9-24-2016

Shanghai port development factors of influence on Shanghai economic

Yong Du

WORLD MARITIME UNIVERSITY

Shanghai, China

Shanghai port development factors of influence on Shanghai economic

By

DUYONG

China

A research paper submitted to the World Maritime University in partial

Fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE

ITL

2016

DECLARATION

I certify that all the material in this research paper that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this research paper reflect my own personal views, and are not necessarily endorsed by the University.

Signature: DuYong 杜雍

Date: 2016/8/18

Supervised by

Professor Sha Mei

Shanghai Maritime University

Acknowledgement

My graduation thesis has finally been completed. Now recall the writing process of the whole thesis, as if still visible before the eyes. First of all, I thank my mentor, because the smooth completion of the paper cannot do without the teacher's hard to know. In the work of my mentor is also relatively busy, he is hard to guide and pay the figure also constantly emerge in my eyes. Although usually busy, but my mentor to his students' requirements of the paper has been relatively strict, did not relax. It can be said that from the topic to the writing until finalized, embodies the teacher a lot of effort, which also from the side reflects the mentor, strict work style and rigorous treatment of the attitude of places.

Here, I would also like to thank teachers of other subjects; it is their meticulous and careful rigorous work attitude, in the process of my thesis has inspired me and taught their eclectic and persuasive attitude in continue to inspire me. Each teacher of a serious and responsible attitude, in the process of thesis writing feel today without even a thousand miles of connotation, including in the teaching mode and curriculum design, to the development of my vision has brought great impact.

Give me bring help, also includes and my dear roommates and classmates, in the creative process, many students are to me provides certain help, including data collection, writing mentality and writing method is formulated in terms of, no help, my thesis will not so smoothly. I believe that through this paper writing, more able to enhance mutual feelings and friendship between us. I wish my classmates and my friends can successfully complete the graduation thesis, at the same time, also hope that their academic success, the work is smooth, in the future be able to get a lot of no small achievement.

Writing also with reference to the many predecessors research results, saving the time of my creation of this thesis, the literature citation and reference, this article to

my increased persuasion, it is also in these references, to the creation of my paper brings great inspiration. On the theory research results of the predecessors to extend the lofty respect and deep gratitude.

Learning is coming to an end, and I will soon be on the way to the society. I believe that the school will be a variety of experiences in my life is an important asset, in the school of the happy growth of the land; I grew up a lot of. Finally, to pay for my thesis writing, hard teachers, students and partners expressed deep gratitude, and to be responsible for the examination and approval and reply to the teacher expressed deep gratitude, thank you!

Abstract

Title of Research paper: **Shanghai port development factors of influence on Shanghai economic**

Degree: **MSc**

With the continuous development of Shanghai Port, Shanghai Port has played a huge role in promoting urban economic development, but also to promote the economic development of the surrounding hinterland. On the one hand, Shanghai strength of the economy, boosting demand for Shanghai to improve the level of financing capacity building and Shanghai Port. On the other hand, a large number of Shanghai's import and export trade but also boost the economic development of Shanghai. The use of quantitative and qualitative analysis of the relationship between the two aspects of this article from Shanghai Port and Shanghai between the economic development of Shanghai port to promote the Shanghai economy, Shanghai's economic strength is also driving the demand of Shanghai. Through economic hinterland of Shanghai, the Shanghai port logistics analysis, collection and distribution system of Shanghai, Shanghai can be drawn to Shanghai's economic development has played a positive role. Similarly, only improve logistics services, the development of logistics centers and information technology to improve the transportation network, rely on the support of economic hinterland to develop the port of Shanghai to promote Shanghai as an international shipping center; Shanghai Port has a significant impact on the Shanghai economy.

Key words: the relationship between port and economy, the Yangtze River Delta, port logistics

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1 Introduction

Under the background of the integration and the networking of appearing in the development of the world economy, the relationship between port and city and regional economy is increasingly close port not only in the city's economic development plays a great role in promoting, but also effectively promotes the area around the economic development. At the same time, the region is also making full use of the advantages of the port to promote its economic growth. The challenge for the city, in the face of it, will be whether it will be able to transform an industry - based economy in a timely manner to an economy based on information and knowledge. In the urban functions, in addition to the basic function to use the port, but also fully will in the cultural landscape of the port, the organizational characteristics to the functional areas of the, to help establish new idea with the competition of urban communities, value and image. Port for the development of the regional economy of the promoting role: interaction between port and city, the port city of growth as the economic center of the region; then, the port through the center of the port city of leading role to promote the development of regional economy. As a result, the port has a close relationship with its host region. In the field of relationship between port and regional economy, the abroad has been a lot of research, and the current our country theoretically less research and ports to reasonable layout to region economy play the biggest role in promoting, regional economy on how to promote the development of the port, has increasingly become the hot issues in the academic research.

Yangtze River economic belt is the Yangtze River Basin is the most developed areas, is the except in coastal open region, economic density maximum economic zone and its strategic meaning to the economic development of our country is incomparable with the rest of the economy. Area of delta of the Yangtse River is one of the

economic core area of the Yangtze River economic belt is located in the busy coastal shipping line and the Yangtze River water transport of T-shaped Jianghai transshipment intersection, locational advantages Obviously, the economic foundation is good, the science and technology culture and education developed. In the process of the development of Shanghai, the port has played a very important role. Shanghai port has a vast economic hinterland, through their port city promote regional economic development, at the same time, the development of regional economy also stimulated the changes in the functions of the port, from the traditional single transportation, loading and unloading function to trade, processing, information and logistics functions change. Therefore, the function of the port system should be divided, how to position, directly affect the coordination and development of the port and regional economy, coordination, complementary advantages, coordination is not good, the power offset. For a long time, Shanghai Port Group, port between the functions of the division of labor cooperation, space layout structure of relationship did not cause people attention of researchers, uneven development between the port speed, seriously lagging behind the development speed of some port; port layout is not reasonable, functional division of labor have repeat; Hong group within the port the inharmonious relations between: port management system is not reasonable, and so the problem still exists.

Therefore, we use quantitative and qualitative methods to Shanghai port, port logistics, transport and logistics, port economic hinterland (the Yangtze River economic belt) and other factors were analyzed and studied. This paper tentatively Shanghai with per capita GDP, import and export trade volume instead of Shanghai economy, instead of Shanghai port cargo throughput of Shanghai Port, the quantitative analysis of the factors in the development of Shanghai Port and Shanghai economic impact analysis using Eviews software derived Shanghai port trade economic impact of the Shanghai, Shanghai's economic growth and

development of Shanghai Port has a close relationship. But also put forward some suggestions on the construction of Shanghai Port, the need to establish an integrated transport network system, take advantage of the economic hinterland of the Yangtze River Economic Belt, and better development of Shanghai as an international shipping center, and actively influence the economic development of Shanghai.

2 Literature reviewed

Liang Shuangbo, Cao has a swing, Wu Wei (2013) believes that with the integration of the world economy development, economic growth in all countries will be more dependent on foreign trade. Statistics show that international trade is growing faster than the overall growth of the world economy. The rapid growth of international trade, promote the reform of international transport chain Hairen: the first is the shipping company (especially the container liner companies) in order to reduce costs, the pursuit of economies of scale, the use of large ships (most notably the large container ship the trend); large-scale ships of international trade port handling facilities, water depth, challenge the related factors of service level and hinterland, thus promoting the reform of port enterprises in technology infrastructure and service; rapid innovation and international trade flow way of international trade requirements, development requirements to promote the shipping companies and port enterprises to provide comprehensive logistics services the. In the international trade logistics chain, including ocean shipping, port loading and unloading, warehousing, multimodal transport, and other different transport modes and transport links. Only each link to achieve or close to the best combination, in order to ensure the smooth flow of the integrated logistics chain, and the key to the land and sea transport on the integrated logistics chain is the port gate.

Bei Hua Zong (2004) that since more than a 90% of world trade was realized by the sea, and the port in the integrated logistics service chain in special position, so

modern port (or the third generation port gate, that is, since the 80s of the 20th century developed port) is not only between land and water transportation way connection point and goods distribution, and is an international trade center, information center and service center, so that in the port to carry out a variety of value-added logistics services possible, and with the economy. In the development of modern logistics industry, the port has become one of the key points and the main body of the modern logistics industry, with its large-scale distribution capacity and the important nodes in the logistics network.

Yang drawing (2009) thinks that there is another definition of port function in the theory research of port economics, namely the function of modern port can be divided into transportation function, business function, industrial function and service function. But with the continuous extension of the modern logistics activities (the extension of the concept and the extension of the business services), the function of the port logistics service can cover the original transport function and service function. Therefore, the concept of the port logistics service is put forward, which makes the modern port to become a real international trade logistics center ".

Far away he (2009) in the world of international trade port development and urban development history, we can find that the development of the port and the location of the city's development is a complementary and mutually promote the close relationship. "City to Hong Kong, Hong Kong for the city with" is a summary of the role of the port to promote the development of the city. Many of the world's advanced ports, such as Rotterdam, Holland, Belgium, Antwerp, Singapore and so on are developed into the world's industrial and trade center with the advantages of the port. And China's reform and development since the establishment of special economic zones and 14 open cities are located in the coastal port cities is on the one hand illustrates the port of a region or a city opening to the outside world, the development of export-oriented economy to a unique role.

