Study on the Impact of U.S. High Tariffs on China and the Game Strategies of Export-oriented Enterprises in the Yangtze River Delta Region

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Abstract: This paper examines the effects of U.S. high tariffs on China's export-oriented firms in the Yangtze River Delta, revealing severe impacts since 2018 due to the trade war. The region, vital to China's export economy, faced heightened costs and trade shifts, prompting firms to adapt through market, industrial, technological, and supply chain strategies.

Drawing on case studies, comparative regional analyses, and policy evaluations, the paper proposes a comprehensive four-dimensional strategy: expanding into emerging markets under the Belt and Road Initiative; leveraging precise policy tools to mitigate tariff burdens; integrating the domestic and international "dual circulation" economic model; and driving innovation to reduce costs and enhance efficiency. The research aims to support policy formulation and offer strategic insights to strengthen export firms' competitiveness and sustainability. Ultimately, the study provides a practical framework for enterprises to shift from passive reaction to proactive breakthrough in the face of global trade reordering.

Keywords: U.S.-China trade war; export-oriented enterprises; policy tools; dual circulation; industrial upgrading; trade strategy

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1. Research Background

Global trade has been hit hard by tariff wars, notably the Sino-U.S. conflict starting in 2018, peaking in April 2025 with the U.S. imposing a 104% tariff on China and China responding with an 84% tariff on U.S. goods, significantly affecting the global trade scene.

Since 2018, U.S. unilateral tariffs on Chinese goods disrupted global supply chains and hurt multilateral trade. U.S.-China trade surged from \$635.2B in 2017 to \$688.3B in 2024, but Yangtze Delta industries saw profit margins fall to 3.2%. Urgent action is needed to reshape trade orders and aid enterprise breakthroughs. The tariffs weakened Chinese export prices, projected to reduce exports by \$100B, amid rising trade protectionism and challenges to the global trade system. Yangtze River Delta's export firms face record challenges due to trade war, with costs soaring and profit margins falling to 3.2%. Production shift to Southeast Asia is costly due to labor inflation, and market dependency risks rise. U.S. policies, like the CHIPS Act, further impede overseas expansion.

In summary, against the backdrop of the reconstruction of the world trade order triggered by the tariff war, in-depth exploration of how export-oriented enterprises in the Yangtze River Delta can achieve breakthroughs is of vital practical

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significance and urgency. This issue not only concerns the survival and development of enterprises themselves but also has far-reaching implications for the economic stability and development of the Yangtze River Delta region and even China as a whole.

2. Literature Review at Domestic and Abroad

2.1. Domestic Research

2.1.1. Policy and Market Diversification

Existing studies point out that China should expand domestic demand by improving the social security network through fiscal expenditure to unleash consumption potential, while implementing loose monetary policies to maintain liquidity^[1,2]. Additionally, enterprises can reduce dependence on the U.S. market by exploring emerging markets such as countries along the "Belt and Road".

2.1.2. Industrial Upgrading and Technological Innovation

Research emphasizes that enterprises need to promote industrial upgrading, such as transforming toward high-end manufacturing, green technologies, and other fields. The government has also introduced supportive policies, such as value-added tax preferences for semiconductor enterprises, to drive the development of new energy and high-end manufacturing^[3]. Enterprises themselves should strengthen technological R&D—for example, Huawei HiSilicon and SMIC (Semiconductor Manufacturing International Corporation) have jointly broken through chip yield bottlenecks ^[4].

2.1.3. Enterprise Strategy and Resilience Management

Enterprises can enhance competitiveness by constructing industrial clusters and strengthening supply chain resilience ^[5]. For instance, ZTE Corporation has achieved rapid risk response through independent R&D of core technologies, global diversified layout, and digital monitoring ^[6]. Some enterprises have also transformed from manufacturers to service providers, expanding full industrial chain services.

2.2. Foreign Research

2.2.1. Reconstruction of Global Industrial Chains

The U.S. tariff policies have led to the "fragmentation" of global industrial chains. To reduce costs and risks, enterprises are accelerating the regional and localized layout of industrial chains ^[7,8]. For example, part of manufacturing capacity has shifted from China to regions with lower factor costs and better industrial bases, such as Southeast Asia.

2.2.2. Trade Rules and International Order

The U.S. adoption of unilateral actions bypassing the WTO framework has exposed global trade rules to the risk of fragmentation ^[9], while regional agreements such as RCEP and CPTPP have become the main channels for international cooperation ^[10]. This has prompted countries like China to more actively participate in and promote regional cooperation to reshape their discourse power in international rules.

2.2.3. Enterprise Coping Strategies

Foreign studies also focus on enterprise coping strategies in the context of tariff wars, such as reducing tariff costs and trade risks through localized production, supply chain optimization, and strengthened compliance management^[11, 12].

