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China's Free Trade Ports: An Effective Way Against the Threat of De-Globalization

*Wei Tian, Zhuxi Xu, Miaojie Yu, Huihuang Zhu**

Abstract: With sluggish external demand and heating trade protectionism in the United States and the European Union, China's deeper, ongoing reforms face severe challenges. To respond actively to such challenges, the Communist Party of China's 19th National Congress proposed to "promote a new pattern of all-around opening-up." Particularly, the establishment of free trade ports is considered an important means to realize deeper integration with the world economy. This paper discusses the background, motivation, possible challenges, and a path for the successful launch of free trade ports in China.

Key Words: Free Trade Port, De-Globalization, Opening-Up Policy, International Trade

JEL codes: F13, F21, F22

* Wei Tian, Associate Professor, School of International Trade and Economics, University of International Business and Economics, Beijing, China, e-mail: weitianpku@163.com; Zhuxi Xu, China Center for Economic Research (CCER), National School of Development, Peking University, Beijing, China, e-mail: zhujiu47@163.com; Miaojie Yu, corresponding author, Professor, China Center for Economic Research (CCER), National School of Development, Peking University, Beijing, China, e-mail: mjyu@nsd.pku.edu.cn; Huihuang Zhu, China Center for Economic Research (CCER), National School of Development, Peking University, Beijing, China, e-mail: zhuhuihuang@pku.edu.cn. This work was supported by China's Natural Science Foundation (No. 71625007; No. 71573006), China's Social Science Foundation (No.16AZD003), and the UIBE Young Scholars Project (Grant No. 14QN02).

1. Introduction

Since the 2008 global financial crisis, a new wave of trade protectionism headed by the United States has intensified, casting a shadow on the world economy. The shadow comes from the stagnation of the Doha negotiations, the failure of the Transatlantic Trade and Investment Partnership, negotiations among Western countries, the Brexit negotiations, the Trump regime's abolition of the Trans-Pacific Partnership, renegotiation of the North American Free Trade Agreement, and the recent threat of a trade war between the United States and China, which would cause a tremendous shock to world markets. Widespread protectionism could lower global output, making worldwide economic recovery difficult.

China is the largest exporter in the world, and indeed it has become one of the major beneficiaries of deepening globalization. However, the country faces domestic and external challenges. On the demand side, it is facing weak external demand from its major trading partners. American protectionism against China has worsened the situation, as the United States and China have mutually become the largest trading partners in the world. On the supply side, China's demographic dividend is shrinking. The increasing aging of the population has become a big concern in Chinese society. As other resource constraints, such as land and the environment, have gradually tightened, the overall cost of labor in the manufacturing sector has increased substantially, which in turn weakens China's export competitiveness.

While the sluggish external demand and heating trade protectionism in Western countries has cast a shadow on China's growth momentum, the path for economic reform is clear. First, China should continue to open its domestic markets to increase trade volume. Second, it should promote industrial transformation to stay competitive in the global economy. An ideal way to kill two birds with one stone would be to establish free trade ports in Mainland China.

The notion of free trade ports was first brought up in a report to the 19th National Congress of the Communist Party of China. Chinese President Xi Jinping explicitly pointed out that it is necessary to promote the formation of a new pattern of full liberalization. Specifically, the country will give more freedom to reform the pilot free trade zone (PFTZ)

and explore the establishment of free trade ports. In the keynote speech at the opening ceremony of the 2018 annual meeting of the Boao Forum for Asia, Xi emphasized the implementation of high-level trade and investment liberalization and facilitation policies, and the exploration of building free trade ports with Chinese characteristics.

However, “free trade port” is a relatively new concept in China. It is natural to ask, what is a free trade port? How would it be different from the free trade zones (FTZs) in coastal and inland China? How will a free trade port help the local economy? And finally, what conditions are required for the development of a free trade port? These are the questions to be answered. Yet, the current literature on free trade ports mainly focuses on the construction and development experience of foreign free trade ports in developed countries and is mostly antiquated. Research on the motive and applicable path for building free trade ports with Chinese characteristics is still blank. Thus, in this paper, we try to answer the above questions through abundant data and careful demonstration. We aim to show that building free trade ports would be an effective way against the threat of de-globalization.

The rest of the paper is organized as follows. Section 2 reviews the emergence of de-globalization in the new era, followed by a discussion of how de-globalization affects trade and economic welfare and a theoretical interpretation of the necessity of the establishment of free trade ports. We suggest that the reform will help increase China’s trade volume in the face of an unfavorable world trade environment. Apart from theoretical justification, we also discuss a path for establishing China’s free trade ports. Section 3 compares the development stage and characteristics of China’s free trade ports with those of more mature international free trade ports, as in Singapore, and domestic PFTZs, such as the Shanghai PFTZ. Section 4 offers some policy suggestions for the development of international free trade ports in China.

2. Theoretical Framework for the Establishment of Free Trade Ports

2.1 New De-Globalization Threat to World Trade

According to classical Ricardian trade theory and the neoclassical Heckscher-Ohlin model, exporting and importing countries benefit from free trade. Empirical evidence intensively shows that globalization indeed promotes economic growth, regardless of the different econometric specifications adopted (Dreher, 2006). For China, increased integration with the global economy has contributed to sustained growth in international trade. China is playing an increasingly central role in regional specialization with its accession to the World Trade Organization (WTO). The country's economic development generates benefits for most of its trade partner countries (Blancher and Rumbaugh, 2004).

