



(REVIEW ARTICLE)



## Small and medium enterprise financing and the structural barriers to credit accessibility in the formal banking systems of developing nations

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### Abstract

Small and medium enterprises (SMEs) form the economic backbone of developing nations, absorbing the bulk of employment, driving entrepreneurial activity, and contributing substantially to national output. Yet persistent and deeply rooted barriers prevent the majority of these enterprises from accessing credit through formal banking channels. This review examines the structural, institutional, informational, and macroeconomic dimensions of this problem, drawing on evidence from Sub-Saharan Africa, South and Southeast Asia, Latin America, and the Middle East and North Africa. It interrogates how asymmetric information, collateral requirements, regulatory design, banking sector concentration, and macroeconomic volatility together create a financing environment that systematically works against SMEs. The review also assesses emerging responses from development finance and credit guarantee schemes to fintech-driven lending models evaluating what these approaches can and cannot achieve. It concludes with a research and policy agenda aimed at making formal financial systems genuinely accessible to the enterprises that need them most.

**Keywords:** SME Finance; Credit Accessibility; Developing Nations; Financial Inclusion; Information Asymmetry; Collateral Constraints

### 1. Introduction

Small and medium enterprises occupy a central but paradoxical position in the economies of developing nations[1]. They account for the overwhelming majority of registered businesses, absorb a large share of formal employment, and generate significant portions of national income. In low- and middle-income countries, their contribution to economic life extends well beyond headline statistics they are frequently the primary source of livelihood for urban and peri-urban households, and often the only productive alternative to informal self-employment in rural areas. And yet, despite this centrality, they are among the least well-served by the financial systems that ostensibly exist to allocate capital toward productive use.

The financing gap facing SMEs in developing countries runs into trillions of dollars annually. This figure reflects not simply a shortage of capital in the aggregate, but a structural misalignment between the way formal banking systems are built and the way SMEs actually operate. Banks in developing economies are not, for the most part, indifferent to SMEs out of ignorance or negligence [2]. They are responding, often rationally, to a set of institutional conditions weak credit information, uncertain contract enforcement, narrow collateral bases, and unfavourable regulatory incentives that make SME lending genuinely difficult and frequently unprofitable under existing arrangements [3].

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Understanding why this is the case requires moving beyond surface-level explanations. It is insufficient to note that SMEs lack collateral, or that banks prefer large clients [4]. The more important questions are: why do SMEs lack bankable assets, and why have formal banking systems evolved in ways that treat this as a disqualifying condition rather than a problem to be creatively addressed? These questions point toward the institutional architecture of developing country financial systems the historical, regulatory, and competitive conditions that shape lender behaviour rather than toward the characteristics of individual SME borrowers.

This review synthesises the academic and policy literature on these questions. It examines the theoretical frameworks that explain SME credit exclusion, the empirical evidence on how structural barriers operate across different regional contexts, the policy instruments that have been deployed in response, and the research gaps that remain. The aim is not to produce a comprehensive catalogue of the literature but to offer a coherent analytical account of why the problem persists and what, realistically, can be done about it.

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## **2. Theoretical Frameworks for Understanding SME Credit Exclusion**

### **2.1. Information Asymmetry and Credit Rationing**

The foundational theoretical contribution to understanding SME credit exclusion comes from the economics of information. In markets where lenders cannot perfectly observe borrower quality, rational credit rationing declining to lend even to borrowers willing to pay a higher interest rate is an equilibrium outcome rather than a market failure in the conventional sense. The intuition is straightforward: raising interest rates to clear excess demand for credit changes the composition of the borrower pool in predictable ways, attracting riskier borrowers and discouraging safer ones, ultimately worsening the average quality of the loan book. Banks respond by limiting the quantity of credit rather than adjusting price [5].

This dynamic is more severe in SME markets than in markets for large corporate credit. Large borrowers typically generate audited financial statements, maintain relationships with multiple financial institutions whose track records are observable, and operate in sectors whose performance is publicly visible. SME borrowers in developing economies, by contrast, frequently maintain informal records, operate across multiple activities, conduct transactions largely outside the banking system, and have no established credit histories. The informational disadvantage of lenders in these markets is not a marginal inconvenience, it is a fundamental feature of the lending environment that shapes every aspect of bank behavior [6].

### **2.2. Transaction Cost Economics and the Small Loan Problem**

A complementary explanation for SME credit exclusion focuses on the cost structure of bank lending rather than on information asymmetries [7]. The fixed costs involved in originating, underwriting, and monitoring a loan do not vary proportionally with loan size. A loan of fifty thousand dollars costs roughly as much to process as a loan of five hundred thousand dollars, but generates one-tenth the interest income. For banks seeking to maximise returns on operational expenditure, this arithmetic strongly favours larger loans and by extension, larger borrowers.

This cost structure is not unique to developing countries, but it is particularly consequential in contexts where banking systems lack the scale economies, standardised processes, and technology infrastructure that allow lenders in more advanced markets to make small-business lending commercially viable. Without automated underwriting, credit scoring models built on rich data, and low-cost digital distribution, small-loan unit economics in developing country banking are genuinely challenging [8].

