

# Article

2025 2nd International Conference on Education, Economics, Management, and Social Sciences (EMSS 2025)

# Research on the Synergistic Development of China's Two-Way Internationalization under the 'Dual Circulation' New Development Pattern

Wenqi Li <sup>1,\*</sup>

- <sup>1</sup> University of Essex, Wivenhoe Park, Colchester, Essex, CO4 3SQ, United Kingdom
- \* Correspondence: Wenqi Li, University of Essex, Wivenhoe Park, Colchester, Essex, CO4 3SQ, United Kingdom

Abstract: Under the "dual circulation" development paradigm, China faces significant opportunities and challenges in promoting mutual reinforcement and coordinated growth between its domestic and international circulations. This paper first reviews the evolution of the dual-circulation concept and the scholarship on two-way internationalization. Through macro-level data analysis and indepth case studies of exemplar firms, it then elucidates the current characteristics and dynamics of interaction between China's domestic market and external markets. From the dual perspectives of supply-side structural reform and a shifting global economic environment, the study identifies key constraints - such as mismatches in market demand, insufficient policy coordination, and risks in overseas investment. It then proposes building an integrated institutional framework linking domestic and international circulation, alongside pathways to foster collaborative innovation among enterprises. The findings suggest that by refining cross-border investment policies, strengthening financial support and risk-alert mechanisms, and encouraging coordinated innovation across industry chains, China can enhance its firms' competitiveness and sustainability within international twoway circulation. Finally, the paper outlines detailed policy implementation considerations and directions for future research, offering both theoretical insights and practical guidance for deeper integration of domestic and international circulations.

**Keywords:** dual circulation; two-way internationalization; coordinated development; institutional framework; cross-border investment

# 1. Introduction

Since 2020, China has advanced a new development pattern that places the domestic circulation at its core, while promoting mutual reinforcement with international circulation. This strategy responds to sluggish global economic recovery, profound adjustments in global value and supply chains, and an increasingly complex international trade environment. Within this framework, the domestic market's consumption potential and industrial-upgrading needs complement the international market's allocation of resources and technological innovation capabilities. Confronted with these internal and external shifts, Chinese firms must pursue two-way internationalization in a coordinated manner. Such coordination, by aligning global resource integration with domestic industrial upgrading, will strengthen their international competitiveness while reinforcing economic resilience at home. By tracing the theoretical evolution of the dual-circulation paradigm

Received: 30 April 2025 Revised: 17 May 2025 Accepted: 21 June 2025 Published: 14 July 2025



**Copyright:** © 2025 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/license s/by/4.0/). and examining firms' internationalization practices, this study enriches theoretical perspectives on coordinated internationalization under the new development pattern. It also offers policymakers and corporate leaders actionable pathways to elevate China's level of opening-up. This paper aims to uncover the intrinsic drivers and external constraints of China's two-way internationalization under the dual-circulation paradigm and to propose feasible institutional and strategic recommendations. First, it quantifies the dynamic interplay between domestic and international circulations using data from the National Bureau of Statistics, the General Administration of Customs, and other official sources. Second, it analyzes representative industries and leading enterprises via a combination of indepth interviews and case studies, exploring firms' collaborative mechanisms in crossborder investment, global supply-chain restructuring, and market expansion. Finally, from the twin perspectives of supply-side structural reform and shifts in global governance, the study synthesizes the main constraints and constructs an institutional framework along with coordinated development pathways. Throughout the research, tools such as PEST and SWOT analyses are used to assess macro-environmental conditions and micro-level business behaviors across economic, technological, and institutional dimensions, ensuring both systematic insights and targeted policy recommendations.