However, history tells us that each time the global economy slows down dramatically or a global economic crisis erupts, the prospects for globalization are gloomy. Under the impact of an economic crisis, developed countries go through profound changes. The domestic contradictions in developed economies intensify. Problems such as unequal distribution of social wealth, job opportunities, and refugee crises become more prominent under an economic downturn and may even lead to regime changes. All these changes trigger a new wave of de-globalization, with unilateralist trade protection policies coming into power (Tong et al., 2017).

This situation was the case after the financial crisis in 2008. World trade slowed down tremendously, and the overall international economic situation has not yet fully recovered. According to IMF (2017), the growth rates of world gross domestic product (GDP) in 2015 and 2016 were 3.4% and 3.2%, respectively, and the GDP growth rates of developed economies were only 2.1% and 1.7%. The growth rates of world trade volume were 2.6% and 2.3%, respectively, even lower than the world GDP growth rate. Commodity prices continued to be low.

Developing countries whose economic growth is highly dependent on export trade are more vulnerable to protectionist policies in the tide of reverse globalization. Therefore, for developing countries to maintain the momentum of economic growth under the unfavorable new world economic situation and safeguard their own interests in international trade will inevitably require corresponding adjustments.

Recent empirical work finds that a U.S.-China trade war would generate substantial losses in output and social welfare, measured as real wages (Guo et al., 2018). China must consider how to deal with the enhanced trade disputes triggered by U.S. President Trump. In the long term, to minimize welfare loss, China should continue to open up its domestic markets for its most important trading partners, like the European Union and the Association of Southeast Asian Nations (ASEAN) 10 countries. Specifically, China can import more from the European Union and the one-belt-one-road countries, to reduce its domestic prices and hence increase real income.

2.2 Free Trade Ports: The Next Endeavor of China's Reform and Opening-Up

Thus far, we have argued that it is necessary for China to push for a new pattern of all-round opening-up. Before its accession to the WTO in 2001, China had already set up a variety of many special economic zones, industrial zones, and export processing zones.

At present, the country's special economic zone with the highest degree of openness is a PFTZ. The Shanghai PFTZ was launched in 2012, and the Guangdong, Tianjin, and Fujian FTPZs in 2015. The Four PFTZs explore various areas, such as opening up investment, trade, and finance; encouraging entrepreneurship and innovation; as well as carrying out interim and post-establishment administration and so forth. The Four PFTZs have accomplished prominent achievements. Building on the successful experience of the first two batches of PFTZs, on March 31, 2017, the State Council officially released the development plan for the third batch of seven new PFTZs, followed by Hainan and Xiongan, forming a "1+3+7+2" "geese" pattern.

Meanwhile, as introduced in Yu (2018), in 2016 the Chinese government selected 12 cities nationwide to build a new, open economy system on a pilot basis. The 12 pilot cities are in the following categories: coastal and border cities (Dalian, Fangchenggang, Shanghai, and Zhangzhou), provincial capitals (Jinan, Nanchang, and Xi'an), and cities of the five Chinese city clusters (Chongqing, Dongguan, Suzhou, Tangshan, and Wuhan).

On April 13, 2018, President Xi Jinping announced the decision to develop the island of Hainan into a PFTZ and gradually explore and steadily promote the establishment of a

free trade port with Chinese characteristics. In developing the island into a PFTZ, Hainan will be granted more autonomy to reform and speed up the fostering of a law-based, international, and convenient business environment as well as a fair, open, unified, and efficient market environment.

The extensive open practices of the FTZ in various fields has not only contributed to the rapid growth of China's economy, but also accumulated valuable experience for China to explore more effective market mechanisms. In the new era, the trial FTZ was given greater autonomy in reform and the historic mission of exploring the construction of a free trade port.

Why does China need free trade ports? Expanding trade volume requires freer trade in goods, high mobility of talent, and unblocked capital circulation. Free trade ports would not only meet the changes in the world economic environment, but also would be closely related to the development of the cities where the ports are located and their surrounding areas.

By definition, a free trade port is a port area within the territory of a country or region that is outside the customs control points and allows free access to overseas goods and funds. The main feature of the port is that it is outside the customs territory of a country. A free trade port is a special economic zone with the highest degree of freedom and the most favorable policy. It has the features of a port and an FTZ, bearing multi-functions such as transit, export, product processing, logistics and warehousing, merchandise retail, as well as tourism. Geographically, a free trade port is part of the territory of a country, but from the perspective of administrative supervision, it is outside the customs management. The goal is to achieve "opening at the front line, controlling effectively at the second line."

For commodity trade, it is vital to reduce costs of all kinds. Good infrastructure is important for guaranteeing port-clearing efficiency. Limao and Venables (2001) find that poor infrastructure accounts for 40% of predicted transport costs for coastal countries and up to 60% for landlocked countries. Clark et al. (2004) also find that port efficiency is an important determinant of shipping costs. Improving port efficiency from the 25th to the 75th percentile reduces shipping costs by 12%. Factors explaining variations in port

efficiency include excessive regulation, the prevalence of organized crime, and the general condition of the country's infrastructure. Therefore, a free trade port must be a cargo hub that can gather international trade and logistics information and allocate resources effectively.

