

Promoting SMEs within the Dual-Circulation Strategy: A Policy Perspective

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Keywords: SME Networks, Internationalization Policy, Industrial Clusters, Dual-Circulation Strategy

Abstract: Within China's Dual-Circulation Strategy, small and medium-sized enterprises (SMEs) are recognized as vital to innovation, employment, and economic resilience. However, the prevailing policy model, which relies on large enterprises to lead SME development through technology and supply chain spillovers, faces mounting challenges. Economic pressures have led large firms to prioritize cost-cutting over collaboration, resulting in payment delays and constrained support for SMEs. This study draws on an analysis of over 600 SME support policies reviewed by the OECD, alongside recent Chinese policy initiatives and empirical data from national industrial and judicial reports. A mixed-methods approach combines qualitative policy analysis with quantitative evaluation of implementation outcomes. The research identifies a significant policy–practice gap. While top-down approaches emphasize large-firm leadership, empirical evidence shows SMEs continue to encounter financing bottlenecks and unequal bargaining power. Conversely, network-based models—such as innovation clusters, cross-border production networks, and digital platforms—prove more effective in enhancing SME resilience and global competitiveness. China's recent gradient cultivation system, which has supported over 14,000 specialized “little giant” firms, offers a promising alternative framework. The study contributes to industrial policy and SME literature by proposing a shift from lead-firm-dependent models to sustainable, network-oriented development paradigms. It offers practical insights for policymakers in enhancing digital transformation, fostering university–industry partnerships, and building internationally competitive SME clusters, thereby facilitating more effective integration into global value chains under the Dual-Circulation Strategy.

1. Introduction

1.1 Research Background

In the context of China's industrial upgrading and quality-focused economic development, policymakers have introduced a range of regulatory and financial measures aimed at nurturing high-quality SMEs. The Ministry of Industry and Information Technology (MIIT) has taken a leading role

in promulgating policies designed to facilitate constructive interactions and integrated development across large, medium, and small enterprises [1]. This policy approach implicitly treats large enterprises as “anchor firms” within the industrial ecosystem, capable of propelling SME growth through supply chain linkages, knowledge spillovers, and resource sharing.

Nevertheless, empirical observations reveal a contrasting reality: many large enterprises are presently downsizing operations in response to declining demand and rising costs. Widespread layoffs, business unit contractions, and delayed payments to SME suppliers reflect a trend wherein large firms prioritize internal stability over spillover benefits to smaller partners. Consequently, a palpable policy–practice gap has emerged: although governmental policies anticipate synergistic cooperation, many SMEs continue to encounter financing constraints, prolonged payment cycles, and asymmetrical bargaining power.

1.2 Research Significance

Amid escalating U.S.–China strategic competition, upgrading the policy apparatus supporting SME internationalization is crucial for enhancing their global competitiveness. Traditional reliance on domestic lead firms has proven insufficient in preparing SMEs dual-circulation. Instead, there is a compelling need for policies that foster SME-led production networks, knowledge-sharing mechanisms, and innovation ecosystems. Such networks can facilitate access to strategic resources, overseas markets, and risk-mitigation capacities, thereby strengthening China’s position within global value chains under the Dual-Circulation Strategy.

2. Policy Measures for Cultivating SME Internationalization in China

2.1 Promoting Integrated Development of Large and Small Enterprises

The MIIT has implemented several policies aimed at fostering partnerships between large enterprises and SMEs [2-3]:

Industrial and Supply Chain Integration: Policies encourage large firms to play a leading role in strengthening supply chain cohesion, improving SME capabilities, and fostering regional industrial ecosystems. SMEs are supported in partnering with chain leaders to enhance coordination in ordering, design, and production. Large enterprises are urged to integrate upstream and downstream partners into unified quality management systems.

Innovation Chain Collaboration: Initiatives such as the “100,000 Enterprises Integration and Innovation Matching Campaign” promote innovation resource sharing, collaborative R&D, and commercialization of innovations among enterprises, universities, and research institutes. Enterprises are encouraged to form innovation consortia focused on common quality and technology challenges.

Strategic Cooperation Platforms: Initiatives such as “Joint Action” serve as catalysts, fostering dialogue and collaboration between large enterprises and specialized, sophisticated, and innovative SMEs. These programs often include joint R&D projects, shared supply chain integration, and collaborative market expansion strategies. Meanwhile, events like “Maker China” and “China Chuangyi” offer expansive platforms for exhibition, exchange, and partnership building. These platforms enable SMEs to showcase their technological capabilities and innovative products on a broader stage, connect with potential partners, and access critical resources and market insights. Through such structured cooperation frameworks, SMEs can leverage the strengths of larger firms while maintaining their unique innovative edge, driving collective advancement within the industrial ecosystem.