# 2. Theoretical Foundation and Literature Review

# 2.1. Review of the Dual-Circulation Paradigm

Since the reform and opening-up era, China's economic development model has followed a path of "import-digest-absorb-reinnovate", building an international circulation system driven chiefly by exports and foreign capital inflows. Entering the twenty-first century, with deepening globalization and rising domestic factor costs, China has increasingly relied on homegrown innovation and domestic demand to sustain growth. In 2020, the central government formally proposed the "dual-circulation" paradigm — placing domestic circulation at the center while enabling mutual reinforcement with international circulation. This strategic design responds to rapid external changes and guides a profound adjustment of China's economic structure [1]. At its core, the paradigm positions domestic circulation as the foundational support: enhancing the quality of the supply system, expanding consumer demand, and stimulating innovation to streamline all links of the industrial and value chains, thereby building a resilient and competitive home market. Simultaneously, higher-level opening-up energizes the international circulation: optimizing cross-border allocation of factors, steadily advancing pilot free-trade zones and the Belt and Road Initiative, and strengthening China's role in global value chains. The dualcirculation model emphasizes that the domestic and international circulations are not parallel tracks but mutually reinforcing loops. Expanding domestic demand and technological upgrading underpin firms' outbound activities, while those outbound activities feed back richer resources, technologies, and market experience to foster high-quality domestic development. Scholarly research on the dual-circulation paradigm has focused on three main dimensions. First, policy design and top-level architecture: how to coordinate fiscal, monetary, industrial, and trade policies at the macro level to support domestic circulation. Second, industrial organization and regional layout: reshaping localized value chains and fostering regional economic synergies. Third, market mechanisms and factor flows: reforming factor market allocation to drive both domestic and international circulation. These studies provide essential theoretical support for understanding the dual-circulation concept, evaluating its implementation, and laying the groundwork for exploring coordinated two-way internationalization [2].

## 2.2. Literature Review on Coordinated Two-Way Internationalization

Research on two-way internationalization — encompassing both "going out" (outbound) and "bringing in" (inbound) — has addressed policy drivers, corporate strategies, and performance assessments. On the "going out" side, scholars have extensively examined the motivations and performance of Chinese firms' cross-border mergers and overseas investments. For example, some scholars, from a resource-dependence perspective, identify government policies, market-seeking, and strategic asset acquisition as core drivers of firms' outbound activities [3]. Wang uses case studies to demonstrate significant differences across industries in institutional barriers and cultural conflicts during overseas M&A, which profoundly affect post-merger performance [2]. Regarding "bringing in", researchers have focused on how foreign direct investment promotes host-country firms' innovation capacity and industrial upgrading through technology spillovers, managerial knowledge transfer, and value-chain integration. Scholar, using econometric models, finds that inbound foreign investment has a significantly positive effect on China's hightech manufacturing innovation output, though regional policy environments and service support levels mediate the magnitude of these synergies [4,5]. Studies treating "going out" and "bringing in" as a unified, coordinated system remain relatively scarce. Those that do exist mainly adopt a macro perspective on cross-border factor flows and global valuechain restructuring [3]. For instance, Chen develops a coordination model based on institutional complementarity and market linkages, exploring how policy coordination, financial support, and industrial clustering under the Belt and Road Initiative can foster positive domestic-international circulation interactions [6]. Liu, from a network-governance standpoint, advocates strengthening multi-level international cooperation platforms and optimizing cross-border regulation and risk-alert mechanisms to enhance coordination efficiency [7,8]. In general, existing research often focuses on single dimensions — either policy or firm behavior — while lacking interdisciplinary studies that simultaneously examine micro-level corporate actions and macro-level institutional frameworks. This gap motivates the present study's integrated approach, which combines macro-policy analysis with micro-case insights to elucidate the mechanisms of two-way coordination [4].

# 3. Analysis of the Current Status of China's Two-Way Internationalization and Coordinated Development

## 3.1. Interaction between Domestic Circulation and External International Circulation

In recent years, China's economic model has gradually shifted from one driven solely by exports and investment to a "dual circulation" paradigm in which domestic demand leads and external demand supports. On the domestic side, consumption has become the primary growth engine. Thanks to continued urbanization and steady increases in household incomes, service consumption and digital consumption have grown rapidly. Emerging business models such as social e-commerce, online education, and smart healthcare have all flourished, greatly strengthening the resilience and potential of the home market. At the same time, supply-side structural reforms have deepened: strategic emerging industries like advanced manufacturing, green and low-carbon technologies, and the digital economy have grown rapidly, moving China's industrial system steadily up the value chain to meet diverse consumer tastes and higher technical requirements. On the international side, China has steadily raised its level of opening-up [5]. Measures such as expanding pilot free-trade zones, advancing the Regional Comprehensive Economic Partnership (RCEP), and refining cross-border e-commerce policies have optimized both the scale and composition of imports, bringing advanced technologies, premium brands, and critical components into the country more quickly. In exports, manufacturing stability has improved and, as the Belt and Road Initiative deepens, the quality and reach of China's goods and services abroad have both expanded — This expansion has been especially pronounced in Southeast Asia, Africa, and Latin America. The interaction between these two circulations manifests in two principal ways. First, the expansion of domestic demand offers outward-oriented firms diversified paths for transformation. Many exporters have leveraged their overseas channels and brand equity to strengthen localized operations within China, using insights from international markets to upgrade both their supply

