Breaking Barriers: How New Quality Productive Forces Drive Small Business Growth in China

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DOI: https://doi.org/10.51244/IJRSI.2026.1310000188

Received: 06 October 2026; Accepted: 11 October 2026; Published: 13 November 2026

ABSTRACT

Using nearly 250,000 observations from the China Micro- and Small-Enterprise Survey (OSOME) spanning 2020Q3 to 2026Q2, this paper empirically investigates the obstacles to and pathways for the high-quality development of micro and small enterprises (MSEs) through the lens of new quality productive forces. Employing an "enabling–obstacle–breakthrough" analytical framework, we establish three key findings: (1) MSE operating conditions have persistently deteriorated; in 2026Q2, average revenue dropped 22.2% year-on-year to RMB 86,000, net profit margins fell to 3.4%, and cash reserves compressed to 2.8 months of operation. (2) Although weak demand (48.0%) and cost pressures (44.8%) are the primary operational pain points, the underlying drivers lie in a systemic interplay of technological (low digitalization, with only 25.5% AI adoption), factor (an actual financing rate of 6.9% and a 2.3-million skilled-worker deficit), and institutional barriers (50% policy coverage juxtaposed with rising dissatisfaction at 15.9%). (3) The sector exhibits severe polarization: specialized "little giant" firms account for just 3.5% of entities but generate 13.7% of profits, whereas unregistered self-employed businesses comprise 55% of the sample. We demonstrate that escaping this "slow-lane" trap requires unblocking the transmission channels of new productive forces, enabling MSEs to transition from passive retrenchment toward active structural transformation.

JEL Classification: L25, L26, O12, O33

Keywords: new quality productive forces; micro and small enterprises; business distress; OSOME survey; high-quality development

INTRODUCTION

The concept of "new quality productive forces" (*xin zhi sheng chan li*) marks a strategic reorientation of China's economic paradigm from factor-driven growth toward innovation-driven, high-quality development. Marking the inception of the 15th Five-Year Plan (2026–2030), ten joint ministries issued the *15th Five-Year Plan for Promoting the Development of SMEs*, explicitly tasking small and medium enterprises (SMEs) with anchoring new quality productive forces and constructing a modern industrial system. As the economic "capillaries" of the national economy, micro and small enterprises (MSEs) contribute over 60% of GDP, more than 70% of technological innovation, and 80% of urban employment, forming the indispensable micro-foundation upon which this national strategy must be built.

However, micro-level empirical data reveal a stark paradox between policy ambition and operational reality. Data from the China Micro- and Small-Enterprise Survey (OSOME)—conducted quarterly by Peking University's Enterprise Big Data Research Center, the Chinese Social Survey Center, Ant Group Research Institute, and MYbank—indicate a persistent and worsening business climate. In 2026Q2, average MSE revenue contracted by 22.2% year-on-year to RMB 86,000, net profit margins compressed to 3.4%, and the business confidence index remained below the expansion threshold for nine consecutive quarters. This alarming trend poses two fundamental research questions: Is the current distress merely a cyclical demand downturn, or does it signal deep-seated structural barriers? Furthermore, why have MSEs failed to capture the technological dividends of the nationwide push for new quality productive forces?

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XIII Issue X October 2026

Existing studies fall short in answering these questions due to three key limitations. First, most analyses attribute MSE precarity to superficial shocks such as weak consumer demand or raw material cost inflation, lacking a structural diagnosis grounded in the new quality productive forces perspective. Second, previous research largely treats MSEs as a homogeneous population, ignoring how structural heterogeneity—specifically between high-tech "little giant" enterprises and unregistered self-employed entities—shapes divergent transformation trajectories. Third, policy discourse remains heavily biased toward traditional supply-side relief (e.g., tax and fee cuts), while neglecting the institutional transmission bottlenecks that block policy execution at the grass-roots level.