3. Research Objectives, Research Contents and Key Issues to be Solved

3.1. Research Purpose

Explore tariff war impact on Yangtze Delta's export firms, proposing "policy incentives-market expansion-technological innovation-supply chain resilience" strategy. Study simulates enterprise decisions, optimizes policy tools, and integrates

digital tech in dual circulation. Aims to provide strategies for regional firms, optimize foreign trade, ensure employment, and support national policy improvements.

3.2. Key Issues to Be Solved

- (1) Analysis of the impact mechanism of tariffs on the supply and demand prices of goods and services in international trade
 - Tariffs, as a trade policy tool, influence international supply and demand via price mechanisms. They raise import prices, curbing domestic demand, e.g., U.S. tariffs on China's products. Exporters may absorb costs or innovate. Tariffs prompt a shift in procurement sources, pushing China towards high-end manufacturing. In services, U.S. semiconductor export restrictions to China foster domestic chains but risk global supply disruptions.
- (2) Analysis of the impact of U.S. high tariffs on China's exports

 U.S. high tariffs on China create price barriers and limit market access, leading to expected declines in exports, especially in machinery and electronics. Impacts include order loss, supply chain restructuring, and SME crises due to tariff costs [13].
- (3) Analysis of the impact of U.S. high tariffs on export enterprises in the Yangtze River Delta Region Affected by the U.S. high tariffs on China, the Yangtze River Delta region demonstrates characteristics of "industry differentiation and regional collaboration". Labor-intensive industries have suffered severe impacts, with profit margins compressed and order volumes declining. The strategy of "shifting from exports to domestic sales" has intensified competition in the domestic market. High-tech industries face a "double squeeze", but show potential for technological breakthroughs through collaborative R&D. The regional transformation of supply chains is accelerating: enterprises are relocating assembly processes, which reduces costs but prolongs logistics timelines and lowers inventory turnover, leading to the loss of low-end jobs.

3.3. Research Goals

Tariff wars' impact on global trade order as a starting point, this study focuses on Yangtze River Delta export firms, identifying key challenges like rising tariff costs and supply chain disruptions. It explores "Belt and Road" opportunities, aiming for 20%-30% export growth in emerging markets within 3-5 years. Analyzing policy support, it constructs a strategy system to cut operating costs by 15%-20% and boost risk resistance by 30%. It also offers data for policy optimization, aiming to improve trade ecosystem, reduce foreign trade dependency by 5-8%, stabilize over 100,000 jobs, and achieve "four stabilities."

3.4. Research Contents

3.4.1. Research on in-depth development paths for "Belt and Road" and multilateral cooperation markets

Integrate multilateral pacts, utilize big data for trade analysis, and develop a market potential model. Examine Yangtze Delta firms' market expansion via e-commerce and overseas warehouses, and assess export growth via infrastructure projects. Investigate localized strategies to mitigate cultural and trade barriers.

3.4.2. Research on the precise implementation and optimization of national tariff war policies

Sorting out relevant laws, regulations, and policies, and establishing a policy effect evaluation index system. Through case studies of enterprises using trade remedy measures to respond to anti-dumping investigations, researching how enterprises form policy research teams and use digital tools to track policy dynamics ^[14,15]. Meanwhile, investigating the interaction mechanism between the government and enterprises, putting forward suggestions for dynamic policy adjustment, and improving policy coverage for small, medium, and micro export enterprises.

3.4.3. Research on the integration path of the dual circulation strategy and the unified domestic market for Yangtze River Delta enterprises

Explore dual circulation collaboration models for enterprises via domestic orders, overseas production, and global distribution. Assess opportunities in major project supply chains and strategies for developing sinking markets. Investigate methods to unify regional markets, enhance Yangtze River Delta collaboration, and cut cross-regional costs.

3.5. Proposed Research Methods and Feasibility Analysis

3.5.1. Case Study Method

3.5.1.1. Case Analysis of Tariff Policy Adjustments

- (1) Case study on the impact of U.S. tariff policy adjustments on specific industries
 In 2018-2019, the U.S. raised tariffs on Chinese motors from 5% to 25%. A U.S. appliance maker saw \$30M rise in costs, a 15% price increase, and 8% market share loss in six months. This example illustrates the effects of tariff changes on costs, pricing, and competitiveness.
- (2) Case study on China's implementation of tariff preferences for "Belt and Road" countries to promote trade growth China cut tariffs on Kazakh agri-products, boosting a Xinjiang firm's exports to \$12m from \$5m in two years, a 140% increase. The study examines how these policies aid trade growth in emerging markets using available enterprise data.