chains and marketing networks. Second, the factor advantages of the international circulation feed back into domestic industrial upgrading. Foreign direct investment brings capital, technology, and management know-how that boost Chinese firms' R&D spending and production efficiency. Simultaneously, cross-border flows of capital and talent reinforce China's innovation ecosystem, forging a virtuous "technology–industry–market" loop. In this mutually reinforcing dynamic, China's two-way internationalization and coordinated development are gradually taking shape [6].

## 3.2. Practices and Case Analyses of Chinese Enterprises' Two-Way Internationalization

Under the dual-circulation paradigm, leading Chinese companies are driving coordinated progress by pursuing both outbound and inbound strategies. Below we examine Huawei and Alibaba – two emblematic cases – drawing on their latest public data. A leading Chinese technology firm has significantly intensified its overseas expansion. In 2022, overseas revenue reached approximately US \$56.3 billion, accounting for nearly 60 percent of its total sales. The company has established localized marketing and service networks across Europe, Southeast Asia, and Latin America. Concurrently, Huawei operates 14 global R&D centers and has set up seven joint innovation laboratories with foreign universities and research institutes. Through these partnerships and talent exchanges, it continuously absorbs advanced international technologies and management practices to enhance domestic innovation capabilities. Alibaba, by contrast, leverages digital trade to foster two-way e-commerce flows. In 2022, its international Gross Merchandise Volume (GMV) reached RMB 1.66 trillion, spanning more than 240 countries and regions [7]. On the inbound side, the Tmall Global platform hosts over 20,000 overseas brands, with import sales totaling around RMB 480 billion. This not only enriches China's consumer choices but also provides a channel for high-quality foreign goods to enter the domestic market (see Table 1).

Company	<b>Outbound Key Metrics</b>	Inbound Key Metrics
Huawei	Overseas revenue: US \$56.3 billion	Joint innovation labs: 7
	(2022) Global R&D centers: 14	
Alibaba	International GMV: RMB 1.66 trillion	Overseas brands hosted: 20,000
	(2022)Coverage: 240 + markets	Import sales: RMB 480 billion

Table 1. Comparison of Key Indicators for "Two-Way" Internationalization of Chinese Enterprises.

These cases demonstrate that by simultaneously "going out" to capture global markets and "bringing in" premium resources, Huawei and Alibaba have enhanced their competitiveness and synchronized synergies across both domestic and international loops [8].

# 4. Challenges and Constraints

## 4.1. Structural Contradictions between Domestic Market Demand and Supply-Side

Under the "dual circulation" paradigm, maximizing the pull of domestic consumption is essential — but stark contradictions remain between demand and supply. First, although consumption's contribution to growth has risen, households' share of GDP and spending growth are still comparatively low and uneven. In 2023, final private consumption expenditure accounted for 39.6 percent of nominal GDP — up 1.8 percentage points year-on-year, but still below the 50 percent-plus typical in many advanced economies. That same year, per-capita consumer spending reached RMB 26,796, but real growth of only 9.0 percent — below the 10 percent-plus typical of earlier growth cycles — indicating weak impetus for consumption upgrading and a persisting tendency toward high savings and low spending [9]. Moreover, significant income and consumption gaps across regions and between urban and rural areas mean that consumption potential in Central, Western, and rural regions remains under-leveraged, hampering balanced domestic market development. Second, on the supply side, traditional industries continue to suffer from overcapacity even as high-end and strategic emerging sectors lag behind. For instance, in 2023 steel capacity utilization averaged only 86.9 percent – down from 90.1 percent in 2021 – while overall capacity continued to expand, forcing many firms to rely on exports to absorb surplus production. This glut squeezes domestic profit margins and heightens international trade tensions. At the same time, supply in high-end manufacturing and strategic sectors – such as integrated circuits and high-performance medical equipment – still falls short of domestic demand, necessitating continued reliance on imports. This mismatch of "low-end surplus and high-end shortage" not only undermines the quality of the domestic circulation but also constrains firms' ability to capture spillover benefits and achieve synergy in the international loop. Addressing these dual constraints requires both stimulating effective demand — through income-distribution reform and enhanced consumer capacity - and simultaneously reducing overcapacity in traditional sectors while bolstering supply in emerging industries. Only by optimizing both demand and supply structures can China remove bottlenecks in its domestic circulation and lay a solid foundation for coordinated two-way internationalization [10].

