

Analysis of the Economic Growth Effect of the National Free Trade Port Zones

Yongsong Huang *

Institute of economics, Sichuan University Sichuan, 610065, Sichuan

* Corresponding Author Email: jixu119@hhu.edu.cn

Abstract. In the dynamic landscape of globalization, the pivotal role of free trade zones in catalyzing openness and international trade has gained unprecedented prominence, drawing keen governmental interest worldwide. As China deepens its commitment to reform and openness, it ambitiously outlined plans for the establishment of national pilot free trade zones and free trade ports in 2018. The grand vision was to set a gold standard for openness in the new era and bolster international competitiveness. A thorough review and analysis of existing literature on national free trade ports reveal compelling insights. Evidence strongly suggests that the construction of these ports has not only significantly propelled economic growth but also triggered a ripple effect across various sectors. Mechanistic dissection elucidates that this growth can be attributed to heightened foreign investment attraction and accelerated technological innovation. This paper contributes robust empirical evidence to the discourse on refining and advancing the construction of the free trade system, thereby offering valuable guidance for policymakers and practitioners alike.

Keywords: The national free trade port, economic growth, foreign investment level, technological innovation, multi-stage double difference.

1. Introduction

In the period of the deepening of globalization and the unprecedented reshaping of the international trading system, China, as the world's second largest economy, is more actively participating in the process of global trade and investment liberalization. In recent years, China has introduced a series of policies to expand opening-up, which is not only a positive response to the establishment of a new global trade order, but also an inherent need to deepen its own reform and opening up and promote high-quality economic development. As the highest form of opening to the outside world in the new era, the free trade port is not only the forefront of China's opening up strategy, but also a new highland for exploring institutional innovation, optimizing the business environment and promoting international economic cooperation and competition. Its importance is self-evident. The construction and development of free trade port, not only carries the upgrading of China's economic structure, promote the task of services and manufacturing depth fusion, also aims to create a new center of global resource allocation, leading the innovation of international trade and investment rules, internally drive the regional coordinated development, to promote the improvement of the global economic governance system. Therefore, the effectiveness assessment of the free trade port and its impact on the economic growth path have become a hot and difficult issue in the current research.

There are relatively few studies on economic growth in national free trade ports. Based on the background of free trade port, Fu Fenghua uses the entropy method to empirically analyze the factors affecting the development of national tourism agglomeration, and uses the penalty regression model to analyze them, and draws the conclusion that the level of national tourism agglomeration is not significant compared with other provinces and autonomous regions, and the advantage of tourism industry agglomeration is not prominent [1]. Yang Fangfang using the ISM model system of the national logistics industry and the economic coordinated development of the relationship between the factors, the results pointed out that the ecological environment directly affect the logistics industry and economic coordinated development level, the ecological environment determines the basic conditions of the coordinated development, the national logistics industry and economy is fundamentally influenced by business environment, is also the key in the construction of the free trade

port [2]. In view of this, this paper aims to systematically review and analyze the existing literature on China's free trade port at home and abroad, combined with the latest data and cases, and deeply analyze the specific impact mechanism of the free trade port on China's overall and local economic development. In the study, literature review and empirical analysis will be used to sort out the theoretical basis and previous research results to accurately quantify the promoting effect of free trade port policy on economic growth, industrial structure optimization, foreign trade and foreign direct investment.

The study is structured as follows: it begins by summarizing the global development trends of free trade ports and China's strategic positioning within this context. It then outlines the background and significance of the research. A comprehensive review of relevant literature follows, highlighting current research findings and gaps. The study establishes its theoretical framework and innovative contributions. Details of the research methods and data sources are provided to ensure scientific rigor. Empirical data analysis explores the positive impacts of free trade ports on China's macroeconomic and regional economy. Finally, the study concludes with targeted policy recommendations aimed at providing a robust theoretical foundation and practical guidance for the long-term planning and sustainable development of China's free trade ports.

2. The Impact of Economic Benefit Growth

2.1. Theoretical Research on the Influence of Economic Growth in Free Trade Ports

Swedish economist Muerdal believes that the reason for the unbalanced development between countries and regions is mainly because developed countries benefit more from global economic growth, while developing countries benefit less, and the uneven distribution of interests leads to the vicious circle of [3]. In this cycle, he proposed two effects: echo effect and diffusion effect. The cho effect refers to the increase of capital and talent outflow of developing countries, generally speaking, international trade is conducive to developed countries, while the establishment of free ports (zones) in developing countries cannot achieve the goal of development, and the backward system restricts the allocation efficiency of various resources, leading to the flow of interests to developed countries in the distribution. The diffusion effect refers to a situation in which with the economic expansion, the surrounding areas of the central radiation will promote the improvement of its infrastructure with the expansion of the central area. The surrounding areas absorb the spillover capital, talent and other resources from the central area, and promote the development of the region, thus gradually keeping up with the economic development of the central area. Based on the above theory, the government in the beginning of economic development should give priority to the development of resources endowment relatively good areas, to seek better investment efficiency and rapid economic growth, and when the economic development to a certain level, the government through special policies to promote developed areas to help backward regional development, and narrow the economic differences of the whole country or region.

