce operational costs and moderate lending rates. Policy-oriented conclusions drawn from the literature consistently suggest that improving institutional efficiency is central to reconciling the dual objectives of financial sustainability and inclusive credit provision in the region's microfinance sector (Kabeho & Kengere, 2024).

3.4 Credit Costs, Institutional Dynamics, and SME Performance

The interplay between credit costs, institutional structures, and SME performance represents a critical theme in the literature on financial inclusion and enterprise development in Sub-Saharan Africa (SSA). High borrowing costs, encompassing elevated interest rates, processing fees, and transactional charges, have consistently been identified as key constraints on both access to finance and the operational performance of micro, small, and medium-sized enterprises (MSMEs). The literature emphasizes that these dynamics affect not only individual borrowers but also the stability and sustainability of lending institutions, creating a complex dual challenge for policymakers and financial service providers.

Empirical studies across SSA demonstrate that elevated lending rates and high overall costs of credit significantly constrain the scale and quality of loan portfolios held by financial institutions. High borrowing costs suppress credit demand, particularly among MSMEs and informal enterprises, thereby limiting portfolio growth for banks and microfinance institutions (MFIs). Simultaneously, elevated interest rates exacerbate borrowers' debt servicing burdens, increasing default risk and contributing to the deterioration of portfolio quality (Future Business Journal,

2025). These findings illustrate the dual tension faced by lenders in SSA: the need to price credit to reflect risk and operational costs, while minimizing negative consequences for portfolio performance.

Further, research highlights the centrality of credit risk in shaping the financial sustainability of MFIs. Marimira and Gumel (2025) find that persistent loan defaults and elevated non-performing loan ratios have a statistically significant negative effect on institutional profitability and long-term sustainability. Despite adopting risk mitigation strategies, including group lending and enhanced monitoring mechanisms, continued high default levels erode profit margins and operational stability. Collectively, these studies suggest that high credit costs in SSA are both a cause and consequence of structural vulnerabilities, including weak borrower information, inadequate collateral frameworks, and macroeconomic volatility. Context-specific approaches to credit pricing and risk management are therefore essential to support institutional sustainability while avoiding exacerbation of credit exclusion (Future Business Journal, 2025; Marimira & Gumel, 2025).

In East Africa, particularly Rwanda, the literature underscores the critical role of institutional cost structures in shaping lending rates within microfinance banks. Operational expenses including cash handling, loan appraisal, credit administration, and monitoring exert a significant upward influence on interest rates (Kabehe & Kengere, 2024). These pressures are pronounced due to the small loan sizes, high transaction intensity, and geographically dispersed client base typical of microfinance institutions. The strong positive correlation between operational costs and interest rates highlights the fundamental tension between financial sustainability and borrower affordability. Elevated costs compel microfinance banks to transfer expenses to clients, potentially restricting access and exacerbating financial exclusion, whereas underpricing these costs risks institutional viability (Kabehe & Kengere, 2024).

The evidence suggests that efficiency-enhancing interventions, such as digitalization, streamlined credit processes, and alternative delivery channels, are critical to moderating operational costs and lending rates. Policy measures that improve institutional efficiency can reconcile the dual objectives of sustainability and inclusive credit provision, ensuring that smaller enterprises remain connected to formal financial systems.

3.4.1 Impact on MSMEs and Small Enterprises

High credit costs have direct and tangible consequences for MSMEs' performance and growth. Empirical research indicates that prohibitive borrowing costs constrain firms' ability to invest, expand operations, and enhance profitability (Beck, Demirgüç-Kunt, & Maksimovic, 2005; Ayyagari, Demirgüç-Kunt, & Maksimovic, 2017). In Kenya, Mwangi and Wanjiru (2023) show that unaffordable credit costs in Murang'a County restrict SMEs' growth opportunities, reflecting the principles of the pecking order theory: when external financing is costly, firms rely on internal resources, which limits expansion potential, especially for young or small enterprises. Similarly, Njiru (2025) documents that annual lending rates in Kenya ranging from 40% to 140% act as substantial barriers to scaling operations and undertaking strategic investments.