Global production factors rapidly circulate around the free trade port. Supply and demand information in each link of the supply chain can be matched accurately on the platform provided by the free trade port. Efficient regulatory mechanisms are designed to minimize trade costs. Taking the speed of customs clearance as an example, existing studies find that each 10% increase in import clearance time in a free trade area (FTA) will lead to a 5.68% fall in the volume of agricultural trade within the FTA (Hu, 2014). If the cost of trade cannot be reduced effectively, there will be no chance for quick circulation of merchandise trade, and the port itself will be at a disadvantage in international competition. The goal of the free trade port is to integrate the port and the city, by combining multimodal transport, wider service coverage of free trade ports, and functional interaction between ports and cities. Through integrated development, an open, free, and efficient free trade port city can be formed, which in turn can promote a new round of economic growth in the region.

Human resources are a key factor for the development of local economic growth. To promote trade, specialized, high-skill personnel and international talent are particularly in need. Studies show that increasing in the number of undergraduate students will enhance the local economy significantly. Hunt and Gauthier-Loiselle (2010) find that a one percentage point increase in the share of immigrant college graduates in the population increases the number of patents per capita by 9% to 18%. Meanwhile, high-tech workers generate large spillover effects. Rosenthal and Strange (2008) find that spatial concentration of employment enhances productivity, and the benefits of spatial concentration are driven by proximity to college-educated workers, an instance of human capital spillovers. Furthermore, the inflow of high-tech talent can dramatically improve the level of technological innovation. Kerr and Lincoln (2010), using U.S. H-1B visa data, find that higher H-1B admissions increase immigrant science and engineering employment and patenting by inventors with Indian and Chinese names in cities and firms dependent upon

the program relative to their peers. Most specifications find limited effects for native science and engineering employment or patenting.

Thus, a free trade port would not only undertake basic functions, such as cargo transportation, port operations, and related industries, but also it would need to focus on services trade, providing value-added services such as logistics distribution, shipping services, financial services, legal services, and community services (leisure and entertainment). Human capital is crucial for further opening the port area. Despite the introduction of certain preferential policies, the lack of professionals and international talent has always been a trouble spot for the development of PFTZs. According to the calculation of the Human Resources Bureau of the Shanghai FTZ, the shortage of professional and technical personnel in the Shanghai FTZ reached 48% in 2014. A free trade port would provide more opportunities and guarantees for the career development of international talent and professionals. Thus, it would be far more attractive than the FTZ.

Finally, foreign investment benefits the economy (Hayat, 2018). Javorcik (2004) provides strong evidence that is consistent with positive productivity spillovers from foreign direct investment taking place through contacts between foreign affiliates and their local suppliers in upstream sectors. Xiang and He (2016) find that the establishment of the PFTZ has had a significantly positive impact on capital flows in Shanghai. In the service sector, Latorre et al. (2017) find that the impact of more foreign multinationals in services is positive for China.

A free trade port is a more open platform than an FTZ. From a theoretical perspective, the construction of free trade ports will enhance the institutional environment of China's opening-up reforms, promote the country's economic transition from relying on the demographic dividend to the "system dividend," and enable better response to the profound changes in the global environment. Practically, the experiences of predecessors, such as Singapore and China's Hong Kong Special Administrative Region, may help FTZs advance toward that goal. The world's major free trade centers, such as Dubai and New York, are defining themselves as international free trade ports or global logistics centers, because this practice is an effective way to drive regional growth in the trade, finance, and service

sectors. Breakthroughs in the areas of trade facilitation measures, ship fuel prices, financial support, customs supervision, inspection, and quarantine must be available for a free trade port within the FTZ. The free trade port has been promoted to become a major aspect of China's opening to the outside world, as well as a gathering place for global goods, talents, and capital, providing a steady stream of new momentum for economic development.

2.3 Functional Orientation for the Construction of China's Free Trade Ports

The development of free trade ports serves as a deep pilot for institutional innovation. China still has long way to go on many aspects, such as loosening capital and controlling the movement of people, to promote trade and investment facilitation and simplify and unify investment standards. Thus, the free trade ports must form an effective management system and legal framework, so that the impacts of external shocks on the onshore market will remain in the controllable range. With the success of the legal framework and operational experience and further duplication throughout the country, the construction of free trade ports will be an important process to stimulate institutional innovation. The innovation of the free trade ports will be deeper and cover a wider scope than the Shanghai and other FTZs in China, given that the free trade ports are larger and more comprehensive and independent economic regions compared with the FTZs. Therefore, the local governments will be authorized with more rights in innovations, which will amplify the effects of new policies and new trials and enable more achievements to be accomplished.

The free trade ports will also play a significant role in boosting the economic development of the mainland. Trade ports such as Hong Kong and Singapore belong to a separate customs territory or tariff state. The free trade ports will be special regulatory areas in the same customs territory as the mainland. At this point, one of the main functions of the free trade ports is to push the development of the mainland economy more forcefully. The free trade ports need to rely on the vast economic hinterland. There are many places in the world where transportation is convenient but no port of trade has been formed. The main reason is the lack of strong support from the economic hinterland. The economic hinterland should have the ability to provide goods, talent, and capital continuously to the

free trade ports, thus bringing about greater market demand for re-export, construction, and bonded workers.

