Proceedings of Business and Economic Studies, 2026, Volume 9, Issue 8
http://ojs.bbwpublisher.com/index.php/PBES
Online ISSN: 2209-265X
Print ISSN: 2209-2641

Research on Institutional Innovation of Trade Facilitation in Pilot Free Trade Zones for the Optimization of Regional Business Environments

Yongqi Wang

Wuhu Vocational Technical University, Wuhu 241000, Anhui, China

Abstract: Institutional innovation of trade facilitation in pilot free trade zones (PFTZs) serves as a key tool to break cross-border trade barriers, reconstruct regional business ecology, and invigorate market entities. This paper systematically analyzes the internal mechanism through which trade facilitation institutional innovation in PFTZs optimizes regional business environments, sorts out existing problems including fragmented institutional innovation, unbalanced coverage of innovation fields, poor inter-departmental coordination, and lagging risk prevention and control systems, and discusses corresponding optimization paths. It aims to promote the transformation of PFTZs from "single-point reform breakthroughs" to "systematic institutional integration," and provide theoretical references for the iterative upgrading of regional business environments and high-level opening-up.

Keywords: Pilot free trade zones; Trade facilitation; Institutional innovation; Regional business environment

Online publication: August 31, 2026

1. Introduction

Pilot free trade zones (PFTZs) are China's "test fields" for opening-up. Since the launch of the Shanghai Pilot Free Trade Zone in 2013, institutional innovation has been set as their core task. The business environment constitutes the major soft power for high-quality regional economic development, while the level of trade facilitation acts as a core indicator reflecting the quality of business environments for export-oriented regions and exerts decisive impacts on the efficiency of foreign trade, operating costs of market entities, and regional attractiveness to opening-up. Therefore, exploring practical problems in trade facilitation institutional innovation of PFTZs and putting forward feasible optimization paths bear great practical significance for advancing regional business environments toward internationalization, facilitation and intellectualization.

2. Internal mechanism of trade facilitation institutional innovation in PFTZs optimizing regional business environments

2.1. Reducing institutional transaction costs and stimulating enterprises' operating vitality

Relying on systematic trade facilitation institutional innovation, PFTZs target institutional bottlenecks and pain points to achieve targeted cost reduction for enterprises. For instance, in customs clearance institutional innovation, PFTZs have fully rolled out a series of innovative measures including single window, paperless customs clearance, advance declaration and two-step declaration as well as aggregated tax payment. They integrate scattered declaration and review procedures of various departments into a unified system that enables "one-time data entry, multi-party sharing and whole-process handling" of trade documents, drastically shortening customs clearance time for cross-border express deliveries and cutting operating costs of cross-border e-commerce and air logistics enterprises [1]. Continuous cost reduction helps expand enterprises' profit margins and boost their business confidence, improving regional business environments from a micro perspective.

2.2. Restructuring port operation systems and improving cross-border trade convenience

PFTZs reconstruct port trade operation systems mainly through process reengineering and model innovation to raise the efficiency of the entire trade chain. On the one hand, reform of approval procedures is carried out to simplify cross-border trade items and shorten approval cycles. Measures such as advance ruling extension, acceptance with incomplete materials, and parallel approval are implemented to address long and cumbersome approval procedures for enterprises [2]. On the other hand, the construction of smart ports deepens the integration of trade facilitation and digital technologies, building a modern trade operation system featuring data empowerment, intelligent supervision and full-process traceability. Many PFTZs have established customs data middle offices with unified data standards and interfaces to break data barriers between departments and realize interconnection of supervision, government, and enterprise data.

