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## The Development of China's Coastal Ports in the Era of Globalization.

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<i>Article history:</i> Received 03 March 2013; in revised form 22 March 2013; accepted 30 May 2013	By the 21 <sup>st</sup> century China's port logistics have been aligned fully with the country's global trade needs, in which the development of Chinese coastal ports is playing a very important role. In this article, we describe briefly the development process and current situation of China's coastal ports from a macro perspective. From the study and analysis of this process, a general picture can be gained of the evolution of China's not closed of the evolution of china's international trade volumes will slow; exports and imports will tend to balance; and the structure of trade will tend to stabilize, with the proportion of normal goods
<i>Keywords:</i> Coastal Port Development, Modern Port Logistics, Operating Modes, Investment, Port Enterprises.	traded increasing. The proportion of intermediate products and materials for further processing traded will decrease; and the structure of foreign trade in commodities will gradually be regularized.
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#### 1. Introduction

Since the basic reform of China's<sup>1</sup> economy and its opening up as an emerging market-oriented country, China has gradually become more integrated with the g lobal economy. Numbers of ports and port production have undergone wide and substantial growth. Ranked by cargo throughput volumes, China now has 8 of the world's leading ports. In respect of container traffic, China accounts for 7 of the world's top 20 container ports. The cargo throughput of China's ports has been in the world top rank for 8 years continuously. This scale of port development is unique in the world.

With globalization companies organize their production and source their raw materials more and more internationally, and so a global trade and transport chain has gradually been formed. In every part of the world, coastal ports especially have become integral parts of the international logistic network. Port logistics plays an important role in most national economies and in international trade, which has become a primary indicator of the level of development reached by a national economy.

Considered by many as the manufacturing centre of the world, China supports a large proportion of total world construction of coastal ports. The logistics of some Chinese ports have reached the advanced level typical of the best international ports but on the whole, the level of port logistics is low because of China's late beginning. Moreover, there are still many problems associated with the infrastructure, technology and organization, which are restricting the development of ports. In view of this, it is of great importance to study the development of Port Logistics and to identify and resolve the problems existing in the context of continuing globalization.

#### 1.1 Methodological aspects

The main research methods adopted for this study are as follows: a historical review has been carried out of the development of China's coastal ports and how they have changed; the case study method, considering a few influential cases, provides secondary evidence and descriptions, for the analysis of the strategy and summary of the process of evolution; lastly,

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<sup>&</sup>lt;sup>1</sup> In this article refers to mainland China, excluding Hong Kong, Taiwan and Macao.

the relevant literature and documents have been reviewed and studied, for process summary and further analysis of the key points in the strategic research on port enterprises. This has enabled us to build up a comprehensive picture of national ports in China, and to put into perspective the modern port logistic process.

In a study of port logistics such as this, sometimes because of insufficient support data, measurements of efficiency made by previous scholars are very difficult to verify by empirical methods. Although the development of China's port logistics presents many similarities with that observed in the world's more developed countries, it is not possible to learn much of value from other countries that could be put into practice in China. There are only a few papers available for us to study on the theoretical aspects of Chinese port logistics. Our study and analysis of the development of China's port logistics and industry is therefore based on a macro perspective.

#### 2. Recent history of port development

Since the founding of the "New China", there have been five distinguishable waves of intensive construction of Chinese ports Junfa (2004), Huosheng (2011). Hence the characteristics of the port system have undergone tremendous changes, and these changes, in turn, have played an important role in supporting the opening-up of China's economy and its rapid development.