At the same time, the FTZs will play a leading role in the economic hinterland, upgrading to high-value links in the global value chain. For example, the development of the complete international service support system that a free trade port requires, including intermediaries such as finance and law, logistics and personnel flow, and other services for all aspects of production and life, can promote a more complete production chain coordinated with the surrounding regions and help the regional economy to develop and upgrade. With such mutual activity, most international trade centers have gradually changed from traditional ports of goods trading to international capital and information transition centers, such as London, New York, Tokyo, Singapore, and Hong Kong. They have gradually developed into world offshore trade centers and become the center of operations and control of global trade.

3. International Experience and Domestic Exploration

Most of the mature international free trade ports are in developed countries and regions with a long maritime history and sound capital market. Different countries and regions have developed free trade ports with different characteristics according to their particular conditions and strategic considerations. Examples include the integrated free trade port in Singapore, the free trade ports in Hamburg and South Korea, and industrial FTZs such as the Port of Rotterdam. Hong Kong, due to its special history, declared a free trade port while it was colonized by Britain in 1841. After more than 100 years of development, it has become a leading international logistics, trade, and financial center. It is also one of the benchmarks for the construction of free trade ports in Mainland China.

China is ready to develop free trade ports. Over 90% of the country's foreign trade is accomplished through freight. With the development of the economy and deepening of the opening-up reform, port construction has made great progress. China has seven of the world's 10 largest container ports by handling capacity. However, many container ships choose to fuel in Singapore due to the price gap and some other extra services.

To achieve a higher level of openness and occupy a proactive position in foreign trade, the major PFTZs are constantly exploring new paths of further reforms. Some qualified bonded port areas are also actively seeking transformation. Although the construction of China's free trade ports has already accumulated certain infrastructure and policy support, the specific path for deepening reforms is still unclear. By looking at mature international ports, such as the Port of Singapore and China's most advanced PFTZ in Shanghai, we can sketch a path for the successful launch of the free trade ports in China.

Table 1. Top 10 World Container Ports (TEU, millions)

Rank	Port	2015	2014	2013	2012	2011
1	Shanghai, China	36.54	35.29	33.62	32.53	31.74
2	Singapore	30.92	33.87	32.6	31.65	29.94
3	Shenzhen, China	24.2	24.03	23.28	22.94	22.57
4	Ningbo-Zhou Shan, China	20.63	19.45	17.33	16.83	14.72
5	Hong Kong, S.A.R., China	20.07	22.23	22.35	23.12	24.38
6	Busan, South Korea	19.45	18.65	17.69	17.04	16.18
7	Qingdao, China	17.47	16.62	15.52	14.5	13.02
8	Guangzhou Harbor, China	17.22	16.16	15.31	14.74	14.42
9	Jebel Ali, Dubai, UAE	15.6	15.25	13.64	13.3	13
10	Tianjin, China	14.11	14.05	13.01	12.3	11.59

Source: World Shipping Council.

Note: TEU = 20-foot equivalent unit.

3.1 Port of Singapore

In 1969, Singapore designated the first FTZ in the Jurong Pier Industrial Zone. Singapore has gradually developed into a highly open free trade port. There are currently eight FTZs in Singapore, which are managed by Singapore Port Group Limited, Jurong Harbor Sdn Bhd, and Changi Airport Group, respectively.

As a country with zero tariff, Singapore's free trade ranks at the top of the world (Table 1). The island nation, which is in the center of Southeast Asia, has become an important channel for world trade.

Convenient trade in goods depends on an intelligent logistics system, an information-based management pattern, and low-cost anchorage, warehousing, and transit. Singapore attaches great importance to infrastructure construction. According to the World Economic

Forum's 2016-2017 Global Competitiveness Index,¹ Singapore ranks second in infrastructure construction. Keeping the logistics efficient was the key to Singapore's becoming a trade center. To facilitate trade, as early as 1989, the Singapore government took the world lead in the development of the trade management electronic platform network, customs, tax, security, and 35 other government agencies connected to a network for enterprises to provide one-stop customs clearance service. In this unified system, companies only need to submit an electronic file. Import and export trade related to all the declaration and audit procedures can be completed within the network, and the fastest can be completed within 10 seconds of customs clearance.

Furthermore, Singapore provides special tax relief and financial support for high-tech, high-value-added enterprises, regional headquarters, international shipping companies, export companies, and other special industries and services industries. Singapore has already become the world's major location for logistics companies. Among the world's top 25 logistics companies, 20 have set up regional or global headquarters in Singapore, including DHL, Dexun, Shan Nine Air, Cink Logistics, and other companies.

As an important part of its trading system, Singapore has signed more than 20 free trade agreements with various regions and countries, including China, the United States, ASEAN, New Zealand, India, and Japan. Based on these FTAs, Singapore-based exporters and investors can enjoy multiple benefits, such as tariff concessions, prioritization in specific areas, faster access to markets, and access to intellectual property protection. Advanced infrastructure, efficient information management, preferential taxation policies, and so forth make the Port of Singapore unrivaled in the trade of goods.

