



The Problem of Financing Small-Scale Businesses by Women Entrepreneurs Through Banks in Enugu

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ABSTRACT

Small-scale enterprises owned by women account for a substantial share of economic activity in Enugu State, yet bank credit remains marginal to their capital structure. This study examined the constraints limiting women entrepreneurs' access to bank finance in Enugu and the consequences of restricted access for enterprise growth. Guided by credit rationing theory, pecking order theory, and the gender-based growth model, a cross-sectional survey of 392 women-owned small-scale enterprises in the Enugu urban corridor yielded 342 usable questionnaires (87.2%). The 43-item BFCWEQ covered seven constructs ($\alpha = .81-.90$; $CR = .86-.93$). Data were analysed with descriptive statistics, correlation, multiple and hierarchical regression, and ANOVA. Collateral and documentation requirements were the most severe constraint ($M = 4.21$, $SD = 0.62$), followed by cost of credit ($M = 4.08$, $SD = 0.67$). Five constraint domains jointly explained 45.8% of the variance in access to bank credit, $F(5, 336) = 56.71$, $p < .001$, $f^2 = 0.84$. Access added 24.4% unique variance to growth performance, $\Delta R^2 = .244$, $F(1, 337) = 128.88$, $p < .001$, $f^2 = 0.38$, and differed across sectors, $F(3, 338) = 12.22$, $p < .001$, $\eta^2 = .098$. The binding constraint is the non-price screening architecture of bank lending rather than the price of credit. Movable-collateral lending, cash-flow underwriting, and sector-sensitive product design are recommended.

Keywords: women entrepreneurs; bank credit; credit rationing; collateral requirements; small-scale enterprises; Enugu State

JEL classification: G21; L26; J16; O16

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1. Introduction

Micro, small and medium enterprises constitute the structural backbone of the Nigerian economy. The most recent national enumeration identified more than 39 million such enterprises, overwhelmingly micro and small units operating below the scale at which conventional commercial banking is profitable for the lender (SMEDAN & NBS, 2022). Enterprises owned or principally managed by women are concentrated in trading, food processing, tailoring, and personal services, and are disproportionately small, informal, and undercapitalised. Across sub-Saharan Africa, female-owned firms are systematically younger, smaller, and less likely to hold a formal loan than male-owned firms of comparable age and sector (Aterido et al., 2013; Ojong et al., 2021).

Enugu State, the commercial nucleus of the South-East, hosts dense small-scale commerce in Ogbete Main Market, New Haven, Abakpa Nike, Garriki, and the Independence Layout corridor. Igbo trade traditions have produced a high rate of female business ownership, yet enterprise density has not translated into credit penetration. Working capital still comes largely from personal savings, family transfers, and isusu rotating contribution schemes. Lending occurs under severe information asymmetry: the lender cannot cheaply observe risk type, verify cash flows of unregistered enterprises, or enforce claims against movable or customarily titled assets. Raising the interest rate worsens the applicant pool, so banks ration credit through collateral thresholds, documentation standards, and guarantor conditions (Stiglitz & Weiss, 1981). Women meet these screens from a structural disadvantage because registered landed title is held disproportionately by men under customary tenure.

Account ownership has risen while formal borrowing has stagnated, producing a widening gap between transactional and credit inclusion that is wider for women than for men (Demirgüç-Kunt et al., 2022). Much of the

gap is produced by self-exclusion rather than rejection (Naegels et al., 2021). Successive Nigerian interventions have treated the binding constraint as a shortage of loanable funds, yet dedicated windows have not produced a proportionate rise in women-owned enterprises carrying bank debt. Scholarship has either catalogued constraints without weighting them or treated access as a single undifferentiated variable, and very little of this work has been conducted in the South-East. This study supplies that estimate for Enugu.

1.1 Statement of the Problem

Successive Nigerian interventions, including the Small and Medium Enterprises Equity Investment Scheme, the MSME Development Fund, the Agricultural Credit Guarantee Scheme Fund, and Development Bank of Nigeria windows, rest on the premise that the binding constraint is the supply of loanable funds. Dedicated funding has not produced a proportionate rise in women-owned small enterprises carrying bank debt. The binding constraints therefore lie in the terms on which credit is offered, the collateral and documentary apparatus through which it is screened, borrower preparedness, and the expectations borrowers form about likely outcomes. Nigerian scholarship has been either descriptive or qualitative from small purposive samples. Quantitative studies generally treat access as a single variable, and almost none have been conducted in the South-East, where land holding and informal intermediation differ from Lagos and the South-South. There is no reliable basis on which a bank or the Enugu State Ministry of Commerce and Industry could decide whether to relax collateral, reduce pricing, invest in borrower capability, or redesign the branch relationship.