### **2.3. Institutional Path Dependency**

A third strand of theory, drawn from institutional economics, emphasises the role of history and institutional design in shaping the persistent exclusion of SMEs from formal credit. Financial systems in many developing countries were not designed with SME lending in mind [9]. Colonial-era banking infrastructure was oriented toward trade finance for export commodities and credit for large-scale plantations or extractive enterprises. Post-independence development banking was often channelled toward state enterprises and priority sectors defined by industrial policy rather than by market demand. The institutional infrastructure that supports SME lending in more advanced economies comprehensive credit registries, efficient collateral enforcement, movable asset registers, standardised SME loan products was simply not built, and its absence has proven durable [10].

Path dependency matters here, because institutional arrangements generate vested interests and complementarities that make reform difficult even when the case for change is clear. Banks that have built profitable businesses around

servicing large clients have limited incentive to invest in the underwriting capabilities, branch networks, and product development required to serve SMEs. Regulators calibrated to supervising large-balance-sheet institutions may lack the expertise and appetite to design proportionate frameworks for SME-focused lenders. Legal systems shaped by colonial property law may perpetuate collateral frameworks that privilege urban real estate over the movable assets that SMEs actually own [11].

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### **3. Information Asymmetry and Its Consequences**

#### **3.1. Adverse Selection in SME Lending**

Adverse selection problems in SME lending manifest most acutely where credit information infrastructure is weakest. In the absence of reliable credit registries, banks cannot distinguish between SME borrowers based on repayment history, forcing them to rely on proxies that are at best imperfect and at worst discriminatory. Enterprise size, sector, geographic location, and owner characteristics including gender and ethnicity function as heuristics that systematically exclude creditworthy borrowers who happen to share characteristics with higher-risk peers. The costs of this bluntness fall overwhelmingly on SMEs at the margins of formal credit access [12].

Studies of bank lending behaviour across Sub-Saharan Africa illustrate the scale of the problem. In markets where credit registry coverage is limited, banks apply standardised eligibility criteria that effectively function as categorical exclusions. An SME without a formal lease on its business premises, or without three years of bank-certified financial statements, may be ineligible for consideration regardless of its actual trading performance. These criteria are defensible from a risk management perspective in environments where the alternative is extending credit based on unverifiable borrower claims, but they create access barriers that have little to do with the creditworthiness of the excluded enterprises [13].

#### **3.2. Moral Hazard and Monitoring Constraints**

The monitoring problem in SME lending is no less significant than the selection problem. Once credit is extended, lenders need confidence that borrowers will use funds as intended and maintain adequate effort to ensure repayment. Monitoring large corporate borrowers is costly but manageable: their financial performance is reported periodically, their assets are visible, and the consequences of default are significant enough to align incentives [14]. Monitoring small enterprises operating across multiple activities, partly in cash, with limited formal record-keeping is genuinely difficult and expensive.

This monitoring burden discourages banks from extending credit on terms that reflect the actual risk profile of individual SME borrowers. Where monitoring is costly, banks prefer secured lending where the collateral substitutes for ongoing monitoring over relationship lending based on detailed enterprise assessment. The result is a strong bias toward collateral-intensive credit products that leave SMEs without adequate fixed assets structurally excluded, regardless of their business performance [15].

#### **3.3. Credit Registry Coverage and Its Gaps**

The development of credit information infrastructure represents one of the clearest policy levers available for reducing information asymmetry in SME lending [16]. Where credit registries achieve broad coverage and high data quality, the evidence consistently shows that credit access improves, interest rate spreads narrow, and default rates decline. The mechanism is straightforward: better information reduces adverse selection, allowing lenders to price risk more accurately and extend credit more confidently to borrowers they would previously have declined [17].

But in many developing countries, credit registry coverage remains thin. Where registries exist, they typically capture data from formal financial institutions only, missing the substantial volume of lending that occurs through microfinance institutions, mobile lenders, and informal credit channels. Positive credit histories built through these alternative channels are invisible to formal bank underwriters, leaving borrowers unable to leverage their repayment records to access formal credit. Closing this gap requires both regulatory action to mandate broader data sharing and investment in the technical infrastructure to support it [18].

**Table 1** Taxonomy of Structural Barriers to SME Credit Access in Developing Nations. [19]

Barrier Type	Primary Mechanism	Most Affected SME Category	Regional Prevalence
Information Asymmetry	Adverse selection; moral hazard	Startups; informal enterprises	Universal across regions
Collateral Requirements	Asset poverty; limited immovable property	Rural SMEs; women-owned enterprises	Sub-Saharan Africa; South Asia
Regulatory Burden	High compliance costs; documentation requirements	Micro-enterprises; sole proprietors	MENA; Latin America
Banking Concentration	Oligopoly pricing; limited product diversity	Small manufacturers; agri-SMEs	Sub-Saharan Africa; Central Asia
Macroeconomic Instability	Currency risk; inflation volatility	Export-oriented SMEs; importers	Latin America; MENA; SSA
Weak Legal Infrastructure	Uncertain contract enforcement; poor collateral realisation	All SME categories	Developing nations broadly

## 4. Collateral Requirements and Asset-Based Exclusion

### 4.1. The Collateral Trap

Collateral requirements are the single most frequently cited barrier to formal credit access among SMEs in developing countries. Banks operating in environments with weak contract enforcement rationally demand collateral coverage that substantially exceeds the loan value often between 150 and 300 percent [20]. This reflects not simply conservative lending practice but a genuine structural dependency: where courts are slow and collateral realisation is uncertain, the economic value of a security interest is heavily discounted, and lenders compensate by demanding more of it.

