Unlocking Finance: Collateral Requirement and Access to Credit among Small and Medium Enterprises in Murang'a County, Kenya

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ABSTRACT

Access to credit remains a persistent challenge for Small and Medium Enterprises (SMEs) particularly in developing economies where financial ecosystems are still evolving. This study investigates the crucial role that collateral requirements play in determining credit accessibility for SMEs in Murang'a County, Kenya. Using a descriptive research design while drawing on empirical data from150 SMEs owners, the research explores how collateral thresholds influence loan approval rates, the types of collateral demanded and the subsequent effects on business growth and sustainability. The findings reveal that while collateral serves as a risk mitigation tool for lenders, it often excludes viable SMEs lacking fixed assets thereby perpetuating financial exclusion. Moreover, the study uncovers a gap between policy intentions and on-the-ground lending practices highlighting the need for more inclusive financial instruments. By unlocking the barriers posed by stringent collateral demands, the paper advocates for adaptive lending models that recognize the unique realities of SMEs. The insights offer valuable implications for policymakers, financial institutions and development partners seeking to foster a more inclusive financial landscape in Murang'a county and similar contexts.

Keywords: Small and Medium Enterprises, Collateral Requirements, Credit Access

BACKGROUND OF THE STUDY

Small and Medium Enterprises (SMEs) constitute a key pillar of economic transformation supporting growth, job creation and inclusive development both globally and within Kenya. They represent approximately 90% of businesses worldwide, generate about 70% of employment and contribute up to 70% of global GDP (Binte, Fauconberg, & Woeffray, 2021). Locally, SMEs play an equally pivotal role in Kenya contributing roughly 40% to national GDP and employing nearly 80% of the workforce outside the formal sector (Financial Sector Deepening Kenya, 2024). Within Murang'a County where the economy is largely anchored in agriculture, SMEs operate across agro-processing, retail, manufacturing and service sectors to drive local commerce and support livelihoods (County Government of Murang'a, 2022). Despite their significance, access to formal credit remains a persistent constraint with over 70% of SME owners identifying lack of acceptable collateral as a primary barrier (Tiriongo, Njino, & Mulindi, 2025). The predominance of movable and informal assets which are often deemed ineligible by financial institutions, systematically excludes otherwise viable enterprises from accessing essential financing thus highlighting a structural misalignment between SME asset profiles and prevailing lending requirements.

Murang'a County offers a compelling empirical context for examining the constraints imposed by collateral-based lending given both its proactive policy orientation toward SME development and the structural features of its enterprise landscape. The county government has actively promoted SME growth through industrial clusters and targeted enterprise support initiatives spanning agro-processing, manufacturing and services (Murang'a County Government, 2025). Despite these efforts, access to formal finance remains uneven with emerging evidence identifying collateral requirements as a critical impediment for micro and small enterprises. Prior studies further demonstrate that collateral is a significant predictor of firm performance (Karanja & Muathe, 2025), underscoring its centrality as a locally salient financial constraint. This challenge is particularly pronounced within the county's heterogeneous SME ecosystem comprising agro-processing, dairy, retail and light manufacturing where many enterprises possess limited fixed assets and are therefore structurally disadvantaged

in meeting conventional collateral thresholds (Murang'a County Government, 2025). Concurrently, ongoing policy interventions, including MSME-targeted credit facilities valued at approximately Ksh 300 million, reflect a supportive institutional environment conducive to applied and policy-relevant inquiry (National Treasury and Economic Planning, 2025).

Against this backdrop, collateral requirements while intended to mitigate lending risks, frequently operate as exclusionary mechanisms that restrict access to credit for otherwise viable SMEs. National evidence indicates that approximately 15% of SME loan applications are rejected, with insufficient collateral cited as a principal determinant (Kenya Bankers Association, 2025). Building on this context, the present study interrogates how collateral demands shape credit access among SMEs in Murang'a County's key economic sectors and examines the subsequent implications for enterprise growth, investment capacity and local economic development. By generating robust and data-driven insights, the study seeks to inform both policy and practice through advancing reforms in collateral frameworks, promoting more inclusive lending models and enhancing the flow of finance to SMEs as a pathway to strengthening economic resilience at the county level.