1.2 Objectives and Hypotheses

The study sought to (1) determine the perceived severity of five constraint domains; (2) estimate their joint and unique contribution to access to bank credit; (3) estimate the unique contribution of access to enterprise growth after controlling for enterprise age, size, and owner education; and (4) test sectoral differences in access. Three null hypotheses were tested at $\alpha = .05$: H_{01} , that the five domains do not jointly or individually predict access; H_{02} , that access does not uniquely predict growth after the controls; and H_{03} , that access does not differ across trading, fashion and tailoring, food processing and agro-allied, and personal and business services.

The study was delimited to registered women-owned small-scale enterprises (1–49 employees) in Enugu North, Enugu South, and Enugu East during 2025. Deposit money banks and licensed microfinance banks were treated jointly as the bank sector.

2. Theoretical Framework and Literature

Credit rationing theory (Stiglitz & Weiss, 1981) holds that the interest rate both prices the loan and sorts the applicant pool. Beyond a threshold, adverse selection and moral hazard dominate, so banks hold the rate below market-clearing and ration through non-price screens, collateral, documentation, operating history, and registration. Groups less able to satisfy those screens are rationed out regardless of project quality. Relationship lending, through which branches gather soft information, is therefore a substantive determinant of access.

Pecking order theory (Myers & Majluf, 1984) explains demand-side ordering: firms exhaust internal and socially embedded funds before approaching a bank. Where application costs are high and expected success is low, the entrepreneur rationally does not apply. The discouraged borrower is invisible in lending statistics and accounts for a large share of the credit gap among African women entrepreneurs (Naegels et al., 2018, 2021).

Neither preceding theory is gendered. Ogundana et al. (2021) argue that growth of women-owned enterprises is determined by the interaction of financial, human, and social capital, each conditioned by norms governing ownership, mobility, negotiation, and household time. Shortfalls in collateralisable assets are products of that order. The model predicts joint rather than additive effects, so sociocultural constraints should be partly absorbed by the collateral and preparedness channels with which they covary.

The integrated model therefore treats collateral and documentation requirements and cost of credit as the non-price and price screens of rationing theory; financial literacy and loan preparedness as the demand-side readiness of pecking-order logic; sociocultural and gender-role constraints as the normative conditioning of the gender-based growth model; and bank institutional responsiveness as the relationship-lending channel. Access is specified as a determinant of growth, with enterprise age, size, and owner education as controls.

2.1 Collateral, price, and capability

Empirical work consistently finds collateral, not price, to be the operative barrier. Naegels et al. (2018) found that high collateral, interest, and guarantee conditions jointly rendered formal loans unattractive to Tanzanian women entrepreneurs and concluded that low uptake was primarily demand-driven. Woldie and Adersua (2004) documented acute difficulty raising start-up and expansion capital among Nigerian businesswomen, attributing it to the absence of assets banks would accept and to requirements for male guarantors. Aterido et al. (2013) showed that an unconditional gender gap in financial-service use exists across sub-Saharan Africa but attenuates once firm size, sector, age, and formality are controlled, implying mediation through the characteristics of the enterprises women own.

Pricing evidence is more equivocal. Brixiová and Kangoye (2016) found that start-up capital size, rather than subsequent interest rates, dominated enterprise performance in Eswatini. Okah-Efogo et al. (2015) reported smaller coefficients on financing costs than on access measures in Cameroon. Naegels et al. (2021) traced how perceptions of repayment burden accumulate into an expectation of default that deters application. Capability studies link inadequate record keeping, limited product knowledge, and the absence of business plans to lower approval probability and smaller volumes (Gichuki et al., 2014; Nukpezah & Blankson, 2017). Ike (2012), the closest Enugu antecedent, found a positive association between microfinance access and performance among small-scale women entrepreneurs but confined the analysis to microfinance institutions and did not decompose constraint domains.