Wang Haijun (2009) port logistics industry to promote the more efficient allocation of production factors. The port's position in the international trade determines the itself is the production elements of the rational combination, for example between the two continents or countries in terms of production factors have great police Fu difference, these factors of production in a beneficial way to combine and port is often the most logical location. With the development of the port service to integrated logistics services, the allocation of various factors of production will be more effective and reasonable. If the original port as the production elements of the rational combination is caused by natural resources t Fu difference of, then the development of port logistics service will promote the social labor, technology, capital and other production resources more reasonable configuration. The port logistics industry promotes the division of labor and the development of economy. Port logistics service expansion and extension of the industrial enterprises in the port city or region where the non core production and business activities from the core in the production and operating activities are separated, and specialized in core production activities. And it is also the specialized division of labor and development of the economy, which makes the whole regional economy and society, get the maximum benefit from the specialization. The port logistics industry has increased the output value of the regional economy. Port as an important node in the integrated logistics chain, providing a number of value-added services, so that products in the circulation process of value-added. Many advanced and advanced ports in the world have made a quantitative analysis of the value of the port logistics. As the branch of the National Bank of Belgium Antwerp in 1997 by the port of Antwerp in 1995 economic value, the economic significance of the port of Antwerp a 1995) report points out, when the port of Antwerp (all in port activities, port industrial business enterprise sum) created the value added of 23.65 million Belgian francs, 3% of GDP: average each processing one ton of shipping goods to create the value added of the

2008 Belgian francs.

Anyang (2006) argues that the policy environment is refers to the state and government management of the logistics industry guidance and control function and means, mainly refers to the port where the country and local governments at all levels and departments to develop policies, regulations and measures, including macroeconomic policy, trade management laws and regulations, guide and other policies promoting the allocation of resources etc.. State and government departments at all levels of the port logistics policy constitutes the macro environment of the industry, is the key factor to promote or restrict the development of the industry. Especially the construction of port logistics platform belongs to large public infrastructure construction, than most with the nature of public goods, such as roads and the environment and therefore need to state and government departments through policy to promote and regulate. At present our country government departments for port construction and development of the introduction of some direct preferential policies have preferential allocation of land, waters and coastline, relief port enterprise tax, permission, and encourage foreign investment policies, investment and financing policy.

Sunxiaoyan (2007) on the logistics industry produce policy environment factors influence many, different countries or regions according to the characteristics of its own industrial structure have taken promote and control the development of the logistics industry policies, regulations and measures are also diverse. Such as taken in Shanghai Waigaoqiao Free Trade Zone to allow foreign investors to set up wholly-owned allocated enterprise policy support (in accordance with the provisions of the law, outside the bonded zones and special economic region, does not allow the establishment of wholly foreign-owned logistics enterprises); Shanghai PudongWaigaoqiao area in order to actively expand merchants, the land owned shares and foreign enterprises established logistics warehousing company

cooperation, and in cooperation take flexible profit into method and local tax incentives and other policies, not only to attract the foreign capital to enter, jointly build modern logistics industry town, and avoidance of the land and other resources continue to add value and sustainable development.

3 Relationship between shanghai port and economic

3.1 Shanghai port

Shanghai surrounding area is a developed area of warehousing, warehousing, transportation, freight forwarders and other various industries booming; the surrounding land resources use potential, land development of low cost, easy to vigorously develop the logistics industry.

As of the end of 2011, Shanghai port has a total of 1164 types of port berths, the total extension of the terminal 119.7km, annual comprehensive throughput. Force 460 million T, of which, 43 special container berths. All types of inland waterway berths (above the scale) 1179, the total extension of the terminal 60.1km, the annual capacity of 140 million Ton.

Warehouse area is188832 square meters; Yard area is 840596 square meters. In 2013, the government hasto spend 2 billion to strengthen the construction of infrastructure.

Shanghai port using RFID technology covering Hong Kong six terminals, more than 30 yards. More than 200 channels of gate, for 20000 truck trailers, lowers the vehicle through the gate of the time and accuracy of the information on ascension. And through the GPS vehicle monitoring to achieve the group's internal customs inspection of cargo containers carrying vehicles and large ore transport vehicles throughout the monitoring. With the aid of the Internet of things, the Shanghai port in the container terminal management and general bulk cargo management are in the leading position in the country. Container terminal automation system CTAOS realized set of cargo loading and unloading, site planning, machinery and vehicle

scheduling, no gate, GPS positioning, large machinery safety control, 3D field operations to simulate the real show, EDI exchange data collecting and distributing in various work, the realization of the automatic management of container terminal. Shanghai port through the EDI platform, integrated logistics information platform, online business hall system, opened the shipping companies, port and other transportation industry and Hong Kong related government agencies of information channel, realizes the information sharing and exchange. Through the system of online business hall, all container terminals in Shanghai port of domestic trade box can realize remote client documents acceptance, suitcase and charging function reservation.

3.1.1 Advantages of Shanghai port

In port construction, strengthen the management of intellectual capital is the key, and high-end shipping construction of team of harbor of intellectual capital management. Nowadays measuring standard of a port city not only is the throughput of the port and shipping enterprise capacity, but shipping service level and on international air transport market control ability. Therefore, in the process of building the international shipping center, in the development of the consolidation of the hardware environment, based on the comprehensive level of shipping soft environment as soon as possible, especially the construction of high-end shipping personnel team. From port hierarchy clustering index can be seen, the talent of port comprehensive competitiveness is slightly less than, of enterprises in the 21st century and the competition essence is talented person's competition theory is not consistent, the reason is that people did not get the attention of port enterprises.[1] So it is very important that how to play the decisive role of the talent in the condition of

[1]Liang Shuangbo, Cao has a swing, Wu Wei. The spatial pattern evolution of the port logistics enterprises in Shanghai metropolitan area [J].geographical research, 2013,08:1448-1456.

sufficient resources and limited facilities.

Due to its own favorable conditions, Shanghai port is a certain advantage to attract talents, and other ports in the Yangtze River Delta need to pay attention to the training of talents from the production line, the special nature of the port industry is the production site. The repair process of the loading and unloading production organization and the large port machinery is the world of port technical personnel and management personnel training. Therefore, the Yangtze River Delta ports can be launched from the following aspects: first, strengthen the training mechanism of production and research collaboration. Construction of high-end composite type of shipping service industry personnel system requires not only government departments at all levels attach great importance, need more shipping service enterprises, universities and research institutions to provide multi-disciplinary, interdisciplinary talent cultivation project; the second is optimize the introduction of talent, growth environment, for the formation of the talent introduction and guarantee mechanism. In addition to enhancing the intellectual and financial support for the development of high-end shipping services, the government should also

Port specialized personnel information database construction, which is the port to reduce personnel cost of the introduction of; the third is to strengthen the shipping personnel training; the fourth is the exchanges and cooperation to strengthen the foreign and international shipping developed regions. Through international organizations and institutions of professional and technical support, to quickly enhance the soft power of shanghai shipping.

The function of the port of Shanghai in the original loading and unloading, storage, transit based provide warehousing, transportation, distribution and improve the added value of the flow of processing services, including freight forwarding, shipping agency, multimodal transport, bonded, storage and transportation of dangerous goods, a major air feeder, container loading and unloading, storage,

cleaning and maintenance, enhance the service function of the port of Shanghai, to customers for the design of distribution, means of transport, etc., to provide door - to - door service.

Major ports in Shanghai in order to enhance the competitiveness of the port of Shanghai, the use of Shanghai port hinterland, transportation and other advantages, the development of Shanghai port, the establishment of the port enterprises in Shanghai. At present, most of Shanghai port enterprises equipped with modern yard, multimodal transport station, warehousing facilities and equipment, loading and unloading handling equipment, container transport vehicle, heavy transportation, information center, facilities and equipment, continuous improvement.

With the growing trend of economic integration and the globalization of trade and trade port's role is more prominent, the majority of Shanghai port to engage in military service, customs agents, temporary storage, handling, distribution, distribution processing, etc. one-stop service.

Shanghai port to the production and consumption of two extensions by the storage and transportation of single function expansion for warehousing, transportation, distribution, packaging, handling, distribution processing, information processing functions. These functions overall coordination and reasonable planning, the formation of large systems, control of goods flow, maximizing the benefits and minimizing the cost, to meet customer requirements, improve economic benefits.

Shanghai port in the development process, in accordance with the requirements of the international, in accordance with the international standard in commodity circulation, processing, loading and unloading, handling, information processing, packaging and other aspects of development to in international trade better participation.

Development of global integration of the goods and factors of production flow in the global range, the major port in Shanghai pay attention to Shanghai port information

system construction, using the network technology, the communication technology and computer technology, Shanghai port, customs and other departments and banks and other enterprise information on the Internet. Electronic data exchange technology and the Internet technology is widely used, and continuously improve the efficiency, the circulation of products more quickly; the use of global positioning system and geographic information system, and the goods through more transparent and customers to be more assured.

The modem development of the port of Shanghai has the following advantages: Shanghai port activities provide a variety of one-stop service, not only has the transportation, warehousing, distribution and other functions, but also has agents, customs clearance, insurance, and other; Shanghai port is the start and end points of the ocean transportation, the port of Shanghai in the whole supply chain is the main distribution center of goods, make use of the multimodal transport channels, the formation of inland network system. Shanghai port is the best place for production factors. Enterprises in order to reduce the circulation costs of raw materials and products in and out, the production and sales base established in the vicinity of the Shanghai port, form of Shanghai port, factory layout, many have the strength of enterprises option for the development of Shanghai port city, the world important base of Shanghai port they are industrial base. Shanghai port is the most important information center. Set service center, business center, information center and personnel service center in one, relying on the park to carry out the integration of services, providing the best solution. Shanghai port to provide the information and activities. Shanghai port is built in Shanghai based on the port information platform, virtual supply chain, supply chain of any one party can achieve resource, information sharing, to realize the optimization of service form relying on virtual chain cover virtual Hong. Modern information technology and automation technology can provide a good control and management for the process of Shanghai port, so that it

can become the center of the harbor and hinterland.

