

# China's Free Trade Ports: Effective Action Against the Threat of De-globalization

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## Abstract

*With sluggish external demand and increasing trade protectionism by the USA and the European Union, China is facing severe challenges in implementing its deeper, ongoing reforms. To respond actively to such challenges, the Communist Party of China's 19th National Congress proposed to "promote a new pattern of all-round opening up." In particular, the establishment of free trade ports is considered an important means to realize deeper integration with the world economy. This paper discusses the background, the motivation, the possible challenges as well as a feasible path for the successful implementation of free trade ports in China. Based on the international experience, the construction of free trade ports in China requires freer trade in goods, high mobility of talent and free capital flow.*

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Key words: de-globalization, free trade port, international trade, opening-up policy

JEL codes: F13, F21, F22

## I. Introduction

Since the 2008 global financial crisis, there has been a new wave of trade protectionism headed by the USA, casting a shadow on the world economy. The current situation arises 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

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American Free Trade Agreement, and the recent threat of a trade war between the USA and China, which would result in 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. US protectionism against China has worsened the world economic situation, because the USA 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 major 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, has weakened China's export competitiveness.

Although the sluggish external demand and intensifying trade protectionism of 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 the volume of trade. Second, China needs to promote industrial transformation to maintain competitiveness in the global economy. An ideal way to kill two birds with one stone would be to establish free trade ports in Chinese mainland.

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 path to full liberalization.<sup>1</sup> Specifically, the country will allow more freedom to reform the pilot free trade zones (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, President Xi emphasized the implementation of trade and investment liberalization and facilitation policies, and the exploration of building free trade ports with Chinese characteristics.<sup>2</sup>

However, a "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 would a free trade port help the local economy? Finally, what conditions are required for the development of a free trade port? These issues deserve exploration. The current literature on free trade ports mainly focuses on the construction and development experience of free trade ports in developed countries (regions) and is mostly outdated. Research on the motives and

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<sup>1</sup>See <http://cpc.people.com.cn/n1/2017/1028/c64094-29613660.html>.

<sup>2</sup>See <http://cpc.people.com.cn/n1/2018/0410/c64094-29917187.html>.

applicable path for building free trade ports with Chinese characteristics is limited. Therefore, in this paper, we attempt to answer the above questions. We aim to show that building free trade ports would be an effective action against the threat of de-globalization.

The rest of the paper is organized as follows. Section II 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 to establish free trade ports. We suggest that the further economic reform will help increase China's trade volume in the face of an unfavorable world trade environment. Apart from presenting a theoretical justification, we also discuss a path for establishing China's free trade ports. Section III compares the development stage and characteristics of China's free trade ports with those of more mature international free trade ports, such as in Singapore port and Shanghai PFTZs. Section IV offers some policy suggestions for the development of international free trade ports in China.

## II. Theoretical Framework for the Establishment of Free Trade Ports

### 1. New De-globalization Threat to the World Trade

According to the classical Ricardian trade theory and the neoclassical Heckscher–Ohlin model, exporting and importing countries can benefit from free trade. Empirical evidence 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 has been playing an increasingly important role in regional specialization since its accession to the World Trade Organization (WTO), and its economic development has contributed to its trade partners' economic growth (Rumbaugh and Blancher, 2004).

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

Following the financial crisis in 2008, world trade slowed tremendously and the overall international economic situation has not yet fully recovered. According to the

IMF (2017), the growth rates of world GDP in 2015 and 2016 were 3.4 and 3.2 percent, respectively, and the GDP growth rates of developed economies were only 2.1 and 1.7 percent, respectively. The growth rates of the world trade volume were 2.6 and 2.3 percent, 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 given the unfavorable new world economic situation and safeguard their own interests in international trade will require corresponding adjustments of their domestic economic structure.

Guo et al. (2018) find that a US–China trade war would generate substantial losses in output and social welfare, measured as real wages. China must consider how to deal with the enhanced trade disputes triggered by US 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 countries in the European Union and the 10 ASEAN countries. Specifically, China could import more from the European Union and the Belt and Road countries to reduce its domestic prices and, hence, increase the real income of consumers.