The problem is compounded by what collateral banks actually accept. In most developing country banking systems, immovable real estate urban land and buildings with clear title functions as the dominant form of acceptable collateral [21]. This preference reflects the legal and administrative infrastructure available for registering and enforcing security interests, which is far better developed for real property than for movable assets. But SMEs in developing countries, particularly in their early stages, are far more likely to own machinery, inventory, and receivables than urban real estate. The mismatch between what banks accept and what SMEs own is a structural feature of the financing landscape rather than a coincidence.

### 4.2. Gender and the Distribution of Bankable Assets

Collateral constraints interact with gender in ways that compound the exclusion of women entrepreneurs. Property ownership in many developing country contexts is shaped by legal frameworks and customary norms that result in women holding significantly less real estate than men of equivalent economic standing [22]. Even where formal law provides for equal property rights, implementation gaps, inheritance practices, and administrative barriers mean that the distribution of titled real estate remains heavily skewed. Women entrepreneurs seeking formal credit thus face a double disadvantage: they are more likely to lack the collateral banks require, and they are more likely to be concentrated in sectors trade, services, informal manufacturing that banks regard as high-risk.

The evidence on gender financing gaps is consistent across regional contexts [23]. Enterprise survey data from across the developing world show that women-owned SMEs are significantly more likely to identify access to finance as a binding constraint, and specifically more likely to cite collateral requirements as the proximate barrier. This is not primarily a story about discrimination in the treatment of similarly situated borrowers, though that too occurs, but about the structural distribution of assets that determines who can meet collateral thresholds in the first place.

### 4.3. Movable Asset Finance and Legal Infrastructure Gaps

In higher-income economies, SMEs can pledge a much broader range of assets as collateral machinery, vehicles, inventory, trade receivables, intellectual property through legal instruments that allow lenders to establish priority claims over movable property [24]. These instruments depend on legal frameworks for secured transactions that define

what can be pledged, how security interests are registered, and how competing claims are resolved in default. Where such frameworks are well-developed, collateral constraints ease considerably because the asset base available to support lending is substantially larger.

In most developing countries, secured transaction law remains underdeveloped in ways that limit movable asset lending [25]. Registries for movable asset pledges either do not exist or are fragmented across different asset categories and institutions. Legal rules for priority among competing creditors may be unclear or inconsistently applied. Enforcement mechanisms for seizing and liquidating pledged movable assets in default are slow and expensive. The result is that lenders rationally avoid accepting movable assets as collateral, and SMEs with viable businesses but limited real estate remain excluded from formal credit.

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## **5. Regulatory and Institutional Dimensions**

### **5.1. Prudential Regulation and Perverse Incentives**

Banking regulation in developing countries is primarily designed to protect the stability of the financial system a legitimate and important objective [26]. But regulatory frameworks that are appropriate for managing systemic risk can create unintended incentive effects that discourage lending to SMEs. Capital adequacy requirements that assign higher risk weights to SME loans than to government securities or mortgage-backed assets create a regulatory preference for sovereign debt and real estate lending. Banks optimising their capital allocation rationally respond by reducing SME loan books and expanding holdings of lower-risk-weight assets [27].

This dynamic is particularly pronounced in developing countries where governments are substantial borrowers in domestic capital markets. When sovereign debt yields are elevated by fiscal pressures as is common in economies managing high deficits the risk-adjusted return on government securities can comfortably exceed what is achievable through SME lending, particularly once the transaction costs of SME lending are factored in. The regulatory framework thus reinforces rather than counteracts the market tendency to underfund productive SME investment [28].

### **5.2. Contract Enforcement and the Legal System**

The reliability of contract enforcement is among the most important determinants of banking system lending behavior [29]. Where courts function efficiently, creditors can extend credit with confidence that security interests will be honoured and default situations will be resolved at reasonable cost and within reasonable time. Where courts are slow, expensive, and unpredictable, the effective value of a loan contract is substantially reduced and banks respond by demanding more collateral, charging higher rates, or declining to lend at all.

Developing country legal systems vary considerably in their efficiency and reliability, but many share characteristics that make contract enforcement problematic for SME lenders. Case backlogs stretch into years or decades [30]. Specialist commercial courts are absent or underresourced. Legal costs are high relative to the value of typical SME loans. And the outcomes of litigation may be uncertain in ways that make legal enforcement an unattractive option even where the creditor's position is legally sound. These conditions push banks toward collateralised lending and away from the relationship-based assessment of business viability that might otherwise support SME credit access.

### **5.3. Governance and the Political Economy of Credit Allocation**

In a number of developing country contexts, formal banking relationships are shaped not only by commercial considerations but by political economy dynamics that systematically advantage connected enterprises over independent SMEs [31]. Credit allocation through state-owned banks may reflect political priorities rather than commercial credit assessment. Relationship banking in concentrated markets may favour firms with established ties to bank management or major shareholders. Regulatory forbearance may protect connected institutions from competitive pressure that would otherwise drive them toward SME markets [32].