To bridge these gaps, this paper constructs an "enabling–obstacle–breakthrough" analytical framework to empirically evaluate MSE integration into new quality productive forces. Utilizing 24 quarterly waves of OSOME panel data from 2020Q3 to 2026Q2 (encompassing nearly 250,000 micro-level observations), we systematically diagnose the systemic bottlenecks obstructing MSE growth across three dimensions: technological capabilities, factor constraints, and institutional frictions. Based on our empirical findings, we map type-based, differentiated breakthrough pathways.

This study makes three main contributions. First, it operationalizes the macro-theoretical concept of new quality productive forces into a testable micro-level analytical framework. Second, it leverages a rare, multi-year panel of quarterly MSE survey data to uncover the structural mechanisms driving business distress and enterprise polarization in China. Third, it provides timely empirical evidence to guide targeted policy design during the critical opening window of the 15th Five-Year Plan.

INSTITUTIONAL BACKGROUND, THEORETICAL FRAMEWORK, AND HYPOTHESES

Institutional Background

China's institutional landscape for micro and small enterprises (MSEs) is undergoing structural realignment. By year-end 2025, registered SMEs nationwide exceeded 60 million, alongside 127 million individual self-employed households. Within this vast ecosystem, 17,600 specialized and sophisticated "little giant" enterprises have emerged as innovative anchors, exhibiting an average R&D intensity of 7.0% and holding an average of 26.6 invention patents per firm (State Council Information Office, 2026).

This policy trajectory is formalized in the *15th Five-Year Plan for Promoting the Development of SMEs*, which establishes explicit quantitative targets for the 2026–2030 planning period. Specifically, the plan mandates a cumulative 15% increase in per-capita revenue for SMEs above designated size, an average annual growth rate exceeding 8% in R&D expenditure for industrial SMEs above designated size, and an expansion of the "little giant" cohort to 22,000 firms (Ministry of Industry and Information Technology et al., 2026). Crucially, by establishing "supporting the development of new quality productive forces" as its core guiding principle, the policy architecture signals a fundamental paradigm shift—transitioning from traditional, reactive "relief" subsidies toward proactive, structural "empowerment."

However, this ambitious macro-level policy supply stands in sharp contrast to deteriorating micro-level perceptions among enterprise operators. Tracking data from the China Micro- and Small-Enterprise Survey (OSOME) reveal that respondent dissatisfaction with the business environment escalated from 15.1% in 2025Q4 to a record high of 15.9% in 2026Q2, while 24.2% of operators anticipated further environment worsening in the subsequent quarter—also an all-time survey peak (Peking University Enterprise Big Data Research Center et al., 2026). The widening chasm between top-down policy intentions and ground-level enterprise realities constitutes the core empirical puzzle examined in this study.

Theoretical Framework and Hypotheses

New quality productive forces are a new form of productivity driven by technological innovation and powered by digital and intelligent technologies, characterized by high technology, high efficiency, and high quality (Zhou & Xu, 2023; Zhang & Pu, 2023). At the firm level, new quality productive forces can enable MSEs

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XIII Issue X October 2026

through three pathways. First, the technology-enabling pathway: digitalization reduces transaction costs, expands market boundaries, and improves operational efficiency. Zhang et al. (2025) empirically demonstrate that digital intelligence transformation significantly enhances enterprise new quality productive forces, with absorptive capacity playing a mediating role. Second, the factor-recombination pathway: the integration of data as a new factor with traditional factors optimizes resource allocation (Liu & Kong, 2024). Third, the ecosystem-synergy pathway: integration into innovation ecosystems of large and small firms generates technology spillovers (Ru et al., 2023).