2.3. Breaking barriers to factor mobility and activating regional market momentum

Through continuous updates to the negative list system, PFTZs gradually relax restrictions on foreign investment, eliminate obstacles to cross-border flow of capital, technology, talents and other high-end factors, and expand opening-up of service sectors. They lower foreign investment access thresholds in finance, logistics, cross-border services, digital trade and other fields to attract agglomeration of foreign-funded enterprises and high-quality talents. Meanwhile, regulatory systems for new trade formats are formulated in light of the development characteristics of cross-border e-commerce, offshore trade, market procurement trade and bonded maintenance. Corresponding facilitation policies are issued to fill gaps and remedy lagging supervision over new business forms, cultivate new foreign trade growth points, and foster an open, inclusive, and orderly regional market ecosystem [3].

3. Existing problems of trade facilitation institutional innovation in optimizing business environments

3.1. Fragmented institutional innovation

Most trade facilitation institutional innovations in PFTZs focus on basic links such as customs clearance simplification and document optimization, overemphasizing solutions to specific problems of individual links and fields without systematic reconstruction of the whole trade chain. Meanwhile, reforms of customs, port, commerce, market supervision, taxation, and other departments operate separately, failing to form coordinated reform synergy, and many innovative achievements cannot be replicated and promoted across departments [4]. In addition, some innovative measures simply copy experience from other pilot zones without differentiated innovation tailored to local industrial characteristics and trade structures, which hardly match actual demands of local business entities and have limited driving effects on facilitation of characteristic industrial trade.

3.2. Unbalanced coverage of innovation fields

With the upgrading of global trade structures, trade in services and digital trade have become major growth drivers of international trade. Nevertheless, many PFTZs have not yet built complete facilitation institutional systems adapted to service and digital trade. In service trade, there remains large room for improvement in facilitation rules for maintenance services, offshore services, technology trade and cross-border finance. Barriers to foreign investment access and factor mobility have not been completely eliminated, and negative lists have not been sufficiently shortened. In terms of digital trade, a complete institutional framework covering cross-border data flow rules, digital identity authentication, and mutual recognition of electronic documents has not been formed, failing to adapt to the paperless, high-frequency, and small-volume development features of digital trade.

3.3. Poor inter-departmental coordination mechanisms

Although many PFTZs have established inter-departmental coordination frameworks, loose linkage and ambiguous rights and responsibilities still exist in actual operation. For one thing, some departments lack enthusiasm for coordination, leading to disconnection and implementation deviations in the rollout of facilitation policies [5]. For another, data standards and interfaces of government and supervision departments are inconsistent, and there is a lack of standardized, regular mechanisms for data sharing, hindering cross-department and cross-regional circulation of key data [6]. Furthermore, innovative measures launched by PFTZs usually only take effect within their own zones, while supervision rules and facilitation measures of adjacent ports and other PFTZs have not been fully aligned, raising compliance costs for cross-regional trading enterprises.

3.4. Lagging risk prevention and control systems

Current risk prevention and control systems for trade facilitation innovation in PFTZs are relatively traditional, dominated by post-event and passive supervision without full-chain mechanisms covering pre-warning and in-process control. They are insufficient in identifying financial risks, credit risks, data security risks, and market supervision risks arising from cross-border trade. In addition, some staff hold conservative mindsets of fearing risks and resisting reforms. To avoid regulatory risks, the implementation of many facilitation innovations is restrained, limiting the flexibility and breakthrough of reforms [7]. Meanwhile, legal guarantee mechanisms including intellectual property protection, fair competition review, and trade dispute settlement remain imperfect, and many innovative measures lack legal support, restricting standardized and law-based upgrading of business environments.

4. Optimization paths of trade facilitation institutional innovation in PFTZs for regional business environments

4.1. Promoting systematic integrated innovation to resolve fragmented reform dilemmas

PFTZs shall shift from single-point fragmented reforms to systematic integrated institutional innovation, building an integrated institutional system covering the whole trade chain. Starting from full trade processes, industrial chains, and all supervision fields, PFTZs coordinate reform tasks of customs, ports, commerce, taxation, and market supervision, formulate systematic innovation implementation plans with clear priorities, rights, responsibilities, and schedules, and eliminate inter-departmental reform barriers to realize full coordination of institutions, processes, supervision, and services [8].