3.1.2 Shanghai port facilities

"12th Five-Year" planning has just to be proposed the main task is: to give full play to the role of the north open door. Comprehensively promote the development and construction of functional areas, participate in global competition and cooperation, and strive to enhance service capacity. Improve the clearance system, to promote the port functions, port functions, bonded to the hinterland extension, to create a world-class port operation system.

Basic establishment of the northern international shipping center and the status of the international logistics center play a seaport, airport and customs special supervision of the regional comprehensive advantage, the port resource integration; significantly improve the function of shipping and logistics services. To speed up the development and construction of Nangang district, Shanghai Port built 30 million ton deep-water channel, construction of harbor separation of the transportation system, the development of continental bridge transportation, built international container hub port and north the largest bulk cargo trunk port. Binhai International Airport to complete the two phase of the expansion project. Beijing Tianjin inter city to build an extension of the line, Tianjin Han Expressway and other projects, the formation of efficient and efficient modern transportation network. Enhance Dongjiang Bonded Port comprehensive bonded functions; expand the inland dry port, the development of cruise economy. Breeding commodities trading market has 8 logistics park construction, seaport and Airport Development Zone, improve the logistics distribution system. Develop the modern service industry such as finance, shipping, logistics, headquarters economy, service outsourcing and so on[2].

[2]Wang Haijun. The model design and strategy choice of port logistics service in Shanghai port [J]. Port & waterway management, 2009,01:16-22.

3.1.3Opportunities and challenges faced by Shanghai port

In the context of the construction of Shanghai international shipping center, the central ministries and commissions of the strategic plan as well as the improvement of Shanghai City

The financial, foreign trade, information and other services generated by the driving force for the sustained and rapid development of Shanghai port the opportunity to play a role in promoting and protecting. However, with the increase of the economic development of the port demand, set the continuous development of the container ship and the rapid growth of the surrounding ports, the further development of Shanghai port critical challenges. Mainly in the following aspects:

(1) The berth capacity of Shanghai port has become saturated, and the port area is almost in a state of overload operation.Can also meet the needs, but can not fully meet the shipping company's new annual increase in the volume of traffic demand.

(2) With the development of large-scale ship, put forward new requirements for port and waterway, although the construction of Yangshandeep water Port. A lifting of the awkward condition and water depth in Shanghai port quay temporarily, but still cannot meet the needs of large container ship the new requirement of water isdepth and shoreline. Shanghai port no more than 20m ultra deep water channel and deep water coastline, the lack of open the land development space.

(3) Competition in the surrounding ports, especially in Zhoushan Ningbo port, the two port of the Yangtze River Delta, in addition to its directthe economic hinterland, the indirect hinterland overlap each other. Zhoushan - Ningbo port has developed rapidly in recent years, and it is constantly growing in its strength.Big at the same time, the supply of the growth of the situation is not enough points; the two portsare bound to face supply of competition, the domestic port is growing fast.

(4) Shanghai port throughput growth is not obvious; the increase is relatively small, but also lower than the national average, such as 2013In the year, the container

throughput of Shanghai port was 33 million 616 thousand TEU, which increased by 3.3% compared with the previous year.Both at a level of 7%, Zhoushan - Ningbo port is 7.3%, the development of serious shortage of stamina.

3.2 Economic development of Shanghai port

After years of development, Shanghai port has become an important container port in mainland China, China's iron ore, crude oil; liquefied petroleum products transfer base and East China region, the main coal transit storage base. In the 28 years of 1978-2006, the average annual growth rate of Shanghai port cargo throughput was 19.4%, which was significantly higher than the growth rate of other ports in the Yangtze River delta. Following the 2000 more than 100 million tons, became the country's second major ports, Shanghai port in 2004 and more than 2 tons, to 2006 and exceeded 3 tons, has entered the world's top 4 ports. At the same time, as an important symbol of modern port container handling business has entered a fast track of rapid growth, increased from 2.2 million TEU in 1990 to 2006 of 706.8 million TEU, with an average annual growth rate of 43.4%, an increase of 8 consecutive years ranking the forefront of major container ports in mainland China, and have been for many years among the China's coastal ports fourth, entered the world container port thirteenth. The contribution of Ningbo port to regional economic development is mainly reflected.

With a standard container heavy box to the port where the direct economic benefits of 6000 yuan calculation, in 2006 Shanghai port on Shanghai's economy has brought 420 yuan of comprehensive benefits, equivalent to 14.7% of the year GDP. From the change of the throughput of Ningbo port and Shanghai's GDP growth relations, 1978-2006 port cargo throughput and GDP correlation coefficient of 0.995, container throughput and GDP correlation coefficient (1990-2006) was 0.948, correlation degree are very high. From the elastic analysis, 1991 - 2006 Shanghai's GDP and port cargo throughput of the elastic coefficient of 1.1, and container throughput of

elastic coefficient is up to 2.8, Shanghai port of Shanghai's economic development has made outstanding contributions, the container throughput contribution to higher than the contribution of port cargo throughput[3].

The port cargo transport to promote the growth of foreign trade.1990 Shanghai self-import and export of 2.98 billion U.S. dollars, in 2006 imports and exports worth $422.1, an average annual growth of 36.3%. The dependence on foreign trade increased rapidly from 17.45% in 2006 to 117.5% in 1990. The enterprises engaged in foreign trade are increasing, in 2006 the import performance of enterprises reached 6669. The market is expanding, and 214 countries and regions which have direct trade with Shanghai have reached. According to the General Administration of Customs Statistics Department released the China city foreign trade competitiveness ranking, Shanghai ranked 48.34 in the country.

The development of shanghai port to promote investment. About one third of the Shanghai actual utilization of foreign capital $21 million, in 2006 reached $24.3 billion, with an average annual growth of 53%, to attract foreign investment to achieve the province to become Shanghai city the development of export-oriented economy is mainly the external gateway.

But port resources are not scientific use. The city's port resource function layout is not reasonable, the progress of the integration of resources need to speed up. Due to the effects of management system and mechanism, port has not yet formed a reasonable division of labor, the benefit sharing model of development cooperation and deep shoreline resources have not been effective use. In the southwest of shanghai Province shipping resources cannot effectively develop, inland waterway and coastal port between did not form perfect Jianghai transport system, especially individual inland waterway bottleneck seriously.

[3]Dumbbell s, Kan commissure, Zhong Peng Zhang.Hebei Port Logistics and regional economic cooperative development analysis [J]. Logistics technology, 2013,01:166-168+217.

Port economic development needs the support of talents and technology, in recent years, the government support to encourage high level research and development institutions in Shanghai, and gives the corresponding amount of the project. Education career has made significant achievements, the rural adult education tertiary education and urban community education network is becoming more and more complete. Adult this specialized subject graduates more than 141000 people over the five years TV University open education graduates 73000 people, the higher education self-study exam graduate more than 60000 people, non-academic education and training of annual average more than millions of people. Went on the old university education in the national front row.The more social services.Binhai contradiction technology ombudsman scheme. Building binhai university technology transfer center, the six big seven strategic alliance, technological innovation service team and eight binhai new area a shortage of skilled personnel training base, key construction hundreds of professional brand characteristics. Led by colleges and universities and to participate in the city's major independent innovation project in a number of achievements. University scientific research funds grew by an average of 18% a year, patent grant growing 25% a year, for the national natural science and technology progress prize in science and technology of invention and accounts for the proportion of the city, 50%, 83% and 31%, respectively. Foreign influence: Foreign students, more than 15000 people, maintain the national third. Development of foreign cooperation has to running 62 schools project (institutions). Abroad to set up 14Confucius institute and 16 Confucius classrooms. Actively participate in the implementation of the one thousand plans, the introduction of a number of high-level overseas talents.

3.3 Relationship of Shanghai port and economy

Port is the amphibious transportation hub, is the change of goods, storage and distribution center. Through to the port function adjustment, development and

integration make port logistics chain nodes, the port gradually in the transformation towards the center of modern logistics system. Modern efficient port logistics center become the necessary means to promote and strengthen trade development, the diversification of the port service function and has become a comprehensive port the basic conditions for survival and development. The development of the port led to the development of relevant industries, become a important promoting force to promote the development of regional economy. According to relevant data shows, in the Shanghai area in Shanghai, for leading group of ports is to build a magnificent ring open production and import and export base in Shanghai. Last year, the port city of import and export amount more than $1000, including nearly $90 billion for export. The port city of foreign trade export concentration is higher. Completed in 2014, Shanghai foreign trade exports of $200 billion, accounting for 23% of the total amount of the national foreign trade export, accounting for 85.0% of the Shanghai area.