By comparing several types of existing special customs supervision zones in China, Huang Zhiyong listed the functional layout and development positioning of each bonded port area, and elaborated the similarities and differences between China's bonded port zones and free trade zones [4]. Sbenye believes that in order to keep up with the needs of economic development in different periods, free trade ports successively developed from re-export trade to processing value-added trade, and then developed to comprehensive service [5]. According to the different functions, the free trade port can be divided into trade free trade port, industry and trade combined free trade port and comprehensive free trade port. The comprehensive free trade port is formed on the basis of the combined free trade port through the development of service industry. It is the most advanced mode of modern free trade port. China explores the construction of free trade port will shoulder the foreign trade prosperity, industrial upgrading, from the perspective of long-term development, the function of free trade port and mode will be multiple and integrated, through the system introduces the function

of free trade port and model, for China's construction of free trade port provides the corresponding Suggestions.

2.2. Empirical Study on the Impact of Economic Growth in Free Trade Ports

Billmeier Using synthetic control method to analyze the impact of economic liberalization on the actual per capita GDP of countries around the world. The results proved that economic liberalization had a positive impact in most regions, but it did not have much positive impact on the African economy in the 1990s [6]. Huang et al found that although the construction of free trade port in Ghana brought some economic benefits to the country, it also produced huge operating costs, and the net benefits of Ghana were not high [7]. Therefore, they believe that the corresponding cost control should be considered in the construction process of the free trade port.

At present, the domestic scholars mostly use the double difference method and the synthetic control method to conduct the empirical analysis of the established free trade zones. In terms of using double difference method, after army based on 2010M1-2015M6 data, using fuzzy breakpoint regression and nonlinear double difference method two methods to analyze the influence of Shanghai free trade zone on capital flows, found that Shanghai free trade zone of positive impact on capital flows, and the influence of free trade on Shanghai foreign investment is greater than the actual utilization of foreign investment [8]. Ye Xiuqun uses the double difference method to study the impact of the establishment of the free trade zone on the regional economy [9]. It is found that the establishment of the free trade zone has significantly promoted the regional economic growth, but the lag effect is obvious. Zhang Jun based on the DID model and space regression model, comparative analysis, discusses the economic growth effect of China's free trade area, found the overall economic effect is significant, but the coastal free trade area positive effect on economic growth is less than the inland free trade area, and promote the effect of falling after rising U type trend of [10].

In the comprehensive review of literature, this research can see that the theoretical and empirical research of free trade port (zone) has accumulated some achievements, especially having a clear understanding of the functional evolution and development model of free trade port and the positive effects of economic growth. At the theoretical level, Murdal's theoretical framework provides profound insights for understanding the role of free trade ports in the unbalanced development of the global economy, emphasizing the dual role of echo effect and diffusion effect. The empirical research generally adopts the dual difference method and the synthetic control method, which reveals the positive impact of the free trade zone on capital flow, regional economic growth and other aspects, and also notes the cost control problem of building a free trade port and the differentiation performance between regions. However, there is still room for improvement in the application of methodology, the specific division of free trade port types and the in-depth analysis of the economic growth mechanism, especially the targeted research on specific free trade ports such as the national free trade ports is still insufficient.

2.3. Literature Review of National Pilot Free Trade Zones

Pei Taowu and Li Chunding reviewed the evolution of China from special economic zones, development zones, bonded zones to free trade zones from 1978 to 2001, and divided them into three stages, pointing out that institutional innovation is the core task of the construction of free trade zones [11].

To sum up, China's pilot Free Trade Zone, as a new highland, needs to continue to explore in the institutional opening up, align international rules, improve market access, strengthen innovation integration and coordination, optimize the layout, pay attention to green and security, so as to promote a higher level of construction, and serve economic globalization and domestic development. In the future, the pilot free trade zones should continue to act as the vanguard of innovation, lead institutional innovation, deepen reform, and contribute to the construction of a new system for an open economy and promote high-quality development.

3. Policy Promotion

The construction of China's free trade port is one of the major strategic measures actively promoted by the Chinese government, aiming to further open up and promote high-quality economic development. With the continuous development and change of the global economy, China has realized that in order to maintain the sustained and steady economic development, it must actively participate in the formulation of global trade, investment and financial rules and promote the construction of free trade port with institutional innovation as the starting point. In this context, the Chinese government has entrusted the new mission of reform and opening up to the national province, aiming to make full use of the superior strategic position of the national province, accelerate the pace of free trade port construction, serve the national development strategy, and realize the new pattern of "double cycle" development.