Statement of the Problem

The increasing prominence of SMEs is reflected in the robust and growing sector with over 7.5 million enterprises highlighting their role in fostering local economic resilience (Osano, 2019). However, despite this crucial contribution, the sustainability of SMEs remains fragile. Studies indicate that **up to 38% start-ups collapse within the first two years** primarily due to limited access to financial resources (Rana, Amritesh, Tyagi & Beniwal, 2025). Access to affordable credit is essential for business start-up, growth and resilience yet a majority of SMEs struggle to secure loans from formal financial institutions. The **Kenya Bankers Association (2025)** reports that over **70% of SMEs** are unable to access bank credit due to stringent **collateral requirements** which often demand fixed assets such as land titles or buildings, assets that most small businesses do not possess. Consequently, many viable enterprises are forced to rely on costly informal credit sources or remain underfunded hence stifling their growth and contribution to equitable and sustainable development. This persistent financing gap raises critical questions about the appropriateness and inclusivity of existing collateral frameworks. Understanding how collateral requirements influence SME access to credit is therefore vital for identifying strategies which can unlock affordable financing and strengthen business sustainability to enhance the county's and Kenya's overall economic development.

Objective of the Study

To determine the impact of collateral requirements on access to credit services by Small and Medium Enterprises in Murang'a County, Kenya

Theoretical Framework

Credit Rationing Theory, proposed by Stiglitz and Weiss (1981), explains why SMEs may be denied loans even when willing to pay higher interest rates as lenders limit credit supply to manage risks of adverse selection and moral hazard. Collateral requirements intensify this rationing particularly for SMEs in agro-processing, retail and small-scale manufacturing that often lack fixed assets which excludes otherwise viable businesses from formal finance. Consequently, SMEs rely on costly informal credit or under-invest in growth thus limiting employment, innovation and local economic development. This study applies Credit Rationing Theory to examine how collateral policies influence lending decisions and SME access to credit, while also evaluating alternative collateral mechanisms and credit innovations to reduce rationing and support SME-driven growth.

Market Failure Theory, proposed by Bator (1958), explains why SMEs often face limited access to formal credit despite their key role in economic growth, employment and poverty reduction. Market failures occur when resources are inefficiently allocated leaving essential services under-provided. In credit markets, informational asymmetries, perceived risks and stringent collateral requirements prevent potentially creditworthy SMEs from accessing finance. Many SMEs lack sufficient fixed assets to meet banks' collateral demands forcing them to rely on costly informal credit or under-invest which constrains growth, sustainability, job creation and local development. This study applies Market Failure Theory to examine how structural inefficiencies, particularly collateral constraints, limit SME access to credit while also exploring alternative solutions such as movable asset

collateral, credit guarantees and policy interventions to correct market gaps and foster SME-driven economic development.

Empirical Review

Thein, Niigata and Inaba (2024) investigated the concentrated bank market and SMEs' collateral issues among 25,000 firms across 19 developing Asian countries. Findings revealed that bank market concentration increased collateral demand making credit access harder for SMEs. While the study provided evidence of how institutional market structure interacts with collateral demand, it presents a contextual gap focusing on Asian firms and failing to distinguish SMEs local variations.

Mwirigi, Gakure and Otieno (2019) examined the impact of collateral on strategic access to credit facilities by women owned small and medium enterprises in Nairobi, Kenya using a sample of size 370 SMEs. Results indicated that collateral significantly predicted access to credit for women-owned SMEs. By focusing on gendered dimension of collateral constraints, the study presents a limitation in scope, focusing only on women-owned firms.

Based on the review, a gap for further research emerges. There is **lack of detailed and localized empirical work** on how collateral requirements affect access to credit for SMEs, particularly focusing on **types of collateral accepted, asset valuation aspects, enforcement, realization of collateral** and **how institutional context such as county level credit markets and asset base influences credit access**. For instance, SMEs may have mainly movable assets or informal assets which banks do not accept. There is need for deeper insights examining alternative collateral instruments like movable assets and group guarantees, and business performance.