3.5.1.2. Cases of Enterprise Operation and Supply Chain Support

- (1) Case analysis of supply chain risk early warning for a Japanese auto parts manufacturer

 A Japanese auto parts maker used a risk early warning platform to predict copper price hikes, signing fixed-price contracts and developing substitutes. This cut their profit loss by 30% and reduced raw material dependence by 20%. The case study offers insights into cost, R&D, and supply chain efficiency.
- (2) Case study on the supply chain collaborative innovation alliance in the Yangtze River Delta Region
 This study analyzes 8-10 Jiangsu firms, like Yangdian Tech, on their strategies and effectiveness during
 tariff changes, focusing on sectors such as semiconductors and automotive electronics. It examines market
 diversification, tech breakthroughs, and supply chain adjustments, using customs and annual report data.

3.5.1.3. Case Studies on Market Expansion and Innovation Development

- (1) Case of South Korean enterprises expanding into the Indian market
 Samsung leveraged India's govt market info platform to understand consumer preferences and competition,
 launching budget smartphones and enhancing offline sales. Within three years, its market share rose from 8% to
 20%, adding \$500 million in sales. The study analyzes the platform's role in enterprise expansion.
- (2) Case of the effect of innovation incentive policies for German enterprises

 The German government provides a 30% subsidy on R&D expenses for enterprises with R&D investment intensity exceeding 6%. A machinery manufacturing enterprise benefited from this policy, increasing its R&D investment intensity from 7% to 9%. Within three years of policy implementation, the enterprise's number of patent applications increased from 20 to 50 per year, the proportion of new product sales increased from 15% to 30%, and production efficiency increased by 15%. By analyzing the enterprise's R&D investment reports, patent application records, product sales data, etc., this study deeply explores the impact of innovation incentive policies on enterprise innovation capabilities, production efficiency, and market performance, providing references for policy formulation.

3.5.2. Comparative Research Method: Differentiated Strategies of Guangdong Province and Sichuan Province in Responding to Tariff Policy Adjustments

This study widely compares the successful experience of Guangdong Province in processing trade transfer and the

effective practices of Zhejiang Province in expanding domestic demand. Through horizontal comparison, it explores the differentiated strategies and applicability of different provinces in responding to tariff policy adjustments, providing diversified reference paths for Jiangsu Province.

- (1) The "Double Chain Collaboration" Model of Processing Trade Transfer in Guangdong Province
 Core mechanisms include industrial chain regionalization and policy toolkits. In industrial chain regionalization,
 Dongguan transferred consumer electronics assembly links to Vietnam, while Shenzhen retained R&D and
 supply chain management centers. In terms of policy toolkits, tax incentives and enclave parks are key measures.
 Effectiveness data shows that in 2023, Guangdong's processing trade share dropped from 45% to 32%, and the
 proportion of high-tech product exports increased to 62%; there are more than 500 Shenzhen-Southeast Asia
 "double headquarters" enterprises, with comprehensive costs reduced by 12%-18%.
- (2) Sichuan Province Deepens Cooperation with ASEAN to Reduce Dependence on the U.S. Against the backdrop of U.S. tariff policies, as an important inland foreign trade province, Sichuan has a high dependency on exports to the U.S., reaching 19.74% in 2024. To alleviate the impact, Sichuan has utilized the U.S. "friendshoring" strategy and global supply chain restructuring opportunities, taken ASEAN as a key node, and strengthened economic and trade cooperation with ASEAN by combining its own geographical advantages, RCEP agreement benefits, and industrial complementarity. From April 22 to 28, 2025, the Governor of Sichuan led a delegation to visit Indonesia and Laos, held economic and trade promotion activities, and signed orders exceeding 7 billion yuan. Compared with the Yangtze River Delta Region, Sichuan tends to use surrounding geoeconomic advantages to open up emerging markets through high-level promotion and large-scale economic and trade activities, achieving remarkable short-term progress. The Yangtze River Delta Region, with its complete industrial system and high level of internationalization, uses the "Belt and Road" Initiative and multilateral cooperation to expand more diverse and comprehensive markets, and attaches greater importance to the global market strategic deployment of modern means such as digital technology and cross-border e-commerce.

4. Objectives

Suggestions for Strategic Objectives

(1) Deepen "Belt and Road" and Emerging Market Development to Reduce Dependence on Traditional Markets

Within the next 3-5 years, increase the export proportion to "Belt and Road" and Third World countries from the current 28% to over 35%, with new export volume from emerging markets accounting for 60% of total export growth. Enterprises can adopt the following strategies:

Precision Market Layout: Apply big data to assess trade in RCEP states, focusing on tariff-friendly regions like SEA and ME-Africa. Jiangsu firms can emulate Xinjiang's use of reduced tariffs to boost mechanical, electrical, and textile exports, targeting 20%-30% annual growth in emerging markets.