# 4.2. Changes in the International Environment and Policy Risks

The global geopolitical landscape has become increasingly complex, with major economies pursuing "decoupling" and supply-chain realignment strategies that pose a multifaceted challenge to China's two-way internationalization. First, since 2022, export controls on semiconductors and related equipment bound for China have intensified due to new U.S. legislation. The Dutch firm ASML's most advanced extreme ultraviolet (EUV) lithography machines are now tightly restricted. This imposes a "ceiling effect" on China's access to sub-2 nm process equipment and could potentially set back its high-end chip manufacturing by two to three years. Such controls raise domestic R&D and substituteproduction costs and force accelerated indigenization in upstream materials — but cannot fully close the technology gap in the short term. Second, the European Union's Carbon Border Adjustment Mechanism (CBAM), effective from 2026, will levy border taxes on high-energy-intensity products — steel, aluminum, cement, and power — according to their carbon footprints. Early estimates suggest CBAM will add 1.5 - 2 percent to Chinese exporters' costs to Europe, and by 2030 could generate €2.1 billion in carbon duties. More critically, 11 – 13 percent of exports may be directly suppressed, which, while incentivizing green and low-carbon transformation of domestic value chains, may trigger a "cliffedge" drop in traditional exports in the short term. Furthermore, trade protectionism and non-tariff barriers are on the rise. In the solar-PV sector, both the EU and the U.S. have launched anti-dumping and countervailing investigations, imposing subsidy-based duties exceeding 70 percent in some cases — driving sharp declines in unit profits and pushing Chinese exporters toward alternative markets such as Southeast Asia. Meanwhile, Western countries have tightened foreign investment security reviews: since 2024, at least 15 national-security reviews targeted Chinese investments, especially in semiconductors, AI, and biopharma — prolonging M&A timelines and raising transaction costs. In digitaleconomy and data-security domains, the EU's Digital Services Act (DSA) and Digital Markets Act (DMA), along with the U.S. Holding Foreign Companies Accountable Act (HFCAA), impose stricter requirements on cross-border data flows, algorithmic transparency, and compliance audits. Chinese internet giants like Alibaba and Tencent now face higher costs for local data storage and the risk of substantial fines when operating in Europe and the U.S., creating new compliance hurdles for their inbound-platform models and global expansions. Together, these elements — export controls, carbon border taxes, trade-remedy investigations, investment-security reviews, and tightened digital-economy regulations — constitute a spectrum of policy risks. To navigate this complex environment, Chinese firms and policymakers must establish forward-looking risk-alert systems, diversify market footprints, and accelerate coordinated reforms in green tech, digital compliance, and core-technology self-reliance to ensure sustainable two-way internationalization.