2.2 Gendered norms, relationship lending, and growth

Mordi et al. (2010) identified the interaction of patriarchal asset ownership, domestic responsibility, and restricted mobility as the mechanism through which cultural norms become financial exclusion. Kuada (2009) showed in Ghana that entrepreneurial networks are themselves gendered. Ojong et al. (2021) concluded that cultural, institutional, economic, political, and social contexts jointly shape both resources and circumvention strategies, and flagged the under-representation of quantitative, sub-national studies as a principal gap. Branch-level information quality shapes application behaviour (Naegels et al., 2018), while Aterido et al. (2013) found no excess rejection of female applicants once they applied. Fowowe (2017) documented a significant positive effect of access to finance on firm growth across 30 African countries. The present study addresses the Enugu gap by measuring five domains separately, reporting construct-level psychometrics, and estimating unique effects with effect sizes.

3. Method

A cross-sectional survey with correlational and comparative components was conducted in the Enugu urban corridor. The population comprised 2,486 women-owned small-scale enterprises registered with the Ministry of Commerce and Industry and recognised market associations as at January 2025. Krejcie and Morgan (1970) and Cochran finite-population correction both returned 333; this was inflated by 15% for non-response, giving 392. Proportionate stratified random sampling was applied across three local government areas and four sectors (12 strata). Of 392 questionnaires, 342 were usable (87.2%). Realised power exceeded .99 for the observed effects.

The Bank Financing Constraints of Women Entrepreneurs Questionnaire (BFCWEQ) contained a factual Part A and 43 Likert items (1–5) across seven constructs. Five experts established content validity ($I-CVI = .91$). Exploratory factor analysis (principal axis, promax) supported the seven-factor structure, $KMO = .91$, Bartlett $\chi^2(903) = 6,842.17$, $p < .001$, 63.4% of variance, loadings $> .50$ and no cross-loading $> .35$. A pilot with 40

entrepreneurs in Nsukka urban produced $\alpha = .81-.90$, $CR = .86-.93$, and $AVE = .50-.60$. Instruments were administered March–May 2025, with an Igbo oral protocol where needed.

Analyses used SPSS 27. Research question one was answered with means and standard deviations. Hypotheses were tested by standard multiple regression, hierarchical regression, and one-way ANOVA at $\alpha = .05$. Effect sizes are reported throughout: Cohen's f^2 for regression, eta squared and omega squared for ANOVA, and Cohen's d for pairwise contrasts (Cohen, 1988). Missing values affected 1.8% of item responses and were MCAR, Little $\chi^2(214) = 231.46$, $p = .196$; they were replaced by expectation maximisation. Skewness ranged from $-.74$ to $.44$ and kurtosis from $-.43$ to $.41$. Residual plots indicated linearity and homoscedasticity; Durbin–Watson = 1.94. VIFs ranged from 1.19 to 1.43. Five potential multivariate outliers identified by Mahalanobis distance did not change the models and were retained. Levene's $F(3, 338) = 1.06$, $p = .367$. Harman's first unrotated factor explained 28.4% of variance. Institutional ethical clearance was obtained; participation was voluntary; questionnaires were serialised by stratum only.

4. Results

The modal respondent was married, aged 31–40, held a secondary or post-secondary technical qualification, operated a trading enterprise with one to three employees, and had been in business three to five years. Just over half (54.7%) were CAC-registered (Table 1).

Table 1. Demographic and Enterprise Characteristics of Respondents (N = 342)

Characteristic	Category	f	%
Age of owner	18–30 years	54	15.8
	31–40 years	128	37.4
	41–50 years	104	30.4
	51 years and above	56	16.4
Marital status	Married	231	67.5
	Single	61	17.8
	Widowed	37	10.8
	Separated or divorced	13	3.8
Highest education	No formal or primary	29	8.5
	Secondary	118	34.5
	OND or NCE	97	28.4
	HND or bachelor degree	82	24.0
	Postgraduate	16	4.7
Enterprise sector	Trading and retail	131	38.3
	Fashion and tailoring	76	22.2
	Food processing and agro-allied	68	19.9
	Personal and business services	67	19.6
Enterprise age	Less than 3 years	78	22.8
	3–5 years	112	32.7
	6–10 years	99	28.9
	More than 10 years	53	15.5
Number of employees	1–3	164	48.0
	4–9	137	40.1
	10–49	41	12.0
CAC registration	Registered	187	54.7
	Not registered	155	45.3

Note. OND = Ordinary National Diploma; NCE = Nigeria Certificate in Education; HND = Higher National Diploma; CAC = Corporate Affairs Commission.