- a) The first of these waves can be dated from the 1950s to the early 1970s. After the founding of the New China, the economy remained focused mainly on domestic markets and industries, with exports and imports having relatively little importance. The transportation system relied mainly on road and rail connections. In the geopolitical context, the government still considered that a potential military threat, and specifically a possible sea blockade by Western powers, existed. China did not invest very much effort and resources in port construction.
- b) During the 1970s, China's national economy achieved a certain degree of development; international communication was becoming easier, and the development of trade between countries began to be promoted. As maritime transportation was becoming more important for the economy, it became evident that the cargo handling capacity of the country's coastal ports was inadequate for the expected needs of international business. Therefore, Premier Zhou announced the need to "change the face of Chinese ports in three years".
- c) The 1980s was the decade in which the global wave of economic integration took place; companies became multinational, competing in global markets, and the factors of production began to be managed on a worldwide basis. All countries grew closer together, economically if not politically. Development of China's foreign trade meant that the requirements for China's port construction were even more pressing. In the sixth Five-Year Plan

(1981-1985), the construction and development of Chinese ports were regarded as a strategic focus of China's national economic development. In this decade, port construction played a crucial role in China's national economic development.

- d) In the 1990s, the process of opening up and reform was continued and intensified. China participated more and more actively in the global economy and competed internationally. The promotion and development of international trade required Chinese ports to invest in the specialized construction of deep water berths for larger ocean-going vessels. This decade saw the third wave of major port construction, in accordance with the Port Development Framework, in which the main pivotal port is the backbone of the system; the major regional ports complement the main ports; and the medium-size and smaller ports are developed as appropriate.
- e) From the early 21<sup>st</sup> century to the present, the modern port is no longer regarded as a place for the simple transfer of cargo to and from vessels. In order to respond to new needs, strategic research is undertaken for the construction and development of major ports, and substantial funds are allocated to the construction of related specialized infrastructure such as information systems and large-scale deep-water berths in the ports. As a result of this modernization, Chinese ports have been greatly improved, and the levels of efficiency and scale of operations of the major coastal ports are now close to those of the most advanced ports of the developed countries.

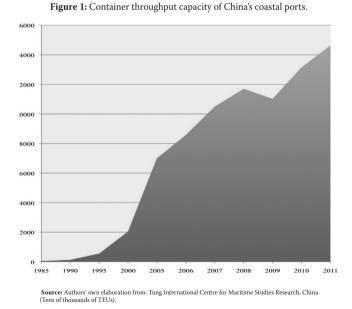
The port serves as a window between the nation's economy and the world; it is at the cutting edge of a country's external liberalization; and it is the node of a great network for the comprehensive transportation of commodities and manufactures. The modern port is an important hub that facilitates domestic and international economic exchanges (Ran, 2003). At the start of a new century, China started a new wave of port construction and development; the amount and scale of investment is unprecedented, and the throughput capacity of China's ports is increasing at an amazing rate. A new pattern of Chinese ports has been formed, and China has ascended in the ranking of the world's leading ports.

After more than 50 years of intensive construction in China, there are now 36 coastal ports, and the total cargo handled annually by these ports has reached more than 10 billion tons. At the end of 2010, Chinese coastal ports had a total of 5453 operational berths, and 1554 of these berths can accommodate vessels of more than 10,000 tons. In particular, since the start of the 21<sup>st</sup> century, the pace of China's port construction has been accelerating. New berths for vessels of more than 10,000 tons are added to the capacity of the coastal ports at an average rate of 78 per year.

This substantial increase in the number of port berths lays a solid foundation for large-scale port operation and productivity. The year 2003 was very significant for China's ports: nationally (excluding HK, Macau and Taiwan ports), all its ports taken together achieved a total throughput capacity of 2.6 billion tons per year, which moved China to the top of the world ranking (Nan et al., 2008). The rate of increase in port throughput capacity of containers is far in excess of any other country in the world. The total capacity has reached 48 million standard containers, which exceeds even that of the USA (Colas, 2008), and again has made China the world's leading country for container traffic.

In recent years, especially those covered by the 11th "Five Year Plan", the pace of construction of Chinese coastal ports is continuous and rapid; with each passing day there are changes in their quantity, scale and capacity (Shunquan, 2011). As reported by the State Statistical Bureau in 2010, ports of national and international scale have achieved a cargo throughput capacity of 8.02 billion tons, representing an increase of 15.0% over the preceding year; of this total capacity, the amount of foreign trade cargo was 2.46 billion tons, which increased by 13.6% over 2009. In standard containers, the annual throughput capacity of China's ports was 145 million TEUs, representing an increase of 18.8% over the preceding year.