Yet these pathways are severely blocked for MSEs. Drawing on prior studies (Chinese Academy of Social Sciences, 2025; Zhejiang Provincial Economic Information Centre, 2026; Lucheng District Statistics Bureau, 2025), we identify three layers of obstacles: technological obstacles (low digitalization and limited technical capabilities—"do not know how to transform"), factor obstacles (financing constraints, talent shortages, high costs—"do not have money to transform"), and institutional obstacles (weak policy transmission, poor commercialization of innovations—"are unwilling or afraid to transform"). These three obstacles are not independent; they reinforce each other through a vicious cycle of "capability poverty–resource scarcity–institutional exclusion," creating a systemic barrier (Xu et al., 2023; Hu, 2024).

We thus propose the following hypotheses:

H1: Both demand weakness and cost pressures have significant negative effects on MSE business performance, but the marginal effect of demand weakness is larger than that of cost pressures.

H2: Technological, factor, and institutional obstacles are the structural roots of business distress, and their interactive and cumulative effects intensify the distress.

H3: The obstacles facing MSEs in engaging with new quality productive forces exhibit significant heterogeneity across registration types, industries, and firm sizes.

Data, Variables, and Descriptive Statistics

Data Source

Our data come from the China Micro- and Small-Enterprise Survey (OSOME), conducted quarterly since the third quarter of 2020 by Peking University's Enterprise Big Data Research Center, the Chinese Social Survey Center, Ant Group Research Institute, and MYbank. The survey uses random sampling via Alipay's online platform, targeting active MSE operators. As of 2026Q2, 24 waves have been completed, with a cumulative effective sample of nearly 250,000 observations—about 8,000–10,000 per quarter. The sample covers three types of entities (corporate enterprises, registered self-employed, and unregistered self-employed) and spans multiple industries (life services, wholesale/retail, manufacturing, etc.). We use the panel data from 2020Q3 to 2026Q2 (24 quarters) for our analysis.

Variable Definitions

Dependent variables. We measure MSE business distress from three dimensions: (1) net profit margin (net profit / operating revenue × 100%); (2) cash flow duration (months that current cash flow can sustain operations); and (3) a binary distress indicator (1 if net profit is negative or cash flow cannot sustain operations, otherwise 0).

Core independent variables. (1) Demand pressure—equals 1 if the respondent cites "market demand" as the top business pressure, otherwise 0. (2) Cost pressure—equals 1 if the respondent cites "costs" as the top pressure, otherwise 0. We further disaggregate cost pressure into sub-components: raw material costs, rent, labour costs, and taxes/fees.

Mediating and moderating variables. (1) Technological capability: whether the firm engages in online sales, share of online sales, and whether it uses AI applications. (2) Financing constraints: whether there is a

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XIII Issue X October 2026

financing need, funding channel, and interest rate. (3) Policy accessibility: whether the respondent is aware of and has benefited from support policies, and policy coverage rate.

Control variables: registration type, industry, years of operation, number of employees, operator's age, gender, and education level.

Descriptive Statistics

Table 1 reports descriptive statistics for the core variables. Over the entire sample period (2020Q3–2026Q2), the average net profit margin is 4.2%, but it shows a clear downward trend—from 5.1% in 2024Q4 to 3.4% in 2026Q2. Cash flow duration averages 3.1 months, dropping to 2.8 months by 2026Q2. Demand pressure averages 39.7%, peaking at 52.1% in 2025Q4; cost pressure averages 38.5%, reaching 44.8% in 2026Q2.

Table 1: Descriptive Statistics of Core Variables (2020Q3–2026Q2)

Variable	Obs	Mean	Std. Dev.	Min	Max
Net profit margin (%)	192,847	4.2	8.6	-15.3	28.7
Cash flow duration (months)	193,216	3.1	2.4	0.5	12
Demand pressure (dummy)	193,845	0.397	0.489	0	1
Cost pressure (dummy)	193,845	0.385	0.487	0	1
Online sales (dummy)	191,523	0.508	0.5	0	1
Share of online sales (%)	97,247	18.3	22.6	0	100
Policy coverage	166,328	0.512	0.5	0	1
Financing interest rate (%)	57,342	6.8	4.2	1.5	18

Source: OSOME 2020Q3–2026Q2. Online sales share is calculated only for firms with online sales.