#### 5. Coordinated Development Pathways and Policy Recommendations

#### 5.1. Establishing an Integrated Institutional Framework

Achieving deep linkage between domestic and international circulations first requires removing institutional "breakpoints" in policy coordination. A national development agency should lead a cross-departmental, cross-regional coordination mechanism - partnering with commerce, financial, customs, and other relevant agencies - to form an "Inter-Circulation Coordination Task Force". This body would periodically assess the synergistic effects and institutional bottlenecks in domestic and international markets and promptly align trade, investment, financial-regulatory, and industrial policies. Simultaneously, pilot institutional innovations should be advanced in key free-trade zones and Belt and Road regions, replicating domestic business-environment optimizations alongside international customs-facilitation measures, thereby building an integrated service chain for cross-border investment, cross-border e-commerce, and international standards certification. Legally, it is vital to expedite the enactment and refinement of investor-protection and dispute-resolution mechanisms for both inbound and outbound investment, promote bilateral and multilateral investment treaties, and clarify rules on "soft" elements intellectual property protection, data security, and labor-environment standards — to lower institutional transaction costs for firms going out and bringing in. To prevent systemic risks, the People's Bank of China and the China Banking and Insurance Regulatory Commission should establish a cross-border capital-flow monitoring platform that provides dynamic alerts on large cross-border payments, foreign-exchange positions, and leveraged overseas financing — and, where necessary, employ macroprudential tools for counter-cyclical adjustments. Financial support must be strengthened in both directions, first by enhancing the RMB cross-border usage and settlement system, encouraging trade and investment settlements in RMB to mitigate exchange-rate risks and broaden firms' financing channels. Second, by establishing a "Dual Circulation Coordination Development Fund" — initiated by national development banks and export-import financing institutions - to support firms' overseas M&A, international capacity cooperation, and cross-border e-commerce platform development, offering preferential loan rates and riskcompensation mechanisms for eligible projects. Digitalization and standardization will accelerate institutional integration. A unified cross-border e-commerce public service platform should be built that integrates customs, quarantine, taxation, and logistics information systems, advancing "Single Window" and "Digital Port" coordination so that firms can complete trade declarations, customs clearance, and tax payments through a "onestop, one-system" process. Concurrently, China should actively participate in international standard-setting and rule negotiations, aligning domestic standards with ISO, IEC, and other global norms, thus providing uniform technical specifications and compliance guidelines for industry chains — and cementing a robust institutional foundation for coordinated two-way internationalization.

## 5.2. Promoting Enterprise Innovation and Cross-Border Coordination

In the dual-circulation paradigm, enterprise innovation and cross-border coordination are key to competitiveness and sustainability. First, leading firms should be encouraged to increase R&D investments and deepen international collaborations — via overseas R&D centers and joint laboratories — to import advanced technologies and management expertise. Second, the cross-border innovation ecosystem must be enhanced by supporting SMEs in partnering with universities and research institutes through industry and innovation alliances, creating collaborative networks that span entire value chains. The government can aid by offering tax incentives, strengthening intellectual-property protections, and easing talent visas — thereby reducing the institutional costs of cross-border innovation. Pilot free-trade zones should also host "Cross-Border Innovation Demonstration Projects" with dedicated funding to accelerate the commercialization and industrialization of new technologies. The following Figure 1 and Figure 2 illustrate recent trends in international R&D cooperation and the performance of cross-border joint ventures offering policymakers and enterprises clear empirical guidance.







Figure 2. Trends in China's Cross-Border Joint Ventures and Innovation Outputs (2020-2023).

These figures show that ICT and pharmaceuticals lead in international R&D collaboration, and that the number of joint ventures, patent filings, and innovation revenues have grown steadily. Going forward, deep collaboration in key industries should be complemented by policies — such as "innovation vouchers" and technology-transfer platforms — that enable SMEs to participate in cross-border coordination. The government should also enhance data sharing and incubation services, and further streamline cross-border talent mobility, thereby strengthening the institutional and ecosystem foundations for enterprise innovation and coordinated cross-border development.