In the present situation the export of goods by container is still the mainstream activity of port production and operation in China (TICMSR, 2008, 2011). Container handling is the main force driving port development, because of the joint effects of three major factors: first, the rapid growth of China's economy and foreign trade; second, the adaptation to containerization of products, packaging, handling and the transport structure; and third, improvement in the costs and prices of containerization. The container throughput capacity of China's coastal ports has been showing rapid and sustained growth of about 27% per year, and reached 146.32 billion TEUs in 2010.



In the ranking of world ports by annual volume of container traffic, there are five Chinese ports in the top ten. China's two largest ports, Shanghai and Shenzhen, have consistently been the second and fourth largest container ports of the world, and in 2010 handled 29 million TEUs and 23 million TEUs, respectively, and are rivaled only by Singapore and Hong Kong. This illustrates that, overall, Chinese ports occupy a very important position among the world's ports. This achievement is the result of the substantial and comprehensive construction and development of China's coastal ports.

According to national statistics, in 2010, the cumulative throughput capacity of the first batch of national coastal cities and special economic zones reached 4,144.9 million tons (including Weihai, but excluding Rizhao). This represented a growth of 12.8% over 2009, and accounted for 51.7% of the total throughput capacity of all China's ports (and 75.8% of the total capacity of the 30 biggest national coastal ports and emerging ports). In respect of container traffic, the throughput capacity of the first batch of national coastal cities and special economic zones reached 121,304.43 million TEUs, representing an annual growth of 18.5%. These cities and zones accounted for 83.7% of the total container capacity of the 28 biggest national coastal ports and emerging ports).

An annual throughput capacity of 100 million tons is taken as defining a great port, and China now has 16 such great ports. According to statistics, the port of Shanghai was the first to exceed 100 million tons. Since then more and more coastal ports of China reached the 100 million tons annual capacity level. In 1999 the ports group of Guangzhou became the second port in the Chinese mainland to move into the world class of a great port. of cargo in ports firstly, the began to be watched, they continuously breached barrier, The following year, in 2000, the port of Ningbo exceeded 100 million tons throughput capacity, followed in 2001 by the ports of Tianjin, Qinhuangdao, Qingdao and Dalian. The port of Shenzhen achieved this capacity in 2003, and the ports of Zhoushan and Rizhao followed in 2006. Between 2007 and 2009, another six ports reached the capacity of 100 million tons per year (Yantai and Yingkou in 2007; Tangshan and Lianyungang in 2008; and Zhanjiang and Xiamen in 2009). Thus, at the end of 2010, there were 16 Chinese ports (excluding Nantong) which could claim world class with an annual throughput capacity of over 100 million tons. China is now the country with the most ports of this capacity in the world. Among these ports there were 13 which now have an annual capacity of over 200 million tons, and 6 of them can boast over 300 million tons of annual throughput capacity.

According to C.Y. Tung's port research report, in 2010, the cumulative throughput capacity of the 16 ports with a capacity of more than 100 million tons each had reached 4,589 million tons, which represented an increase of 15.6% over 2009, and was 0.6% higher than average national growth rate; these 16 ports accounted for 84.0% of the total throughput capacity of the 30 biggest coastal ports, and 57.4% of the total throughput capacity of all Chinese ports. In respect of containers, the cumulative throughput capacity of 15 national coastal ports (excluding Tangshan) has reached 120,929 million TEUs, which is an increase of 19.0% over the preceding year, and 0.2% higher than average national growth rate; These 15 ports accounted for 94.0% of the total throughput capacity of containers in the 28 biggest coastal ports, and 83.4% of the total throughput capacity of containers in all Chinese ports.