These dynamics are difficult to measure precisely, but their effects are visible in the pattern of credit distribution in affected economies concentrated in a relatively small number of large enterprises with political connections, and largely absent in the broad SME sector. Addressing them requires institutional reforms that go beyond banking regulation to encompass broader governance improvements, including stronger enforcement of competition law, greater transparency in credit allocation by state financial institutions, and accountability mechanisms for banking supervisors [33].

**Table 2** Institutional Barriers to SME Credit Access and Policy Remedies. [34]

Institutional Factor	Effect on SME Credit Access	Policy Remedy	Implementation Challenges
Weak credit registries	Elevated adverse selection; higher interest rates	Mandatory bureau participation; public credit registries	Data privacy; institutional capacity
Poor contract enforcement	Excessive collateral demands; short loan tenors	Judicial reform; specialist commercial courts	Political resistance; long timeline
Regulatory capital requirements	Banks favour sovereign debt over SME lending	Risk-weighted SME loan relief; classification reform	Prudential risk trade-offs
Complex business registration	High informality; exclusion from formal credit	Registration simplification; one-stop shops	Bureaucratic resistance; IT gaps
Underdeveloped movable asset law	Only real estate accepted as collateral	Secured transaction reform; movable asset registry	Political economy of property rights

## 6. Macroeconomic and Banking Sector Structural Factors

### 6.1. Banking Sector Concentration

The structure of banking markets in many developing countries is characterised by levels of concentration that would prompt regulatory scrutiny in higher-income economies. Across much of Sub-Saharan Africa, the Middle East, and Central Asia, a small number of large commercial banks control the majority of sector assets, deposits, and lending [35]. This concentration is not accidental it reflects historical patterns of bank licensing, the consolidation dynamics of post-crisis banking reforms, and the network advantages that accrue to established institutions in thin financial markets.

Concentrated banking markets have several consequences for SME credit access. Oligopolistic pricing allows dominant banks to sustain wide interest margins that make formal credit expensive for SMEs without generating competitive pressure toward efficiency or product innovation. The homogeneity of risk appetite and lending practice among a small number of dominant institutions means that SMEs rejected by one bank are likely to face similar rejection criteria across the market [36]. And the absence of specialist SME lenders which tend to emerge in more competitive markets where differentiation creates commercial advantage leaves the SME segment served by institutions with neither the tools nor the incentive to serve it well.

### 6.2. Macroeconomic Volatility and Lending Risk

The macroeconomic environments of many developing nations present lenders with structural challenges that translate directly into more restrictive credit conditions for SMEs. Currency volatility creates foreign exchange risk for SMEs that import inputs or export outputs, and for banks whose liabilities may be denominated in foreign currency while their SME loan books are in local currency [37]. Inflation volatility complicates loan pricing and erodes the real value of fixed-rate lending. Commodity price dependence creates systemic sector risks that can turn performing SME portfolios into problem loan books within a single commodity cycle.

Banks respond to this volatility in predictable ways: shorter loan tenors, higher interest rate spreads, more conservative collateral requirements, and a preference for lending to sectors and borrowers with demonstrated resilience to macroeconomic shocks [38]. SMEs particularly those in manufacturing, agriculture, and traded sectors are less resilient to these shocks than large, diversified enterprises, and bear a disproportionate share of the credit tightening that follows macroeconomic deterioration.

### 6.3. Fiscal Crowding Out

Government borrowing in domestic capital markets absorbs lending capacity that would otherwise be available for private sector credit. In developing economies managing significant fiscal deficits, domestic debt markets often offer attractive risk-adjusted returns relative to private sector lending particularly when sovereign debt is assigned low risk weights under prudential frameworks and credit risk on SME lending is high [39]. The result is a systematic crowding-

out of private sector credit that falls most heavily on the enterprises least able to access alternative financing: SMEs without the international capital market access available to large corporations or the informal credit networks available to micro-enterprises embedded in community lending arrangements [40].

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## **7. Policy Responses and Emerging Financing Models**

### **7.1. Development Finance Institutions**

Development finance institutions represent the most established policy instrument for addressing SME credit market failures [41]. National development banks, regional multilateral institutions, and bilateral development financiers have deployed a range of tools direct lending, wholesale funding of SME-focused intermediaries, technical assistance, and risk-sharing arrangements aimed at extending credit to SMEs that commercial banks will not serve. The scale of these interventions is substantial in some markets: Brazil's BNDES, India's SIDBI, and a range of African national development banks have channelled significant resources toward SME financing over extended periods [42].

The developmental record of DFI-led SME finance is more mixed than the scale of interventions might suggest. Direct lending programs risk crowding out private sector credit in market segments that are commercially viable [43], while potentially failing to reach the most financially excluded SMEs who represent the genuine market failure. Wholesale and on-lending models where DFIs provide funding to commercial banks or microfinance institutions that on-lend to SMEs address the crowding-out concern but depend heavily on the capacity and risk appetite of the financial intermediaries involved. Where those intermediaries are themselves constrained by the structural barriers described in earlier sections, wholesale funding may simply reproduce the same exclusion patterns at lower cost [44].