## 2. Free Trade Ports: The Next Step in China's Reform and Opening Up

Thus far, we have argued that it is necessary for China to push for a new path to all-round opening up. Before its accession to the WTO in 2001, China had already set up 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 focus on different areas, such as opening up investment, trade and finance, encouraging entrepreneurship and innovation, as well as carrying out interim and post-establishment administration. The four PFTZs have had some prominent achievements. Building on the successful experience of the first two batches of PFTZ, on 31 March 2017, the State Council officially released the development plan for the third batch of seven new PFTZs,<sup>3</sup> followed by Hainan and Xiongan, forming a “1+3+7+2” “geese” pattern.

Meanwhile, as discussed in Yu (2018), in 2016 the Chinese Government selected

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<sup>3</sup>Seven new PFTZs are Liaoning PFTZ, Zhejiang PFTZ, Henan PFTZ, Hubei PFTZ, Chongqing PFTZ, Sichuan PFTZ and Shaanxi PFTZ.

12 cities nationwide to build a new open economy system on a pilot basis. The 12 pilot cities are: coastal and border cities, including Dalian, Fangchenggang, Shanghai and Zhangzhou; provincial capitals, including Jinan, Nanchang and Xi'an; and five Chinese city clusters, including Chongqing, Dongguan, Suzhou, Tangshan and Wuhan.

On 13 April 2018, President Xi Jinping announced the decision to develop the island of Hainan into a PFTZ and gradually explore and promote the establishment of a free trade port with Chinese characteristics. In becoming a PFTZ, Hainan will be granted more autonomy in developing a law-based and international business environment, as well as a fair, open, unified and efficient market environment.

The extensive open practices of the FTZs in various areas has not only contributed to the rapid growth of China's economy, but also has resulted in the accumulation of valuable experience for China in establishing effective market mechanisms. In the new era, the trial FTZs have been given greater autonomy in enacting reform and in the development of free trade ports.

Why does China need free trade ports? Key reasons include that expanding the trade volume requires freer trade in goods, high mobility of talent and free capital flow. Moreover, development of free trade ports can coincide with 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 not subject to the usual customs control, with free access to overseas goods and funds. The main feature of a free trade port is that it is outside the control of the customs authority of a country. It has the features of a port and an FTZ, with many trade-related functions, including product processing, logistics and warehousing. 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 jurisdiction of the country.

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

A free trade port must be a cargo hub that can facilitate international trade and logistics information collection and sharing, with resources allocated effectively. Supply and demand information in each link of the supply chain must be matched accurately on the platform provided by the free trade port. Efficient regulatory mechanisms need

to be designed to minimize trade costs. Taking the speed of customs clearance as an example, Hu (2014) finds that each 10-percent improvement in import clearance time in an FTZ will lead to a 5.68-percent fall in the volume of agricultural trade within the FTZ. If the cost of trade cannot be reduced effectively, there will be no chance for quick circulation of merchandise trade flow, and the port itself will be at a disadvantage in terms of international competition. The goal of free trade ports is to integrate ports and cities. This is achieved by improving multimodal transport systems, service coverage and functional interaction between ports and cities. Through integrated development, an open and efficient free trade port city can be formed, which, in turn, can promote economic growth in a region.

Human resources are an important factor in economic development. To promote trade, specialized, high-skilled personnel and international talent are particularly valuable. Studies show that increasing the number of undergraduate students will enhance the local economy significantly. Hunt and Gauthier-Loiselle (2010) find that a 1-percentage point increase in the share of immigrant college graduates in the population increases the number of patents per capita by 9 to 18 percent. Meanwhile, high-technology 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. Furthermore, the inflow of high-technology talent can dramatically improve the level of technological innovation. Kerr and Lincoln (2010), using US H-1B visa data, find that higher H-1B admissions increases 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 of this study find limited effects for native science and engineering employment or patenting.