3.1. Promotion of Policies

As a major national strategic deployment, the national free trade port carries a special historical mission. Its unique geographical location in China, located in the South China Sea, is the gateway to Southeast Asia and has a natural deep-water port. As a pilot free trade zone, the whole island has the unique advantages of exploring and building a free trade port.

The policy promotion of the national free trade port is embodied in the following aspects.

3.1.1. Clear national strategic positioning

Since 2018, the central government for the national free trade port carefully drawn the "three center" grand strategic blueprint, the vision positioning —— comprehensively deepen reform and opening up, the field of national ecological civilization construction, international tourism consumption, not only for the construction and development of the clear path, also shows the China in the new era of opening to the outside world and the development of green determination. This strategy not only goes beyond the functions of traditional free trade zones, but also reflects China's ambition to play a more active role in economic globalization.

3.1.2. Construction of the policy system

National level has issued a series of support for the construction of the free trade port policy documents, including in June 2020, the national free trade port construction overall plan, etc., has been clear about the goal of the free trade port construction, principles, system design, industry development direction and policy support measures to promote the free trade port provides legal and policy guarantee.

3.1.3. Institutional innovation

Free trade ports across the country are actively exploring institutional innovations, such as implementing more open policies in free trade, free investment, free and convenient cross-border capital flow, free access to people, free transportation, travel and safe and orderly flow of data, accumulating experience for deepening reform and opening up.

3.1.4. Industry cultivation and upgrading

Free trade ports across the country focus on tourism, modern service industries and high-tech industries, and promote the optimization and upgrading of the industrial structure by optimizing the business environment, introducing foreign investment, and building internationally competitive industrial clusters by encouraging innovation.

3.1.5. Infrastructure construction and ecological and environmental protection

The whole country pays attention to the modernization of infrastructure, and also emphasizes ecological and environmental protection, and strives to find a balance between economic development and ecological protection to promote green and sustainable development.

3.1.6. International cooperation and openness

Since 2019, China's free trade ports have strengthened cooperation with countries and regions along the "Belt and Road" routes, especially Southeast Asian countries, to promote cross-border trade and investment facilitation, build regional international shipping hubs and aviation hubs, and enhance their international influence.

Through the promotion of these policies, the national free trade ports not only aim to achieve their own rapid development, but also intend to contribute "national wisdom" to the reform of China and even the global economic governance system through their own opening practice, and promote the formation of a new development pattern of mutual promotion between domestic and international double cycles.

4. Problems, Challenges and Countermeasures in the Promotion of Free Trade Port Policy

4.1. The Problems and Challenges

While pursuing institutional innovation and relaxing market access, the free trade port can effectively prevent financial risks and safeguard national economic security has become a major challenge. In particular, the supervision of cross-border capital flows and anti-money laundering and anti-terrorism financing mechanisms need to be constantly improved. As a national ecological civilization pilot zone, the free trade port in the process of rapid development, how to balance economic development and environmental protection, prevent excessive exploitation of resources and environmental pollution is a big test.

Although it is positioned as an international tourism consumption center, how to face the intensified global competition and the rapid changes of consumer preferences, how to continuously improve the quality of tourism services, enrich tourism products and optimize the consumption environment to attract more international tourists and high-end consumption is an urgent problem to be solved. The development of the free trade port requires a large number of high-quality professionals, especially in the high-tech industry, modern service industry and other fields. How to attract and retain top talents at home and abroad and promote the training and growth of local talents is the key to achieve industrial upgrading.

4.2. Countermeasures, Suggestions and Prospects

In order to strengthen the construction of risk prevention and control system, the key is to establish and improve a set of comprehensive risk early warning and prevention and control mechanism. This requires people to make full use of advanced technologies such as big data and artificial intelligence, empower supervision with science and technology, and improve the efficiency and accuracy of supervision work. Through the application of these modern technologies, real-time monitoring and intelligent analysis of market activities can be realized, so as to ensure that national security and social stability can be maintained while increasing openness, and the goal of both openness and security can be achieved.

Innovating a green development model seeks to guide society onto a path of sustainability by actively promoting green architecture, eco-friendly transportation systems, and circular economic practices on a broad scale. Both sentences convey the same meaning but are grammatically correct and clearer in their expression. The implementation of strict environmental protection standards and an active ecological compensation mechanism is an important link in this process. This goal is to promote the formation of a new development model, which can not only drive the sustainable and healthy development of the economic society, but also effectively protect and improve the ecological environment, and ultimately achieve the harmonious coexistence and win-win situation between the two.