### **7.2. Credit Guarantee Schemes**

Credit guarantee schemes address collateral constraints and adverse selection problems by providing government or third-party guarantees that reduce the credit risk borne by lending institutions [45]. In principle, a well-designed guarantee scheme allows banks to extend credit to SMEs they would otherwise decline by substituting the creditworthiness of the guarantor for that of the individual borrower. Schemes of this type operate in a large number of countries across the developing world, with significant variation in design, scale, and developmental effectiveness.

The evidence on CGS performance in developing country contexts is genuinely mixed. Schemes designed with appropriate guarantee ratios, adequate due diligence requirements on lending institutions, and efficient claims processing have demonstrated measurable improvements in SME credit access without generating unsustainable fiscal costs. But schemes characterised by excessive coverage where banks bear so little residual risk that the incentive for prudent credit assessment is effectively eliminated have repeatedly generated high default rates, fiscal liabilities, and in some cases explicit subsidy capture by connected enterprises. The design details of CGS programs matter enormously for whether they produce genuine credit market development or simply socialise the losses associated with poorly assessed lending [46].

### **7.3. Fintech and Digital Lending**

Digital financial technology has introduced new approaches to SME lending that bypass many of the structural barriers embedded in traditional bank-based credit [47]. By using alternative data sources mobile phone transaction records, payment histories, supply chain data, utility payments digital lenders can construct credit assessments for borrowers with no formal banking history and limited documentation [48]. The unit economics of digital lending, delivered through mobile applications without physical branch networks, are substantially different from those of traditional bank lending, making small loan sizes commercially viable in ways they are not for conventional banks.

The growth of digital SME lending in East Africa, South and Southeast Asia, and parts of Latin America has been striking. Mobile money platforms have enabled the development of short-term credit products accessible to enterprises with no prior formal banking relationship. Marketplace lending platforms have provided working capital finance to traders and small manufacturers outside the traditional banking system. In some markets, these innovations have achieved meaningful scale and appear to have extended credit access to enterprises genuinely underserved by formal banks [49].

The limitations of fintech-driven SME finance are nonetheless real. Alternative credit scoring models built on mobile transaction data work well for working capital finance but are poorly suited to the longer-term, larger-scale lending that SME capital investment requires [50]. Digital credit can facilitate over-indebtedness when it is not accompanied by adequate consumer protection frameworks and credit reporting to prevent multiple borrowing across platforms. And the regulatory frameworks governing digital SME lending remain underdeveloped in most developing countries,

creating ambiguities that limit the willingness of established financial institutions to partner with fintech platforms and leaving borrowers with limited recourse when problems arise [51].

#### **7.4. Value Chain and Supply Chain Finance**

Supply chain finance approaches embed SME lending within commercial relationships between small enterprises and larger, more creditworthy counterparts [52]. Where an SME supplies goods or services to a large buyer with established creditworthiness, that commercial relationship can support financing through reverse factoring, purchase order finance, or dynamic discounting that allows the SME to access working capital on terms reflecting the buyer's credit quality rather than its own. These approaches are particularly relevant in agricultural value chains, where the financing needs of smallholder producers are closely linked to off-take agreements with larger processors or exporters, and in manufacturing, where small component suppliers depend on payment terms from larger assembly firms.

Value chain finance is not a solution to all aspects of SME credit exclusion, it works best for established supply relationships and working capital needs, and is less applicable to investment financing or to enterprises without anchor commercial counterparts. But in contexts where supply chain relationships are well-developed, it can extend credit access to enterprises that would be ineligible under conventional bank underwriting standards, without requiring the fundamental institutional reforms that are necessary for broader market development [53].

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### **8. Future Perspectives and Research Directions**

#### **8.1. Institutional Reform Trajectories**

The evidence reviewed here points toward a reform agenda that is genuinely multi-dimensional. Improving credit information infrastructure expanding registry coverage, enabling alternative data integration, and mandating data sharing across financial institutions is foundational to reducing the information asymmetries that drive adverse selection in SME lending [54]. Legal system reforms targeting contract enforcement, secured transaction law, and land titling create the institutional conditions under which banks can lend to a broader set of SME borrowers without requiring excessive collateral. Banking competition policy that creates space for specialist SME lenders alongside large generalist banks introduces the market dynamics that drive product innovation and risk appetite diversification [55].

What is less clear from the existing evidence is the sequencing and prioritisation of these reforms in specific country contexts. The interaction effects between different structural barriers are complex, and gains from addressing one dimension may be limited if others remain unresolved. A country with strong credit registries but weak contract enforcement may not see significant improvements in SME credit access until enforcement reliability improves. A country with well-designed CGS programs but concentrated banking markets may find that guarantee benefits accrue primarily to enterprises already close to the margin of formal credit access rather than to those most deeply excluded [56]. Research that examines these interaction effects more rigorously would substantially improve the quality of policy advice available to developing country governments.

#### **8.2. Technology, Data, and the Limits of Fintech**

The potential of digital financial infrastructure to transform SME credit access in developing countries is significant but should not be overstated. Fintech innovation can reduce transaction costs, expand the range of data available for credit assessment, and make small-loan economics commercially viable in ways that traditional banking cannot [57]. But it cannot substitute for the institutional foundations legal systems, regulatory frameworks, macroeconomic stability on which sustainable SME credit markets depend. Digital credit delivered without adequate consumer protection, credit reporting, and regulatory oversight can harm rather than help financially excluded SMEs.