For example, a certain PFTZ has launched a self-developed comprehensive cross-border data service platform built on privacy computing and blockchain underlying technologies. The integrated software architecture consolidates scattered business modules including port customs clearance, data filing, compliance review and cross-border transmission as well as financial docking, breaking data barriers between regulators, market entities and service providers. Abandoning separate online handling of single businesses, the system reconstructs full digital workflows for cross-border data trade and embeds functions such as intelligent compliance verification, dynamic risk early warning, and full-process data notarization. Fragmented approval and filing items scattered across multiple departments and portals are integrated into an online closed-loop process, empowering the implementation of trade facilitation reforms through digital system integration.

4.2. Expanding coverage of innovative fields to achieve coordinated facilitation of all trade types

The institutional innovation structure shall be improved to make up deficiencies in service and digital trade facilitation and realize comprehensive facilitation of goods, service and digital trade. PFTZs shall further upgrade goods trade facilitation, update and perfect single windows, fully implement mature practices such as intelligent customs clearance, non-inductive supervision and aggregated tax payment, continuously shorten clearance time and cut costs to consolidate reform achievements in traditional fields. Meanwhile, the negative list for service trade shall be further shortened to relax foreign investment access in finance, cultural tourism, medical care, scientific innovation, logistics and other high-end service sectors [9]. Barriers to cross-border mobility of talents and technologies shall be broken, and innovative approval and supervision modes for service trade shall be adopted including simplified cross-border service filing and mutual recognition of qualifications.

For instance, a PFTZ has built an intelligent service platform for new cross-border trade formats, extending trade facilitation innovations from traditional goods trade to service trade, cross-border e-commerce, and offshore trade to expand the coverage of institutional innovation. Targeting industrial pain points such as inconsistent rules, scattered procedures, and low coordination efficiency of new formats, the platform develops exclusive functional modules covering cross-border service contract filing, e-commerce bonded verification, offshore fund inspection, and credit rating. It connects supporting service ports of cross-border logistics, settlement and tax declaration to build a digital trade service system applicable to all business types, comprehensively raising the digital and facilitation level of all trade activities.

4.3. Improving cross-regional coordination mechanisms and building intelligent governance systems

First, regular inter-departmental coordination mechanisms for trade facilitation reforms shall be established, and special working groups shall be set up to coordinate reform tasks of relevant departments. Joint research, supervision, and service mechanisms shall be perfected to remove barriers in policy implementation and resolve disconnection and execution deviations. Cross-regional linkage between PFTZs shall be advanced with strengthened policy mutual recognition, experience exchange and port connectivity to continuously raise cross-regional trade facilitation.

Second, construction of smart ports and data middle offices shall be promoted with unified data standards and interfaces. Full-process mechanisms for data sharing, security and application shall be improved to break data silos. Intelligent supervision modes featuring automatic review and full-process traceability shall be fully implemented to digitize and intellectualize all links including trade declaration, customs clearance, inspection, supervision, and tax rebates, lifting the intelligence of trade facilitation and business environments through digital empowerment.

For example, multiple PFTZs in the Yangtze River Delta rely on a unified Yangtze River Delta intelligent trade coordination platform to build a mutual recognition mechanism of supervision rules across zones and ports. Unified standards for declaration documents and inspection requirements allow enterprises to complete all regional trade procedures at one stop without repeated document submission and inspections, greatly cutting compliance costs of cross-regional trading enterprises and improving the overall cross-border trade efficiency of the Yangtze River Delta [10].

4.4. Improving risk prevention and control systems to balance opening-up and security development

Adhering to the principle of opening-up, innovation, and controllable risks, PFTZs shall establish a full-chain risk prevention and control system covering pre-warning, in-process control, and post-disposal to underpin institutional innovation and business environment improvement. On the one hand, big data and artificial intelligence shall be leveraged to build intelligent trade risk early warning platforms capable of identifying emerging risks in cross-border trade, factor mobility and digital trade, realizing dynamic risk monitoring, precise early warning and targeted disposal. Hierarchical credit supervision shall be implemented to build a regulatory system of incentives for trustworthy conduct and penalties for bad faith, improving supervision accuracy and effectiveness. On the other hand, boundaries for reform and innovation fault tolerance shall be defined to encourage staff to carry out exploratory facilitation reforms. Legal systems including intellectual property protection, fair competition review and trade dispute settlement shall be perfected to remedy deficiencies of law-based business environments.