From the point of view of talent accumulation, the Singapore government has set up a "citizen and population group" in the Prime Minister's Office to take charge of overseas immigration projects. The government has passed the following: Contact Singapore, Foreign Talent Settlement Plan, Professional and Technical Talents, and Investment Residency Program. A series of incentive policies to attract entrepreneurs to settle in and increase the reserve of technical talent has enabled the Port of Singapore to have the vitality

¹ See <https://cn.weforum.org/reports/2016-2017>.

and strength of continuous innovation. The Singapore government's policy of free entry and exit has greatly facilitated the movement of international personnel and the development of transnational businesses in Freeport. In the 2017 ranking of the Passport Index, Canada's leading global passport freedom ranking, Singapore ranks first along with Germany.²

The development of commerce and trade in a free trade port requires the support of a liberalized financial environment. According to the Global Financial Centres Index 19 ranking report released by the Z/Yen Group in London in 2016, Singapore surpassed Hong Kong as the third largest international financial center, and is the largest financial center in Asia. Singapore also has the third largest international foreign exchange market. Its modern communications equipment is directly connected with the New York Clearing House Interbank Payment System and the European Society for Worldwide Interbank Financial Telecommunications system. Thus, currency settlement is very convenient. A relaxed currency exchange mechanism and a well-developed leasing system help attract foreign investment and provide adequate financial support for trade activities. Singapore's sound financial system has powered the city's economic and trade development, providing an excellent role model for the regulation and liberalization of China's financial market.

3.2 Yangshan Free Trade Port Area

Formally founded in 2013, China Shanghai FTZ's bonded area consists of the Waigaoqiao FTZ, Waigaoqiao Free Trade Logistics Park, Yangshan Free Trade Port Area (YSFTPA), and Pudong Airport FTZ. The customs area of the YSFTPA is 14.16 square kilometers, which accounts for 49.2% of the total area of the Shanghai FTZ. Endowed with excellent deep-water coastline and shipping lanes, the YSFTPA enjoys the dual policies of PFTZ and Comprehensive Test Zone for Development of International Shipping, becoming one of the most competitive international shipping and off-shore service areas in China. Moreover, the YSFTPA functions most like a free trade port in Mainland China. The All-Round and In-Depth Reform and Opening-Up Plan on China Shanghai FTZ, issued by the State Council in March 2017, has clearly pointed out the establishment of free trade port

² See <https://www.passportindex.org/byRank.php>.

zones in YSFTPA, Pudong Airport FTZ, and other areas under special customs supervision, which marks the reform of YSFTPA coming into the stage 3.0.

As the first free trade port area, the YSFTPA has been exploring innovation over the past three years and made tremendous achievements. For business services, the YSFTPA has advanced infrastructure, core technology, and the biggest automated container terminals in the world. For logistics, it has developed complete domestic market channels, connecting the port with the city by a cross-sea bridge, which expands the internal radiation effect. The YSFTPA has a business system based on information technology to conduct cross-border e-commerce. Under the guidance of the policy “Two Exemptions and Three 50%-Reductions,” the YSFTPA provides tax breaks for logistics enterprises, trade enterprises, and their operation centers. Giving full play to the advantage of “import, export, and transit trade,” the port area is also committed to exploring the high-end consumer goods market to build a professional and international bulk commodity trade platform.

Shanghai Free Trade Zone (henceforth, FRZ) has adopted various programs, such as the “Leading Talents Program,” “Youth Talents Program” in finance, and policy of “Permanent Residency for Foreigners” to attract talent in various industries. In 2015, the Ministry of Public Security issued 12 policies on immigration and visas, which would benefit the Shanghai Technology and Innovation Center. At the end of 2016, the government proposed the “new ten” policy, providing a more convenient immigration environment for the exchange of talent and better residency treatment for foreigners.

As the most developed financial center in China, Shanghai ranked 16th in the list of the 2016 Global Financial Centers Index. Shanghai FTZ continues to provide financial support for cross-border investment and trade and improve convenient exchange in financing and investment. The zone exerts further efforts to promote interest rate marketization and deepen the reform of foreign exchange. As a result of these measures, the number of products in the negative list has been reduced to 122 from 190, and about 90% of the national industries have provided pre-establishment national treatment for foreign capital. The China Banking Regulatory Commission has encouraged Chinese and foreign banks to start business in the FTZ and private capital to invest in banks there. The

China Securities Regulatory Commission has invited securities and futures institutions to establish subsidiaries there, and the China Insurance Regulatory Commission has proposed to establish a pilot professional health insurance institution funded by foreign capital in the FTZ. To strengthen the cross-border financial services to adjust to a more open environment and prevent financial risks more effectively, the zone has already opened about 60,000 free trade accounts that promote the two-way opening-up of capital projects and expand the cross-border use of the renminbi (RMB).

3.3 Comparison between the Shanghai FTPA and International Free Trade Ports

Although there is not a strict common definition of a free trade port, a definition can be found by looking at the most successful international free trade ports and FTZs. Some of their major common characteristics can be identified, which may shed light on the path for the development of China's free trade ports. Table 2 highlights the development history and major policies of four selected international ports.

First, greater trade facilitation and an efficient legal system in a free trade port create higher mobility of labor and capital, attracting a large amount of transit shipments, such as value-added services, import and export containers loading and unloading, and multiple combined transportation. As an example, in Hong Kong, most commodities, except liquor, tobacco, methanol, and several other goods, are exempted from tariffs and additional taxes. Most products can pass through customs without document applications. Customs declarations can be completed through electronic channels within 14 days after the goods are exported or imported, and the cost of goods passing through is only half that in the Organisation for Economic Co-operation and Development countries. These conveniences reduce business costs for enterprises and facilitate small and medium-size enterprises to participate in international trade activities.