Despite the introduction of certain preferential policies, the lack of professionals and international talent has always been a focal point for the development of PFTZs in China. According to the Human Resources Bureau of the Shanghai FTZ, the shortage of professional and technical personnel in the Shanghai FTZ reached 48 percent in 2014. A free trade port would provide more opportunities and guarantees for the career development of international talent and professionals. Thus, a free trade port would be far more attractive than an FTZ.

Apart from human resources, capital is another crucial factor for economic growth. Xiang and He (2016) find that the establishment of the PFTZ has had a significantly positive impact on capital flows in Shanghai. Latorre et al. (2017) find that the impact of more foreign multinationals in providing services is positive for China. Javorcik (2004) provides strong evidence of positive productivity spillovers from foreign direct

investment between foreign affiliates and their local suppliers in upstream sectors. With less restrictions on the financial market, the free trade ports will be the frontier of a new round of financial market liberalization.

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 for 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 the goal of being a more transparent institutional environment. 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 are necessary for free trade ports. Free trade ports in China could become centers for the exchange of global goods, talent and capital, providing a steady stream of momentum for economic development.

### 3. Functional Orientation for the Construction of China's Free Trade Ports

The development of free trade ports serves as an experiment for institutional innovation. China still has a long way to go in many aspects, such as loosening capital control and controlling the movement of people, to promote trade and investment facilitation, and to simplify and unify investment standards. Therefore, the free trade ports need an effective management system and legal framework so that the impacts of external shocks on the onshore market remain controllable. The construction of free trade ports will be important to stimulate institutional innovation. The innovation in the free trade ports will be greater than in Shanghai and other FTZs in Chinese mainland, given that the free trade ports will be larger compared with the FTZs. Therefore, the local governments will have greater rights in regards to policy innovation, which will amplify the effects of new policies.

The free trade ports will also play a significant role in boosting the economic development of Chinese mainland. Trade ports, such as Chinese Hong Kong and Singapore, belong to a separate customs territory. However, the free trade ports to be established in Chinese mainland will be special regulatory areas in the same customs territory. To this end, one of the main aims of the free trade ports is to advance the development of the Chinese mainland economy. At the same time, the development of free trade ports needs to rely on the development of peripheral regions. There are

many places in the world where transportation is convenient but no free trade port has been formed. The main reason is the lack of strong support from the peripheral regions. The peripheral regions can provide goods, talent and capital continuously to the free trade ports, thus bringing about greater demand for re-export, construction and bonded workers.

At the same time, the free trade ports will play a leading role in upgrading 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 with intermediaries, such as finance and law companies 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. Most international trade centers have gradually changed from traditional ports of goods trading to international capital and information transition centers, like London, New York, Tokyo, Singapore and Chinese Hong Kong. They have gradually developed into world offshore trade centers and become centers of global trade.

### III. 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 markets. Various countries and regions have developed free trade ports with different characteristics according to their particular conditions and strategic considerations (e.g. the integrated free trade port in Singapore, the free trade ports in Hamburg, Germany and Busan, South Korea, and industrial FTZs such as Rotterdam of the Netherlands). Chinese Hong Kong became a free trade port while it was colonized by Britain. Following more than 100 years of development, it has become a leader in international logistics and trade, and a global financial center. It is also a model for the construction of free trade ports in Chinese mainland.

Over 90 percent of Chinese mainland's foreign trade is shipped by sea. With the development of the economy and deepening of the opening-up reform, port construction has made great progress in Chinese mainland. China (including Hong Kong) has 7 of the world's 10 largest container ports (Table 1). However, many container ships choose to fuel in Singapore due to the oil price gap and other extra services.

To achieve a higher level of openness and acquire a proactive position in foreign trade, the major PFTZs in Chinese mainland are constantly exploring new paths for further reforms. Some bonded port areas are also actively seeking transformation. Although the construction of China's free trade ports has already relied on certain infrastructure and policy support, the specific path for deepening reforms remains



unclear. By looking at mature international ports, such as in Singapore and China's most advanced PFTZ in Shanghai, we attempt to identify a path for the successful implementation of free trade ports in China.

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

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

Source: World Shipping Council, available from: <http://www.worldshipping.org/about-the-industry/global-trade/top-50-world-container-ports/>.