Research on the developmental impact of digital SME lending is growing but remains incomplete in important respects. Most existing studies focus on credit access outcomes rather than on whether digital credit translates into enterprise investment, productivity, and income growth. The risk that digital credit facilitates consumption smoothing or debt cycling rather than productive investment deserves serious empirical attention. And the interaction between fintech innovation and formal banking sector development whether digital lenders complement or crowd out formal bank SME lending is poorly understood in most developing country contexts[58].

### 8.3. Gender Financing Gaps as a Research and Policy Priority

The gendered dimensions of SME credit exclusion merit sustained attention as both a research and a policy priority [59]. The evidence that women-owned enterprises face greater financing barriers than male-owned enterprises of comparable size and sector is consistent across regional contexts and data sources [60]. To what degree does the gender financing gap reflect differential access to collateral assets? To what degree does it reflect discriminatory credit assessment by loan officers? To what degree is it an artifact of the sectors and size classes in which women entrepreneurs tend to operate? Disaggregating these mechanisms would allow policy to be targeted more precisely at the binding constraints.

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## 9. Conclusion

The financing challenges facing SMEs in developing nations are not a peripheral feature of financial system development, they are near its centre. The enterprises that account for the bulk of employment, the most dynamic entrepreneurship, and the greatest potential for economic mobility are precisely those that formal banking systems serve worst. This is not primarily because banks are indifferent to SME business or because small enterprises are inherently uncreditworthy. It is because the institutional environment in which formal banks operate the legal frameworks, information infrastructure, regulatory incentives, and competitive dynamics has not been built to make SME lending commercially viable or socially rewarding.

That is, ultimately, a correctable condition. The structural barriers identified in this review are not laws of nature. Credit registries can be built and expanded. Secured transaction law can be modernised. Regulatory frameworks can be redesigned to remove perverse incentives. Banking markets can be made more competitive. These reforms are difficult, politically complex, and slow but they have been achieved in a range of contexts, and the evidence that they improve credit access is reasonably robust.

What is needed is a clearer-eyed acknowledgement that the financing gap is structural rather than incidental, and that closing it requires institutional reform at multiple levels rather than the deployment of individual financial products or programs. Policy instruments development finance, guarantee schemes, fintech platforms can expand credit access at the margin, but they cannot substitute for the institutional foundations on which sustainable SME lending markets depend. Building those foundations is the central challenge, and it is one that deserves more sustained policy attention than it has typically received.

### *Policy Recommendations*

Based on the evidence examined in this review, three broad priorities stand out for governments, regulators, and development finance institutions working to expand SME credit access in developing country contexts.

The most foundational priority is the development of credit information and legal infrastructure. Credit registries should be expanded to capture data from non-bank lenders, mobile money platforms, and utility providers, giving formal banks visibility into the repayment histories of SMEs that have never held a bank account. Alongside this, secured transaction law reform including functional movable asset registries and clear priority rules for competing creditors would substantially widen the collateral base available to SME borrowers, reducing dependence on urban real estate as the near-universal condition for formal credit access. These institutional investments take time but have demonstrated, in a range of country contexts, a reliable capacity to shift lending behaviour at scale.

Regulatory and market structure reform represents a second priority. Prudential frameworks should be reviewed to remove the implicit incentives that steer bank capital toward sovereign debt and mortgage lending at the expense of SME portfolios where risk weights are calibrated conservatively relative to what actual default data would justify, adjustment is warranted. Banking competition policy should actively create room for specialist SME lenders and fintech platforms, since concentrated markets dominated by a few large institutions have neither the incentive nor the product diversity to serve the SME segment effectively. Challenger institutions that develop differentiated underwriting capabilities introduce pressure that established banks would not otherwise face.

Finally, targeted interventions, credit guarantee schemes, development finance programs, and gender-focused financing initiatives should be designed with greater discipline than has historically been the case. Guarantee schemes work when lending institutions retain meaningful risk and are held to sound underwriting standards; they fail when excessive coverage ratios eliminate the incentive for prudent credit assessment. Development finance should concentrate on segments where market failure is genuine rather than on enterprises that could access commercial credit with modest

institutional improvements. And gender financing gaps, which persist across all regional contexts reviewed here, require attention to the property rights frameworks that determine who holds bankable assets in the first place, not merely to the lending policies of individual banks.