3.3.1Relationship between port and city

For a long time, the port and the city depend on each other and develop together. For geographical conditions, the port first selects the location of the building, then the city around the sea of this natural development of the window up. City, as the concept of a system, city and port in the economic, cultural and spatial relations have a common framework, collaborative work, good cooperation will get results. To start, the port may promote the city's development, increase employment opportunities, the development of new relations with foreign port cities, and the city is likely to provide management, scientific and technological strength for the port. In any case, this positive interaction has become contemporary economic globalization; market interdependence and intermodal station advantage an indispensable condition, to success in the competition, the port requirements can easily enter some urban areas, such as information, communication, finance and application of. Modern port

competitiveness is not only dependent on its internal functions, but also increasingly dependent on the economic efficiency of the city, including the common development policy of the city. Today's port needs an unprecedented support from its place in the city. Results in the process of economic globalization, the port of freight, information and better connectivity and benefit first, established new integrated logistics functions of the port. At the same time, the city has also gained great benefits from the port's comprehensive logistics and the development of multimodal transport: increasing employment opportunities, and the world's connection and the total economic growth. This is because: port of direct employment due to automation and declining, new employment can only send to marine economy and marine economies mainly rely on in passenger and cargo transit comprehensive infrastructure capacity. The latter can be translated into a number of new economic sectors (light industry, distribution industry, logistics park, business park, tourism, etc.). If the city could depend on the integrated transport system, because the city can easily to different modes of transport and node link, city industry and Commerce and tourism industry can in the international scale faster and more favorable development.

In the study on the relation between Shanghai and early port, analyzes the developed in Shanghai many influence factors, including the limitation of natural conditions and political barriers, together a large number of empirical examples are given to demonstrate the interdependent relationship exists between ports and their Shanghai. Port is the gateway to the development of Shanghai. In the 1980s to Shanghai port and interdependence have new understanding, understanding to the port in regional development plays a central role, due to the awareness of port infrastructure development is the forerunner of regional development, economic growth, investment in port is a necessary condition for the development of regional to in many countries and regions in the postwar regional development projects and the

development of the regional economy policy port has been in center position (such as Europe, Japan). By 70s, the initial concept of the port center of the political, economic, technical conditions began to change. With the globalization of economy and trade, the emergence of container transport has broken the original port of Shanghai, which has established a new model of trade. On the one hand, these changes quickly profoundly changed nature of ports, because ports around the world are in action in a network, they are bound to their own interests and competition and seek a proper position, they pursue is more efficient, safe, and convenient transport of goods and not a regional activity center, so some scholars and planners to port center point of view is correct began in doubt. On the other hand, formation of Shanghai and its port, role in the development of is being the impact from two aspects, one, for the owner to choose research proved single Shanghai concept for each port is no longer valid, second, the door to door transport system evolution of attention to a port is feasible seems determined and it has no ability to attract cargo transportation and non-exclusive control of Shanghai. Port and Shanghai have emerged in a number of new situations, the link between the port and the formation of the network in Shanghai. In academia, Shanghai port and a concept of relation of further corrections: first of all, the traditional port and Shanghai in the research on the relationship between the key is gateway port and port center, now no matter is in has developed the infrastructure network and broad Shanghai developed countries or in only weak immature infrastructure and Limited Shanghai less developed countries, the emphasis are has been the port, the global network of space and the interaction of the alternative. Second, the scope of the relationship between the port and Shanghai must be examined in a larger spatial structure. Because the port is one of global transportation chain link, only from the global transportation system of, from interstate development prospect of thinking, 'may be real ports to measure the background and the relation between Shanghai. Third, the development of inland to

establish effective links with the coastal areas is not a problem, the important is to avoid ownership and a port, both developing and developed countries and Shanghai port in the diversity and effectiveness of differences exist, but the development trend is common, namely to improve relations and expand the selection.

4 Analysis of the various factors in the development of Shanghai port

4.1 GDP is one of the factors of the development of shanghai port

GDP is a general measure of economic development level of all countries in the world.GDP the most popular concern in the macro economy. As a measure of the level of a country's economic indicators, GDP has many advantages. First, GDP statistical data is basically based on the exchange of goods on the market, with a high degree of accuracy and correctness. Second, GDP is a measure of the amount of production and supply of goods in a country. Third, GDP can tell us all the mass production of all products and final products. It is precisely because of the GDP in measuring the level of the economy with these three advantages, so GDP has become a national economic development level of an important comprehensive index.

GDP represents the world general accounting system of national economy, GDP is a great invention in the world, the invention makes all the countries in the world recognize their own position, know their development advantages and understand their strengths and contributions. Itimproves the competitiveness of the manufacturers, making the market economic efficiency is growing, the market sales and production scale is growing. GDP has the advantage of simply too much, he is the measure of a country's level of economic development unit, it is by the United Nations, the World Bank, the world trade organization, the International Monetary Fund agreed, jointly developed by world leaders and the masses a balance weight unit. With this unit, the world's economic development level and the comprehensive strength of the economy will be clear at a glance.

GDP is playing a more and more good role in international affairs. We can create jobs and jobs for the next generation through the GDP.

To GDP as the core indicators of national economic accounting system is a adapt to market economy, to quantify the indexes for the characteristics of the system arrangement, it reflects the in the accounting period, economic relations and economic overall institutions units, departments, such as output, input, benefit between the relations of production, income distribution and redistribution relationship, consumption and accumulation, savings, real investment and financing, assets, liabilities, and net worth between stock and changes in the relationship between. National economic accounting system is a complete description of economic operation of the overall process and results of accounting framework, GDP reflects the final results of the process of economic production, disposable income reflects the economic distribution and redistribution process of the final results, savings reflected the economic life in income and consumption, the accumulation of mutual relations, surplus and deficiency of funds reflects the relationship between economic savings and capital formation, in the beginning of the period of net asset value based on the operation of the national economy eventually accumulated achievements are reflected in the net asset value of the final. "GDP, disposable income, savings and capital formation, net asset value" is the national economic accounting system is the most important index system, they complement each other; reinforce each other, forming a complete reflection of national economic operation index chain. From the GDP, we can see that the total output of the economy or the total income of the economy, but also summed up some good economic theory and economic phenomena, to lay a solid theoretical basis for the future economic development

Therefore, the use of GDP as an indicator to measure the economy of Shanghai

4.2 Relationship between foreign trade and shanghai economic

According tracks Shanghai Import and Export Trade and Economic Operation of the analysis, along with China's expanding opening-up and in-depth, import and export trade Shanghai's rapid growth, economic growth has attracted worldwide attention. According to statistics from the Shanghai Foreign Trade and GDP growth trend line chart is made, as shown in Figure 1

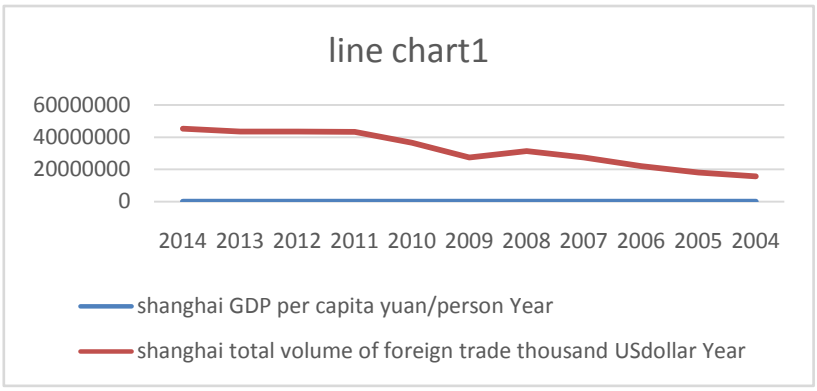

Figure 1

As can be seen, from the line graph, since 2004 Shanghai's import and export trade value and GDP are maintain to the overall growth trend. From 2004 to 2014, Shanghai import and export volume grew from $1567.9 billion to $ 4526 billion an average annual growth rate of 11.8%; from 2004 to 2014, per capita GDP of Shanghai from 46,338 yuan / person, up to 97,370 yuan / people, with an average annual growth rate of 7.7%. Since China joined the WTO, China's import and export trade has entered a rapid growth period, can be broadly seen in FIG. 1 according to China's import and export trade and GDP showing a change in the same direction, reflecting the mutual influence of Shanghai Import and Export Trade and Economic Growth and the promotion of relations.

4.2.2 Relationship between throughput and shanghai economic

Shanghai cargo throughput of Shanghai Habitat GDP growth trend line chart in Figure2

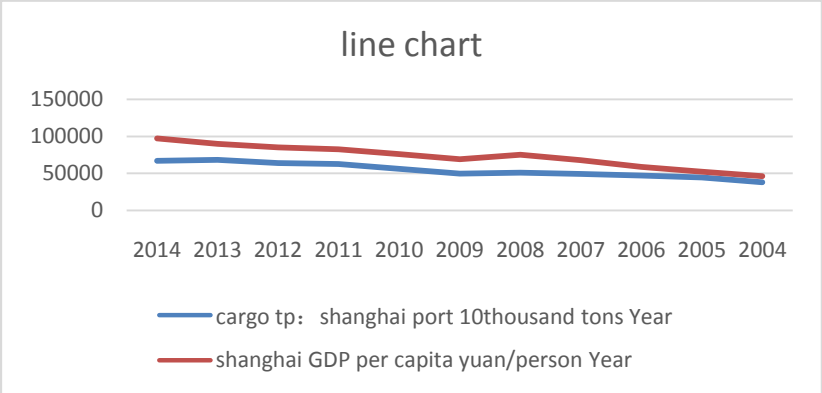

Figure 2

As can be seen from the line graph, since 2004cargo throughput of Shanghai and GDP are maintain to the overall growth trend. From 2004 to 2014, Shanghai cargo throughput rose to 378,960 tons from 66.954 million tons, an average annual growth rate of 59.9%; from 2004 to 2014, per capita GDP of Shanghai from 46,338 yuan / person, up to 97,370 yuan / person average annual growth rate of 7.7%. According to Figure 2 can be broadly seen Shanghai cargo throughput and GDP also showed changes in the same direction, and reflects the relationship between Shanghai cargo throughput and economic growth and the promotion of mutual influence.