The Conceptual Framework

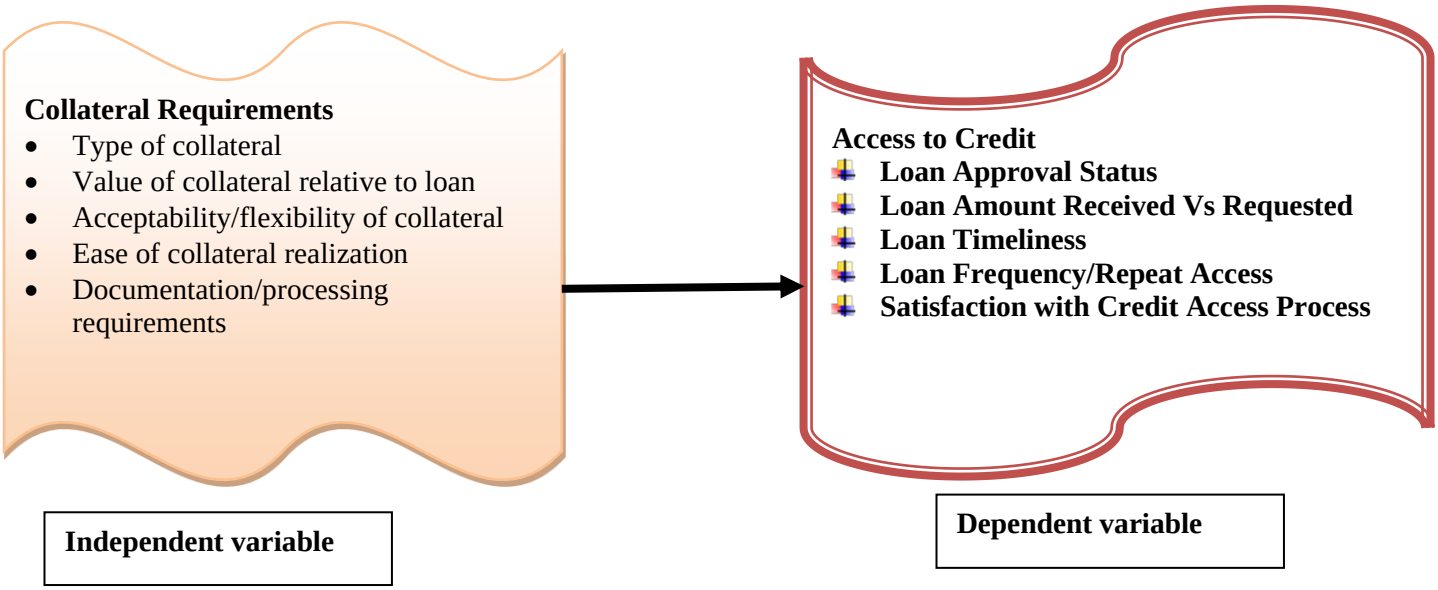

Figure 1: The Conceptual Framework

DATA AND METHODOLOGY

Research Design

This study employed a descriptive research design to examine the influence of collateral requirements on SMEs in Murang'a County, Kenya. The design was appropriate for analyzing naturally occurring phenomena and identifying patterns and relationships without variable manipulation (Mugenda, 2013). Collateral requirement was operationalized using five dimensions: type of collateral, value of collateral relative to the loan amount, acceptability/flexibility of collateral, ease of collateral realization and documentation/processing requirements. **On the other hand, access to credit** was operationalized using five dimensions: **loan approval status, loan**

amount received relative to the amount requested, loan timeliness, loan frequency/repeat access and **satisfaction with the credit access process**. These dimensions were used to assess the extent to which borrowers were able to obtain credit from lending institutions. Data were collected using a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) based on respondents' perceptions and experiences.