Shanghai: In respect of cargo throughput capacity, the ports of Shanghai (there are five major working zones) have held the top ranking in recent years, and have presented excellent scores on many parameters. After taking the lead by breaking through the 100 million ton annual capacity mark in China, it surpassed the 200 million ton mark in 2000, and one year later, in 2003, the port of Shanghai even exceeded the huge capacity of 300 million tons. By achieving a throughput of 316 million tons, it became the third largest port in the world, next only to the ports of Rotterdam and Singapore. By 2004, the throughput capacity of Shanghai reached 379 million tons, surpassing the port of Rotterdam in The Netherlands, which ranked second among the cargo ports of the world. In 2005, Shanghai made a further almost miraculous advance, not only exceeding the throughput capacity mark of 400 million tons by reaching 443 million tons, but also for the first time surpassing the port of Singapore, to become the No. 1 port of the world (Henan, 2009).

By 2010, the cargo handling operations of the port for the whole year amounted to 653 million tons. Shanghai remained at the top of the world's port ranking for 6 years continuously. By 2010, the container traffic handled by Shanghai ports reached the impressive figure of 29.069 million TEUs for the whole year, representing an increase of 16.3% over the previous year, and 0.669 million TEUs more than Singapore. Shanghai ranked as the No. 1 container port in the world for the first time. In 2011 Shanghai set a historic record by handling more than 30 million TEUs.

**Tangshan**: This port started with the building of a berth for vessels of 15,000 tons in 1988, and this has since been opened to navigation. The throughput capacity of cargos was increasing at an annual rate of 1 to 1.5 million tons. The annual throughput capacity first surpassed the 10 million tons level in 2001, and by 2008, it had exceeded 100 million tons. In October of 2010 it surpassed the 200 million tons mark, and reached 250.62 million tons for the year as a whole, thus becoming the tenth port nationally to exceed the annual throughput capacity of 200 million tons. Based on the official Annual Report on National Ports, 2011, during the period of the 11<sup>th</sup> Five Year Plan, the cargo throughput capacity of Tangshan was increasing at an annual growth rate of 40%, putting this port in top place nationally for the amount of increased throughput achieved each year.

This amazing rate of growth was outstanding not only among Chinese ports but also globally. Presently, Tangshan ports are divided into three areas: the Caofeidian, Jingtan and Fengnan port areas, which form a comprehensive development. By division of work, cooperation, coordination and interaction, these three ports go forward together. Specializing in the importation of bulk coal and iron ore from overseas, especially from Australia, for the development of the region's steel industry, the ports of Tangshan have become comprehensive ports associated with China's steel industry.

**Lianyungang:** One of the first batch of port cities of China, designated when further external liberalization was carried out, Lianyungang port opened in 1993, and since then it began

to fulfill the dream of being a great oriental port with its practical activities. During the 11th Five Year Plan period, Lianyungang made great advances in strategic status; it presented a very fast rate of development and the results of this became very evident. In that period, Lianyungang won acclaim both in Jiangsu province and at the national level. The "National Coastal Ports Layout and Plan" clearly listed Lianyungang, together with the ports of Shanghai Ningbo, as the main ports of the Yangtze Delta ports group, and Lianyungang was designated as a major national coastal hinge port, and the important node of a comprehensive national transportation system. It was charged with the important task of serving the economic development of Yangtze Delta and Midwest areas of China. The central government approved the strategy for Jiangsu province to give top priority to the development of the port of Lianyungang.

According to official Annual Report on National Ports, 2011, in the whole period of the 11th Five Year Plan, particularly in 2008, Lianyungang suddenly moved up into the ranks of Chinese coastal ports with 100 million tons throughput capacity. By 2010, the throughput capacity of Lianyungang port reached 135.064 million tons, making it one of the 16 Chinese coastal ports with over 100 million tons annual throughput capacity. This represented an increase of 18.7% over 2009, and Lianyungang was ranked in tenth place among the 30 major national coastal ports (excluding Dandong and Nantong), and in sixth place among the 16 ports with over 100 million tons handled annually. Now it has became the only port of Jiangsu Province among the 12 Chinese coastal hinge ports. Since it started operations, the construction of a deep sea channel to accommodate vessels of 300,000 tons, has been a significant milestone for the port of Lianyungang. This indicates that Lianyungang has begun to move into the era of "ocean highway", and this has made its advantages as a strong port more evident after it ascended into the "national team".