Baseline Model Specification

To test the effects of demand weakness and cost pressures on business distress, we estimate the following two-way fixed effects model:

$$Y_{it} = \alpha + \beta_1 Demand_{it} + \beta_2 Cost_{it} + \gamma' X_{it} + \mu_i + \lambda_t + \varepsilon_{it}$$

where Y_{it} is the distress indicator (net profit margin or cash flow duration), $Demand_{it}$ and $Cost_{it}$ are dummy variables for demand and cost pressures, X_{it} is a vector of controls, μ_i is firm fixed effects, λ_t is time fixed effects, and standard errors are clustered at the firm level.

Structural Mediation Specification

To formally model the transmission mechanism in Section 4.3 (*Demand Weakness →→ Digital Retrenchment →→ Efficiency Loss*), we introduce the full system of structural equations:

$$\text{Online Sales}_{it} = \theta_0 + \theta_1 \text{Demand}_{it} + \delta' \text{X}_{it} + \mu_i + \lambda_t + u_{it}$$

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XIII Issue X October 2026

$$Y_{it} = \alpha' + \beta_1' \text{Demand}_{it} + \phi \text{OnlineSales}_{it} + \gamma' \text{X}_{it} + \mu_i + \lambda_t + v_{it}$$

Empirical Analysis and Hypothesis Testing

Baseline Results: Demand vs. Cost (H1)

Table 2 presents the baseline regression results. Columns (1)–(3) use net profit margin as the dependent variable, and columns (4)–(6) use cash flow duration. All regressions include firm fixed effects, time fixed effects, and operator characteristics.

Table 2: Baseline Regression Results

Variable	(1) Margin	(2) Margin	(3) Margin	(4) Cash flow	(5) Cash flow	(6) Cash flow
Demand pressure	-1.872***	-1.634***	-1.528***	-0.524***	-0.471***	-0.438***
	-0.146	-0.139	-0.135	-0.058	-0.054	-0.052
Cost pressure	—	-1.203***	-1.086***	—	-0.386***	-0.352***
		-0.128	-0.124		-0.051	-0.049
Demand × Cost	—	—	-0.874**	—	—	-0.293***
			-0.342			-0.096
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	167,283	167,283	167,283	167,647	167,647	167,647
R^2	0.172	0.186	0.189	0.154	0.163	0.167

*Notes: *** p<0.01, ** p<0.05, * p<0.1; clustered robust standard errors in parentheses. Controls include registration type, industry, years of operation, number of employees, operator's age, gender, and education.*

Column (1) shows that demand pressure alone reduces the net profit margin by 1.872 percentage points (significant at 1%). When both demand and cost pressures are included (Column 2), the coefficients are -1.634 and -1.203, respectively, both significant at 1%, with the demand coefficient larger in absolute value—supporting H1. Adding the interaction term (Column 3), the interaction coefficient is -0.874 (significant at 5%), indicating that demand weakness and cost pressures reinforce each other: when demand is slack, the profit squeeze from cost rigidity is amplified. The results for cash flow duration (Columns 4–6) follow the same pattern. These findings carry clear policy implications: in a persistent weak-demand environment, relying solely on tax and fee cuts is insufficient; demand-side stimulus becomes more critical.

Systemic Three-Layer Obstacle Architecture (H2)

Table 3 reports the joint effects of all three obstacle dimensions on profit margins. We sequentially include proxies for technological (online sales), factor (financing rate), and institutional (policy coverage) obstacles. The full model raises R^2 from 0.189 to 0.241. More importantly, the coefficient on demand pressure falls from -1.528 to -1.013—a reduction of 33.7%—after controlling for the three obstacles, implying that part of what appears as "demand weakness" is actually a reflection of structural impediments.