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## Compliance with ethical standards

### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

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## References

- [1] Poole DL. Entrepreneurs, entrepreneurship and SMEs in developing economies: How subverting terminology sustains flawed policy. *World Development Perspectives*. 2018 Mar 1;9:35-42.
- [2] Yadav RJ. *Issues in SME Financing*. Mumbai: Indian Institute of Banking & Finance. 2014.
- [3] Emuwa A. *Barriers to SME lending in Nigeria finding context-specific solutions*. Nottingham Trent University (United Kingdom); 2015.
- [4] Okoye CF, Mensah KE. Challenges and prospects of technology adoption by small and medium enterprises in Rivers state, Nigeria. *Ayden Energies Journal*. 2025 May 13;13(2):1-5.
- [5] Bernanke B. *Banking, credit, and economic fluctuations*. Nobel Lecture. 2022 Dec 8.
- [6] Haselmann R, Wachtel P. Institutions and bank behavior: Legal environment, legal perception, and the composition of bank lending. *Journal of money, credit and banking*. 2010 Aug;42(5):965-84.
- [7] Ma B, Zhou Z, Chen X. Financing difficulties for SMEs and credit rationing—an expanded model of mortgage loans with asymmetric information. *Applied Economics*. 2019 Oct 14;51(48):5243-57.
- [8] Xing Y. *Economic Analysis of Digital Transformation and Upgrading of The Small Loan Service Industry*. Geneva Finance Research Institute. University of Geneva. 2022 Oct.
- [9] Beck T. Bank financing for SMEs—lessons from the literature. *National institute economic review*. 2013 Aug;225(1):R23-38.
- [10] Daka A. *Challenges faced by small and medium scale entrepreneurs in accessing credit facilities from Zambia National Commercial Bank (PLC) headquarters in Lusaka* (Doctoral dissertation, The University of Zambia).
- [11] Munshi S. Dispossession: An American property law tradition. *Geo. LJ*. 2021;110:1021.
- [12] Dhawnarain K. *Access to Finance and SME Growth in the Formal Sector* (Master's thesis, University of Pretoria (South Africa)).
- [13] Saunders A, Allen L. *Credit risk management in and out of the financial crisis: new approaches to value at risk and other paradigms*. John Wiley & Sons; 2010 Apr 16.
- [14] Minnis M, Sutherland A. Financial statements as monitoring mechanisms: Evidence from small commercial loans. *Journal of Accounting Research*. 2017 Mar;55(1):197-233.
- [15] Musthaq F. *Financial Globalization, Central Banking, and the Politics of Liquidity in the Global South*. Indiana University; 2021.
- [16] Moro A, Fink M, Maresch D. Reduction in information asymmetry and credit access for small and medium-sized enterprises. *Journal of Financial Research*. 2015 Mar;38(1):121-43.
- [17] Yan J, Yu W, Zhao JL. How signaling and search costs affect information asymmetry in P2P lending: the economics of big data. *Financial Innovation*. 2015 Dec 29;1(1):19.
- [18] Ogbodo DC, Awan IU, Cullen A, Zahrah F. From regulation to reality: a framework to bridge the gap in digital health data protection. *Electronics*. 2025 Jun 29;14(13):2629.
- [19] taxonomy of Structural Barriers to SME Credit Access in Developing Nations. Sources: Beck & Demirguc-Kunt (2006); IFC (2023); World Bank Enterprise Surveys (2022); Berger & Udell (2006).
- [20] Chatzouz M, Gereben Á, Lang F, Torfs W. *Credit guarantee schemes for SME lending in Western Europe*. EIF Working Paper; 2017.

- [21] Belay AA. The Practice of Movable Collateral Registry Management Information System: the case of Rural Land Use Right as Collateral.
- [22] Gaddis I, Lahoti R, Swaminathan H. Women's legal rights and gender gaps in property ownership in developing countries. *Population and Development Review*. 2022 Jun;48(2):331-77.
- [23] Roy P, Patro B. Financial inclusion of women and gender gap in access to finance: A systematic literature review. *Vision*. 2022 Sep;26(3):282-99.
- [24] Ramsden E. The role of SMEs in employment creation and economic growth: Lessons from other countries. In *Bank of Namibia, 12th Annual Symposium Publication 2010* (pp. 26-50).
- [25] Castellano GG, Dubovec M. Global regulatory standards and secured transactions law reforms: At the crossroad between access to credit and financial stability. *Fordham Int'l LJ*. 2017;41:531.
- [26] Garicano L, Lastra RM. Towards a new architecture for financial stability: Seven principles. *Journal of International Economic Law*. 2010 Sep 1;13(3):597-621.
- [27] Akin I. Investigating performances of commercial banks in the UK by using grey relation analysis. *İzmir İktisat Dergisi*. 2024 Nov 11;39(4):1079-106.
- [28] Borri N, Di Giorgio G. SMEs and the going public challenge. *CASMEF Working Paper Series*; 2023.
- [29] Olusanya SO, Oyebo AO, Ohadebere EC. Determinants of lending behaviour of commercial banks: Evidence from Nigeria, a co-integration analysis (1975-2010). *Journal of Humanities and Social science*. 2012 Nov;5(5):71-80.
- [30] Khan WU, Ullah A, Ismail M. THE NEXUS AMONG JUDICIAL EFFICIENCY AND SMES FINANCING PATTERNS: A CASE OF PAKISTANI FIRMS. *City University Research Journal*. 2025;15(1):1-8.
- [31] Meagher K. Unlocking the informal economy: A literature review on linkages between formal and informal economies in developing countries. *Work*. ePap. 2013 Apr;27:1755-315.
- [32] Dewey M, Di Carlo D. Governing through non-enforcement: Regulatory forbearance as industrial policy in advanced economies. *Regulation & Governance*. 2022 Jul;16(3):930-50.
- [33] Agarwal U. The Effect of Regulatory Changes on Banking Performance and Stability. *International Journal of Academic*. 2025.
- [34] Institutional Barriers to SME Credit Access and Policy Remedies. Sources: Love & Mylenko (2003); Fleisig, Safavian & de la Pena (2006); Djankov, McLiesh & Shleifer (2007); Green (2003).
- [35] Nikolaidou E, Vogiazas S. Credit risk determinants in Sub-Saharan banking systems: Evidence from five countries and lessons learnt from Central East and South East European countries. *Review of development finance*. 2017 Jun 1;7(1):52-63.
- [36] Agostino M, Gagliardi F, Trivieri F. Bank competition, lending relationships and firm default risk: An investigation of Italian SMEs. *International Small Business Journal*. 2012 Dec;30(8):907-43.
- [37] Badshah I, Borgersen TA. Management of exchange rate risk in SMEs: Reflections on exchange rate pass-through and hedging of currency risk. *SEISENSE Journal of Management*. 2020;3(6):35-49.
- [38] Li J. Risk Assessment of Banks When Interest Rate Hikes. In *SHS Web of Conferences 2024* (Vol. 193, p. 01024). EDP Sciences.
- [39] Farounbi BO, Okafor CM, Oguntegbe EE. Comparative review of private debt versus conventional bank lending in emerging economies. *J Priv Debt*. 2021 May;15(3):201-18.
- [40] Jordaan H. *Access to finance of SMMEs from formal lending institutions in the Free State Goldfields* (Doctoral dissertation, University of the Free State).
- [41] Gutierrez E, Kliatskova T. National development financial institutions: Trends, crisis response activities, and lessons learned. Washington, DC: World Bank; 2021 Oct 8.
- [42] Gutierrez E, Kliatskova T. National development financial institutions: Trends, crisis response activities, and lessons learned. Washington, DC: World Bank; 2021 Oct 8.
- [43] Cornaggia J, Wolfe B, Yoo W. Crowding out banks: Credit substitution by peer-to-peer lending. Available at SSRN 3000593. 2024 Oct 31.