The intelligent risk control platform built by relevant authorities relies on shared multi-departmental supervision data and enterprise credit databases to build differentiated risk portrait models for various trade types and operators. It can automatically identify and grade early warnings of risks such as abnormal cross-border capital flow, illegal cross-border data transmission, and false declaration, enabling regulators to adopt targeted control measures according to warning levels without hindering normal trade activities, and effectively contain risks within a reasonable scope.

5. Conclusion

In summary, institutional innovation of trade facilitation in pilot free trade zones serves as a powerful tool to advance China's institutional opening-up, optimize regional business environments, and invigorate export-oriented economic momentum. Therefore, PFTZs shall always base themselves on the development requirement of constructing a new open economic system, deepen institutional exploration in trade facilitation, resolve existing deficiencies in reforms, carry out multi-pronged innovative reforms, continuously release dividends of institutional innovation, build higher-standard international business environments, help China deeply participate in global economic governance, and foster new international competitive advantages.

Funding

Key Humanities Research Project of Wuhu Vocational and Technical University: Research on Industrial Structure Optimization of Comprehensive Bonded Zone in Wuhu Area of Anhui Pilot Free Trade Zone from the Perspective of New Development Philosophy (Project No.: wzyrwzd202117)

Disclosure statement

The author declares no conflict of interest.

References

[1] Mu X, 2025, Analysis on Spillover Effect of Institutional Innovation of Pilot Free Trade Zones on Cross-Border Trade Facilitation. China Economic & Trade Herald, (24): 97–99.

[2] Wang C, Yu W, Song Z, 2026, Research on the Impact of Pilot Free Trade Zones on Regional Open Economy. Journal of University of Electronic Science and Technology of China (Social Sciences Edition), 28(1): 99–116.

[3] Dai X, Zeng L, 2025, Talent Agglomeration, Institutional Innovation and High-Quality Economic Development—Empirical Evidence from Cities with Pilot Free Trade Zones. Journal of Macro-Quality Research, 13(5): 32–48.

[4] Yin F, 2025, Theoretical Mechanism and Realization Path of Pilot Free Trade Zones Empowering the Development of New Quality Productive Forces—A Case Study of Zhejiang Province. Enterprise Science and Technology & Development, (9): 66–70.

[5] Wang D, Yang M, 2025, Practical Experience of Pilot Free Trade Zones Boosting the Optimization of Liaoning's Business Environment. Journal of Shenyang Normal University (Social Science Edition), 49(5): 57–64.

[6] Guo H, Li J, 2025, Research on Foreign Trade Development Path of Kashgar Prefecture under the Background of Pilot Free Trade Zone Construction. Journal of Kashgar University, 46(2): 46–55.

[7] Cui Q, Bai X, Zhou H, 2025, Pilot Free Trade Zones Empowering Border Opening: Dilemma Resolution and Development Logic. Journal of Xi'an University of Finance and Economics, 38(2): 67–78.

[8] Yin P, Cao B, 2025, Mechanism and Path of Coordinated Development Between Pilot Free Trade Zones and Regional Economy. Journal of Changchun Normal University, 44(2): 170–174.

[9] Deng F, Ni M, Jiang Y, 2024, Practical Constraints, Evolution Logic and Policy Orientation of China's Pilot Free Trade Zone Construction Under the New Development Pattern. International Trade, (9): 41–50.

[10] Lei Y, Yang D, 2024, The Impact of Pilot Free Trade Zone Construction on High-Quality Urban Economic Development. Economy and Management, 38(3): 84–93.