Notes: TEU, twenty-feet equivalent unit; UAE, United Arab Emirates.

## 1. Singapore Port

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

As a country with zero tariffs, Singapore's free trade ranks second in the world in terms of port trade volume (Table 1). Geographically, it is at the center of South-East Asia and has become an important channel for world trade.

Trade in goods depends on an intelligent logistics system, an information-based management approach, and low-cost anchorage, warehousing and transit options. Singapore attaches great importance to infrastructure construction. According to the World Economic Forum's 2016–2017 Global Competitiveness Index,<sup>4</sup> Singapore ranks second in infrastructure construction. Maintaining the efficiency of logistics was the key for Singapore to become a trade center. To facilitate trade, as early as 1989, the Singapore Government took the world lead in the development of a trade management electronic platform for customs, tax and security, with 35 other government agencies now connected to this network for enterprises to provide a one-stop customs clearance

<sup>4</sup>See <https://cn.weforum.org/reports/2016–2017>.

service. With this unified system, companies only need to submit an electronic files to request customs clearance. The declaration and audit procedures related to import and export trade can be completed within the network, and can, in some cases, be completed within 10 seconds.

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

Singapore has signed more than 20 free trade agreements with various regions and countries, including China, the USA, ASEAN, New Zealand, India and Japan. Based on these free trade agreements, Singapore-based exporters and investors can enjoy multiple benefits, such as tariff concessions, faster access to markets and access to intellectual property protection. Advanced infrastructure, efficient information management and preferential taxation policies mean that Singapore is unrivaled in facilitating 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 policies: Contact Singapore, the Foreign Talent Settlement Plan, Professional and Technical Talents and the Investment Residency Program. A series of policies to attract entrepreneurs to settle in Singapore and to increase the reserve of technical talent has enabled Singapore to have 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 the 2017 Passport Index, which ranks global passport freedom, Singapore is positioned first along with Germany.<sup>5</sup>

The development of commerce and trade in a free trade port requires a liberalized financial environment. According to the Global Financial Centres Index (19th) report released by the Z/Yen Group in London in 2016, Singapore surpassed Chinese Hong Kong to become 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. Therefore, the currency

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<sup>5</sup>See <https://www.passportindex.org/byRank.php>.

settlement process is simple. A relaxed currency exchange mechanism and a well-developed leasing system attract foreign investment and there is adequate financial support for trade activities. Singapore's sound financial system has powered the city's economic and trade development, providing an excellent model for the regulation and liberalization of China's financial market.

## 2. Shanghai Yangshan Free Trade Port Area

The China Shanghai FTZ bonded area, formally founded in 2013, consists of the Waigaoqiao FTZ, the Waigaoqiao Free Trade Logistics Park, the Yangshan Free Trade Port Area (YSFPTA) and the Pudong Airport FTZ. The customs area of the YSFPTA is 14.16 km<sup>2</sup>, which accounts for 49.2 percent of the total area of the Shanghai FTZ. Endowed with an excellent deep-water coastline and shipping lanes, the YSFPTA benefits from the policies of both the PFTZ and the Comprehensive Test Zone for Development of International Shipping, and is one of the most competitive international shipping and off-shore service areas in China. *The All-round and In-depth Reform and Opening-up Plan on China Shanghai FTZ*, issued by the State Council in March 2017, pointed out that the establishment of free trade port zones in YSFPTA, Pudong Airport FTZ and other areas under special customs supervision marks the reform of YSFPTA entering a new stage.

As the first free trade port area, the YSFPTA has been exploring innovation over 2014–2017 and has made tremendous achievements. For business services, the YSFPTA has advanced infrastructure and core technology and has become the biggest automated container terminal in the world. For logistics, it has developed domestic market channels, connecting the port with Shanghai by a cross-sea bridge. The YSFPTA has formed a business system based on information technology to conduct cross-border e-commerce. Under the guidance of the policy “Two years exemptions and three years 50 percent-reductions,”<sup>6</sup> the YSFPTA 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.

