

High-Quality Development of Hainan Free Trade Port from the Perspective of Multi-Dimensional Collaboration: Bottleneck Identification and Path Optimization

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Abstract. Against the dual backdrop of unprecedented global changes in a century and the domestic effort to build a new development paradigm, the international landscape is undergoing profound adjustments. China is gradually transforming from a passive recipient of globalization to an active shaper and leader of the globalization landscape. The Hainan Free Trade Port (hereinafter referred to as "Hainan FTP"), as a landmark project in China's expansion of high-standard opening-up in the new era, holds significant policy value and academic importance for exploring its development path. Grounded in the comprehensive development model of Hainan FTP, this study constructs a multi-dimensional collaborative analytical framework of "opening-up—endogenous development". By comprehensively employing policy text analysis, statistical data description, and case study methods, it systematically analyzes the current situation and bottlenecks of Hainan FTP across four dimensions of opening-up: overseas project cooperation, tariff policy innovation, healthcare industry cultivation, and private equity industry development. While the policy dividends of Hainan FTP have been initially realized, it faces multiple challenges, including insufficient international recognition, underutilized policy effectiveness, imbalanced industrial structure, a shortage of high-end talent, and a marginally optimized business environment.

Keywords: Hainan Free Trade Port, High-Quality Development, Institutional Innovation, Multi-Dimensional Collaboration, Industrial Upgrading

1. Introduction

The global landscape is undergoing profound transformation, characterized by intensifying competition among major powers, the rise of emerging economies, and the restructuring of globalization. At the same time, the Fourth Industrial Revolution is accelerating the development of digital technologies, green industries, and advanced manufacturing, reshaping global economic and industrial systems. Against this backdrop, China has stayed committed to advancing high-standard opening-up through the Belt and Road Initiative, upgrades to free trade zones and port infrastructure, and deepened regional cooperation.

The Hainan FTP is a key national strategy to support this objective. Since the implementation of the Master Plan for the Construction of the Hainan FTP in 2020, Hainan has leveraged policies such as zero tariffs, low tax rates, and simplified taxation to promote industrial upgrading, financial innovation, and international cooperation. Following the launch of island-wide customs operations in December 2025, the Hainan FTP entered a new stage of institutional innovation and high-level opening-up. By 2025, Hainan's gross regional product (GRP) surpassed 800 billion yuan, a figure that underscores its sustained steady economic expansion.

Despite these achievements, significant challenges remain. International awareness of the Hainan FTP is limited, investor confidence in policy stability requires strengthening, and small and medium-sized enterprises continue to face operational, linguistic, and cultural barriers. Moreover, existing studies mainly examine individual aspects such as taxation, finance, or industrial development, with limited attention to their systemic interactions. Therefore, this study develops a dual-drive analytical framework integrating external openness and endogenous development to identify key development bottlenecks, explore coordinated strategies for attracting investment and supporting global expansion, and propose feasible pathways for the Hainan FTP's high-quality development.

2. Research theory & framework

Based on system theory and collaborative development theory, this study develops a multidimensional analytical framework for the Hainan Free Trade Port (Hainan FTP). The framework argues that the high-quality development of the Hainan FTP depends on the coordinated interaction between external opening-up and endogenous development rather than progress in a single dimension.

The opening-up dimension functions as the external driving force, focusing on institutional innovation and international integration through policies such as zero tariffs, preferential taxation, and trade facilitation. This opening-up dimension is examined through four aspects: overseas project cooperation, tariff policy, the health and wellness industry, and the private equity industry. The endogenous development dimension provides the internal foundation for sustainable growth and includes industrial upgrading, employment, education, and the business environment.

3. Development bottlenecks of Hainan FTP

3.1. Institutional opening: policy progress with limited effectiveness

Although, after the closure and customs clearance operation, the catalogue of duty-free imported commodities in the Hainan Free Trade Port has shifted from a positive list to a negative list, covering more than 6,600 tariff items (which account for approximately 74% of all commodity tariff items), and benefiting entities have been extensively covered, with policy dividends continuing to be unleashed [1], the effectiveness of these reforms remains constrained in terms of cross-border investment facilitation and overseas cooperation. International awareness of Hainan is still limited, policy implementation is uneven across enterprises, and institutional alignment with high-standard international rules remains incomplete. In addition, private-sector participation in overseas cooperation and cross-border investment remains insufficient, reducing the overall effectiveness of policy dividends. Consequently, institutional innovation has not yet been fully transformed into industrial competitiveness.

