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THE EFFECT OF THE NEW EURASIAN CONTINENTAL BRIDGE ON THE EASTERN COASTAL AREAS OF CHINA

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ABSTRACTS: This article has discussed the effects on the eastern coastal areas of China brought by the new Eurasian Continental Bridge when it was joined up from Chinese coastal harbour Lianyungang to Rotterdam Harbour in Holland. The effects will be discussed from four aspects which are promoting the developing process of containerized traffic, accelerating the adjustment of industrial structure, thriving Lianyungang City and setting up a more beneficial external conditions for Chinese eastern coastal areas.
KEY WORDS: Lianyungang, the new Eurasian Continental Bridge, containerized traffic, industrial structure, coastal areas

Continental Bridge transport is a set of land and water transport system for passengers and goods covering by linking up two coastal harbours by railway. It has been growing with the increase in the need of international transport and the wide spread use of containerized traffic, and because it is high-speed, low-consumption and large-volume, it is famed as "a revolution" in the human's shipping history. The new Eurasian Continental Bridge starts from Chinese coastal harbour Lianyungang in the east and ends at Rotterdam Harbour in the west, and is about 10,800 kilometers long. It lies across the Eurasian continent through China, the former Soviet Union, Poland, Germany, Holland and so on, with a radiation district of more than 20 countries and places. For it is the shortest route to connect the Pacific Ocean with the Atlantic Ocean on land, people have been paying close attention to it since the whole railway was opened to traffic after Longhai (Lianyungang—Lanzhou)—Lanxin (Lanzhou—Urumqi) railway of China was jointed with the railway of the former Soviet Union at Ala mountain pass in September 1990. This article

will study its influence from the respects concerning the development of eastern coastal areas of China.

I. SETTING UP A MORE BENEFICIAL EXTERNAL ENVIRONMENT FOR THE DEVELOPMENT OF CHINESE EASTERN COASTAL AREAS

Since the 1960s, great changes have taken place in the space pattern of world economy: The western coast of the Pacific Ocean became the most rapidly developing region instead of north America, Japan has grown to be a powerful economic nation, then, "Four Small Asian Dragons" followed to take off in economy, and the Asia, Pacific Region became one of the most active centers of international trade. Many experts have predicted that the Pacific region will grow to be the new center of world economy in the 2000s. The new Eurasian Continental Bridge just spans over the two world center areas and will provide good convenience for the frequent contacts between them.

The new Eurasian Continental Bridge is the most economic way to combine Asia and Europe at present. It is not only 8,000 kilometers shorter than the sea route from Lianyungang Harbour to Rotterdam Harbour and saves 20 days, but also superior to the old Eurasian Continental Bridge which is more than 13,000 kilometers long, and spent 5 days more on the way. There are only four harbours (Vladivostok, Nakhodka, the Orient and Soviet harbours) in east, the radiation district is narrow, besides, the climatic condition over there is harsh, with a freezing period of 3—4 months every year, and as the main thoroughfare for imports and exports in the eastern areas of the former Soviet Union, it is near to its saturation point and can not suit the increasing needs of transport task. The new Eurasian Continental Bridge has great potentialities compared with it. The climatic condition in the eastern coastal areas of China is temperate; besides Lianyungang Harbour there are a lot of appropriate harbours such as Guangzhou, Shanghai, Qingdao, Tianjin and Dalian, they all can become transfer stations for land-and-water coordinated transport, so it has a wider radiation range, and can draw westbound containers from western coastal areas of America, "Four Small Asian Dragons", the Association of Southeast Asian Nations (ASEAN), and on the other hand convey eastbound goods to these areas from the Middle East, the Near East, Europe and North Africa.

While the new Eurasian Continental Bridge is becoming active day by day, the regional superiority of Chinese eastern areas will be more notable. They face the Pacific Ocean in the front and connect to the new Eurasian Continental Bridge in the rear. These areas will become the joint belt of international land-

and-water transport and an important link for trade between countries in western coast of the Pacific Ocean and Europe. To speak shortly, the new Eurasian Continental Bridge will furnish favorable conditions for these areas, enhance the status of these areas in world economy, and provide beneficial factors for China to further open to externals and take part in the circulation of world economy. On the hand of Chinese eastern areas, to improve the entire competitive strength, the coastal trunk railway should be built up, and the coastal harbours should even more share out the work and cooperate with one another to ensure that the coastal harbour system will be rationally organized and function perfectly.