4.3Analysis

This paper selected 2004--2014 in Shanghai per capita GDP (yuan), Shanghai port cargo throughput (million tons) and total ($ 000) import and export of Shanghai index value as the object of this study. Data sources are China National Bureau of Statistics. In order to eliminate the effects of heteroscedasticity, we take the values of all variables to be processed. They were recorded as LnGDP, LnTP and LnIEF.

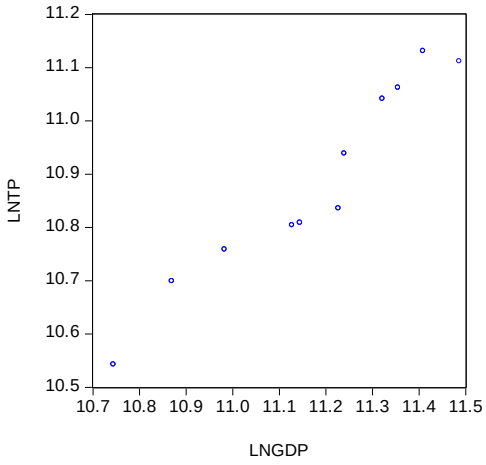

Figure3LNGDP and LNTP scatterplot

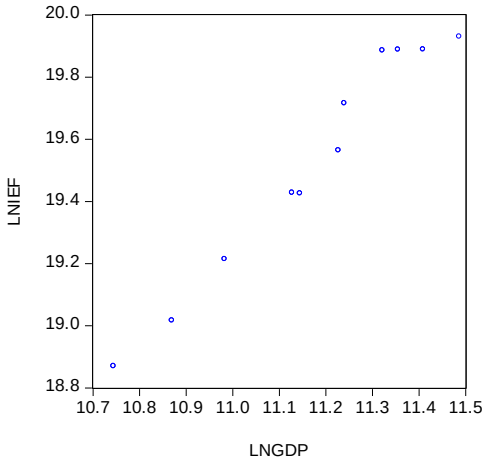

Figure4 LNGDP and LNIEF scatterplot

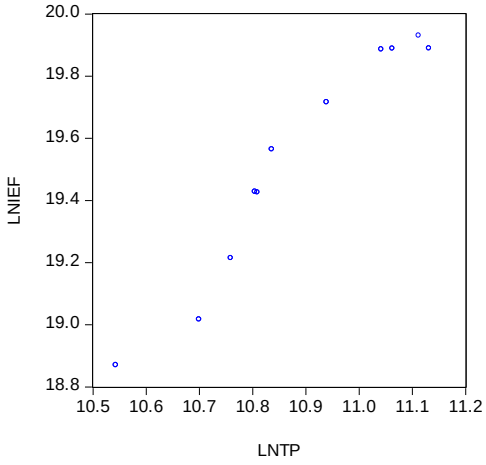

Figure5 LNTP and LNIEF scatterplot

As can be seen from the chart, incremental linear relationship LNGDP with LNTP and LNIEF exist separately, but there are also increasing LNTP and LNIEF linear relationship.

4.3.1Correlation Analysis

We use Eviews in Shanghai per capita GDP (yuan), Shanghai port cargo throughput (million tons) and total Shanghai Import and Export (US $ thousand) correlation test to determine whether there is a correlation between the variables, obtained the following results table 1.

Table 1 Correlation test results

	LNGDP	LNTP	LNIEF
LNGDP	1.0000	0.9661	0.9841
LNTP	0.9661	1.0000	0.9727
LNIEF	0.9841	0.9727	1.0000

Correlation test results can be seen in the above table, the Shanghai per capita GDP (yuan) and Shanghai Port cargo throughput (million tonnes) and total (in thousands of dollars) Shanghai Imports & Exports showed a positive correlation between Shanghai per capita GDP (yuan) cargo throughput of Shanghai Port and the correlation coefficient (tons) and total Shanghai Import and Export (thousands of US dollars) between 0.9661 and 0.9841, respectively, indicating that Shanghai per capita GDP (yuan) and Shanghai Port cargo throughput (million tons) and Shanghai a strong correlation between total imports and exports (thousands of US dollars) between.

4.3.2Analysis of covariance

Here we use the software Eviewsto make covariance table three variables, as shown in Table 2:

Table 2 Covariance analysis

	LNGDP	LNTP	LNIEF
LNGDP	0.0483	0.0381	0.0772
LNTP	0.0381	0.0321	0.0622
LNIEF	0.0772	0.0622	0.1273

4.3.3Regression Analysis

Regression analysis is a relationship between variables and process variables mostcommonly used methods of statistical analysis, the application is very extensive. Its main purpose is to study the relationship between the number of explanatory variables and the explanatory variables. Which according to many involved in the explanatory variables can be divided into simple regression analysis and multiple regressionanalysis. This paper will be based in Shanghai we selected variables per capita GDP (RMB) as explained variable to Shanghai port cargo throughput (million tonnes) and total Shanghai Import and Export (US $ thousand) as explanatory variables, the establishment of a multiple regression model, the model the expression is:

$$LNGDP_t = \beta_0 + \beta_1 LNTP_{1t} + \beta_2 LNIEF_{2t} + \varepsilon_t$$

ε_t is a random error term.

Use Eviews software, using ordinary least squares regression (OLS) said the establishment of the above established regression analysis to obtain results shown in Table 3.

Table 3 Result

Dependent Variable: LNGDP
Method: Least Squares
Date: 08/16/16 Time: 12:52
Sample: 2004 2014
Included observations: 11

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNTP	0.202524	0.324231	0.624628	0.5496
LNIEF	0.507406	0.162911	3.114613	0.0143
C	-0.941122	0.856600	-1.098672	0.3039

R-squared	0.969901	Mean dependent var	11.17313
Adjusted R-squared	0.962377	S.D. dependent var	0.230586
S.E. of regression	0.044726	Akaike info criterion	-3.149514
Sum squared resid	0.016003	Schwarz criterion	-3.040997
Log likelihood	20.32233	Hannan-Quinn criter.	-3.217919
F-statistic	128.8959	Durbin-Watson stat	0.911269
Prob(F-statistic)	0.000001		

From the above table we can see that the total amount of Shanghai Import and Export (thousands of US dollars) this explanatory variables at 0.05 significance level is significant, the overall regression test P value less than 0.000001 significant level of 0.05, indicating that the overall regression model is significant ground. And the goodness of fit of the adjusted value $R_a^2 = 0.962377$, indicating that the effect of the fitting equation is very good. Therefore, the regression equation is:

$$LNGDP_t = -0.941122 + 0.202524LNTP_t + 0.507406LNIEF_t$$

t = (-1.098672) (0.624628) (3.114613)

Total (in thousands of dollars) in Shanghai Import and Export t-statistic 3.114613, greater than 5% critical value, at 5% significance level, Shanghai import and export volume (in thousands of dollars) on Shanghai per capita GDP (million) It is significant. Total (in thousands of dollars) in Shanghai Import and Export correlation coefficient is 0.507406, indicating that other conditions remain unchanged, the total import and export Shanghai ($ 000) for each additional units, the Shanghai per capita GDP (yuan) a corresponding increase 0.507406 units, in addition, the Shanghai Port cargo throughput (million tons) of the correlation coefficient is positive, indicating that the increase in cargo throughput of Shanghai Port (tons) will cause a

corresponding increase in Shanghai, per capita GDP (million). But Shanghai Port cargo throughput (million tons) of t value does not pass the significance test, we show good reason to believe this relationship.

4.3.4Chow test

Chow test is mainly used to test the model structure stability during the different samples, structural stability if its model, then during different samples, the parameters do not change, and contrary opposite. In general, the factors leading to structural changes in the model are important exogenous events, often set a point in time or year, as the sample was divided into two sub-samples were estimated two sub-samples and samples all constitute F statistics amount to infer whether the model structural changes, the paper 2008 nodes, the sample was divided into two parts Chow test, test results are as follows.

Table 4 Chow test results

Chow Breakpoint Test: 2008			
Null Hypothesis: No breaks at specified breakpoints			
Varying regressors: All equation variables			
Equation Sample: 2004 2014			
F-statistic	0.910597	Prob. F(3,5)	0.4986
Log likelihood ratio	4.794928	Prob. Chi-Square(3)	0.1874
Wald Statistic	2.731790	Prob. Chi-Square(3)	0.4349

By the Chow test results show that, at the 5% significance level, F statistic P value of 0.4986, therefore we cannot reject the null hypothesis of no structural change, that is, without structural changes.

5 Shanghai port development factors

5.1 Development of port logistics in shanghai

5.1.1 Port Logistics

Information, intelligent port is the necessary trend of the development of the port

logistics, modern logistics management and distribution technology in a large number of uses of advanced information technology and commodity logistics technology. Logistics system must have good information processing and transmission system, through the logistics center to obtain timely and accurate goods flow, capital flow of information, convenient for the customer to develop a unique logistics service, timely data exchange, reduce unnecessary physical exchange, reduce logistics costs, accelerate the transformation of the industry of port logistics enterprises, improve logistics efficiency, reduce import and off time, increase the transparency of the operation process, also provide convenience for the management department of the port a unified information release platform.

5.1.2Existing problem and Disadvantage of logistics

5.1.2.1Existing problem

Shanghai port logistics development has achieved remarkable results, production logistics, operation efficiency, technical level of equipment and enterprise scale are among the highest in the forefront of the domestic, but a lot of difficulties and problems still exist in the development process[4].