The literature positions these constraints within a broader structural context: emerging market credit systems frequently balance institutional sustainability against borrower affordability, resulting in smaller enterprises bearing the brunt of high costs. The repercussions extend beyond limited access, as elevated debt servicing burdens increase default risk and reduce willingness to seek further financing, perpetuating cycles of underinvestment and stunted growth. Policy and institutional responses recommended in the literature include risk-based pricing frameworks, credit guarantee schemes, and financial literacy initiatives to optimize credit utilization and repayment outcomes (Mwangi & Wanjiru, 2023; Njiru, 2025).

4. Synthesis and Discussion

The literature consistently illustrates that the relationship between credit pricing, financial institution sustainability, and borrower performance is complex and multifaceted, particularly in the context of MSMEs operating in emerging market economies. Credit costs are not merely transactional parameters; they operate at the intersection of institutional efficiency, borrower characteristics, and broader economic dynamics, influencing both micro-level firm outcomes and macro-level financial stability. High borrowing costs, when combined with structural constraints such as weak collateral frameworks, limited financial information, and geographic dispersion of borrowers, amplify the challenges faced by financial institutions and MSMEs alike (Beck & Demirgüç-Kunt, 2006; Ndung'u, 2019).

For financial institutions, strategic credit pricing emerges as a central determinant of long-term sustainability. Literature indicates that effective pricing must simultaneously account for operational costs, borrower risk profiles, and prevailing macroeconomic conditions to preserve net interest margins, maintain capital adequacy, and ensure portfolio resilience (Mishkin, 2019; Casu et al., 2022). Institutions that fail to align pricing with these factors risk escalating non-performing loans, declining profitability, and potential solvency challenges, particularly in high-risk or competitive lending environments. The evidence also underscores the nuanced trade-offs inherent in liberalized credit markets: while deregulation can improve nominal access to finance and increase competition, it

can compress net interest margins and incentivize riskier lending behavior if not coupled with robust prudential supervision (Ashraf & Shen, 2019; Beck & Demirgüç-Kunt, 2006). Emerging regulatory trends, including the integration of environmental, social, and governance (ESG) considerations into lending practices, further complicate credit pricing. While ESG-sensitive lending can enhance long-term portfolio resilience and align financial intermediation with sustainable development goals, it may also increase borrowing costs for enterprises with weaker ESG profiles, reflecting a tension between sustainability objectives and credit affordability (Do banks price ESG risks?, 2024).

From the perspective of MSMEs and other borrowers, high credit costs remain a persistent barrier to investment, operational expansion, and innovation. Empirical studies from Kenya and the broader East African context indicate that prohibitive interest rates and transaction fees limit firms' ability to engage in productive activities, adopt modern technologies, or implement process improvements (Mwangi & Wanjiru, 2023; Njiru, 2025). Conversely, access to more affordable credit facilitates firm-level growth and can improve competitiveness, although this places additional pressure on financial institutions to maintain profitability and manage risk effectively (Mutinda & Kamau, 2023).

The literature further highlights that the impact of credit access and affordability is mediated by borrower-specific characteristics. Financial literacy emerges as a critical determinant of loan performance, enabling SMEs to budget effectively, manage cash flows, optimize investment decisions, and reduce default risk (Supriyadi et al., 2024). Firms with stronger financial knowledge not only achieve better repayment outcomes but also improve the efficiency of credit utilization, ultimately lowering the effective cost of borrowing and supporting institutional sustainability. Similarly, well-documented credit histories allow lenders to differentiate risk profiles more accurately, enabling risk-based pricing and equitable loan allocation, which enhances the efficiency of credit markets and reduces the incidence of both over- and under-lending (Stiglitz & Weiss, 1981).

Synthesizing these findings, several key insights emerge. First, credit costs function as both a signal and constraint: they convey information about risk and operational efficiency while simultaneously influencing firm behavior, investment decisions, and innovation capacity. Second, financial institutions and policymakers must navigate a delicate balance between affordability for borrowers and sustainability for lenders. Excessively high rates restrict access and curtail SME growth, whereas rates that are too low relative to operational and risk costs can undermine institutional resilience. Third, credit outcomes are not uniform; heterogeneity in firm size, financial literacy, collateral availability, and sectoral characteristics introduce differential effects that must be accounted for in both research and practice. Finally, integrating complementary strategies including risk-sensitive pricing, operational efficiency improvements, financial literacy programs, and regulatory oversight appear essential for aligning the objectives of financial inclusion, institutional sustainability, and SME development. Taken together, the literature underscores that sustainable credit markets in emerging economies require an integrated approach that simultaneously addresses institutional cost structures, borrower capabilities, and broader regulatory frameworks. Such an approach not only enhances the growth prospects of MSMEs but also strengthens the resilience of financial institutions, contributing to a more inclusive and stable economic ecosystem.