2.2 Gradient Cultivation and Sustainable Development Policies

China has established a multi-tiered cultivation system to support SMEs' sustainable development under the Dual-Circulation Strategy [3]:

Specialized, Sophisticated, and Innovative Enterprises: By 2024, China had cultivated over 14,000 "little giant" enterprises with average R&D intensity exceeding 7% and 22 authorized invention patents per enterprise. These firms represent the vanguard of China's SME innovation capability.

Financial Support Mechanisms: The National SME Development Fund has invested RMB 69 billion in 1,981 projects, while more than 2,000 specialized SMEs have listed on A-share markets. These financial channels provide crucial capital support for technology upgrading and market expansion.

Resolution with reduced burdens: China has continuously optimized inclusive support policies, including the temporary deferral of social insurance contributions, postponed principal and interest repayments, reductions in corporate income tax and value-added tax, and a 50% cut on six taxes and two fees. During the 14th Five-Year Plan period, the national balance of inclusive micro and small enterprise loans increased by over 19 trillion yuan, representing a growth of more than 120%. The "Regulations on Guaranteeing Payments to SMEs" have been revised and initiatives to clear overdue payments owed to enterprises have yielded notable results.

Digital Transformation Initiative: A joint program with the Ministry of Finance has supported digital transformation in over 45,000 SMEs across hundreds of cities, enhancing their productivity and integration into digital supply chains.

2.3 Developing Characteristic SME Industrial Clusters

China has introduced interim measures to promote the development of distinctive industrial clusters for SMEs. These clusters-typically situated within county-level administrative regions-are designed to enhance specialization, aggregation, and innovation capacity. Guided by the new development philosophy, these clusters aim to leverage local industrial advantages, concentrate resource elements, and foster efficient collaborative networks [4].

Cluster development policies emphasize enhancing SME competitiveness, revitalizing county-level economies, and reinforcing supply chain resilience. Implementation principles combine government guidance with market leadership, enterprise cultivation with industrial strengthening, and dynamic management with targeted services.

2.4 Identified Gaps in Current Policies

Data from the 2024 Supreme People's Court Work Report reveal that large-scale arrears owed by large enterprises to SMEs remain a serious issue, with RMB 18.78 billion disbursed in 2023 to address payment delays [5]. This indicates that, rather than fostering integrated development, many large firms are squeezing SME liquidity to alleviate their own financial pressures.

Moreover, as many large enterprises undergo restructuring and downsizing, their capacity and willingness to support SMEs have diminished. SMEs frequently face unequal contract terms and prolonged payment cycles, exacerbating their operational vulnerabilities [6].

Current policies continue to place heavy expectations on large enterprises to drive SME development, despite clear structural and motivational constraints. There is a critical need to encourage strategic partnerships among SMEs themselves, facilitate the formation of innovation and supply chain networks, and foster internationally competitive SME clusters.

Recent initiatives mark significant strides in bolstering SME support mechanisms; these include the development of specialized overseas service directories tailored for SMEs, the implementation of

targeted market expansion programs, and the introduction of light-weight AI deployment solutions designed to enhance operational efficiency and innovation capacity among small and medium enterprises.

However, to achieve sustainable and scalable impact, it is imperative to adopt a more systematic and strategically integrated policy framework that prioritizes the cultivation of dynamic, multi-stakeholder networks and innovation ecosystems.

3. International Policy Frameworks for SME Internationalization

3.1 SME Networks in Developed Economies

According to a review by OECD of over 600 SME financing policies in developed countries across Europe and the United States, establishing SME networks-which help connect SMEs with various stakeholders in their ecosystem in terms of products, services, knowledge, and assets-is crucial for them to expand into overseas markets. The quantitative analysis reveals the following distribution of policy efforts aimed at building functional networks for global trade relations: 52% focus on strengthening SMEs' integration into production and supply chains, 33% on public initiatives to advance knowledge and innovation networks, while the remaining 12% and 3% are dedicated to developing strategic partnerships and industrial clusters, respectively [7].

3.2 Typology of SME Networks

SME production and supply chain networks link processes from R&D and design to procurement, assembly, and marketing. These networks integrate distributors into the production process based on cost-effectiveness and lean management principles, with a focus on optimizing interfaces between participating enterprises. Emphasis should be placed on production networks that generate knowledge and innovation spillover effects for the SMEs involved.

Production and Supply Chain Networks play a pivotal role in facilitating the global integration of SMEs, offering pathways for cost optimization, operational excellence, and innovation-driven growth [8]. By embedding SMEs within these networks, businesses can harness synergies, leverage collective resources, and unlock new opportunities for value creation in an increasingly interconnected global economy [9].

Knowledge and Innovation Networks facilitate cross-boundary knowledge sharing, resource pooling, and skill transfers. They include professional service providers with legal, accounting, R&D, design experts and institutional actors such as standards bodies and certification agencies [10].