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Table 3: Joint Effects of Three Obstacles (Dependent: Net Profit Margin)

Variable	(1) Baseline	(2) +Tech	(3) +Factor	(4) +Institution	(5) Full
Demand pressure	-1.528***	-1.446***	-1.287***	-1.158***	-1.013***
Cost pressure	-1.086***	-1.034***	-0.967***	-0.892***	-0.821***
Online sales (Tech)	—	2.158***	1.934***	1.786***	1.634***
Financing rate (Factor)	—	—	-0.186***	-0.172***	-0.158***
Policy coverage (Institution)	—	—	—	0.874***	0.792***
Observations	167,283	165,847	52,174	52,174	52,174
R^2	0.189	0.201	0.222	0.234	0.241

These results support H2: each obstacle is individually significant, and they are mutually reinforcing—firms with weaker technological capabilities are less likely to obtain financing (*r* = 0.31, *p* < 0.01), and those with lower policy coverage also have lower online-sales shares (*r* = 0.28, *p* < 0.01). Together, they form a "low-level equilibrium trap."

Digital Retrenchment Mechanism Analysis

To test whether technological barriers mediate the effect of pressures on distress, we use "whether the firm engages in online sales" as a proxy for technological capability. Table 4 reports the mediation results.

Table 4: Mediation Effect of Technological Capability

Variable	(1) Margin	(2) Online sales	(3) Margin
Demand pressure	-1.528***	-0.038***	-1.446***
	-0.135	-0.011	-0.132
Online sales	—	—	2.158***
			-0.398
Controls	Yes	Yes	Yes
Observations	167,283	189,426	165,847
Sobel Z	—	-3.42***	—

The mediation effect accounts for 5.4% of the total effect (Sobel Z = -3.42, *p* < 0.01), suggesting that demand pressure lowers profit margins partly by discouraging digital investment. This uncovers a "demand weakness → digital retrenchment → efficiency loss → deeper distress" transmission chain, and it provides micro-evidence for the "dare not transform" behaviour: when survival is at stake, firms prioritise cutting medium- to long-term transformation investments over immediate cost reduction.

Enterprise Heterogeneity and Polarization (H3)

By registration type. Table 5 reports subsample regressions. For corporate enterprises, the demand-pressure coefficient is -2.186, which is larger in absolute value than for registered self-employed (-1.472) and

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unregistered self-employed (-0.938), and the differences are statistically significant ($p<0.01$). This seemingly counter-intuitive result can be explained by two factors: (1) corporate enterprises have higher fixed-cost shares, so revenue declines translate more strongly into profit drops; (2) more formalised firms are more deeply embedded in the formal economy and thus more exposed to aggregate demand fluctuations.

Table 5: Heterogeneity by Registration Type (Dependent: Net Profit Margin)

Variable	(1) Corporate	(2) Registered self-employed	(3) Unregistered self-employed
Demand pressure	-2.186***	-1.472***	-0.938***
	-0.312	-0.168	-0.141
Cost pressure	-1.534***	-1.018***	-0.764***
	-0.286	-0.154	-0.128
Observations	16,873	58,436	91,974
R^2	0.204	0.181	0.152

By industry. For manufacturing MSEs, the cost-pressure coefficient (-1.672) is significantly larger than for life services (-1.024) and wholesale/retail (-1.138), consistent with manufacturing's higher raw-material cost share and weaker bargaining power. In contrast, life-services MSEs show the largest demand-pressure coefficient (-1.846), reflecting their heavy reliance on consumer sentiment.

DISCUSSION

Structural Polarization and Economic Dualism

The heterogeneity results above reveal a crucial fact: the distribution of structural obstacles varies greatly across MSEs, leading to divergent transformation trajectories. Three diagnostic observations emerge from our analysis.