Target, Sample Size & Sampling Technique

Target population comprised 150 SMEs with SME owners serving as the respondents due to their direct experience with collateral-based credit access. Murang'a County was purposively selected given its active SME sector, documented collateral constraints and policy relevance. To enhance representativeness across sectors, a combination of purposive and simple random sampling techniques was applied to obtain a sample of 89 respondents. This sample translating to 59.3% of the population was considered adequate since it met the minimum requirement for multiple regression analysis as recommended by Green's (1991) formula ($N \geq 50+8m$). Primary data were collected using a structured questionnaire based on a five-point likert scale.

Data Analysis

The collected data was analyzed using both descriptive and inferential statistical techniques with the aid of STATA software. Descriptive analysis involved computation of measures of central tendency and dispersion while inferential analysis employed correlation and multiple linear regression methods. Regression analysis was conducted to determine the extent to which the independent variables predict variations in the dependent variable, as well as the strength of the relationship between them. The regression model was specified in the following functional form:

$$Y_i = \beta o + \beta_1 X_{i1} + \beta_2 X_{i2} + \beta_3 X_{i3} + \mu_i$$

Where;

Y = Access to Credit Service

X_{ij}, ij= 1, 2, 3 represents Collateral Requirement, Cost of Credit and Business Risk respectively.

βo = Constant term

μ_i = Error term

FINDINGS

A response rate of 69% (n = 62) was achieved. This was considered adequate for reliable analysis and reporting (Mugenda & Mugenda, 2012).

Descriptive Results

Table 1: Descriptive results for collateral requirements

	Mean	**Std. Dev.**
Type of collateral owned is acceptable by financial institutions	2.48	0.987
Value of my collateral is adequate to guarantee me access to credit facility from financial institutions	2.56	1.002
Financial institution prefer collateral availability compared to entrepreneur's ability to repay loans	4.52	0.741
Demand for collateral is a major hindrance to accessing credit	4.58	0.714
Lending institutions require collateral support documentation	4.32	0.719
SME owners are willing to commit collateral to access credit from a financial institution	4.65	0.546

Descriptive analysis indicates that respondents generally perceived collateral requirements as a significant constraint to credit access. Specifically, respondents disagreed that the type (M = 2.48, SD = 0.987) and value (M = 2.56, SD = 1.002) of their collateral met financial institutions' lending criteria suggesting widespread inadequacy of SME-owned assets in satisfying loan requirements. In contrast, there was strong agreement that financial institutions prioritize collateral over repayment capacity (M = 4.52, SD = 0.741) highlighting a perceived bias toward asset-based lending. This is further reinforced by the high level of consensus that collateral requirements constitute a major barrier to credit access (M = 4.58, SD = 0.714). Additionally, respondents agreed that lenders require extensive collateral documentation (M = 4.32, SD = 0.719) reflecting procedural rigidity in credit appraisal processes. Despite these constraints, SME owners expressed a strong willingness to pledge collateral to obtain credit (M = 4.65, SD = 0.546) indicating that limited access is driven more by structural barriers than by borrower reluctance.

Correlation Analysis

Table 2: Correlation results

Variable	Collateral Requirement	Cost of Credit	Business Risk
Credit Access	0.232(p< .05)	0.106(p< .05)	-0.422(p< .05)

The correlation coefficient of 0.232 with a p-value less than 0.05 reveals a weak but statistically significant positive relationship between collateral requirements and access to credit among SMEs. The finding indicate that SMEs that are able to meet collateral requirements have higher chances of accessing credit facilities owing to their perceived stronger repayment capacity, lower default risk and financial stability. Such businesses are more likely to possess assets that meet lending conditions which improves their creditworthiness and loan eligibility. Collateral requirements therefore act as a screening mechanism through which financially capable SMEs have greater access to credit especially where lenders consider collateral as indicative of borrower's financial strength and reliability. Cost of credit had a correlation coefficient of 0.106 (p < .05) revealing a weak but statistically significant positive relationship with access to credit. The weak correlation implies minimal association between cost and access to credit. On the other hand, business risk had a moderate and statistically significant negative correlation with access to credit (-0.422; p < .05) indicating that increased levels of business risk led to reduced access to credit among SMEs.