The Shanghai FTZ has established various programs, such as the “Leading Talents Program” and the “Youth Talents Program” in finance, and the policy of “Permanent Residency for Foreigners” to attract more talent in various industries. In 2015, the Ministry of Public Security issued 12 policies on immigration and visas that would benefit the Shanghai Technology and Innovation Center. At the end of 2016, the Chinese

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<sup>6</sup>“two year exemptions and three year 50 percent-reductions” policy means that a foreign-invested company can enjoy business income tax exemptions for the first 2 years and a 50-percent reduction for the next 3 years.

Government proposed the “new ten” policy,<sup>7</sup> providing a more convenient immigration environment for the exchange of talent.

As the most developed financial center in China, Shanghai FTZ continues to provide financial support for cross-border investment and trade. The FTZ has also made efforts to promote interest rate marketization and to deepen foreign exchange reforms. As a result of these measures, the number of products on the list of exclusions has been reduced from 190 to 122, and approximately 90 percent of the national industries have implemented pre-establishment national treatment. The China Banking Regulatory Commission has encouraged Chinese and foreign banks to engage in business in the FTZ. The China Securities Regulatory Commission has invited securities and futures institutions to establish subsidiaries in the FTZ, and the China Insurance Regulatory Commission has proposed establishing a pilot professional health insurance institution funded by foreign capital. To strengthen the cross-border financial services to adjust to a more open environment and to prevent financial risks more effectively, the zone has already opened approximately 60,000 free trade accounts that promote the two-way opening up of capital projects and expand the cross-border use of the RMB.

### 3. Comparison between the Shanghai Free Trade Port 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 FTZ. 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 international ports.

From Table 2, we can identify some common characteristics of the free trade 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 multimodal transportation. For example, in Hong Kong, most commodities (except liquor, tobacco, methanol and several other goods) are exempt from tariffs and additional taxes. Most products can pass through customs without submitting paperwork. 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 OECD countries. These factors reduce business costs

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<sup>7</sup>The “new ten” policy includes ten different new policies to attract high-technology talent to work and live in Shanghai. For the detail of this policy, see <http://www.pudong.gov.cn/shpd/InfoOpen/Detail.aspx?Id=780227>.

for enterprises and facilitate small and medium-sized enterprises' participation in international trade activities.

Table 2. Policies and Development of Four Major International Free Trade Ports

	Chinese 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-exporting dominates	Rashid Port is a traditional container port, built in the 1960s; Jebel Ali Port, built in 1985, is a multi-function zone, including logistics, warehousing, importing and exporting, production and processing
Firm registration	3-step online application, certificate issued within 1 hour; 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 contracts or tax records are required; at least 5 Panamanian employees; at least 60 percent of imports reexported	Procedure for investment can be completed within 7 days; customs, banks, post and telecommunications, transportation and public security, are under unified management
Investment admittance	Equal treatment for all investors in almost all industries; 100 percent 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-percent 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	US 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 imports, exports and re-exports	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 percent), salary and property taxes	Unified business income tax for domestic and foreign firms (17 percent); partial tax exemption for the first 0.3 million in income; zero tariff except alcoholic beverages, tobacco, petroleum and motor vehicles	Business income tax 2–5 percent, capital tax 1 percent	Tariff free for processing intermediates and capital goods; exemption of business income tax for 15 years; no personal income tax

Second, most international free trade ports have undergone industry and trade upgrading and have good financial, logistical and legal systems, allowing them to develop various 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-percent ownership. The procedures for establishing a company are quick; the registration can be completed within 1 hour and there is no minimum capital stock requirement. Fully-opened financial markets allow enterprises to convert foreign exchange and mobilize capital freely inside and outside Hong Kong.