Strategic partnerships serve as a powerful catalyst for SMEs, enabling them to leverage collective resources, mitigate individual cost burdens, and gain access to strategic assets that would otherwise be beyond their reach. Through diverse collaborative frameworks such as licensing agreements, joint ventures, R&D alliances, and shared innovation centers, SMEs can significantly enhance their operational capabilities and market competitiveness [11].

Industrial clusters serve as vital ecosystems that facilitate robust linkages among SMEs, universities, research institutions, and end customers within specialized sectors or geographic regions, thereby significantly enhancing collective production efficiency, accelerating knowledge diffusion, and fostering collaborative innovation.

3.3 Networks as Risk-Mitigation Assets

For SMEs, networks can serve as risk-resistant assets. In stable environments, enterprises only need to establish exclusive partnerships with a few collaborators. However, in the dynamic

environments of international markets or innovation systems, especially in volatile environments, networks provide redundancy, flexibility, and diversified resources-key attributes for resilience. Firms are encouraged to develop business continuity plans, diversify suppliers and markets, and build strategic redundancies.

Additionally, compliance with Environmental, Social, and Governance (ESG) standards is increasingly necessary for integration into global production and innovation networks. To respond to rising consumer concerns about sustainability and new regulatory demands, enterprises of all sizes are incorporating sustainable practices into their production strategies-including adapting their own production processes and making procurement and contractual arrangements more sustainable. In particular, multinational corporations (MNCs) have taken steps to mitigate environmental and social risks linked to their operations. Due diligence principles must be applied to ensure ESG compliance and reduce exposure to high-risk areas.

4. Toward a Sustainable Policy Framework for SME Internationalization

4.1 Strengthening International Production Networks

China should continue to pursue open economic policies, particularly with non-U.S. partners, to buffer against geopolitical tensions. Strengthening production and supply chain networks with European and other non-U.S. economies can mitigate the impact of decoupling efforts. The establishment of 15 China-foreign SME cooperation zones provides institutional platforms for such international production networking [3].

4.2 Leveraging Digital Platforms

Digital platforms-including e-commerce, cloud services, and collaborative innovation tools-can significantly expand SMEs' production and knowledge networks. These platforms reduce innovation costs, enhance market access, and facilitate cross-border cooperation [12]. China's initiative on lightweight deployment of large-model technology for SMEs represents an important step in this direction.

4.3 Embracing Open Innovation

Open innovation allows SMEs to access external knowledge, share costs, and accelerate market entry. Cooperative firms demonstrate higher innovation outputs, and open innovation strategies can reduce barriers to participation in global innovation ecosystems [13]. The "100,000 Enterprises" integration and innovation matching campaign exemplifies this approach in the Chinese context [3].

4.4 Building University-SME Partnerships

Universities and public research institutions play critical roles in upskilling workers, co-creating knowledge, and providing innovation infrastructure. Academic licenses and spin-offs are disproportionately beneficial to SMEs and startups [13]. Geographical and technological proximity enhances trust and knowledge transfer. China's policies promoting industry-academia-research collaboration should be further strengthened to support SME innovation.

4.5 Comprehensive Service System Development

China has established a four-level SME service system with over 1,800 public service institutions nationwide [3]. This infrastructure should be leveraged to provide integrated services including

market expansion, international talent cultivation, rights protection, and digital transformation support. The China SME Service Network and "Together Benefit Enterprises" campaign represent important components of this service ecosystem [2].

4.6 Developing Characteristic Industrial Clusters

Efficient business networks are the backbone of successful industrial clusters. Clusters reduce transaction costs, foster trust, and facilitate knowledge exchange through geographic concentration and repeated interaction [14]. China's focus on developing characteristic industrial clusters at the county level provides a solid foundation for building efficient SME networks with international competitiveness.

5. Conclusion

Within the dual-circulation strategy, China's existing SME development policies, which heavily rely on lead firms as catalysts for growth, are increasingly encountering practical limitations. In the face of global economic volatility, SMEs can no longer depend solely on trickle-down benefits from large domestic enterprises. Instead, a network-based development model-centered on innovation clusters, cross-border production and knowledge networks, and multi-stakeholder partnerships-offers a more sustainable and resilient pathway.

The Dual-Circulation Strategy requires a balanced approach that strengthens domestic capabilities while enhancing international competitiveness. By fostering SME-centric ecosystems through gradient cultivation, digital transformation, financial support, and international cooperation, China can strengthen the competitiveness of its SMEs, improve supply chain resilience, and consolidate its role in the global industrial landscape. Future policies should emphasize building sustainable innovation networks, enhancing digital capabilities, and fostering international partnerships to enable SMEs to thrive in both domestic and global markets.

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