Across SSA and East Africa, the literature consistently underscores that the cost of credit is a determinant not only of SME financial performance but also of institutional sustainability. Elevated credit costs reflect and reinforce structural vulnerabilities, including operational inefficiencies, limited collateral, and weak information systems. At the enterprise level, high borrowing costs suppress investment and growth, disproportionately affecting smaller and younger firms. At the institutional level, elevated interest rates are both a risk management tool and a potential barrier to portfolio expansion.

4.1 Thematic Imperatives

Addressing the challenges of high credit costs in emerging markets requires a multifaceted approach that balances borrower affordability with the sustainability of financial institutions. One critical strategy involves the adoption of context-sensitive credit pricing. Financial institutions must implement risk- and cost-reflective pricing mechanisms that accurately account for operational expenditures and borrower risk profiles, while avoiding disproportionate penalties on smaller enterprises. Such approaches ensure that interest rates and fees are aligned with the actual cost of lending and the risk of default, rather than serving as blunt instruments that inadvertently restrict access to finance for the most vulnerable segments of the market.

Operational efficiency represents a second, complementary avenue for mitigating credit costs. Streamlined lending processes, the integration of digital platforms, and the use of alternative delivery channels can substantially reduce the administrative and logistical burdens associated with small and geographically dispersed loan portfolios. By lowering operational costs, financial institutions gain the flexibility to moderate interest rates, improving affordability for micro, small, and medium-sized enterprises (MSMEs) without compromising profitability. Moreover, these efficiency-enhancing measures can accelerate loan processing, enhance monitoring, and reduce transaction risks, thereby strengthening overall institutional performance.

Finally, supportive policy frameworks are essential to bridging the gap between institutional sustainability and borrower access. Interventions such as credit guarantee schemes can reduce collateral requirements for small enterprises, while financial literacy programs equip borrowers with the knowledge to utilize credit effectively and manage repayment obligations. Targeted SME financing initiatives, including subsidized loans or structured risk-sharing mechanisms, further enhance the ability of smaller firms to secure capital, invest in productive activities, and contribute to local economic growth. Collectively, these policy measures complement institutional strategies, creating an ecosystem that supports inclusive credit provision while safeguarding the financial health of lending institutions.

In combination, context-sensitive pricing, operational efficiency, and supportive policy frameworks constitute a holistic approach to reducing the cost of credit. By integrating these strategies, financial institutions and policymakers can reconcile the dual imperatives of affordability and sustainability, thereby fostering SME growth, promoting financial inclusion, and strengthening the resilience of credit markets in emerging economies.

Ultimately, the literature demonstrates that addressing the dual challenges of institutional sustainability and borrower affordability is central to enhancing SME growth, expanding financial inclusion, and stabilizing the credit ecosystem in SSA and East Africa. By linking institutional cost dynamics with SME outcomes, this body of research provides a compelling basis for both policy intervention and further empirical inquiry into sustainable and inclusive credit markets.

4.2 Credit Access and Performance Interactions

The interplay between credit costs, institutional dynamics, and the performance of micro, small, and medium-sized enterprises (MSMEs) represents a central concern in the literature on financial inclusion and enterprise development in Sub-Saharan Africa (SSA). Empirical studies across the region consistently demonstrate that high borrowing costs including elevated interest rates, processing fees, and transactional charges impose significant constraints on access to finance and limit the growth trajectories of SMEs. In SSA, steep lending rates suppress credit demand, particularly among smaller and informal enterprises, while simultaneously increasing debt servicing burdens and heightening default risk, which in turn negatively affects the quality and sustainability of loan portfolios. Persistent high non-performing loan ratios, as documented by Marimira and Gumel (2025), have been shown to erode profitability and operational stability in microfinance institutions, despite the adoption of group lending models and enhanced monitoring strategies. These findings underscore the dual challenge for lenders in the region: the need to price credit in alignment with operational costs and risk, while avoiding measures that disproportionately restrict access or undermine portfolio performance (Future Business Journal, 2025; Marimira & Gumel, 2025).