Although 75.7% held a dedicated business account, only 14.7% had financed start-up from any bank source, and a mean of 11.3% (SD = 18.4) of current working capital was bank-sourced (Table 2). Among 193 applicants, 56.0% were rejected and 29.5% were partially approved. Of 149 never-applicants, 31.5% expected refusal. Self-exclusion therefore accounts for a larger share of the gap than observed rejection.

Table 2. Banking Relationships, Capital Sources, and Application History

Variable and category	f	%
Start-up capital: personal savings	158	46.2
Family or spouse contribution	71	20.8
Isusu or cooperative society	63	18.4
Microfinance bank loan	32	9.4
Commercial bank loan	18	5.3
Holds a dedicated business bank account: yes	259	75.7
No dedicated business account	83	24.3
Has ever applied for a bank loan: yes	193	56.4
Never applied	149	43.6
Outcome (n = 193): fully approved	28	14.5
Partially approved	57	29.5
Rejected	108	56.0
Rejection reason: inadequate collateral	51	47.2
Inadequate records or financial statements	26	24.1
Absent or weak credit history	18	16.7
Enterprise not formally registered	13	12.0
Never applied: expected refusal	47	31.5
Lacked acceptable collateral	39	26.2
Interest burden considered unaffordable	33	22.1
Documentation too complex	19	12.8
Objection to interest-bearing debt	11	7.4

Note. Isusu = rotating savings and credit associations in south-eastern Nigeria. Rejection n = 108; never-applied n = 149.

Table 3. Reliability and Distributional Properties of Study Constructs (N = 342)

Construct	k	M	SD	α	CR	AVE
Collateral and documentation	7	4.21	0.62	.88	.91	.53
Cost of credit	6	4.08	0.67	.84	.88	.51
Financial literacy / preparedness	6	2.87	0.74	.81	.86	.50
Sociocultural / gender-role	7	3.46	0.81	.86	.90	.52
Bank institutional responsiveness	6	2.64	0.79	.83	.87	.51
Access to bank credit	5	2.41	0.86	.89	.92	.58
Enterprise growth performance	6	2.96	0.77	.90	.93	.60

Note. k = items; α = Cronbach's alpha; CR = composite reliability; AVE = average variance extracted. $\sqrt{\text{AVE}}$ (.71–.77) exceeded each construct's highest intercorrelation (.58).

Collateral and documentation (M = 4.21) and cost of credit (M = 4.08) exceeded the criterion mean of 3.00; access (M = 2.41) and institutional responsiveness (M = 2.64) fell below it. The highest-rated items concern the type and valuation of security, not the absence of assets (Table 4).

Table 4. Highest-Rated Constraint Items (N = 342)

Rank	Item	Domain	M	SD
1	Banks require landed property with registered title	CDR	4.52	0.71
2	Value of security demanded far exceeds amount needed	CDR	4.41	0.76
3	Effective interest rate beyond what margins can carry	COC	4.37	0.74
4	Stock, equipment, or vehicle not accepted as security	CDR	4.33	0.80
5	Guarantor who holds a salaried appointment required	CDR	4.24	0.83
6	Processing, legal, and insurance charges add to cost	COC	4.22	0.79
7	Repayment begins before the activity generates return	COC	4.11	0.84
8	Audited statements demanded that the firm does not produce	CDR	4.08	0.88
9	Repayment period offered is too short for the loan purpose	COC	4.02	0.87
10	Documentation takes more time than can be taken from the business	CDR	3.96	0.91
11	Banks require evidence of CAC registration	CDR	3.93	0.94
12	Charges not fully disclosed before commitment	COC	3.91	0.92
13	Title to family land held in a male relative's name	SGC	3.88	0.86
14	Penalty charges for late repayment are disproportionate	COC	3.85	0.95
15	Male relative's consent required to pledge household assets	SGC	3.71	0.92

Note. CDR = collateral and documentation; COC = cost of credit; SGC = sociocultural and gender-role constraints.

All correlations ran in the predicted direction (Table 5). Access correlated most strongly with collateral requirements ($r = -.52$) and institutional responsiveness ($r = .49$); the strongest association in the matrix was access with growth ($r = .58$).

Table 5. Intercorrelations Among Study Variables (N = 342)

Variable	M	SD	1	2	3	4	5	6
1. CDR	4.21	0.62	—					
2. COC	4.08	0.67	.43**	—				
3. FLP	2.87	0.74	-.28**	-.22**	—			
4. SGC	3.46	0.81	.35**	.29**	-.33**	—		
5. BIR	2.64	0.79	-.39**	-.31**	.27**	-.25**	—	

Variable	M	SD	1	2	3	4	5	6
6. ABC	2.41	0.86	-.52**	-.41**	.44**	-.37**	.49**	—
7. EGP	2.96	0.77	-.36**	-.29**	.38**	-.31**	.40**	.58**

Note. ** $p < .01$. FLP = financial literacy and preparedness; BIR = bank institutional responsiveness; ABC = access; EGP = growth performance.