Lianyungang started to handle containers in 1986, and during the 10 years to 1996, the annual throughput capacity had not exceeded the 100,000 TEUs level. However, in recent years, Lianyungang has begun to exert its unique location advantages; it responded fully to the directive spirit of Premier Wen Jiabao; it utilized fully the supportive measures available at national, provincial and city level; it has grasped the opportunities and fought well. In 2005, it generated an annual growth of over 100% in containers handled; throughput capacity jumped from only 500,000 TEUs to over 1 million TEUs, thereby taking Lianyungang into the ranks of the top ten national coastal ports and top 100 national container ports (Xian, 2010). In 2010, the throughput capacity of containers reached 3.871 million TEUs, which ranked it in ninth place nationally, and in the top place among the ports of Jiangsu Province; this was an increase of 27.7% over the preceding year. It now ranks just below Yingkou in the top 10 national container ports, and it has reached No. 1 place in the first batch of coastal cities and ports of special economic zones.

**Suzhou**: In June 2002, Jiangsu Province integrated the ports of Taicang, Changsu and Zhangjiagang into one, and introduced "Suzhou port" as the name of the ports group. The

throughput capacity of Suzhou port as a whole reached 102.15 million tons in that year, making it the first national inland river port to surpass the 100 million tons mark. Later, in 2006, Nantong port achieved a throughput capacity of 103.862 million tons, and became the second national 100 million tons inland river port. In 2007, Nanjing port reached a throughput capacity of 108.59 million tons, and it thus became China's third inland river port of over 100 million tons throughput. In September 2009, the throughput capacity of Zhejiang's Huzhou port exceeded 100 million tons, while Jiangyin port reached a throughput capacity of 108.45 million tons in the same year, and Zhenjiang port achieved the throughput capacity of 122 million tons in 2009. All these inland river ports thus ascended to the rank of ports handling 100 million tons throughput (Fang, 2009).

According to provisional statistics, of the six national inland river ports of over 100 million tons throughput capacity, Jiangsu Province accounts for 5, and Zhejiang Province has 1. In 2010, the inland river ports with cumulative throughput capacity of over 600 million tons have actually achieved a total throughput of more than 1 billion tons, which represented an increase of 19.0% over the previous year; the contribution of these inland river ports accounted for 12.6% of the total throughput capacity of all the national ports, which had grown by only 0.4% over the previous year. Among the inland river ports, the 5 ports with over 100 million tons throughput each together reached a throughput capacity of 869.40 million tons, which accounted for 85.8% throughput capacity of the 6 ports of more than 100 million tons.

The container statistics are still incomplete, but in 4 of the inland river ports of more than 100 million tons each, the combined throughput capacity of containers reached 6.311,7 million TEUs, which represented an increase of 32.0% compared with the previous year. Within this total throughput capacity of containers, Suzhou accounted for 2.717,4 million TEUs, which put Suzhou top in the ranking of inland river ports, just ahead of Lianyungang and in the second position in Jiangsu; it increased by 34.1% over the previous year, making it also the fastest growing of all the inland river ports in container traffic.