3.2. Industrial system: resource advantages without strong industrial chains

According to data from the Hainan Provincial Bureau of Statistics, in 2025, Hainan's four leading industries — tourism, modern service industry, high-tech industry, and tropical high-efficiency characteristic agriculture — accounted for 68.6% of regional GDP. The added value of high-end industries rose by 28.1% year-on-year, steadily consolidating the foundation for industrial development [2]. Following the closure of customs boundaries for official operation, high-end industries including cross-border finance, cross-border e-commerce, seed industry for southern breeding, and deep-sea technology have gradually clustered, forming a new industrial ecosystem jointly built by four types of characteristic enterprises [3]. Nevertheless, industrial development remains constrained by incomplete industrial chains, limited value-added production, industrial homogenization and weak industrial agglomeration. Although several emerging industries have expanded rapidly, stronger integration among industrial policy, capital support and international markets is still required.

3.3. Talent support: growing demand but insufficient supply

Relying on the special policies for licensed medicines, medical devices, and digital innovation measures, Boao Lecheng International Medical Tourism Pilot Zone has served as the core carrier for the development of the health and wellness industry. Hainan Province has issued the Three-Year Action Plan for Promoting the Development of the Health and Wellness Industry in Hainan Province (2025-2027) [4], and established a mechanism of government leadership, meteorological support, inter-departmental coordination, and enterprise collaboration, striving to make climate-based health and wellness a major driver for the growth of Hainan's health and wellness industry. Despite continuous employment growth, the supply of high-skilled talent remains insufficient to satisfy the needs of emerging industries (Table 1).

Table 1. Matching degree between the structure of newly added jobs and talent demand in key industries in Hainan, 2025 [2]

Job Type / Industry Sector	Proportion of New Jobs	Average Monthly Salary (CNY)	Talent Demand Satisfaction	Major Issues
Traditional Services (Retail, Accommodation, Catering)	35%	4,500	Supply exceeds demand	Low salaries, high turnover
Infrastructure & General Manufacturing	25%	5,500	Basically balanced	Low skill requirements, low added value
Tropical High-Efficiency Agriculture	15%	5,000	Talent shortage exists	Shortage of specialized and technical personnel
Tourism-Related Services	12%	4,800	Significant seasonal fluctuations	Service quality fails to meet international standards

Table 1. (continued)

High-Tech Industries (Digital, Biotechnology, Deep-Sea)	5%	12,000	Severe shortage	Acute shortage of high-end R&D and technical personnel
Modern Finance & Professional Services	4%	15,000	Severe shortage	Lack of professionals with international qualifications and experience
Cross-Border Commerce & Trade	4%	9,000	Talent shortage exists	Insufficient personnel proficient in minority languages and international rules

Data source: Compiled based on data from the Hainan Provincial Department of Human Resources and Social Security (2026) and surveys of key enterprises.

Traditional service industries and the primary industry absorb a large number of employees, while there are insufficient job opportunities in high-end manufacturing, modern services, finance, and other fields, making it difficult to meet the employment needs of workers. Existing education and vocational training systems have yet to fully align with the industrial transformation of the Hainan FTP. Shortages of internationally competitive professionals in finance, digital technology, healthcare and cross-border trade have become major constraints on sustainable development. In addition, jobs are mostly concentrated in economic zones such as Haikou and Sanya, while employment opportunities in county and rural areas are relatively scarce, restricting the balanced development of employment.

3.4. Business environment: improving institutions with remaining barriers

Combined with Wall Street research feedback and Hainan business environment evaluation data, the business environment of the Hainan Free Trade Port has been continuously optimized under policy support, scoring 83.7 in the 2025 business environment assessment, an increase of 2.3 year-on-year, and ranking 12th nationwide [5], although practical obstacles remain. The research shows Hainan's continuous improvement in its business environment. Still, practical obstacles remain. Administrative procedures for small, medium entrepreneurs are still relatively complicated, multilingual public services are limited, intellectual property protection requires further strengthening, and existing support policies remain more favorable to large enterprises than to start-ups. These issues increase transaction costs and weaken the attractiveness of the Hainan FTP for global investors. Therefore, improving the business environment remains essential for translating institutional advantages into long-term competitiveness.