# 6. Conclusion

Under the "dual circulation" paradigm, the intrinsic driver of China's coordinated two-way internationalization is the complementary interaction between domestic and international circulations. Macro data analysis and case studies of Huawei and Alibaba reveal that: Domestic and international circulations have begun to interact effectively through consumption upgrading, industrial restructuring, and two-way factor flows. Expanded domestic demand provides a solid base for firms' outbound activities, while international circulations feed back technology spillovers and market learnings that spur domestic innovation. Institutional accelerators - such as integrated policy frameworks, financial-support mechanisms, and digital platforms — play critical roles in streamlining cross-border investment, e-commerce, and standards certification. Enterprise-level R&D investment and international collaboration have risen continuously. The number of crossborder joint ventures, joint patents, and innovation revenues has all increased, indicating the maturation of multi-tiered coordination networks. Nevertheless, Chinese firms still face mismatches in domestic demand and supply, persistent overcapacity alongside highend shortages, and compounded external risks from trade protectionism, carbon border taxes, and export controls. To achieve deeper coordinated development, China must: At the institutional level, establish unified coordination mechanisms across departments; build cross-border capital-flow monitoring and risk-alert platforms; and advance RMB cross-border settlement and investment-treaty frameworks. At the enterprise level, boost R&D and innovation ecosystems; leverage pilot free-trade and Belt and Road zones for digital-port and innovation-demonstration initiatives; and foster a model of "large firms leading, multi-stakeholders collaborating". Through these measures, China can enhance its influence and competitiveness in global value chains, realizing virtuous interaction between domestic and international circulations and achieving high-quality, sustainable development.

## References

- 1. S. A. Javed, S. Ahmed, M. Abbas, M. Anwar, M. U. Khattak, A. Muneer et al., "The 'Dual Circulation' development model of China: Background and insights," *Rajagiri Manag. J.*, vol. 17, no. 1, pp. 2–20, 2021, doi: 10.1108/RAMJ-03-2021-0016.
- J. Y. Lin and X. Wang, "Dual circulation: A new structural economics view of development," J. Chin. Econ. Bus. Stud., vol. 20, no. 4, pp. 303–322, 2022, doi: 10.1080/14765284.2021.1929793.
- 3. J. Y. Lin, "What does China's 'dual circulations' development paradigm mean and how it can be achieved?," *China Econ. J.*, vol. 14, no. 2, pp. 120–127, 2021, doi: 10.1080/17538963.2021.1933053.
- 4. J.-J. Ou and L.-Y. He, "Opportunity or challenge? Carbon emissions reduction under new development pattern of dual circulation," *Sustainability*, vol. 15, no. 3, art. 1757, 2023, doi: 10.3390/su15031757.
- Q. Miao and H. Yin, "Promote the "dual circulation", build a new development pattern: edited by Jianxing Yu, Hangzhou, Zhejiang People's Publishing House, 2020, 201 pp., ¥68 (hardcover), ISBN: 9787213100567," J. Chin. Gov., vol. 6, no. 3, pp. 456– 460, 2021, doi: 10.1080/23812346.2021.1890418.
- H. Zhu, R. Liu, B. Chen, X. Zhao, Y. Huang, Z. Wang et al., "The rise of specialized and innovative little giant enterprises under China's 'dual circulation' development pattern: An analysis of spatial patterns and determinants," *Land*, vol. 12, no. 1, art. 259, 2023, doi: 10.3390/land12010259.
- 7. K. Jia, "Accelerating the construction of a new development pattern with the domestic circulation as the mainstay and mutual promotion of dual circulation," *J. Chin. Econ. Bus. Stud.*, vol. 21, no. 2, pp. 301–309, 2023, doi: 10.1080/14765284.2021.1929785.
- 8. Z. Liu, "Demand-Side Reform: A New Mission to Promote the Dual Circulation Development Pattern," Front. Econ. China, vol. 18, no. 3, pp. 324–344, 2023.
- 9. J. Wang, S. Liu, Y. Zhao, H. Fang, X. Xu, L. Zhang et al., "Spatial-temporal evolution and driving factors of economic dual circulation coordinated development in China's coastal provinces," *Sustainability*, vol. 15, no. 14, art. 11009, 2023, doi: 10.3390/su151411009.
- 10. C. Liu, Y. Chen, Q. Chen, J. Zhou, J. Wang, H. Zhang et al., "Evolution Characteristics and Driving Mechanism of China's Dual Circulation Coordinated Development," Econ. Geogr., vol. 42, no. 11, pp. 1–8, 2022.

**Disclaimer/Publisher's Note:** The views, opinions, and data expressed in all publications are solely those of the individual author(s) and contributor(s) and do not necessarily reflect the views of CPCIG-CONFERENCES and/or the editor(s). CPCIG-CONFERENCES and/or the editor(s) disclaim any responsibility for any injury to individuals or damage to property arising from the ideas, methods, instructions, or products mentioned in the content.