- [44] Philippon T. Has the US finance industry become less efficient? On the theory and measurement of financial intermediation. *American Economic Review*. 2015 Apr 1;105(4):1408-38.
- [45] Honohan P. Partial credit guarantees: Principles and practice. *Journal of financial stability*. 2010 Apr 1;6(1):1-9.
- [46] Samujh RH, Twiname L, Reutemann J. Credit guarantee schemes supporting small enterprise development: A review. *Asian Journal of Business and Accounting*. 2012 Dec 31;5(2).
- [47] Andrei P, Cezar B. Bank Lending for Legal Entities and Its Contribution to their Economic Development. Available at SSRN 5532018. 2025 Sep 26.
- [48] Blechman JG. Mobile credit in Kenya and Tanzania: Emerging regulatory challenges in consumer protection, credit reporting and use of customer transactional data. *The African Journal of Information and Communication*. 2016 Jan 1;2016(17):61-.
- [49] Mills K, McCarthy B. The state of small business lending: Innovation and technology and the implications for regulation. Harvard Business School Entrepreneurial Management Working Paper. 2016 Nov 29(17-042):17-042.
- [50] Adian I, Doumbia D, Gregory N, Ragoussis A, Reddy A, Timmis J. Small and medium enterprises in the pandemic. Policy research working paper, 9414, World Bank IFC. 2020 Sep.
- [51] Huang RH, Wang CM. Fintech-bank partnership in China's credit market: Models, risks and regulatory responses. *European Business Organization Law Review*. 2023 Dec;24(4):721-55.
- [52] Ali Z, Gongbing B, Mehreen A. Predicting supply chain effectiveness through supply chain finance: Evidence from small and medium enterprises. *The International Journal of Logistics Management*. 2019 May 15;30(2):488-505.
- [53] Castellano GG, Dubovec M. Global regulatory standards and secured transactions law reforms: At the crossroad between access to credit and financial stability. *Fordham Int'l LJ*. 2017;41:531.
- [54] Ighedosa J. *Mandatory and voluntary credit information sharing among banks* (Doctoral dissertation, University of London).
- [55] Ozdemir B. A strategy road map for small and medium-sized banks from a Canadian perspective: Transformation from start-up to mid-size and beyond. *Journal of Risk Management in Financial Institutions*. 2022 Jun 1;15(3):220-44
- [56] Soumaré I. Credit guarantees: SME access to finance and employment in Africa: strengthen2: employment impact assessment to maximise job creation in Africa.
- [57] Xing Y. Economic Analysis of Digital Transformation and Upgrading of The Small Loan Service Industry. Geneva Finance Research Institute. University of Geneva. 2022 Oct.
- [58] Okafor CM, Osuji VC, Dako OF. Fintech-enabled transformation of transaction banking and digital lending as a catalyst for SME growth and financial inclusion. *Int J Multidiscip Res Growth Eval*. 2021 Jul;2(6):485-504.
- [59] Azizov A. Female leadership and innovation in emerging market SMEs: causal evidence from lower-middle income countries. *Cogent Business & Management*. 2026 Dec 31;13(1):2635803.
- [60] Berguiga I, Adair P. Are there barriers to funding female entrepreneurs in MENA countries?. *Finance a Uver: Czech Journal of Economics & Finance*. 2022 May 1;72(3).