Technological Bottlenecks: Superficial vs. Deep Adoption. OSOME data show that in 2026Q2, 51.3% of MSEs engaged in online sales, yet the share of online sales in total revenue was only 17.8%—a new low since the survey began (Peking University Enterprise Big Data Research Center et al., 2026). Only 25.5% of firms had applied AI to their actual operations (2026Q1). By firm size, micro-enterprises with 1–4 employees have an online-sales share of only 14.2% and an AI adoption rate below 15%, while small firms with 10+ employees reach 28.6% and 42.3%, respectively—a clear size gradient. The overall digitalization rate of SMEs is only 42.5%, and full-process digitalization of core business is below 15% (Zhejiang Provincial Economic Information Centre, 2026). This "surface-level digitalization" means that firms have only expanded their sales channels, far from restructuring their production functions—hence the technology-enabling pathway of new quality productive forces is effectively broken.

Factor Bottlenecks: Expectation-Driven Credit Rationing. In Q1 2026, the average interest rate on newly issued inclusive small firm loans was 3.64%, but the average rate actually paid by OSOME respondents who obtained loans was 6.9%—a gap of 3.26 percentage points (Peking University Enterprise Big Data Research Center et al., 2026; People's Bank of China, 2026). More strikingly, 43.4% of MSEs reported no external financing needs, up 4.7 percentage points from a year earlier, continuing a five-quarter declining trend. This shrinking demand for credit is not because firms are flush with cash—cash-flow duration was simultaneously shrinking—but because operators are pessimistic about their chances and give up trying. This "expectation-driven" credit constraint is even harder to resolve than traditional information-asymmetry constraints. Talent shortages are equally severe: the manufacturing sector faces a shortage of 2.3 million skilled workers, while

labour costs for basic positions rise 12% annually. Only 19.4% of MSEs obtain operating loans from traditional banks; the vast majority of "grassroots" MSEs are excluded from the formal financial system.

Institutional Bottlenecks: Policy-Transmission Failure. Policy coverage stood at 53.1% in 2025Q4 and remained around 50% in 2026Q2. Yet dissatisfaction with the business environment rose to 15.9%—the highest on record—and 24.2% expected it to worsen, also a record (Peking University Enterprise Big Data Research Center et al., 2026). When asked about their top policy demands, MSEs prioritised cost reduction (37.3%) and financing support (30.0%). This suggests a structural misalignment between policy supply and real needs. More fundamentally, more than half of MSEs "cannot understand, cannot reach, or cannot use" the policy benefits—the complexity of policy documents exceeds the limited information-processing capacity of typical MSE operators.

The Matthew Effect and Economic Dualism. Specialised and sophisticated "little giant" firms—though accounting for only 3.5% of industrial SMEs above designated size—contribute 9.6% of revenue and 13.7% of profits (State Council Information Office, 2026). Their R&D intensity reaches 7%, with 26.6 invention patents per firm. These firms have already crossed the transformation threshold and face relatively low technological and factor barriers. At the other end of the spectrum, unregistered self-employed businesses now make up 55% of the sample. These entities lack formal operating licenses, have much lower policy coverage and financing accessibility, and possess the weakest technological capabilities. In 2025, 1.326 million enterprises were deregistered nationwide, of which nearly 800,000 were MSEs; the average annual closure rate for self-employed individuals was 28.6%, and the three-year survival rate was only 65.8%.

This polarization implies that the enabling effect of new quality productive forces exhibits a strong Matthew effect—firms that already have a foundation and formal status are more likely to access transformation resources, while the grassroots MSEs that most need upgrading are excluded by multiple barriers. This finding carries a clear policy implication: while pursuing the "little giant" cultivation targets, policymakers must not neglect the transformation support needed by the vast number of "grassroots" MSEs, or else economic dualism will worsen.

Further Discussion: Structural Polarisation and Its Implications

The heterogeneity results above reveal a crucial fact: the distribution of structural obstacles varies greatly across MSEs, leading to divergent transformation trajectories. Specialised and sophisticated “little giant” firms – though accounting for only 3.5% of industrial SMEs above designated size – contribute 9.6% of revenue and 13.7% of profits (State Council Information Office, 2026). Their R&D intensity reaches 7%, with 26.6 invention patents per firm. These firms have already crossed the transformation threshold and face relatively low technological and factor barriers.