Evidence from East Africa, particularly Rwanda, highlights the pivotal role of institutional cost structures in shaping microfinance lending rates. Operational expenses such as cash handling, loan appraisal, credit administration, and monitoring exert a direct upward influence on interest rates, a pressure compounded by small loan sizes, high transaction intensity, and geographically dispersed client bases (Kabehe & Kengere, 2024). The strong positive correlation between operational costs and lending rates illustrates the fundamental tension between achieving institutional sustainability and maintaining affordability for low-income and small enterprise borrowers. Streamlined processes, digital platforms, and alternative delivery channels have been identified in the literature as critical efficiency-enhancing interventions that can reduce operational costs and moderate interest rates, thereby facilitating broader access to finance while protecting institutional viability.

At the enterprise level, high credit costs significantly shape SME performance and growth potential. Empirical research in Kenya, for instance, demonstrates that prohibitive lending rates ranging from approximately 40% to 140% annually restrict firms' ability to invest in productive activities, expand operations, and enhance competitiveness (Njiru, 2025). Mwangi and Wanjiru (2023) further illustrate that in Murang'a County, the reliance on internal financing due to unaffordable credit constrains growth potential, particularly for young or small enterprises, a pattern consistent with the pecking order theory. However, the literature also highlights more nuanced dynamics: some SMEs facing tighter credit constraints have been observed to achieve stronger profitability relative to less-constrained peers (Aminkeng et al., 2024). These counterintuitive findings reflect the capacity of firms to adapt strategically to credit limitations through disciplined investment prioritization, optimized resource allocation, or engagement in higher-margin activities, demonstrating that the relationship between credit access and performance is mediated by managerial capabilities, sectoral context, and firm-specific strategic responses.

Taken together, the literature underscores that elevated credit costs are both a structural challenge and a determinant of financial outcomes at institutional and firm levels. They are symptomatic of underlying vulnerabilities, including weak borrower information systems, limited collateral frameworks, and macroeconomic volatility, yet they also influence firm behavior in complex ways that can sometimes enhance operational efficiency. Addressing these dynamics requires a combination of institutional and policy interventions. Financial

institutions are encouraged to adopt context-sensitive, risk- and cost-reflective pricing mechanisms that do not unduly penalize smaller borrowers, thereby aligning interest rates with actual lending costs and risk profiles. Operational efficiency can be strengthened through digitalization, process streamlining, and alternative delivery channels, enabling institutions to moderate lending rates while maintaining portfolio quality. Complementary policy measures including credit guarantee schemes, financial literacy programs, and targeted SME financing initiatives are critical to bridging affordability gaps, enhancing the strategic use of credit, and promoting sustainable SME growth without compromising institutional viability.

Ultimately, the literature emphasizes that reconciling the dual objectives of financial sustainability and inclusive credit provision is central to fostering SME development and strengthening the resilience of credit markets in SSA and East Africa. By integrating regional evidence, firm-level performance insights, and practical strategies, this body of research highlights the importance of nuanced, contextually grounded approaches that simultaneously support institutional stability and enable SMEs to contribute effectively to economic growth and financial inclusion.

4.3 Financial Literacy and Loan Performance

A review of the literature indicates that financial literacy plays a pivotal role in shaping loan repayment behavior and the overall financial performance of micro, small, and medium-sized enterprises (MSMEs). While not a direct component of credit costs, the level of financial knowledge and capability among borrowers significantly influences how credit is allocated, managed, and ultimately repaid (Supriyadi et al., 2024). Empirical evidence suggests that borrowers with higher financial literacy are more likely to engage in disciplined budgeting, effective cash flow management, and strategic deployment of borrowed funds, which enhances repayment rates and reduces default risk.

Conversely, limited financial literacy has been associated with suboptimal credit utilization, inadequate record-keeping, and misaligned investment decisions, all of which contribute to delayed repayments and increased likelihood of loan default. These repayment challenges impose indirect costs on both lenders and borrowers, manifesting as higher penalties, elevated interest charges on subsequent loans, and greater administrative burdens related to loan recovery (Supriyadi et al., 2024). From a systematic review perspective, financial literacy emerges as a critical mediating factor that affects the effective cost of credit, operational risk, and the sustainability of lending portfolios, particularly for MSMEs that often lack collateral and formal financial documentation.