The five-predictor model was significant, $R^2 = .458$, $F(5, 336) = 56.71$, $p < .001$, $f^2 = 0.84$ (Table 6). All five unique contributions were significant. Institutional responsiveness ($\beta = .258$, $sr^2 = .053$) and collateral requirements ($\beta = -.260$, $sr^2 = .047$) were strongest; sociocultural constraints were significant but smallest ($\beta = -.097$, $sr^2 = .008$), consistent with absorption through collateral and preparedness. H_{01} was rejected.

Table 6. Multiple Regression Predicting Access to Bank Credit (N = 342)

Predictor	B	SE	95% CI	β	t	p	sr^2
(Constant)	3.484	0.293	[2.91, 4.06]	—	11.89	<.001	—
CDR	-.0361	0.067	[-0.49, -0.23]	-.260	-5.41	<.001	.047
COC	-.0178	0.059	[-0.29, -0.06]	-.138	-3.03	.003	.015
FLP	0.273	0.051	[0.17, 0.37]	.235	5.36	<.001	.046
SGC	-.0103	0.048	[-0.20, -0.01]	-.097	-2.15	.032	.008
BIR	0.281	0.049	[0.18, 0.38]	.258	5.73	<.001	.053

Note. Adjusted $R^2 = .450$. VIFs = 1.19–1.43.

Controls explained 11.8% of growth variance at Step 1. Access raised explained variance to 36.2%, $\Delta R^2 = .244$, $F(1, 337) = 128.88$, $p < .001$, $f^2 = 0.38$ (Table 7). Access was the strongest final predictor ($\beta = .494$). H_{02} was rejected. Direction cannot be established in a cross-sectional design.

Table 7. Hierarchical Regression Predicting Enterprise Growth Performance

Step and predictor	B	SE	β	t	p
Step 1: enterprise age	0.094	0.029	.170	3.21	.001
Number of employees	0.146	0.037	.210	3.94	<.001
Owner education	0.071	0.027	.140	2.63	.009
Step 2: enterprise age	0.061	0.027	.110	2.28	.023
Number of employees	0.097	0.034	.140	2.87	.004
Owner education	0.046	0.025	.090	1.86	.064
Access to bank credit	0.442	0.039	.494	11.35	<.001

Note. Step 1 $R^2 = .118$, $F(3, 338) = 15.07$, $p < .001$. Step 2 $R^2 = .362$, $F(4, 337) = 47.80$, $p < .001$. 95% CI for access B = [0.366, 0.519].

Access differed by sector, $F(3, 338) = 12.22$, $p < .001$, $\eta^2 = .098$, $\omega^2 = .090$ (Tables 8–9). Personal and business services exceeded trading ($d = 0.80$), fashion ($d = 0.91$), and food processing ($d = 0.70$); no other pairwise contrast was significant. H_{03} was rejected.

Table 8. Access to Bank Credit by Enterprise Sector

Sector	n	M	SD	95% CI
Trading and retail	131	2.28	0.81	[2.14, 2.42]
Fashion and tailoring	76	2.19	0.78	[2.01, 2.37]
Food processing and agro-allied	68	2.36	0.84	[2.16, 2.56]
Personal and business services	67	2.94	0.88	[2.73, 3.15]
Total	342	2.41	0.86	[2.32, 2.50]

Note. Levene's $F(3, 338) = 1.06$, $p = .367$. Welch $F(3, 163.25) = 11.13$, $p < .001$.

Table 9. Tukey HSD Comparisons of Access by Sector

Comparison	MD	SE	p	d
Trading vs. fashion and tailoring	0.09	0.119	.873	0.11
Trading vs. food processing	-0.08	0.123	.916	-0.10
Trading vs. personal and business services	-0.66	0.124	<.001	-0.80
Fashion vs. food processing	-0.17	0.137	.604	-0.21
Fashion vs. personal and business services	-0.75	0.138	<.001	-0.91
Food processing vs. personal and business services	-0.58	0.142	<.001	-0.70

Note. d computed with pooled within-group SD = 0.824.