At the other end of the spectrum, unregistered self-employed businesses now make up 55% of the sample. These entities lack formal operating licenses, have much lower policy coverage and financing accessibility, and possess the weakest technological capabilities. In 2025, 1.326 million enterprises were deregistered nationwide, of which nearly 800,000 were MSEs; the average annual closure rate for self-employed individuals was 28.6%, and the three-year survival rate was only 65.8%. This polarisation implies that the enabling effect of new quality productive forces exhibits a strong Matthew effect – firms that already have a foundation and formal status are more likely to access transformation resources, while the grassroots MSEs that most need upgrading are excluded by multiple barriers. This finding carries a clear policy implication: while pursuing the “little giant” cultivation targets, policymakers must not neglect the transformation support needed by the vast number of “grassroots” MSEs, or else economic dualism will worsen.

CONCLUSIONS AND POLICY IMPLICATIONS

Using 24 waves of OSOME panel data from 2020Q3 to 2026Q2, this paper empirically analyses the obstacles

and breakthrough paths for high-quality development of MSEs from the perspective of new quality productive forces. Our main conclusions are as follows.

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XIII Issue X October 2026

First, the business distress of MSEs has persistently worsened. In 2026Q2, revenue fell 22.2% year-on-year, profit margin dropped to 3.4%, cash flow could sustain only 2.8 months, and the confidence index remained below the boom-or-bust line for nine consecutive quarters. The distress exhibits both cyclical and structural characteristics.

Second, demand weakness and cost pressures are the immediate triggers, but the deeper roots lie in the systemic overlap of technological, factor, and institutional obstacles. Baseline regressions show that demand pressure has a larger marginal effect (-1.528) on profit margins than cost pressure (-1.086), and they interact positively. The mediation analysis uncovers a vicious cycle of "demand weakness → digital retrenchment → efficiency loss → deeper distress." The full model reduces the demand-pressure coefficient by 33.7%, confirming that structural obstacles are the underlying cause.

Third, MSEs display significant heterogeneity and polarization. Corporate enterprises are most sensitive to demand shocks, while manufacturing firms are hardest hit by cost pressures. The gap between "little giant" firms and grassroots MSEs continues to widen, with unregistered self-employed now accounting for 55% of the population—a large segment being left behind in the transformation process.

Based on these findings, we offer the following policy implications, structured to mirror the three-layer obstacle framework identified in our analysis.

Targeted Policy Matrix: Symmetry between Obstacles and Solutions

Obstacle Layer	Empirical Finding	Proposed Policy Intervention
Technological Obstacles (*"Do not know how"*)	Superficial online presence (17.8% revenue share) and low AI adoption (25.5%).	Public computing vouchers, open-source AI toolkits, and shared technology platforms for MSEs.
Factor Obstacles (*"Do not have money"*)	Credit shrinking due to expectation gaps (43.4% non-borrowing) and actual rates (6.9%).	Inclusive credit guarantees, interest-rate subsidies, and targeted vocational training incentives.
Institutional Obstacles (*"Unwilling or afraid"*)	Policy awareness/perceived gap; rising dissatisfaction with business environment (15.9%).	Plain-language policy digests, "quasi-formalization" tiers for self-employed entities, and streamlined application channels.

Cross-Cutting Priority—Balance "Peak" and "Base": While the "little giant" cultivation targets in the *15th Five-Year Plan* are important, policy design must prevent new quality productive forces from becoming a "club good" for only a few. Shared technology platforms, computing-power vouchers, and lightweight digital solutions can help lower the technological threshold so that the dividends of new quality productive forces truly reach the broadest group of MSEs. Liu and Kong (2024) contend that the development of new quality productive forces necessarily requires the establishment of corresponding new relations of production—a principle that applies equally to the institutional arrangements for MSE support.

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