Second, most international free trade ports have experienced industry and trade upgrading and have good financial, logistical, and legal systems, allowing them to develop more comprehensive types of trade. They are usually offshore financial centers, such as

Hong Kong, and have mature capital markets and international clearing services, which enable them to upgrade from low-value-added processing trade and entrepot trade to the rapidly expanding offshore trade in response to increasing labor and capital costs. At the same time, international free trade ports usually have a high level of investment facilitation. For example, in Hong Kong, foreign capital generally enjoys 100% ownership and national treatment. The procedures for establishing a company are quick; the registration can be completed within one hour; and there is no minimum capital stock requirement. Fully open financial markets allow enterprises to convert foreign exchange and mobilize capital freely in and outside Hong Kong.

Third, free trade ports are not only logistics and transportation centers, but also they are associated with a large headquarters economy. The agglomeration effect of finance, insurance, design, and high-tech industries, and the preferential policies help the free trade ports to attract many headquarters of foreign enterprises, foster services trade and offshore trade, and have a strong motivation for trade and economic growth. For example, the Government of Singapore has developed several measures, including a concessionary international trade plan and rewards for business and multinational headquarters, to encourage foreign enterprises to set up headquarters or regional headquarters in Singapore. Dubai has more than half of the free economic zones of the United Arab Emirates and attracts many multinational enterprises to move their headquarters there. It can attribute this to the policy of free zones, such as that foreign capital can be wholly owned by enterprises registered in the free zone; capital and profit remittances are not restricted; and foreign enterprises can enjoy exemption from business taxes for 50 years, be totally exempt from personal income taxes, and pay zero import and export tariffs.

Fourth, the development of free trade ports is based on the industry structure of the surrounding areas. For example, the Government of Dubai attaches great importance to the joint development of ports and industry. Port Rashid is a traditional port. It is the ship repair center of the Bay Area, with a million tons of dry dock. The main industries include

shipbuilding, plastics, aluminum smelting, seawater desalination, rolling and vehicle assembly, and cement plants with an annual output of 500,000 tons.

The Port of Jebel Ali attached importance to the development of trade, logistics, and information and high-technology industry and established an FTA. At present, there are more than 1,100 global multinational corporations and enterprises entering the Jebel Ali FTA. These enterprises have set up production and logistics centers in the FTA, which has promoted the growth of Dubai's import and export goods. Beginning in 1995, the "Dubai Internet City" was built in the Jebel Ali FTA, with the advantage of the port. The project is the main project of the Dubai government for developing the network economy. In 1999, it completed the preparatory work for the feasibility study, planning, and formulation of relevant laws and regulations. The construction projects were the Internet University, software development center, and so on. By the end of 2000, the construction of infrastructure in the city was basically completed. It was reported that after the completion of the Dubai Internet City, there were 30 world famous information technology companies, such as Microsoft, Siemens, and IBM, with 300 senior managers.

Finally, the FTZ has a complete and strong legal system, and the management institution is highly authorized. The ports in Hamburg, New York, Singapore, and Hong Kong were all first legislated before setting up districts to ensure the healthy development of the FTA with strict laws and regulations. In addition to the national legislation, the local government formulated corresponding regulations to regulate activities in the FTA. The four countries have similar authorizations for the management institutions of their FTZs. They are authorized by the government to manage and coordinate the overall affairs of the FTA, invest and build the necessary infrastructure, and have the right to examine and approve projects. In particular, they make plans to promote the economic development of the surrounding cities, especially in finance, insurance, trade, and intermediaries.

The ports in New York and Singapore have specialized operation companies, which operate entirely in a market-oriented manner, while there are powerful government regulators. For example, the Dubai Ports Authority was established in 1991, directly under the Government of Dubai, under the leadership of the Dubai local government, to manage the Port of Dubai. At the same time, it is an independent port management

organization, an independent legal person, and an independent accounting system. The Jebel Ali FTA has relatively independent power: (1) to acquire and rent the land, and to operate and manage factories, warehouses, and other social infrastructure (reservoirs, water, communications, transportation, and so forth); (2) to ratify and have jurisdiction over in the enterprise, introduce public utilities and services in the FTZ, and approve the use of facilities, such as land, standard plants, port facilities, and so forth; (3) to impose fees on businesses and public utilities and be response of the police in the FTA; and (4) to sign loan contracts with organizations outside the zone and establish other management institutions as needed.