Regression Analysis:

The regression analysis results examining the influence of collateral requirements on access to credit are presented as follows.

Table 3: Regression Co-efficients

Predictor	**B**	**SE**	**β**	**t**	**p**
Constant	2.428	0.674	-	3.602	.001
Collateral Requirements	-	0.141	-0.230	-2.017	.047
Cost of Credit	-	0.082	-0.239	-1.929	.057
Business Risk	-	0.103	-0.468	-4.331	< .001

From Table 3, collateral requirements had a negative and statistically significant effect on access to credit (B= -0.284, β= -0.230, t= -2.017, p= .047) revealing that stricter collateral requirements significantly reduced SMEs' ability to access credit. This suggests that increased demands for asset-based security may limit borrowing more so for businesses with inadequate collateral documentation and limited assets. The findings support the argument that collateral requirements act as barriers to credit accessibility which limits the eligibility of borrowers who are financially constrained (Tiriongo, Njino, & Mulindi, 2025). The findings agree with Alinitwe (2023) who established a significant effect of collateral on credit accessibility and SME performance in Buloba Uganda. Simba, Tajeddin, Dana& Ribeiro (2024) in their study of manufacturing SMEs across 41 African countries established that higher security requirements and higher collateral values reduce SMEs' access to credit. Cost of credit also yielded a negative relationship with access to credit (B= -0.150, β= -0.239, t= -1.929, p = .057). The

findings show that higher borrowing costs reduced SMEs' ability to obtain credit. However, the effect was not statistically significant at the conventional 5% significance level since the p-value exceeded 0.05. Further, business risk resulted into a negative but statistically significant effect on access to credit (B = -0.448, β = -0.468, t = -4.331, $p < .001$). The results suggest that high business risk substantially reduced SMEs' access to credit. Lenders are more likely to consider high-risk businesses as having greater probabilities of repayment difficulties and loan defaults which reduces their chances of accessing credit.

The overall model results revealed a statistically significant regression equation as shown in Table 4.

Table 4: Model summary

Statistic	Value
R	0.475
R^2	0.226
Adjusted R^2	0.198
$F(3, 85)$	8.251
p-value (Model)	< .001
Std. Error of the Estimate	0.553

Model summary statistics yielded coefficient (R = .475) showing a moderate relationship between the independent variables and access to credit. Based on the coefficient of determination (R^2 = .226), predictors explained 22.6% of the variation in access to credit. The overall model was statistically significant, $F(3, 85)$ = 8.251, $p < .001$, suggesting that the predictors collectively had a significant effect on access to credit. Results were substituted as follows:

$$Y_i = 2.428 - 0.284X_{i1} - 0.150X_{i2} - 0.448X_{i3}$$

DISCUSSIONS OF THE FINDINGS

The descriptive findings indicate that the perceived acceptability of collateral owned by SMEs to financial institutions is generally low (M = 2.48, SD = 0.987). This suggest that most enterprises view their assets, primarily comprising movable property, inventory and informal equipment as insufficient or unacceptable forms of security under prevailing lending criteria. This perception reflects the continued preference by financial institutions for fixed assets such as land and buildings which are often beyond the asset portfolios of many SMEs, especially micro and small enterprises (Brassell & Boschmans, 2022). Collectively, these results underscore a structural misalignment between the asset composition of SMEs and the collateral requirements imposed by lenders thus reinforcing the role of stringent collateral standards as a persistent constraint to credit access within the SME sector.

In regards to the perceived adequacy of collateral value for securing credit facilities, results indicate a generally low level of confidence among SME owners (M = 2.56, SD = 1.002) revealing that many enterprises consider the value of their available assets insufficient to satisfy the collateral requirements imposed by financial institutions. This perception is consistent with prevailing lending practices that prioritize high-value (Luck & Santos, 2024) fixed assets often beyond the reach of a substantial proportion of SMEs. The observed moderate dispersion in responses further points to heterogeneity across firm characteristics with relatively larger or more established enterprises potentially possessing collateral assets that are more likely to meet institutional lending thresholds compared to micro-enterprises. Overall, these results underscore inadequate collateral valuation as a significant constraint to credit access highlighting the need for more flexible, inclusive and context-sensitive collateral assessment frameworks to enhance SME financing opportunities.