(1) The function of modern port logistics needs to be further expanded. At present except in the Ningbo Zhoushan port and other coastal port service is still in traditional handling, storage and transportation of the main and port logistics port trade, processing, storage, financial services and other function expansion is not enough; port transportation organization function and integrated transport hub role is not obvious, the development of modern logistics industry of space is still very great. Port development in promoting economic restructuring and upgrading, promote regional economic coordination and sustainable development of the role is still to be

[4]Wang Zhan Jun, Wang SWOT. Shanghai port logistics industry based on the analysis of [J]. science and technology information (Research), 2007,36:15+17.

further strengthened.

(2) The development of the port logistics and the modern shipping service industry is slow. And supporting port logistics and shipping service industry development is relatively backward, shipping, freight forwarding, non vessel carrier and other industry is still in the development stage of the lower level, enterprises small, scattered, chaotic characteristics significantly, it can not give the shipping enterprises in our province should develop its support, coastal port has not yet formed a scale of shipping services concentrated area. Inadequate understanding of the overall point of view, the government on the development of the shipping industry important, attention degree is not enough, and heavy land LWR of guiding ideology for a long time to change, on the development of the shipping industry lack of policy support.

(3) Port logistics facilities port and the degree of information technology is relatively backward. Port operations for center of E-port Information System has been basically completed, but the information interoperability, data sharing, identity authentication, technical data of uniform standards, the enterprise popularity application also needs to continue to promote and enhance, and customs, inspection and quarantine and other local regulatory authorities is not willing to share relevant information such as, which is not conducive to the establishment of efficient, convenient and safe import and export logistics service network. At the same time, coastal ports, the relevant departments, the port enterprise information network construction and information equipment, the application level is uneven, restricted the promotion of port, the overall level of information and port related information to effectively share.

5.1.2.2Disadvantage of logistics

Shanghai condition of fundamental facility that the relatively low level of the development of Shanghai port and ningbo - zhoushan port, a huge difference, and the surrounding the gap is smaller, bordering on the harbor in Shanghai port and

Shanghai port and ningbo - zhoushan port should be strengthened communication and contact, learn their successful experience, constantly improve their own infrastructure conditions, driving the development of ports around together, constantly create a shipping center in the north.

The port infrastructure is a factor for the development of logistics, port cargo throughput is a reflection of the development of the port logistics reaction, so it is necessary to strengthen port logistics infrastructure means and ways.

5.2Hinterland of shanghai port

Shanghai port has a broad development hinterland. Look from the hierarchy, direct hinterland is in the Shanghai area of Shanghai, is currently China's economy the most developed area in Shanghai, in a significant role in the national economy and social development. Shanghai is the first indirect hinterland of the Yangtze river basin (not including Shanghai), which include sichuan, hubei, hunan, jiangxi, anhui and other provinces and chongqing municipality directly under the central government, as well as parts of jiangsu, zhejiang, container import and export mostly generated in these areas will be via Shanghai transfer. Shanghai second indirect hinterland deep (or potential) is other coastal provinces, including the north of Qingdao in shandong province, jiangsu lianyungang (its hinterland than in jiangsu province), the south of fujian province fuzhou, xiamen import and export ocean container. Hinterland of the total population of more than 400 million, which is unmatched by any other ports in the world. Shanghai port facilities, container shipping, good foundation to 2007, Shanghai has 3084 sets of various kinds of loading and unloading machinery, including container bridge cranes, 170, 7 ship transport ships, all kinds of port for ship 338, Shanghai had container depot, yard, 59, a total area of 1.69 million square meters, and can satisfy the container feeder, and other value-added services. Shanghai has all kinds of berth 1202, of which 171 berths, terminal line extended total 91.6 km, capacity of 253.52 million tons,

container berths 42, terminal line extension of 91600 meters, 2007 container throughput of 2007 teu. Shanghai inland port has more than 2100 various berth, the maximum design berthing capacity of 2000 t. Shanghai has basically formed railway, highway, water transport, air transport a variety of ways of comprehensive transportation network, is one of the country's largest transportation hub, is the most convenient Shanghai and the Yangtze river transit transport of goods, the lowest total cost of transportation of the port. Has the beijing-shanghai railway, shanghai-hangzhou two mains connections across the country, the highway has two shanghai-nanjing, shanghai-hangzhou expressway, national highway extraction loose outer ring highway and city road connected the national highway, water transportation such as the Yangtze river and the grand canal river channel.[5]

On the one hand, the hinterland of Shanghai port economic strength, stimulating the needs of Shanghai port, Shanghai port to improve the financing capacity and the level of construction. On the other hand, the Shanghai municipal government attaches great importance to the Shanghai port, has increased the investment in Shanghai port construction, these have greatly promoted the development of Shanghai port, and thus improve the comprehensive competitiveness of Shanghai port.

The Shanghai port has the relationship with the Yangtze River delta is "heart" and "mouth" in. First look at the "heart", as the central city of the Yangtze River Delta, Shanghai city size and population size in this region is the largest, the level of urbanization reached 74.62%. If the city of Shanghai city population divided by the Yangtze River Delta, Nanjing City, city population, we can come to a region of the city's first degree, that is 3.19%, this figure is far higher than the national average of

[5]Pan Donghui, Tang Gen. Port logistics to promote regional economic development research -- Take Ningbo as example [J]. Modern economic information, 2014,03:331-332.

1.3%. From the economic scale, Shanghai social fixed assets investment, the actual use of foreign investment, local financial revenue and other major economic indicators are located in the Yangtze River Delta, the first of the 15 cities. From the degree of industrial agglomeration, the second industry in Shanghai, the third industry maintained a very high "city center", the "city center" 0. 473, far more than ranked second in Suzhou (152) and third place of Hangzhou (0. 147), visible Shanghai in the industry aggregation effect and center functions far long triangle other cities.

Shanghai on the Yangtze River Delta region to promote the development of. In the eighties of the 20th century, Shanghai's GDP growth rate far below River, short for shanghai Province and coastal provinces and cities, and even lower than the national average, which leads to the overall decline in Yangtze River Delta economy, even though Jiang, shanghai development speed was significantly higher than that of the country, but also the impact of Shanghai. In the early 1990s, CPC Central Committee and the development and opening of Pudong, the Shanghai built "a head, three centers" of the major strategic, prompted Shanghai to get rid of the 1980s serious stagflation situation and economic development into the fast lane, driven by strong uplift of the entire Yangtze River Delta economy.

With Shanghai as the core of the Yangtze River Delta, Gold Coast and the golden waterway in the interchange, this unique economic geographic location is conducive to Shanghai in the Yangtze River Delta and the national foreign trade and economic cooperation play a role in the window. At the same time, it is foreign beach China, access to the Yangtze River Delta, an important platform and springboard. In many areas of financial, trade, information, to attract foreign investment, transportation and foreign trade port plays a high quality and level of service window function[6].

[6]Zhang Qian. Research on the development of port logistics in Shanghai based on principal component analysis [J]. logistics engineering and management, 2013,04:15-16.

The characteristics of its economic development are: economy, foreign trade, with Beijing and Tianjin as the center, and gradually to inland radiation. Industrial Development in the hinterland to coal, electric power, metallurgy, petrochemical, building materials and other heavy chemical industry base, machinery, textile, video, electronic products, such as light industry as a leader, to the commerce, science and technology, transportation, posts and telecommunications, tourism and foreign trade and financial as the core of the third industry is growing rapidly. In the hinterland of grain production, stable production of fishery comprehensive growth.

With the implementation of the national "western big development" strategy, the Shanghai Port indirect hinterland economic and social development will be significantly improved, social productivity, comprehensive productivity will greatly speed up the pace, foreign trade and freight transport development potential is enormous[7].

According to the Shanghai Port Master Plan (2010 to 2030) ", northern port of Shanghai Port vigorously develops modern logistics, bonded warehousing, financial trade and shipping services. Dongjiang port to the main container transport is the core carrier of development of Shanghai international shipping center in North, the Shanghai port international cruise home port and Dongjiang port coastal beach are located here. The southern port for coal, iron ore, oil and oil products such as bulk cargo transshipment. Haihe River port services in the development of the port and shipping industry, building materials, transport and tourism functions. The construction of the coastal tourist area is mainly based on the passenger transport in Beitang port area. Hangu port services in the area of the construction of aquatic products industry in order to groceries and cold chain logistics[8910].

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[7]Yang painting. Shanghai port logistics development status and Countermeasures of logistics technology, 2012,02:54-57., [J].

[8]Liu Qingchang. SWOT analysis of the development of port logistics in Shanghai [J]. shopping mall

5.3 The collection and distribution of Shanghai port

After more than half a century of construction and development, Shanghai port has developed into a comprehensive, multi-functional, modern large-scale main hub port, and among the world's big port. Shanghai port cargo throughput growth trend

5.3.1Highway

Highway collection and distributionhas the characteristic of agility, crossing the transportation network, combined with the heavenly stems and earthly branches, compared with other transportation networks more dense. According to the highway collecting and distributing of geographical division, can be further divided into for the supply of other provinces and cities into the road in Shanghai set distributing subsystems, Shanghai local supply road set distributing subsystems and the area surrounding the road set distributing subsystem. With the continuous optimization of transportation structure of Shanghai, Shanghai port highway collection and distribution of the declining proportion of total.