#### 3. The new regional pattern of national coastal ports.

In September 2006, the "National Coastal Ports Layout and Plan" was issued, which indicated that the construction and development of coastal ports has moved into a new stage. It determined that, in the Chinese coastal areas, five large-scale, intensive and modern groups or clusters of ports will be formed; these will be in the Bohai Economic Rim area, the Yangtze Delta, the Southeast Coastal Area, the Pearl River Delta and the Southwest Coastal Area. With the continuous enlargement of the operating scale of Chinese ports, a series of large-scale groups of ports, relatively concentrated geographically, has been gradually formed; and a rational national pattern and layout of China's ports has gradually emerged. This is intended to promote the better and faster development of China's port industry. According to the National Bureau statistics of 2011, of throughput capacity of ports, and from Shi and Nan's study in 2010 (Shi and Nan, 2010), among the recently-formed five areas of port groups, the "Yangtze Delta" and "Bohai Rim" are still the largest, followed by the "Great Pearl Delta", the Southeast Coastal Area and the Southwest Coastal Area.

(1) "Yangtze Delta": this is the short name for the Changjiang Delta zone. In the narrow sense it is a city group consisting of 17 cities of the Suzhou, Zhejiang and Shanghai areas. Because of the expansion of China's economy and the needs of Jiangsu, Zhejiang, Anhui and other provinces, all the ports of Jiangsu, Zhejiang, Shanghai and Anhui have now been included in the Yangtze Delta cluster of ports (Huaping, 2010). According to incomplete statistics, there are now 6 major coastal ports and 6 inland river ports, each of more than 100 million tons capacity, in the Yangtze Delta. The cumulative throughput capacity of cargos has reached 2.5 billion tons in 2010, having increased by 14.2% over 2009. The ports of the Yangtze Delta accounted for 31.2% of the total throughput capacity of all China's national ports. Within this total, the cumulative throughput capacity of the 6 leading coastal ports, from Lianyungang to Wenzhou, was 1.49 billion tons, representing a growth of 11.1% compared with 2009, and these 6 ports accounted for 18.6% of the total throughput capacity of all China's national ports.

(2) "Bohai Rim": this is the short term for the Bohai Economic Rim zone, which refers specifically to the Liaotung Peninsula, Shandong Peninsula and Bohai Economic Rim zones encircling the Bohai Sea, in Northern China. The area includes Beijing, Tianjin and Hebei, and, at the same time, extends and radiates to Shanxi, Liaoning, Shandong and Mideast Neimenggu. The Bohai Rim is the most active economic area of Northern China. According to statistics, in 2010, the Bohai Rim area reached a total cumulative throughput capacity of 2.445 billion tons in 11 major ports from Dandong to Rizhao. These 11 ports accounted for 30.5% of total throughput capacity of cargos in all China's national ports - slightly less than the proportion of the Yangtze Delta. Compared with the year before, this was an increase of 18.8%; this rate of growth was 4.6% higher than that of the Yangtze Delta ports, and 3.8% higher than that of all China's national ports.

(3) "Great Pearl Delta": this is short-hand for the Zhujiang Delta, and originally consisted of 10 inshore cities of Guangdong Province which were mainly centered on Guangzhou, the so-called Guangdong Pearl Delta or "Little Pearl Delta". The area now referred to as the "Great Pearl Delta" consists of Guangdong, Hong Kong and Macau. In 2010, the five coastal ports of the "Little Pearl Delta" in onshore Guangdong, which are mainly based on Guangzhou, achieved a combined cargo throughput capacity of 876 million tons, which accounted for 10.9% of the total capacity of the nation's ports; this represented an increase of 14.9% over the previous year, greater than the growth of the "Yangtze Delta" ports, but less than the growth of the "Bohai Rim" ports, and also less than average growth of all national ports. (4) **Southeast Coastal Area**: this refers mainly to Fujian Province and includes its surrounding areas, which link with the economic zones of the Pearl Delta and Yangtze Delta in the north and south, face Taiwan Island in the east, and are adjacent to the broad inland area of Jiangxi in the west. In recent years, this area is always referred to as the (Taiwan) Channel East Shore Economic Zone. In 2010, 3 major ports of the Fujian coastal area, Fuzhou, Xiamen and Quanzhou, achieved a cargo throughput capacity of 295.11 million tons; however, for all the ports of the Southeast Coastal Area the total amount is higher. The increase over the previous year was 12.5%, and this Area accounted for 3.7% of the total throughput capacity of all the national ports.