The results further indicated a strong perception among SME owners that financial institutions prioritize collateral availability over borrowers' repayment capacity (M = 4.52, SD = 0.741). This suggests a prevailing view that lending decisions are predominantly anchored in an asset-based lending model which disproportionately disadvantages entrepreneurs who lack substantial fixed assets despite potentially strong repayment capabilities. Similar notion is supported by (Corradin, Hoerova & Heider, 2017) who observed that *collateral improves the incentives of a borrower to repay a loan*. The relatively low standard deviation further reflects a high level of

consensus among respondents underscoring the widespread nature of this perception across the SME population. Collectively, these findings point to a persistent structural bias within credit allocation practices that constrain financial inclusion. This underscores the need for a paradigm shift toward more flexible lending frameworks that incorporate repayment capacity, cash flow performance and alternative forms of collateral including relationship-based and character-based assessments in order to enhance access to credit for SMEs.

The findings further revealed a strong consensus among respondents that stringent collateral requirements constitute a major impediment to accessing credit (M = 4.58, SD = 0.714). This indicates that most SME owners perceive existing collateral conditions, particularly those requiring high-value fixed assets such as land and buildings, as a significant structural constraint to formal financing. The relatively low dispersion in responses further suggests a broadly shared perception across firms underscoring the systemic nature of collateral-related barriers within the SME credit market. Collectively, these results highlight the entrenched role of collateral as a gate-keeping mechanism in credit allocation (Degryse, De Jonghe, Laeven & Zhao, 2025), and point to the need for more flexible and inclusive lending frameworks. Such reforms may include the acceptance of movable assets as collateral, the expansion of credit guarantee schemes and the adoption of group-based or alternative lending models designed to enhance financial inclusion for SMEs.

Additionally, results indicated a high level of agreement among respondents that lending institutions require collateral-related supporting documentation as a standard condition for loan approval (M = 4.32, SD = 0.719). This suggests that SME owners widely perceive documentary evidence of collateral as an essential prerequisite within formal credit assessment processes. The results reflect a strong and consistent understanding that financial institutions systematically enforce collateral documentation requirements prior to credit approval (Love, Martinez Pería & Singh, 2016), hence reinforcing the centrality of collateral in lending decisions. The relatively low standard deviation further indicates minimal variation in perceptions across different business categories pointing to a broadly shared experience among SMEs irrespective of sector or size. Overall, these findings underscore the institutionalization of collateral documentation practices within the formal credit system and highlight their potential to constrain access to finance for SMEs lacking formally recognized or easily documentable asset bases.

Lastly, descriptive findings indicated a high level of willingness among SME owners to pledge collateral in order to access credit from financial institutions (M = 4.65, SD = 0.546). The elevated mean score suggests strong agreement that entrepreneurs are prepared to commit available assets as security to obtain external financing (Steijvers & Voordeckers, 2009), reflecting a clear recognition of the role of collateral within formal lending frameworks. The low standard deviation further denotes a high degree of consensus across respondents, indicating that this willingness is broadly shared irrespective of firm characteristics or sectoral differences. Notably, this result points to a critical juxtaposition: while collateral requirements are widely perceived as restrictive, SME owners nonetheless demonstrate a proactive disposition toward meeting these conditions to support business growth. Collectively, the findings highlight a latent demand for credit that is constrained not by unwillingness to provide security, but by the nature and valuation of acceptable collateral thus underscoring the need for more inclusive and flexible lending mechanisms capable of aligning institutional requirements with SME asset realities.