4. Policy recommendations

4.1. Deepen institutional opening

To help alleviate the limited effectiveness, Hainan requires exposure to international view. One of the directions is to focus on deepening cooperative relations with Southeast Asian countries, RCEP member states and the Middle East region. Relying on projects such as the China-Arab International Science and Technology Innovation Park, Hainan should build cross-border industrial chains and supply chains, and help itself upgrade from a "channel and market" to an "innovation source and

high-value-added link" [6]. At the same time, institutional alignment with international trade rules should be accelerated to improve policy credibility and investment confidence. Leverage the policy advantages of the FTP to focus on industries including cross-border e-commerce, cross-border finance, scientific and technological innovation, and the digital economy, accelerating the formation of emerging industrial clusters.

4.2. Build a competitive industrial system

At present, constructing a comprehensive industrial chain aligns with the goal of the Hainan industrial system. Industrial policy should focus on strengthening complete industrial chains, promoting differentiated industrial development and encouraging deeper integration among health care, tourism, finance and advanced manufacturing. Promote the integrated development of "medical care + tourism + health and wellness + sports" [4], and enrich the supply of health and wellness products. Avoiding homogeneous competition, building up supporting facilities, and implementing the enterprise ESG information disclosure system will further enhance the international competitiveness of the industry in Hainan. Furthermore, simplifying the approval procedures for foreign work visas and appropriately extending the validity period of visas can increase the hospitality of the environment towards foreign workers. Meanwhile, strengthen language service support, provide multilingual employment and daily life services, and help overseas employees better integrate into the local community. Those measures provide a better environment for a competitive workforce to enter the Hainan FTP, boosting productivity for the industrial chain.

4.3. Strengthen talent development

Cultivation of high-end educational resources can be achieved from two directions: continuously increasing investment in local universities and supporting them to optimize the discipline layout around key industrial directions such as green finance, deep-sea technology, health care, and private equity; and introducing high-quality domestic and foreign universities and scientific research institutes to settle in Hainan, carrying out cooperative education and joint training, and improving the internationalization level of education. To enhance the internationalization of education, strengthen cooperation and exchanges with high-quality international educational resources, introduce international curricula and bilingual teaching models, and cultivate talents with global vision and cross-cultural communication capabilities. Build the brand of "Studying in Hainan Equals Studying Abroad", and meanwhile improve education services for the children of overseas entrepreneurs to relieve talents of worries about their families. These measures can ensure that talent training is synchronized with industrial development and employment needs.

4.4. Optimize business environment

Further reforms should simplify administrative procedures, improve multilingual government services, strengthen intellectual property protection and provide more targeted support for small and medium-sized entrepreneurs. Interconnection between government service platforms and overseas platforms can enhance the accessibility of policy information for overseas stakeholders. In addition, improve the intellectual property protection system, formulate and refine laws and regulations on intellectual property protection, strengthen data safety supervision, and safeguard the core rights and

interests of high-tech enterprises. A transparent and efficient business environment will enhance the international competitiveness of the Hainan FTP.

5. Conclusion

This study develops a multidimensional analytical framework integrating institutional opening and endogenous development to examine the high-quality development of the Hainan FTP. The findings indicate that the major challenges are concentrated in four interconnected dimensions: institutional opening, industrial development, talent support and the business environment.

These four dimensions follow a mutually progressive developmental logic. Institutional opening provides the policy foundation, industrial upgrading transforms policy advantages into economic growth, talent supports industrial competitiveness, and a sound business environment ensures sustainable development.

Future reforms should strengthen coordination among these four dimensions to improve the international competitiveness and long-term sustainability of the Hainan FTP. Adhering to opening-up as the guide, consolidating the foundation of endogenous development, and advancing coordinated multidimensional progress will serve as the core guideline for the Hainan FTP's high-quality development in the coming period.

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