The comprehensive upgrading of tourism consumption experience focuses on the construction of diversified and high-quality tourism product matrix, and strengthening the construction of tourism infrastructure and smart tourism service platform. This includes increasing the cultural connotation of tourist attractions, enhancing their unique appeal, and attracting more overseas tourists by enhancing international marketing strategies. At the same time, the application of smart tourism technology will greatly improve the experience of tourists, and make the tourism services more personalized and convenient.

To build a strategic highland for talent development, it is necessary to implement more open and inclusive talent introduction policies, and provide a number of incentives, including tax breaks and housing subsidies, to attract top talents at home and abroad. Deepening the cooperation with international educational institutions is crucial to improving the level of local higher education and vocational education. Through these measures, Enterprises will be encouraged to augment their investment in research and development, nurture innovations in technology, industries, and business models, thereby transforming the free trade port into a global epicenter of innovation and a breeding ground for nascent industries.

The core of implementing the innovation-driven development strategy is to increase financial and policy support for scientific and technological innovation projects, promote the deep integration of industries, universities and research institutes, and accelerate the transformation of scientific and technological achievements into real productive forces. Enterprises will be encouraged to heighten their investment in research and development, leading to the fostering of new technologies, new industries, and innovative business models. This initiative aims to transform the free trade port into a global epicenter of innovation and a pivotal incubation hub for emerging industries. This will not only be a new driver of economic growth, but also the key to enhancing national competitiveness.

5. Conclusion

Through comprehensive analysis, this study confirms that the national free trade port policy has shown a significant effect in promoting economic growth, especially in promoting the influx of foreign capital, trade facilitation and upgrading of industrial structure. However, the study has also identified several core challenges, including how to balance innovation and risk control, maintaining the harmony between economic development and ecological protection, enhancing the competitiveness of international tourism, and dealing with the shortage of high-end talents. In response to these challenges, this study advocates strengthening the risk monitoring system, promoting green and sustainable strategies, improving the quality of tourism services, and building an efficient talent attraction mechanism, so as to ensure the healthy and long-term development of the free trade port.

The significance of this study lies in that it not only provides empirical evidence of the impact of free trade port on economy, but also provides practical guidance and theoretical support for the open economic policy of China and even the world. The study emphasizes the role of free trade port as a new highland of openness and its potential contribution to global economic governance.

Objectively speaking, this study is limited by data availability and analysis period, and fails to fully cover the long-term dynamic changes of the development of free trade ports and the complex interaction effects of the external environment. Future research is expected to further expand the scope of data, using longer-term tracking data, explore the free trade port in the global supply chain restructuring, digital economy rules in the new role and how they adapt to the changing global environment and evolution, for free trade port and the coordinated development of the global economy to provide more in-depth and comprehensive insights.

References

- [1] Fu Fenghua. Research on the development of National Tourism Cluster under the background of free trade Port. *China's Circulation Economy*, 2020, 34 (07): 43 - 59.

- [2] Yang Fangfang, Yang Xiaoyan. Research on the correlation and coordination between logistics and transportation mode and economic development —— Based on the perspective of national free trade port construction. *Business Economics Research*, 2021, (15): 108 - 112.
- [3] Xiao Gaoli. Muerdal's structuralist theory of economic Development. *Economic Dynamics*, 1988, (05).
- [4] Huang Zhiyong, Li Jingwen. Free trade port strategy research. *Macroeconomic Management*, 2012 (05).
- [5] Sbenye. Exploring the construction of a Free trade port with Chinese characteristics- -Theoretical analysis, experience reference and construction of institutional system. *Journal of Peking University*, 2019, (07).
- [6] Billmeier Andreas, Tommaso Nannicini. Assessing economic liberalization episodes: A synthetic control approach. *Review of Economics and Statistics*, 2013, 95 (3): 983 - 1001.
- [7] Huang, Dechun, et al. A comparative analysis of effective free trade zone policies in Ghana: A model from Shanghai Free Trade Zone. *Open Journal of Business and Management*, 2018, 6 (4): 900 - 922.
- [8] Xiang Hou Army, He Kang. The impact of free trade zone and capital flow —— A natural experimental study taking Shanghai as an example. *International Trade issues*, 2016, (08): 3 - 15.
- [9] Ye Xiuqun. Pilot free trade zones and economic growth —— empirical research based on quasi-natural experiments. *Economic Review*, 2018, (04): 18 - 30.
- [10] Zhang Jun et al. Study on the economic growth effect of free trade area —— Dynamic analysis based on the dual differential spatial autoregressive model. *Economics*, 2019, (7).
- [11] Pei Taowu, Li Chunding. Construction of China Pilot Free Trade Zone: historical evolution, main experience and practical approach. *Journal of Guizhou Provincial Party School*, 2024.