The regression analysis revealed a negative relationship after controlling for other variables, revealing that collateral requirements independently constrained access to credit. This finding aligns strongly with credit access theory and financial inclusion literature which frequently identify collateral demands as a major constraint to borrowing more so with small businesses (Alinitwe, 2023; Brassell & Boschmans, 2022; Love, Martinez Pería & Singh, 2016). This indicates that while financially stable groups may benefit from collateral-based lending systems, stringent collateral demands may simultaneously act as barriers to borrowing for many SMEs. The **statistical significance** of the regression coefficient implies that collateral requirements play a meaningful role, but the relatively small magnitude shows that other factors access such as business performance, credit history, financial literacy and lending policies also play vital roles (Fan, Pan, Wang, & Yu, 2023). When interpreted alongside the descriptive results, a more nuanced picture emerges. Respondents largely **disagreed** that the *type* or *value* of their collateral was acceptable or adequate for securing credit highlighting a perceived mismatch between what SMEs can offer and what financial institutions demand. At the same time, strong agreement that *financial institutions prefer collateral availability over repayment ability* and that *collateral is a major barrier* underscores a widespread perception that collateral remains a critical yet exclusionary condition. Furthermore,

the strong consensus that *lenders require collateral documentation* reinforces the rigidity of lending practices even though most SME owners are *willing to commit collateral.*

Critically, while the regression coefficient suggests a statistically significant link, the weak strength reveals that stricter collateral demands may not effectively expand credit access and may even discourage potential borrowers who lack acceptable or sufficient assets. The descriptive findings emphasize this tension: SME owners recognize the necessity of collateral but feel disadvantaged by institutional inflexibility. Thus, although collateral contributes to explaining access to credit, its overall impact appears **constraining rather than enabling**. These findings suggest that for SMEs to gain better access to finance, policymakers and lenders need to reform collateral frameworks by accepting movable assets, leveraging credit guarantees or using creditworthiness and cash flow assessments to ensure that willingness to provide collateral translates into actual credit access.

CONCLUSIONS AND RECOMMENDATION

While collateral requirements are statistically linked to SME access to credit, the relationship is weak and stringent collateral demands often act as a **barrier rather than an enabler**. This reveals that while collateral remains a key consideration in lending decisions, its influence on credit access is limited. The weak relationship may be attributed to the dual role of collateral as both a risk-mitigation tool for lenders and a barrier for SMEs that lack sufficient assets. Stringent collateral requirements including cumbersome documentation procedures, limited acceptance of alternative collateral and high collateral-to-loan ratios may limit access to credit for many SMEs. Although collateral requirements significantly affect credit access, other factors such as creditworthiness, lending policies and business performance may exert a greater impact on SMEs' ability to obtain financing. SMEs largely perceive that their available collateral both in type and value does not meet financial institutions' requirements even though they are willing to pledge assets. Lenders' preference for collateral over borrowers' repayment ability, coupled with rigid documentation requirements, further limits access to formal credit. This highlights a structural mismatch between SMEs' capacities and traditional lending practices emphasizing the need for reforms to make credit more inclusive and accessible.

To enhance SME financing, financial institutions and policymakers should adopt more inclusive approaches. There is a need to **support policy and regulatory reforms where** governments can develop frameworks for movable collateral registries and strengthen credit information systems to facilitate lending without over-reliance on fixed assets. Acceptable collateral should be broadened to include movable assets, while credit guarantees and risk-sharing mechanisms can reduce lenders' reliance on stringent collateral. Leveraging alternative credit assessment methods based on cash flow and repayment history, simplifying documentation requirements and strengthening credit information systems can further improve access. Additionally, targeted awareness and training programs can equip SMEs to effectively structure collateral and navigate lending processes. These measures would help translate SMEs' willingness to provide collateral into actual credit access, fostering financial inclusion and supporting the growth of the sector.

Overall, the results underscore that SME access to credit is primarily constrained by structural and informational factors rather than purely financial cost considerations. The dominance of collateral requirements in explaining credit outcomes highlights the continued reliance on traditional asset-based lending models which may not adequately reflect the realities of SMEs, especially those with limited fixed asset bases. These findings carry important policy implications suggesting that improving SME financing requires a shift toward more inclusive lending frameworks, including the use of alternative collateral forms, credit guarantee schemes, and enhanced risk assessment tools that incorporate cash flow and business performance metrics rather than relying predominantly on fixed asset security.

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