Table 2. Policies and Development of Major International Free Trade Zones

	Hong Kong	Singapore	Colon	Dubai
History and development	Since 1840, from a single re-export port and processing center to a free trade zone with diversified economic and trade structure	Since 1969, including 7 free trade zones (1 airport, 6 sea ports); from an international goods and distribution basis to a highly open free trade port, then to a comprehensive technology free trade zone	Since 1948, the world's second largest free trade port; re-export dominates	Rashid Port is a traditional container port, built in the 1960s; Jebel Ali Port was built in 1985, is a multi-function zone, including logistics, warehousing, import and export, production, and processing
Firm registration	3-step online application, certificate issued within 1 hours; no restriction on registration capital; no capital verification	4 documents and certificate issued within 3 days; capital required over 0.1 million Singapore dollars	No minimum investment requirement; 6-7 documents such as social contract, tax records are required; at least 5 Panamanian employees; at least 60% of imports re-exported	Procedure for investment can be completed within 7 days; customs, banks, post and telecommunications, transportation, public security, and so on are under unified management
Investment admittance	Equal treatment for all investors in almost all industries; 100% holdings allowed; conditional admittance for gambling, telecommunications, and radio	No admittance limit for most industries; finance, insurance, and securities need to be put on record; no foreign capital share limit except retail, news, and publication	No admittance limit in processing	100% foreign holdings allowed; no restriction on domestic employment
Capital and foreign exchange	Any currency allowed for trade settlement, no restrictions on currency trading or international capital flows, profits freely remitted	Any currency allowed for trade settlement, no restrictions on currency trading and international capital flows, profits freely remitted	U.S. dollar as major currency for trade, no capital control, profits freely remitted	Allowing profits to be remitted abroad; no limit on currency exchange
Customs supervision	Declaration complete within 14 days after export or import	Efficient online customs system for applications, declarations, approvals, and controls	One unified form for import, export, and re-export	Declaration complete within 24 hours
Tax preference	Zero tariff except alcohol, tobacco, hydrocarbon, and methanol; no value-added tax or business tax, no tax on personal investment income; the main taxes are profit (15%-16.5%), salary, and property taxes	Unified business income tax for domestic and foreign firms (17%), partial tax exemption for the first 0.3 million income, zero tariff except alcoholic beverages, tobacco, petroleum, and motor vehicles	Business income tax 2%-5%, capital tax 1%	Tariff free on processing intermediates and capital goods; exemption of business income tax for 15 years; no personal income tax

Through the comparison of the Shanghai FTPA and other international FTZs, it can be concluded that many ports in China are not merely bonded trade areas or FTZs; their functions cover more and more, and they are developing into free trade ports. However, there is still much room for Chinese ports to improve in areas such as operating systems, support services, and the construction of related industries. Table 3 shows differences in functions and operating systems between the PFTZs in Mainland China and international free trade ports. Through comparison, the capabilities of the ports in Mainland of China can be comprehensively evaluated in the aspects of attracting talent, investment, and trade, which will help to reveal the condition of the ports and guide their future development.

Table 3. Differences in Functions and Operating Systems between the Pilot Free Trade Zones in Mainland China and International Free Trade Ports

		Mainland China	Hong Kong	Singapore	Rotterdam
Function	Type	Free trade pilot zone	Free trade port	Free trade port	Free trade port
	Positioning	Experimental field of opening-up	Center of international logistics, finance, trade, and sightseeing	Center of international logistics, finance, trade, and sightseeing	Sustainable, effective, secure, and clean port with multi-functions and high technology
	Functions	Transportation, trade, storage, logistics, and processing	Trade, international transshipment, fully-opened domestic financial market	Trade, international transshipment, storage, logistics, container distribution, financial services, and sea and air transport	Dealing with dry bulk containers, liquid bulk containers, and container cargo; the center of storage, transportation and selling, collection, distribution, and reprocessing
Operating systems	Infrastructure	Fully automated wharf	Urbanized free trade port, with complete support services	Short distance between port and airport	Informatization and integration of the port by establishment of public information platform.
	Customs declaration and clearance	“Entry first, clearance then”、“Separate batches and inspected collectively”	Documents required and sample inspection	Electronic trade management, clearance as fast as 10 seconds	Clearance in 24 hours (except Sunday), storage before clearance, companies’ accounting reports and inventory data required
	Law and regulation	Null	The Basic Law and Sales of Goods Ordinance	Preferential polies on free shipment and trade and the Special Law	Tariff Law of the European Union and the Netherlands; Tax Law and policies on Rotterdam Port’s development, operation, and logistics management by the Netherlands

International free trade ports have complete infrastructure, advanced logistics, informationized management, convenient declaration and clearance processing,

preferential tax policies, and low costs for calling, storage, and transshipment. With more than 20 years of development, the ports in Mainland China are becoming increasingly competitive. On February 13 and March 1, 2017, the world's largest 450,000-ton supertanker, TI Europe, called at Daxie Port in Ningbo and Dalian Port. On March 27, the world's biggest container ship, Mitsui Osk Achievement (MOL Triumph) was put into service and arranged to follow the Dalian-Europe lane. It would call at ports in Tianjin, Yangshan, Ningbo, Zhoushan, Yantian, and others, indicating that the infrastructure and operational efficiency of the ports have gained the recognition of the international community.

However, there are also some problems that need to be solved, such as the mono-function, low systematization, and informatization of logistic companies; imbalance between the development of the ports in coastal developed areas and those in developing areas in infrastructure and logistics; and lack of systematic connections between each port. In the World Bank's 2014 Business Environment Report, Singapore's cross-border trade facilitation level ranks first among the world's 189 economies. Specifically, the country has a free system of trade settlement, the least restrictions on investors and investment capital, and a sophisticated shipping services system. At the ports in Mainland China, many tedious steps must be followed in declaration and clearance, and there is no automated and electronic customs declaration and clearance service provided, which all result in the low efficiency of customs. The ports have many preferential tax policies, such as tax reductions, which have already attracted increased foreign capital. However, compared with the Port of Singapore and Port of Busan, which are well-known for their tax exemptions and low call fees, Chinese ports still have a long way to go.