Localized Operations and Model Innovation: Establish overseas warehouses in Southeast Asia (e.g., Suzhou electronics enterprises in Vietnam), shortening logistics timeliness to 3-5 days; participate in local infrastructure projects (e.g., China-Laos Railway, Jakarta-Bandung High-Speed Railway) to drive equipment manufacturing exports, aiming to increase order volume by 15%-20% through infrastructure-related trade.

Cross-Border E-Commerce Empowerment: Rely on platforms like Alibaba.com and AliExpress to promote «online breakthroughs» for small and medium-sized enterprises, aiming to increase the proportion of cross-border e-commerce sales from the current 10% to 25%, with key breakthroughs in consumption nodes such as the Middle East «Ramadan» and Southeast Asia «Double 11».

(2)Strengthen the Application of Policy Tools to Enhance Tariff Cost Hedging Capability

Reduce enterprise tariff costs by 10%-15%, increase policy utilization from less than 50% to over 80%, and raise the trade friction victory rate from 45% to 60%. Enterprises can adopt the following strategies:

Precise Policy Matching: Form professional policy research teams (or entrust third-party institutions) to track real-

time Sino-U.S. and Sino-EU tariff exemption lists (e.g., 352 U.S. tariff exemptions for Chinese goods), aiming for over 90% of eligible enterprises in key industries like machinery, electronics, and semiconductors to enjoy tariff reductions.

Trade Remedies and Compliance Management: Join industry associations to establish an "anti-dumping early warning alliance", and actively contest discriminatory policies such as the U.S. CHIPS Act through WTO dispute settlement mechanisms (e.g., SMIC responding to 25% additional tariffs), aiming to initiate no less than 50 trade remedy applications annually.

(3) Deepen Dual Circulation Integration to Build an Internal-External Collaborative Supply Chain

Increase the proportion of domestic market sales from the current 35% to 50%, reduce Yangtze River Delta regional supply chain collaboration costs by 18%, and improve domestic trade circulation efficiency by 25%. Enterprises can adopt the following strategies:

Domestic Circulation Potential Mining: Connect with the construction of a "unified domestic market", explore sinking markets through live-stream e-commerce and community group buying (e.g., Nantong home textile enterprises "diversifying from exports to domestic sales"), aiming to increase domestic retail channel coverage to 70% within 3 years; participate in supply chains of national major projects (e.g., Yangtze River Delta G60 Science and Innovation Corridor), such as providing supporting facilities for new energy vehicles and semiconductor equipment, aiming for new domestic orders to account for 30%.

Regional Industrial Chain Collaboration: Establish industrial alliances for automobiles and electronics in the Yangtze River Delta (e.g., the Geely-Zhejiang University Joint Laboratory model), promote "zero-tariff" cross-regional circulation of components (e.g., Shanghai R&D + Jiangsu manufacturing + Zhejiang logistics), aiming to increase regional supply chain response speed by 40% and reduce inventory costs by 15%.

(4)Innovation-Driven Cost Reduction and Efficiency Improvement to Consolidate the Foundation of "Four Stabilities" Increase R&D investment intensity from 3% to over 5%, raise patent conversion rate from 40% to 60%, reduce labor costs by 15%, and maintain employment stability rate over 95%. Enterprises can adopt the following strategies:

Technological Breakthroughs and Industrial Upgrading: Focus on "bottleneck" fields (e.g., semiconductors, industrial software), jointly build R&D centers with universities (e.g., SMIC-Fudan University cooperation), aiming to break through 10 key technologies within 3 years and increase the proportion of high-end product exports from 25% to 40%.

Intelligent Manufacturing Cost Reduction: Introduce industrial robots and automated production lines (e.g., Wuxi integrated circuit enterprises), aiming to increase production efficiency by 20% and reduce energy consumption per product by 12%; optimize processes through lean management (e.g., Shaoxing textile enterprises' "zero inventory" model), aiming to reduce inventory costs by 18%.

Supply Chain Resilience Construction: Use blockchain technology to build an "intelligent supply chain" (e.g., real-time tracking of raw material price fluctuations), establish alternative libraries for key materials like copper and rare earths (e.g., 20% application of copper substitute materials by Japanese enterprises), aiming to reduce supply chain disruption risks by 30% and ensure "stable production and employment".

Through the four-dimensional strategy of "market diversification + policy precision + dual circulation collaboration + sustainable innovation", export-oriented enterprises in the Yangtze River Delta can systematically crack the dilemma of tariff wars, achieving a transformation from "passive response" to "active breakthrough" in the reconstruction of trade order, and providing support for the high-quality development of the regional economy.

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