Table 10. Summary of Hypothesis Tests

Hypothesis	Test	Statistic	Effect	Decision
H_{01}	Multiple regression	$F(5, 336) = 56.71$, $p < .001$	$f^2 = 0.84$	Rejected
H_{02}	Hierarchical regression	$F(1, 337) = 128.88$, $p < .001$	$f^2 = 0.38$	Rejected
H_{03}	One-way ANOVA	$F(3, 338) = 12.22$, $p < .001$	$\eta^2 = .098$	Rejected

5. Discussion

The principal obstacle is not the price of credit but the architecture through which credit is screened and the quality of the relationship through which it is negotiated. Collateral requirements were the most severe rated constraint and the second-largest unique predictor, while cost of credit, though rated almost equally severe, contributed only a

third as much unique variance. That is the configuration credit rationing theory predicts (Stiglitz & Weiss, 1981). Respondents held stock, equipment, and vehicles; what they lacked was a lender willing to take security over them. The constraint sits in collateral registry and enforcement infrastructure, not simple asset poverty (Naegels et al., 2018).

Institutional responsiveness was the strongest unique predictor ($M = 2.64$). Under rationing theory the branch relationship is how banks acquire the soft information that substitutes for hard collateral; a weak relationship removes the only channel by which an entrepreneur without registered title can be underwritten. Preparedness ($\beta = .235$) confirms the pecking-order demand-side proposition (Myers & Majluf, 1984; Gichuki et al., 2014). That 43.6% never applied, most citing anticipated refusal, shows discouragement is as much a preparedness phenomenon as an institutional one (Naegels et al., 2021). Sociocultural constraints correlated with access ($r = -.37$) but contributed little unique variance because their effect is transmitted through title and preparedness, the joint conditioning specified by Ogundana et al. (2021) and consistent with Aterido et al. (2013).

Access added 24.4% unique variance to growth after controls, consistent with Fowowe (2017) and Ike (2012). Reverse causation is plausible; the likeliest reading is a reinforcing cycle. The sectoral advantage of services is most plausibly documentary: formal tenancy, contractual receivables, registration, and bank-channel turnover produce cash-flow evidence that banks can underwrite. The relevant distinction is documented versus undocumented cash flow, not manufacturing versus commerce.

6. Implications

6.1 Banking practice

Because bank institutional responsiveness carried the largest unique effect, the highest-return intervention available to banks in Enugu is relational and informational rather than capital-intensive: full pre-application disclosure of charges, published and enforced turnaround standards, and officers with explicit responsibility for small-enterprise relationships in the major market clusters. Parallel product reform should underwrite against movable assets registered under the National Collateral Registry and substitute verified account turnover for registered title. The sectoral result suggests that account-history underwriting already works in services and could extend to trading and food processing.

6.2 Public policy

Only 5.3% financed start-up from commercial banks while 75.7% held business accounts, so the marginal return to further liquidity injection is low relative to reforming the screening apparatus. Public resources would be more productively deployed to partial credit guarantees absorbing the collateral shortfall, operational strengthening of the movable collateral registry, and subsidised enterprise registration, since 12.0% of rejections were attributed directly to its absence. The Enugu State Ministry of Commerce and Industry is well placed to combine registration support with record-keeping training.

6.3 Women entrepreneurs

The preparedness finding indicates action within entrepreneurs' own control. Maintaining separate business accounts with consistent turnover, retaining purchase and sales records, formalising registration, and building a documented relationship with a single branch before credit is needed all address constraints found decisive here. Market and trade associations are a natural vehicle for such capability building, and guarantee structures some already operate could be formalised into arrangements lenders recognise.

7. Limitations and Further Research

Limitations include the cross-sectional design, single-source self-report, restriction to registered urban enterprises (so estimates are likely conservative), and the absence of matched lender data. Longitudinal or guarantee-scheme

designs, bank-held application records, and tests of fintech underwriting on transaction data are the natural next steps.

8. Conclusion

Three conclusions follow. First, the binding constraint is the non-price screening architecture of bank lending, and the point of failure is the type of asset accepted rather than the absence of assets. Second, branch relationship quality is the strongest unique predictor of access and a partial substitute for collateral reform. Third, the credit gap carries a measurable growth cost. Expanding the supply of loanable funds alone will not close the gap. Collateral reform that recognises movable and cash-flow security, branch practice that supplies clear information and predictable process, and capability building that converts discouraged non-applicants into informed applicants must move together.

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