Third, free trade ports are not only logistics and transportation centers, but are also headquarters economies. The agglomeration effect of finance, insurance, design and high-technology industries, and the preferential policies help the free trade ports to encourage the establishment of headquarters of foreign enterprises, foster service trade and offshore trade, and provide a strong motivation for trade and economic growth. For example, the Singapore Government has adopted 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. This can be attributed to FTZ policy measures such as that: foreign capital can be wholly owned by enterprises registered in the FTZ; 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 Dubai Government has attached great importance to the joint development of ports and industry. The Port of Jebel Ali, focusing on the development of trade, logistics, and information and high-technology industry, has established an FTZ. In 2014, there were more than 1225 global multinational corporations and enterprises entering the Jebel Ali FTZ. These enterprises have set up production and logistics centers in the FTZ, 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 FTZ. This is the main project in place by the Dubai Government for developing the network economy. In 1999, it completed the preparatory work for the feasibility study,

including planning and formulation of relevant laws and regulations. The construction project included, for instance, an Internet university and a software development center. By the end of 2000, the construction of infrastructure in the city was basically completed. Following its completion, the Dubai Internet City contained 30 world famous information technology companies, including Microsoft, Siemens and IBM, with 300 senior managers.

Finally, the administrations of free trade ports are empowered by central governments. The ports of Hamburg, New York, Singapore and Hong Kong were all first legislated before setting up districts to ensure the healthy development of the free trade ports with strict laws and regulations. In addition to the national legislation, the local government formulates corresponding regulations for activities in the free trade ports. Port administrations are authorized by the government to manage their own affairs and to invest in and build necessary infrastructure, and have the right to examine and approve projects. They also promote the economic development of the surrounding cities, especially in relation to finance, insurance, trade and intermediaries.

The New York and Singapore ports have specialized operation companies, which operate in a market-oriented manner, and have powerful government regulators. For example, the Dubai Port Authority was established in 1991, directly under the leadership of the Dubai local government, to manage Dubai ports. At the same time, it is an independent organization and has an independent accounting system. The Jebel Ali FTZ is relatively independent and (i) can acquire and rent land, and operate and manage factories, warehouses and other social infrastructure (e.g. reservoirs, water, communications and transportation); (ii) has jurisdiction over enterprises, can introduce public utilities and services in the FTZ, and can approve the use of facilities, such as land, plants and port facilities; (iii) can impose fees on businesses and public utilities; and (iv) can sign loan contracts with organizations outside the zone and establish other management institutions as needed. Through the comparison of the Shanghai PFTPZ and other international free trade ports, it can be concluded that many ports in Chinese mainland are not merely bonded trade areas or FTZs; their functions are expanding, and they are developing into free trade ports. However, there is still much room for Chinese free trade ports to improve, for instance through improvements in operating systems, establishing support services and the construction of related industries. Table 3 shows differences in functions and operating systems between the PFTPZs in Chinese mainland and international free trade ports. Through comparison, the capabilities of the ports in Chinese mainland 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 Chinese Mainland and International Free Trade Ports

		Chinese Mainland	Chinese 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 system	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	<i>The Basic Law and Sales of Goods Ordinance</i>	Preferential polices on free shipment and trade and the <i>Special Law</i>	<i>Tariff Law of the European Union and the Netherlands; Tax Law</i> and policies on Rotterdam port's development, operation and logistics management by the Netherlands

International free trade ports should have complete infrastructure, advanced logistics and information management systems, user-friendly declaration and clearance processes, preferential tax policies, and low costs for calling, storage and transshipment. After more than 20 years of development, the ports in Chinese mainland are becoming increasingly competitive. On 13 February and 1 March 2017, the world's largest 450,000-ton supertanker, TI Europe, called at Daxie Port in Ningbo and Dalian Port. On 27 March, the world's biggest container ship, Mitsui Osk Achievement (MOL Triumph), was put into service and it was decided that it would follow the Dalian–Europe lane. It