The literature consistently emphasizes that integrating financial literacy interventions into credit programs is essential, especially in emerging markets where MSMEs constitute a substantial share of economic activity. By improving borrowers' understanding of loan terms, repayment obligations, and broader financial management practices, such initiatives can simultaneously enhance firm-level performance, reduce default-related costs, and support the dual objectives of financial inclusion and institutional sustainability. Consequently, financial literacy is not merely an ancillary consideration but a strategic lever through which the efficiency and effectiveness of credit delivery can be significantly improved.

4.4 Theoretical Perspectives on Credit Access and SME Performance

Understanding credit access, pricing, and their impact on firm performance in emerging markets necessitates critical engagement with foundational economic theories and their contemporary applications. Two complementary theoretical perspectives Loanable Funds and Credit Rationing theories, and the Innovation of Entrepreneurship theory provide useful lenses through which to analyze the dynamics of financial inclusion, institutional sustainability, and SME growth.

The Loanable Funds Theory posits that interest rates in credit markets are determined by the interaction between the supply of and demand for loanable capital (Mishkin, 2019). In principle, higher interest rates constrain borrowing by raising the cost of capital, while an abundance of credit exerts downward pressure on rates, stimulating investment. The theory's strength lies in its simplicity and its ability to conceptualize interest rates as market-clearing mechanisms that balance supply and demand. However, a critical limitation is its assumption of perfect information and homogenous risk perception among borrowers conditions that rarely hold in emerging markets characterized by asymmetric information, heterogeneous borrowers, and varying levels of financial sophistication.

Credit Rationing Theory extends the Loanable Funds framework by explicitly addressing these informational imperfections. Stiglitz and Weiss (1981) argue that lenders often limit loan quantities or deny credit to borrowers despite their willingness to pay prevailing rates, due to uncertainty about borrower risk and potential adverse selection. This theory effectively explains why SMEs and other financially opaque enterprises frequently face restricted access to external finance, even when willing to pay higher interest rates (Beck & Demirgüç-Kunt, 2006; Ndung'u, 2019). Its principal strength is its empirical relevance: it accounts for structural constraints in credit markets, including the scarcity of collateral, incomplete financial records, and institutional weaknesses, thereby providing a more realistic depiction of how credit access operates in practice. Its weakness, however, is that it does

not provide direct guidance on mitigating these constraints beyond the broad recommendation for improved risk assessment and institutional mechanisms, leaving a gap in prescriptive policy strategies.

The Innovation of Entrepreneurship Theory complements these perspectives by focusing on the role of credit in enabling entrepreneurial activity and innovation. Schumpeter (1934) and subsequent studies highlight that affordable and appropriately structured credit is essential for investments in new technologies, process improvements, and operational expansion (Mwangi & Wanjiru, 2023). By lowering financial constraints, accessible credit allows firms to undertake research and development initiatives, diversify products, and enhance productivity and competitiveness. Its strength lies in connecting financial accessibility to long-term economic outcomes, emphasizing that the cost and availability of credit are not merely operational concerns but strategic determinants of entrepreneurial dynamism and firm-level innovation. The theory's limitation, however, is that it may overemphasize the positive potential of credit, potentially underestimating the risks associated with over-leveraging or poorly managed borrowing in contexts of high interest rates or weak institutional support.

Integrating these theoretical perspectives into a systematic review provides a nuanced framework for interpreting empirical evidence. Loanable Funds and Credit Rationing theories explain why SMEs frequently face constrained access and elevated borrowing costs in Sub-Saharan Africa and East Africa, highlighting the structural and informational factors that influence credit supply and portfolio quality. The Innovation of Entrepreneurship theory extends this understanding by illustrating the implications of credit costs for firm behavior, strategic investment decisions, and innovation-driven growth. Together, the two frameworks clarify the dual imperative faced by financial institutions and policymakers: ensuring institutional sustainability while enabling SMEs to access affordable, risk-appropriate financing that supports growth, innovation, and market competitiveness.

From a systematic review standpoint, these theories help to interpret heterogeneous findings in the literature, such as instances where SMEs under tighter credit conditions adopt adaptive financial strategies to maintain profitability (Aminkeng et al., 2024), or where operational efficiency in microfinance institutions moderates the relationship between cost of credit and borrower outcomes (Kabeho & Kengere, 2024). They also highlight areas where further empirical research is needed, such as the interaction between financial literacy, credit access, and innovation adoption, or the effectiveness of policy interventions like credit guarantee schemes in mitigating the effects of information asymmetry. Overall, combining these theoretical lenses strengthens the analytical framework for understanding credit markets in emerging economies, providing both explanatory power and actionable insights for policy and institutional design.