With the deepening of globalization, more and more talented workers are choosing to come to China. There are many preferential policies to attract talented workers to the ports. However, the number of scientific, professional, and versatile workers has not met the fast development of the ports. The proportion of foreign high-tech professional talent is still low in the total component of talent. The development of supporting infrastructure and services has been unbalanced among the country's regions. Moreover, due to historical and diplomatic factors and the national situation, the use of the Chinese passport is not as wide as that of the passports of Hong Kong, Singapore, and South Korea. Although the Chinese

passport has scored higher in the Passport Index recently, it still ranks behind those countries, at 64th in the list for 2017. The low fluidity of immigration hinders international trade. For example, the length of a valid visa for immigrant workers is relatively short. To solve all these problems, China's central and local governments are seeking more convenient immigration management in bonded areas and FTZs, to create a more open and effective environment.

Finally, international free trade ports require fewer formalities, better exchange mechanisms and financing, and more complete and flexible rental systems. For example, Hong Kong is the only integrated city for offshore and local businesses in Asia, in terms of having a unified free exchange system for both business types. With the most open currency market in the world, Hong Kong is manifested in the freedom of investment and financing and the guarantee of free flow of funds across the border. However, because of the short history and low level of openness of the Chinese financial market, with the exception of the Port of Shanghai, the coastal ports in China lack complete financial mechanisms. Thus, it is difficult to promote the development of trade and business in the port areas. It is a fact that China is still a developing country. Although it has signed bilateral reciprocal swap agreements with several countries, and the RMB has joined in the Special Drawing Rights, the Chinese government still maintains a relatively prudent attitude toward finance, especially capital account liberalization. It is experimenting in the Shanghai FTZ to promote the reform of the financial system, such as in the areas of convenience, free exchange, cross-border use of the RMB, and free reign of interest rates and foreign exchange.

4. Path for the Construction of Free Trade Ports in China

That economies are becoming increasingly interdependent cannot be denied by the trade protectionism. The trend of de-globalization may not be the obstacle that hindered the trade and business development of China; conversely, de-globalization may be an opportunity for deepening the reform. China is actively seeking solutions to the challenges and putting forward the strategy of a new pattern of full-scale opening-up. The government is

deepening the FTZ reform and improving the functioning of free trade ports to push the opening-up reform to a new stage.

With the trend of tariff exemptions and reductions and regional economic integration, free trade ports, although they originated in developed countries, are losing attraction in foreign capitals. For emerging markets like China, although its economic openness and liberalization are relatively low, the economy is developing and foreign trade is expanding. It is the best time for China to develop free trade ports. China now enjoys a vast domestic market and policy dividends, such as the Belt and Road Initiative. And China has gained much practical experience from developing comprehensive bonded areas and PFTZs. These necessary software and hardware facilities support the development of free trade ports. However, compared with international free trade ports, there is still much room for improvement, such as in trade, talent, and finance. Therefore, the Chinese government should focus policies on these three aspects to promote the construction of free trade ports.

The first step is to improve the convenience of trade in the ports. Trade must be fast and convenient in the ports. “fast trade” requires a simplified approval process. And “convenient trade” requires a complete logistics system and informationized, comprehensive management. These will enable a low-cost environment for manufacturing and delivery, to ensure that all products flow into the world market in an effective way. The second step is for the government to provide more preferential policies for goods trade. China will build an integrated, international, standardized transportation network that combines river ports, sea ports, highways, railways, and aviation. It will build a large-scale, intelligent, and multi-functional information network and a secure and effective electronic customs clearance system to speed up the integration of customs and simplify its procedures. The ports in underdeveloped areas should ensure the implementation of the policy of “inside the territory while outside customs” and achieve the management of “free entry into China’s territory while strict inspection before entering the domestic market, free entry and exit in the free zones while separate management of people and goods.”_And for the ports in developed areas, it should further explore a more competitive offshore taxation system.

Next, the ports must improve their ability to attract talent and the fluidity of personnel. These improvements will help to provide a convenient environment, more preferential entry-exit policies, and a livable environment and better services for businesspersons and international talent. To achieve this, the first step is to regulate the license system for foreigners working in China and set an effective visa system for talent to ease entry-exit and residency in China. The second step is to spare no effort to attract high-tech talent to improve the introduction of talented workers to the ports in underdeveloped areas. These changes would help to improve the environment and infrastructure, lift the level of public services, and establish international working standards to tackle the difficulties of attracting and retaining talent.

Finally, the ports need to improve the ease of finance within a controllable range. Improving the ports' financial systems is an opportunity for deepening financial reform and improving market openness. In this process, the government can gain experience in risk prevention and management. The ports should continue to adhere to the relevant policies on openness and improve the convenience of foreign exchange settlement. All these measures will support re-export trade financially and reduce trade risks for enterprises in ports. Moreover, the government will build the finance leasing system to meet the new rules of international trade and investment, so that it can provide sufficient capital support for all businesses in ports and attract more international companies to establish headquarters in the FTZs and develop the headquarters trade business.

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