would call at ports in Tianjin, Yangshan, Ningbo, Zhoushan and Yantian, 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 imbalance between the development of the ports in coastal developed areas and those in developing areas infrastructure and logistics, and the weak connection between ports. 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, Singapore has a free system of trade settlement, the least restrictions on investors and investment capital, and a comprehensive shipping service system. For the ports in Chinese mainland, there are no automated and electronic customs declaration and clearance services available, reflected in the low efficiency of customs. Although the ports in Chinese mainland have many preferential tax policies (e.g. tax reductions), which have already attracted increased foreign capital, compared with the Singapore and Busan ports, 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, increasing numbers of talented workers are choosing to come to China. There are many preferential policies in place to attract talented workers to the free trade ports. However, the number of scientific, professional and versatile workers still does not meet that required with the fast development of the ports. The proportion of foreign high-technology professional talent is still low among employees. The development of supporting infrastructure and services has been unbalanced among different regions in China. Moreover, because of historical and diplomatic factors, Chinese mainland passports are not used as widely as Chinese Hong Kong, Singaporean and South Korean passports. Although the Chinese mainland passport has scored higher in the Passport Index recently, it still ranks behind those countries and regions, and ranked 64th on the Passport Index for 2017. The low fluidity of immigration hinders international trade. For example, the duration of visas available for immigrant workers to Chinese mainland is relatively short.<sup>8</sup> To solve all these problems, China's central and local governments are seeking to improve immigration management in bonded areas and FTZs, to create a more open and effective environment for those with the skills needed in free trade ports.

Finally, international free trade ports require fewer formalities, better exchange mechanisms, 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

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<sup>8</sup>For example, the duration of a visa for a Vietnamese worker is only 1 month. See <http://www.gxswt.gov.cn/htmlcontent/zwgkdetail/429aa457-f1df-4e61-9654-b80995113146>.

a unified free exchange system for both business types. With the most open currency market in the world, Hong Kong offers freedom to invest and free flow of funds across the border. However, because of its short history and low level of openness of the Chinese mainland financial market, with the exception of the Shanghai port, the coastal ports in China lack well-established financial systems. Thus, it is difficult to promote the development of trade and business in the port areas. China is still a developing country and although it has signed bilateral reciprocal swap agreements with several countries, and the RMB has joined the Special Drawing Right basket, the Chinese Government 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, focusing on convenience, free exchange, cross-border use of the RMB, and free rein of interest rates and foreign exchange.

#### IV. Path for the Construction of Free Trade Ports in China

Even though economies are becoming increasingly interdependent, trade protectionism still exists. The trend of de-globalization may not be an obstacle to trade and business development in China; conversely, de-globalization presents an opportunity for China to deepen reforms. China is actively seeking solutions to the challenges faced and putting forward new opening-up strategies. The Chinese Government is deepening the FTZ reform and improving the functionality of free trade ports to push the opening-up reform to a new stage.

Although China has a way to go in relation to economic openness and liberalization, the economy is developing and foreign trade is expanding. Now is the best time for China to develop free trade ports. China has a vast domestic market and is enjoying policy dividends from the Belt and Road Initiative, for example. China has gained much practical experience from developing comprehensive bonded areas and PFTZs. However, compared with international free trade ports, there is still much room for improvement, including in attracting trade, talent and finance. Therefore, the Chinese Government should focus on policies in these three areas to promote the development of free trade ports.

First, it is necessary to improve the convenience for businesses engaging in trade in the ports. "Fast trade" requires a simple approval process. "Convenient trade" requires a complete logistics system and informationized, comprehensive management. Improvements in these areas will help create a low-cost environment for manufacturing and delivery, to ensure that all products flow into the world market in an effective way. The Chinese Government should provide preferential policies for goods trade.

China should build an integrated, international, standardized transportation network that combines river ports, sea ports, highways, railways and aviation. It should 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 to simplify its procedures. The ports in underdeveloped areas should ensure the implementation of the policy of “inside the territory while outside customs” and “free entry into China’s territory while strict inspection before entering the domestic market, free entry and exit in the FTZ while separate management of people and goods.”<sup>9</sup> For the ports in developed areas, a more competitive offshore taxation system should be explored.

Second, the ports must take steps to improve the fluidity of personnel as well as their ability to attract talent. Such initiatives would help in developing a more livable environment and better services for business persons and international talent. To achieve this, the first step is to regulate the license system for foreigners working in China and to establish an effective visa system for talent to enter, exit and reside in China. The second step is to spare no effort to attract high-technology talent to the ports in underdeveloped areas. These steps would help to improve the environment and infrastructure, improve public services, and establish international working standards to tackle the difficulties of attracting and retaining talent in the local economy.