Table 5Highway Collection and Distributionvolume in 2010-2014

Year	2010	2011	2012	2013	2014
Volume (10000 TEU)	1790.7	1859.9	1830.5	1907.5	1847.6
%	61.60%	58.60%	56.80%	54.20%	54.06%

Data source: Shanghai city transportation and Port Authority Yearbook

5.3.2Waterway

(1) Shanghai inland waterway transport subsystem(2) Jianghai transport subsystem river sea transport subsystem is mainly refers to the Yangtze River waterway

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modernization, 2012,02:21-23.

[9]Zhang Qing, Ren Jianxiong, Tao Haifei. An Empirical Study on the interactive relationship between port logistics and modern logistics development -- Based on the comparison of Shanghai and Zhejiang [J]. logistics technology, 2012,23:86-89+92.

[10]far Hector male. Journal of the overall trend of the port logistics in China [J]. Tianjin Institute of Finance and Commerce Management from the current situation of Shanghai port logistics, 2009,01:25-26.

transportation system of Shanghai Port Container Terminal(3) rotor system in the harbour, including the two parts of the coastal port and the offshore port.

During the "Twelfth Five Year Plan" period, with the continuous dredging waterway of the Yangtze River, Jianghai direct development of the ship and inland shipping in Shanghai infrastructure improvement, steady development of Shanghai waterway collection and distribution,water set transport accounted for the proportion of the collection and distributing significantly improved.

Table 6 Waterway Collection and Distribution volume in 2010-2014

Year		2010	2011	2012	2013	2014
container throughput (10000TEU)		2906.9	3173.9	3252.9	3377.3	3528.5
Water transit	Volume (10000TEU)	1105	1304	1392	1533	1615
	%	38.0%	41.1%	42.8%	45.4%	45.8%

Data source: Shanghai international port group

5.3.3Railway

The economic transportation distance of the railway is in the range of 500 kilometers, and the middle and upper reaches of Shanghai, Hunan, Hubei and other western regions of the middle and upper reaches of the Yangtze River are basically in the range of this area. With the development of the economic hinterland of Shanghai port development and the central and western regions of foreign economic, railway transportation subsystem will become Shanghai port collection and distributing system with transportation mode for the larger development potentiality.

To meet the requirements of the development of railway transportation, Shanghai Port Railway Rapid development. Although the railway collection and distribution in the port of Shanghai in the proportion is still small, but the transportation amount is

generally rising trend.

Table 7 Railway Collection and Distribution volume in 2010-2014

Year	2010	2011	2012	2013	2014
Volume(10000TEU)	7.19	10.29	10.99	8.59	5.1
Volume growth rate	-15.12%	43.12%	6.80%	-21.83%	-40.6%
%	0.25%	0.32%	0.34%	0.25%	0.14%

Data source: Shanghai international port group

5.3.4Existing problems and improved method

1 highway transportation almost saturated, city traffic pressure2 serious shortage of inland water infrastructure, water transfer depends on the larger space3 railway and terminal separation, the proportion of sea rail transport is too small

1 to support the development of inland waterway transport, improve the water transit system2 establish mechanisms for the coordination of sea rail transport, increase financial subsidies3 make clear the highway toll preferential policies

5.4Shanghai port transportation condition is superior.

In 2001, the first industry in Yangtze River delta proportion in national economy for h. 9%, lower than the national average of 8.8%; Secundiparity proportion of 51. 50 / a, higher than the national average U. 9%, and the industrial added value accounts for the gross domestic product (GDP)5. 7%, higher than the national average of 0.5%, tertiary industry accounted for 12.1%, 3.5% higher than the national average}. Several cities, there are three cities are distributed in the proportion of three times industry 231 pattern distribution and zhoushan is 321 (Shanghai); In addition to the nanjing and zhoushan, other Shanghai become especially in Yangtze river delta region economic development of the country's leader. The development of the last decade of the 20th century, especially in the pudong new area development and opening, the Shanghai finance, information, technology and other advantages to get

more and more full play, in the Shanghai area and even the national economic development in the leading position is irreplaceable, but increasingly important role in the radiation center of the foreign investment. In 2001, with 1% of its population in Shanghai, less than 0.1 of the country's land area, provide and create 5.2% of the country's gross domestic product, 12.2% of revenues and 11.3% of foreign trade import and export; Similarly, the Shanghai population and land area of the Shanghai area only 17. % and 6.1%, and the above three indicators are accounted for 20.2% of the Shanghai area, 53.6% and 4.2%.

5.4.1Disadvantage

Between the various modes of transport, convergence insufficiency, especially the cohesion between the railway, waterway, river, highway, has become in the port and the weakest link in the transportation network construction. At present, our country different modes of transport infrastructure construction plan under the jurisdiction of different departments in charge of industry, comprehensive transportation development of various mechanisms of institutional barriers still exist, industry disorderly competition, region segmentation, cohesion is impeded problems have become increasingly prominent, the transportation industry management system and mechanism needs to be reform and innovation.

5.4.2 Suggestion

(1) the Lingang New City to strengthen ties with the rest of the world, to participate in the cooperation of the world economy, port can provide convenience for the Lingang New City of opening to the outside world, and international cooperation; and Shanghai Port enable the Lingang New City of transportation cost, logistics cost decreased, but also reduce the transaction cost in the regional economic development, improve the regional competitive advantage.

(2) for more than 70% of the Shanghai port of goods from economic hinterland, port to the hinterland of the radiation effect to a large extent affect the Lingang New City

of external radiation effect; Lingang New City to build international shipping center and an international logistics center, rely on port modernization, international port, Shanghai Port to the role of the core carrier.

(3) Shanghai port for the Lingang New City of high and new technology industry to great support, Lingang New City Development of petrochemical industry need oil imports, need to have million tons of crude oil terminal is realized, Shanghai port infrastructure perfect, facilitate the development of Lingang New City.

(4) The development of the port needs the support of warehousing, transportation, processing, trade, agency and other related services, to promote the development of related industries in Lingang New City, and increase the employment rate.

6 conclusion and suggestion

6.1 Development international hub port

Into the new century, the Yangtze River Delta port group pattern is brewing a new change. With the development of container transport, coupled with the Jianghai transport development trend, is bound to in the Yangtze River Delta coastal development in major international hub port, port of 2-3 large backbone and a number of small and medium-sized port, to form a small binding to meet regional, multi levels and multi-channel to the coastal port complex. According to the results of the classification of division, it has the eight ports.

To establish the strategic position of Shanghai international shipping center, the in building Shanghai into an international economic, financial and trade center of the modern port city, Shanghai really play the role of "leading", driven by the forward vigorous development of Yangtze River Delta, Yangtze River Basin and coastal areas of the economy. Therefore, it is necessary to establish the status of Shanghai port as an international hub.

Shanghai port must pay close attention to the construction of deep water

ports;vigorously develop international container transport, as soon as possible to build an international container hub port. Structure of goods to Shanghai port of reasonable adjustment, for the transit of Yangtze River Basin and other areas of domestic supplies such as energy, ore and other diversion to the Yangtze River Delta and other port; for the transit of the Yangtze River Basin and other areas of foreign trade goods, moderately retained foreign trade cargo transit, shunt foreign trade cargo transit, in order to focus on the development of international container transport.

Railway transportation is a kind of ideal land transport methods compared with highway transportation has low cost, high efficiency, punctuality, but the port of Shanghai Railway set transport system is not ideal. the Yangshan Port container throughput with the rapid development of the economy of the central and western hinterland, rail sea intermodal transport demand is rising rapidly, but the direction of Shanghai traffic slow growth. The reason mainly is: Shanghai to the port of the railway network is not perfect, railway was not very well and the frontier of container terminal yard handling vessels operating link up; Shanghai sea rail intermodal service is not perfect, high cost. If Shanghai Port to hinterland of waterway transportation has good railway connection, to Shanghai to Hong Kong for more supply, therefore improve rail transportation system, to carry out a wide range of rail sea intermodal transport has been put on the Shanghai port's agenda. Shanghai port and railway cooperation or joint venture development logistics center, distribution park will help Shanghai port and railway transport sector to establish a coalition to better carry out sea rail transport[11].

6.2 Shanghai port and economic coordinated development challenges

Shanghai, the Pearl River Delta and Beijing and Tianjin is China's economic

[11]Li Chenxi. Shanghai port logistics development strategy to explore [J]. logistics technology, 2014,01:142-145.

development of the "three carriages", and the competition between the three major economic circles is increasingly fierce. The economic circle should improve the environmental conditions and strengthen mutual economic and technical cooperation. Shanghai is brewing a new change. It is understood, Shanghai in the "Tenth Five Year Plan" of the goal, in addition to emphasizing "a dragon head, three centers", with particular emphasis on the construction of international shipping center, put forward " Tenth Five Year Plan " Shanghai will be completed and the International Asian mega cities, economy close to intercontinental economic center of the city. Shanghai city as China's coastal and along the two economic zone of the "meeting point" has a solid regional foundation. To further seek the trinity of industrial structure, urban function and regional distribution, Shanghai city is likely to be necessary and conditional to develop into an economic center city. Guangdong is the Pearl River Delta to become an international city group. At the end of last year introduced the "urbanization in Guangdong Province" Tenth Five Year "plan", clearly put forward: to 2005, the province's level of urbanization reached more than 40 percent, which the three special economic zones in Shenzhen, Zhuhai, Shantou and the Pearl River Delta region of the level of urbanization reached about six percent. Guangdong has also developed a clear urban development policy, take the coordinated development of large, medium and small cities urbanization road, and ultimately the formation of two mega cities of Guangzhou, Shenzhen as a leader, with a number of large and medium cities as the backbone, to small cities and small towns to rely on, to establish a rational distribution and coordinated development and distinctive features of urban system, and comprehensively improve the quality of urban development[12].