5. Policy and Practice Recommendations

The literature reviewed highlights a critical need for coordinated interventions across multiple levels global, regional, and local to address the intertwined challenges of credit affordability, institutional sustainability, and SME development. At a global level, financial policymakers and international development institutions are encouraged to promote frameworks that facilitate efficient, risk-sensitive lending while fostering inclusive financial systems. These include the adoption of standardized risk assessment methodologies, encouragement of transparent pricing practices, and support for credit information sharing across borders. Evidence indicates that such initiatives can reduce information asymmetries and improve lenders' ability to differentiate borrower risk profiles, thereby reducing reliance on excessively high interest rates as a blanket risk mitigation tool (Beck & Demirgüç-Kunt, 2006; Stiglitz & Weiss, 1981). Moreover, global actors can support the integration of environmental, social, and governance (ESG) criteria into lending frameworks, ensuring that sustainable lending practices do not inadvertently exacerbate borrowing costs for SMEs in emerging markets. While ESG-aligned lending strengthens long-term portfolio resilience, it requires careful calibration to avoid creating affordability barriers for enterprises with limited ESG capacity (Do banks price ESG risks?, 2024).

At the regional level, particularly in Sub-Saharan Africa, policymakers and regulators must focus on enhancing institutional capacity and operational efficiency within financial markets. The evidence reviewed underscores the importance of balancing financial inclusion with risk management, particularly in liberalized credit environments where competition can compress net interest margins and incentivize riskier lending behaviors (Ashraf & Shen, 2019; Beck & Demirgüç-Kunt, 2006). Regulatory interventions that enforce robust prudential supervision, risk-based pricing frameworks, and improved collateral and credit reporting systems are critical. Such measures can both support institutional sustainability and create equitable access to finance, particularly for microfinance institutions that serve geographically dispersed and resource-constrained borrowers (Kabeho & Kengere, 2024). Regional development banks and financial sector associations can play an important role by facilitating knowledge transfer, promoting best practices in credit administration, and supporting capacity-building initiatives that enhance operational efficiency and loan performance.

At the local level, policy and practice recommendations should be directly responsive to the needs and capabilities of MSMEs. First, risk-sensitive pricing mechanisms must be adopted to ensure that interest rates reflect both operational costs and borrower-specific risk profiles without unduly penalizing smaller enterprises. Empirical

evidence from Kenya and East Africa indicates that unaffordable credit constrains firm growth, stifles innovation, and limits investment in process improvements (Mwangi & Wanjiru, 2023; Njiru, 2025). Financial institutions, therefore, must integrate borrower-level risk assessment tools with flexible lending products to accommodate heterogeneity in firm size, collateral availability, financial literacy, and sectoral dynamics.

Second, operational efficiency improvements within lending institutions are critical. Streamlining credit appraisal, administration, and monitoring processes, alongside digitalization and alternative delivery channels, reduces operational costs and enables institutions to moderate interest rates while maintaining portfolio quality (Kabeho & Kengere, 2024). Such measures are particularly relevant for microfinance banks and small-scale lenders that manage high transaction intensity and geographically dispersed clients, where efficiency gains directly translate into improved affordability for borrowers.

Third, financial literacy initiatives are essential at the borrower level. The literature highlights that SMEs with higher financial knowledge demonstrate improved loan management, investment decision-making, and repayment performance (Supriyadi et al., 2024). Integrating structured financial education programs within credit products can enhance borrowers' capacity to utilize funds effectively, reduce default risk, and lower the indirect costs of borrowing. This intervention serves a dual purpose: improving firm-level financial performance while strengthening the sustainability of lending institutions by reducing operational risk.

Fourth, policy instruments such as credit guarantee schemes and targeted SME financing initiatives can mitigate barriers posed by insufficient collateral or incomplete credit histories. Evidence suggests that these mechanisms enable lenders to extend credit to riskier but potentially high-growth enterprises without disproportionately increasing interest rates (Mutinda & Kamau, 2023). Such instruments also enhance market inclusivity by ensuring that smaller, younger, or resource-constrained enterprises are not excluded from formal financial systems, thereby fostering broader economic participation.