Finally, the process of improving the ports’ financial systems presents an opportunity for deepening financial reform and improving market openness. In this process, the Chinese Government can gain experience in risk prevention and management. The ports should continue to adhere to the relevant policies on openness and improve efficiency in cross-border foreign exchange settlement. All these measures will support re-export trade financially and reduce trade risks for enterprises in ports. Moreover, the Chinese Government should establish a financial leasing system, so that it can provide sufficient capital support for all businesses in ports and encourage more international companies to establish headquarters in the free trade ports.

## References

- Clark, X., D. Dollar and A. Micco, 2004, “Port efficiency, maritime transport costs, and bilateral trade,” *Journal of Development Economics*, Vol. 75, No. 2, pp. 417–50.
- Dreher, A., 2006, “Does globalization affect growth? Evidence from a new index of globalization,” *Applied Economics*, Vol. 38, No. 10, pp. 1091–110.

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<sup>9</sup>See <http://www.customs.gov.cn/publish/portal0/tab46391/info343506.htm>.

- Guo, M. X., L. Lu, L. G. Sheng and M. J. Yu, 2018, "The day after tomorrow: Evaluating the burden of Trump's trade war," *Asian Economic Papers*, Vol. 17, No. 1, pp. 101–20.
- Hu, C., 2014, "Comparison of trade effects of China–ASEAN import customs clearance time: An empirical analysis based on different time-intensive agricultural products," *Guoji Maoyi Wenti (Journal of International Trade)*, Vol. 380, No. 8, pp. 58–67.
- Hunt, J. and M. Gauthier-Loiselle, 2010, "How much does immigration boost innovation?" *American Economic Journal: Macroeconomics*, Vol. 2, No. 2, pp. 31–56.
- IMF (International Monetary Fund), 2017, *World Economic Outlook*, Washington, DC: IMF.
- Javorcik, B. S., 2004, "Does foreign direct investment increase the productivity of domestic firms? In search of spillovers through backward linkages," *American Economic Review*, Vol. 94, No. 3, pp. 605–27.
- Kerr, W. R. and W. F. Lincoln, 2010, "The supply side of innovation: H-1B visa reforms and US ethnic invention," *Journal of Labor Economics*, Vol. 28, No. 3, pp. 473–508.
- Latorre, M. C., H. Yonezawa and J. Zhou, 2017, "A general equilibrium analysis of FDI growth in Chinese services sectors," *China Economic Review*, Vol. 47, No.12, pp. 172–88.
- Limao, N. and A. J. Venables, 2001, "Infrastructure, geographical disadvantage, transport costs, and trade," *World Bank Economic Review*, Vol. 15, No. 3, pp. 451–79.
- Rosenthal, S. S. and W. C. Strange. 2008, "The attenuation of human capital spillovers," *Journal of Urban Economics*, Vol. 64, No. 2, pp. 373–89.
- Rumbaugh, T. and N. Blancher, 2004, "China: International trade and WTO accession," *IMF Working Paper* No. 4–36, International Monetary Fund, Washington, DC.
- Tong, J. D., D. Y. Xie, Q. Bao, Q. H. Huang, X. Y. Li, Z. B. Liu, B. Jin, M. J. Yu and X. S. Wang, 2017, "The talks on paper of the deglobalization and transformation and upgrading of real economy," *Zhongguo Gongye Jingji (China Industrial Economics)*, Vol. 351, No. 6, pp. 5–59.
- Xiang, H. J. and K. He, 2016, "The impact of free trade zone and capital flows—A natural experimental study of Shanghai," *Guoji Maoyi Wenti (Journal of International Trade)*, Vol. 404, No. 8, pp. 3–15.
- Yu, M. J., 2018, "Three tasks for building an all-around opening-up strategy," *China Economic Transition*, Vol. 1, No. 1, pp. 118–23.

(Edited by Zhinan Zhang)