In recent years, the city of Shanghai and strive to create a good facilities and

[12]Li Hehua, Huang Zhongding. Shanghai port logistics development trend analysis [J]. China market, 2008,41:84-86.

environment, policy environment, social environment and market environment, attracted a large number of internationally renowned multinational companies have access to invest and set up factories, project grade, quality and scale will continue to improve, showing a good momentum of development. 2001, the actual use of foreign investment in the Yangtze River Delta region, the total amount of more than 1007 of the Pearl River delta. Two major economic zones in attracting foreign investment have their own characteristics, the Pearl River Delta region performance for the urban scale of FDI are relatively balanced, 12 cities have more than $10 billion of foreign capital actually used in the six cities, the highest Shenzhen amounted to 36 billion, Nanhai City, the lowest also reached 2.5 billion U.S. dollars, the difference between high and low is 2.1 times; attracting foreign capital in the Yangtze River Delta region is relatively concentrated in Shanghai, Suzhou and Wuxi City, last year, three cities a total foreign investment of $117. 9 billion, accounting for 73.1% of the total amount of the Yangtze River Delta, and other cities are less than $10 billion. The Yangtze River Delta region is the largest investment in Shanghai City, up to70 billion, the lowest for the city of Zhoushan, only $114billion the difference between the high and low.

From the point of view of domestic demand, economic well-off capital and technology intensive type industry in urgent need of development and function of technology innovation and knowledge economy in the development of the industry more obvious, accession to the world trade organization may also will enable the region some traditional industries, high-tech industries and services in the short term by the impact. Shanghai area should be gradually transferred to the capital, technology intensive high processing industry, to achieve economic structure upgrade, but the external environment is not loose.

The development of Shanghai port has led the development of the information industry. Carrier, the shipper, forwarder, customs, warehousing, dial between center

and other departments there is a transfer of large amounts of data exchange and documents, effectiveness and efficiency of the internal management also need to information industry to support. The use of electronic data exchange system and the Internet, the use of modern information management system, can greatly improve the efficiency of the service, and provide timely and accurate market and decision-making information, saving enterprise operating costs. Therefore the level of the city's information is no doubt an important factor to measure the strength of the current port competitiveness. Port development in Shanghai is challenged by information technology[13].

6.3 Problems existing in the layout and development of Shanghai port

(1) The speed of port development is uneven, some of the port development speed is seriously lagging behind, in the domestic and international competition in a disadvantageous position. Since the reform and opening up, the construction of the port group in Shanghai has made great achievements, but some port construction and Shanghai port, Ningbo port is still a big gap, especially in the level of container transport. In addition, the rapid development of the surrounding areas of the port, but also to the development of the port group in Shanghai region caused a lot of pressure.

(2) The port layout is not reasonable, functional division of labor has been repeated. Ningbo Beilun and Shanghai deep-water wharf are based on common hinterland and Hong Kong as the hub to the layout of the building, if not its function positioning is reasonable, is bound to resulting in duplication of investment and construction, but also induce the two ports is not satisfactory competition and internal friction. Other ports also exists the problem.

(3) The relationship between the port and the port is not coordinated. Because of the

[13]Liang Shuangbo, Cao Hui, Cao Weidong, Terri Kwan. Development and evolution of port logistics in Shanghai [J].resources development and market, 2006,01:8-10.

compartmentalization of the port's own local interests driven and management system, resulting in port construction lacks the unified plan, blindness, between the ports is not formation reasonable division of labor and cooperation relationship and disorderly competition leads to Shanghai Port Group has an innate advantage have not been able to play very good.

(4) The system is not reasonable. Diversified management system between the port and the local government, between the port and the relevant government departments and between the ports of the increasingly prominent contradictions,Economic and industrial restructuring to further accelerate the development of the logistics industry tend to intensive. The transformation of national economy and industrial structure requires the whole city to speed up the transformation of the whole economy. In order to realize the upgrading of the industrial structure of the city, the advanced manufacturing industry and the modern service industry are the carriers. Under this trend, the operation of the city logistics system gradually from extensive to intensive, logistics node from the scattered layout, single function to the systematic, intensive, and relying on networking and modernization and informationization of logistics organization, to enhance the overall efficiency and quality of logistics.

Yangtze River Delta regional integration is the new trend, the requirements of the new pattern of overall planning of the port logistics. The State Council, "the Yangtze River Delta regional planning" issued formal, regional development coordination, rational division of labor, each with its own characteristics of the spatial pattern. Shanghai logistics development must break the boundaries of administrative divisions, combined with the industrial distribution in the Yangtze River Delta region,

Constructing the port logistics network system of regional integration and guiding the cross regional integration of logistics resources are important.

The construction of port and city "three-in-one" port service system development is

the new requirements. Shanghai City, the Twelfth National Congress of Communist Party of China in the lead to the port and waterway construction, the strategy of strengthening the city that shanghai will continue increase shipping and port industry, marine economic zone and the construction of port logistics industry, to the project as the basis, focus on promoting the bulk trading platform, joint land and sea transportation network, financial and information support system is the focus of "Trinity" port service system construction, port logistics brings new development platform. Revitalization of the inland waterway is rehabilitation program to bring new opportunities for development economic. Inland waterway transport in Shanghai is significant, but the development is still relatively backward compared with other modes of transport. Revitalization plan of inland water transport is the municipal government according to shanghai economic development in the new situation proposed, will focus on accelerating the high grade waterway network, inland hub port, ship type standardization and information system construction, to promote the development of inland waterway transport, promote shanghai inland economic development plays an important role, but also bring important opportunities for the shanghai inland port logistics development.

6.4Suggestion

For the logistics center in the Yangtze River Ports in the development of the main points, should choose cooperation or joint venture type logistics center. Shanghai Hong alone to complete the huge whole logistics chain management is not realistic, need the help of the port companies, shipping companies and shippers advantage can effectively control the logistics center, and also improve the operation and management of logistics center. The operation and management of logistics centers are as follows:

(1) In cooperation with the central government and the port enterprises, it is easy to win the policy support of the government, and to strengthen the connection between

the logistics center and the inland river ports;

(2) The port of import and volume of large shipping companies, can provide more supply as a logistics center, strengthen the connection of logistics center and the Shanghai port logistics park.

(3) The owner of the business cooperation, the enterprise through the logistics center is located in the Yangtze River port and cargo should have broad market demand, or with the development prospect and potential market supply, Shanghai port and the owner of the business can be joint venture in the port area or near the port office establishes the matter base flow, formation of market transactions, to stabilize and expand the port logistics service is of positive significance.

For in ports around the large and medium-sized cities and inland transport hub development of distribution park, it should choose the type of labor division and cooperation or joint venture logistics center, but the cooperation object is slightly different,

(1) According to deliver the goods in the park are the main transportation mode choice of partner, such as shipping, highways, railways and other transport enterprises and cooperate in the development and management of distribution park;

(2) Selection and distribution zone of the large cargo owner enterprise cooperation.

6.4.1To improve the comprehensive transportation system

According to the Shanghai local economic and social development of the overall planning and the transportation overall layout requirements, in accordance with the overall planning, rational division of labor, focused, coordinated and implemented step by step, comprehensive development to raise the principle, construction in Shanghai international shipping center as the core, cohesion of a variety of modes of transport, the coordinated development of Shanghai comprehensive transportation system is a must.

6.4.2 Give full play to the "golden waterway" of the Yangtze River shipping value, the construction of Shanghai international shipping center

The construction of Shanghai international shipping center is the construction of Shanghai international economic, financial and Trade Center, play the leading role in Shanghai, and promote coordinated economic development of Shanghai; Shanghai is further expand opening to the outside world, promote industrial upgrading strategy part, which is the construction of integrated transportation system in Shanghai The most important.

Therefore, we must first remediation Yangtze River mouth bar, dig deep channel, in order to make full use of shipping of the Yangtse River and river port transportation capacity, and promote the development of Nanjing the following deep water coastline development, promote the development of the construction of Shanghai international shipping center and the golden waterway of the Yangtze River economic belt. Secondly, should play the role of the organization and management of Shanghai port, do a good job in the division of labor and cooperation between various ports in Shanghai; take advantage of ports, formed above the harbor for the center, complement each other, reasonable division of Shanghai giant port system.

6.4.3 To improve the land transport network, to strengthen the internal links

Shanghai area of land transportation network shall focus on strengthening the economic ties with the mainland. At the same time, to ensure that the delta between cities within the passenger express smooth, enhance urban centers on the surrounding area radiation impetus function, promote the area economic exchanges and cooperation. Therefore, in the railway construction: one is the early construction of Pudong New Area external connection line to ensure that Pudong and Shanghai and the contact smooth; the second is finished as soon as possible new (Yi) a long (Xing) line, strengthen the North South Link; third, as soon as possible the construction along the railway, speed up the Yangtze River coastal economic belt

development, pre from Shanghai by Taicang, Jiangyin connected the new long-term, extends back to Zhenjiang connects Huning line. In addition, in view of the railway passenger peak of should be as soon as possible the construction of the Nanjing section of Beijing Shanghai high speed railway, Shanghai Nanjing railway shunting. In highway construction, the priority is to give priority to the development of large and medium cities, the main port, the airport's high grade highway, especially the highway and motor vehicles.

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