Finally, continuous monitoring, evaluation, and data-driven decision-making are critical for aligning policy and practice. Financial institutions and regulators should leverage credit reporting systems, borrower performance data, and portfolio analytics to refine risk pricing, identify emerging credit trends, and respond proactively to systemic vulnerabilities. By adopting evidence-based approaches, stakeholders can ensure that interventions remain responsive to both market realities and the evolving needs of MSMEs.

In summary, the literature underscores that effective policy and practice must be multidimensional, integrating global best practices, regional regulatory frameworks, and locally responsive strategies. By combining risk-sensitive pricing, operational efficiency, financial literacy programs, targeted financing mechanisms, and data-driven oversight, financial institutions and policymakers can create a sustainable credit ecosystem that promotes SME growth, enhances financial inclusion, and maintains institutional resilience. Such an integrated approach is particularly vital in emerging markets, where structural constraints, heterogeneity among borrowers, and macroeconomic volatility pose ongoing challenges to equitable and effective credit delivery.

References

- Ashraf, M., & Shen, Y. (2019). Financial liberalization and credit market dynamics: Evidence from emerging economies. *Journal of Banking & Finance*, *102*, 123-137. <https://doi.org/10.1016/j.jbankfin.2019.02.015>
- Ayyagari, M., Demirgüç-Kunt, A., & Maksimovic, V. (2017). SME finance. *World Bank Economic Review*, *31*(1), 1-26. <https://doi.org/10.1093/wber/lhw037>
- Beck, T., & Demirgüç-Kunt, A. (2006). Small and medium-size enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance*, *30*(11), 2931-2943. <https://doi.org/10.1016/j.jbankfin.2006.05.009>
- Beck, T., Demirgüç-Kunt, A., & Maksimovic, V. (2005). Financial and legal constraints to firm growth: Does firm size matter?. *Journal of Finance*, *60*(1), 137-177. <https://doi.org/10.1111/j.1540-6261.2005.00727.x>
- Carnevale, C., & Drago, D. (2024). Do banks price ESG risks? A critical review of empirical research. Do banks price ESG risks?. *Research in International Business and Finance*, *69*, 102227.
- Casu, B., Girardone, C., & Molyneux, P. (2022). *Introduction to banking* (3rd ed.). Pearson Education.
- Kabeho, A., & Kengere, L. (2024). Operational costs and interest rate determination in microfinance banks: Evidence from Rwanda. *Journal of African Financial Studies*, *9*(1), 45-66.
- Marimira, S., & Gumel, A. (2025). Credit risk, portfolio performance, and MFI sustainability in Sub-Saharan Africa: A cross-regional study. *Future Business Journal*, *11*(2), 112-135.
- Mishkin, F. S. (2019). *The economics of money, banking, and financial markets* (12th ed.). Pearson Education.

- Mutinda, P., & Kamau, R. (2023). Risk-based credit pricing and SME financial performance in Kenya. *African Journal of Economic and Management Studies*, 14(2), 45-62.
- Mwangi, J., & Wanjiru, H. (2023). Cost of credit and SME performance in Murang'a County, Kenya. *Journal of Small Business and Enterprise Development*, 30(4), 567-586.
- Ndung'u, N. (2019). *Credit access, regulatory frameworks, and financial inclusion in Kenya*. Central Bank of Kenya Research Paper Series.
- Njiru, P. (2025). Interest rate barriers to SME growth in Kenya: A longitudinal study. *East African Journal of Finance*, 12(1), 78-102.
- Saunders, A., & Cornett, M. M. (2021). *Financial institutions management: A risk management approach* (10th ed.). McGraw-Hill Education.
- Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *American Economic Review*, 71(3), 393-410.
- Supriyadi, S., et al. (2024). Financial literacy and loan repayment performance among MSMEs. *Journal of Development Finance*, 10(1), 34-50.

Copyrights

The journal retains exclusive first publication rights to this original, unpublished manuscript, which remains the authors' intellectual property. As an open-access journal, it permits non-commercial sharing with attribution under the Creative Commons Attribution 4.0 International License (CC BY 4.0), complying with COPE (Committee on Publication Ethics) guidelines. All content is archived in public repositories to ensure transparency and accessibility.