(5) Southwest Coastal Area: this refers to the Northern Guangxi Bay Economic Zone and comprises "4+2" zones of supervised administration, including 4 cities (Nanning, Beihai, Qinzhou and Fangchenggang) and two logistics cities (Yulin and Chongzuo). In January 2008, China put into practice the "Northern Guangxi Bay Economic Zone Development Programme". The National Development and Reform Commission has emphasized in its reports that the Northern Guangxi Bay Economic Zone is an important area for the development of Western China, and is a zone for the growing cooperation with ASEAN countries. The Area has major significance for China's implementation of its general strategy of regional development and its strategy of opening up the economy to international collaborations for potential mutual benefit, and with "win-win" results. China will develop the Northern Guangxi Bay Economic zone as the base for logistics, trade and manufacturing, and the information and communication centre which services the growing China-ASEAN cooperation. The strategy envisages this Coastal Area driving and supporting the development of all the hinterland of Western China. It will become the critical zone for global and regional economic cooperation with other countries, open to a high degree, radiating strong economic growth, promoting social harmony and protecting its ecosystems (Liehui, 2008). According to the statistics, in 2010, the cargo throughput capacity of the three ports, Beihai, Qinzhou and Fangcheng, located in the Northern Guangxi Bay Coastal Area reached 155.98 million tons. This represented an increase of 65.8% over the previous year, the fastest rate of growth in the five regional ports groups.

#### 4. Conclusions

China is still in a period of social transition; the market economy has not completely developed; and the effect of the market on the basic distribution of resources is not yet evident. However, the development has not been incoherent, and the strategies adopted present strong local characteristics.

Considering the overall international and domestic situation facing Chinese ports in the future, it can be stated that both opportunities and challenges exist for the development of Chinese ports, at the same time as uncertainty and uncontrollable factors are increasing. Globally, the world economy is recovering only slowly after the financial crisis of 2008-10. Volatile situations in Western Asia and North Africa, and factors such as the Fukushima nuclear leak have increased the instability of the world economy. Affected by the situation on the Korea Peninsula, the process of economic integration in Northeast Asia has almost stopped. International competition has become more intense, new trade protectionism, including a low carbon tariff, and environmental protection, is popular. The strength of developing countries and emerging economies has further increased, and the tendency for world economic centers and international shipping centers to transfer to the Asia Pacific area has gradually become stronger. Judged from China, the country's comprehensive power and soft power will increase further in the 12th "Five Year Plan" period. The Chinese Yuan will not only face pressure to appreciate, but will also have the opportunity to become an international currency. The rate of growth of China's international trade volumes will decrease; exports and imports will tend to balance; the structure of trade will tend to stabilize, the proportion of trade in normal finished goods will increase, with the proportion of trade in intermediate products and materials for further processing decreasing, and the structure of foreign trade in commodities will gradually be regularized?? .

China has entered a new stage in which particular regions are opening up and developing. Each region is racing to develop as fast as possible, and advanced regions such as the Pearl Delta and Yangtze Delta are promoting a new wave of evolutionary development. The Bohai Rim area, including Tianjin, Bin Hai, Xin Qu, the Shandong Peninsula Blue Economic region, the Liaoning coastal economic region and others, are all growing fast. General regional development strategies such as the Western China Development Plan, the accelerating growth in the middle parts of China, and the encouragement of further growth in those eastern areas that were the first to develop, have been confirmed. Thus the regional development policy of China is being extended to cover the entire country completely.

All the ports of China will gradually modernize, but their transformation into powerful ports will only be achieved by courageously grasping opportunities, by boldly welcoming challenges, and generally by converting difficulties into opportunities. Existing advantages must be more fully exploited; the operational functioning of ports and services must be improved by changing practices and development modes. New thinking is required to explore how to accelerate the construction of ports, and new systems are required to accelerate further the development of all China's ports.

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