II. PROMOTING THE DEVELOPMENT OF CONTAINERIZED TRAFFIC IN CHINESE EASTERN COASTAL AREAS

The new Eurasian Continental Bridge mainly provides service to containerized goods which pass through China. Containers are very large standard boxes which can be repeatedly used, and containerized traffic has meritorious characteristics as follows: (1) It shortens transportation time. Because goods are packed in containers, it's easy to lift or move, and not necessary to load and unload on the way, the transporting efficiency is raised. (2) It reduces transportation expense. For transport speed is high, the turnover rate and utilization ratio of trains, ships, stations, docks and warehouses are increased, and then the cost of storing and berthing is cut down. (3) It is safe and reliable. Containers can protect goods from being polluted and damaged. (4) It is convenient for customs to inspect. Containerized import and export goods are easy to be examined and checked, so the burden and failure in customs is lessen. On account of these characteristics, containerized traffic has been expanding rapidly since it started at the end of the 1950s, and has become a major means of transport as important as bulk cargo transport and oil transport in today's international ocean shipping.

Containerized traffic has been developed in China for more than ten years, and it's going to be mature now. In railway transportation, some fragile and precious goods are progressively containerized, and most goods are transported by this means in ocean shipping too. Up till now, 13 container docks have been built in six harbours such as Tianjin New Harbour, Shanghai, Huangpu, Dalian, Qingdao, and Xiamen, and it has been proved that containerized traffic has brought about tremendous economic benefit for China. But up till now the containerization level in China is still very low, container docks and berths are not enough yet, the automation level of the operating machines in harbours is

low, and many roads, bridge and culverts in rear route can't meet the demands of containerized traffic. All these shortcomings have seriously restricted the development of containerized traffic in eastern coastal harbours, a lot of import and export goods must be carried to major harbours such as Shanghai to be loaded and unloaded and then tramrsported away, and Shanghai Harbour is only a branch harbour for Hongkong and Japan. According to statistics, Hongkong Harbour is the largest harbour in the world and can handle up to 4,030,000 containers a year. Singapore is the second and can handle up to 3,380,000 containers a year. But Shanghai Harbour which is the largest in China can handle only 350,000 containers a year, ranking the fortieth in the world and does not suit its status of being one of "ten foremost harbours in the world".

After the new Eurasian Continental Bridge is normally run, the tie between China and foreign countries has been closer, and the standardization of containerized traffic in the world will stimulate the standarization of containerized traffic in China, especially the eastern coastal areas. For containerized traffic has been rapidly developed in several countries and regions along the Pacific Ocean coast, six of the ten foremost harbours were located there in 1988, after the new Eurasian Continental Bridge is normally run, a greater part of container goods will be drawn to the eastern coastal harbours in China from these areas. As a result, handling capacity of harbours and loading and unloading technology will be enhanced. Not only Lianyungang Harbour, the bridge end of the new Eurasian Continental Bridge, will be in this way, but also all harbours in the eastern coast because that continental bridge transportation usually has more than one route, and more than one harbour can be its end. Especially in the beginning period, this kind of supplement is very important. Among all the eastern coastal harbours in China, Guangzhou Harbour is the largest harbour in the southern China, it's near to Hongkong and Southeast Asian countries, and can be connected to the new Eurasian Continental Bridge by Jingguang (Beijing—Guangzhou) railway in Henan Province. Shanghai Harbour that can handle more than 10 million tons of cargo a year is the largest one in China and can be connected to the new Eurasian Continental Bridge by Jinpu (Tianjin—Pukou) railway at Xuzhou in Jiangsu Province. Tianjin Harbour which is a large comprehensive coastal harbour in north China can be connected to the new Eurasian Continental Brige by the railway of Beijing—Datong—Baotou—Yinchuan. Other harbours such as Qingdao, Ningbo, Xiamen and Zhanjiang will also be connected to the new Eurasian Continental Bridge in future.

On the other hand, because the high-speed and large-capacity container-

ized traffic needs advanced railroads in its rear transportation system, to prepare for the opening of the new Eurasian Continental Bridge, Chinese Ministry of Railway has reinforced and reformed Longhai—Lanxin railway in the past few years, extending transportation hubs such as Xuzhou, Zhengzhou, Xining and Lanzhou, and constructing the multiple track from Xuzhou to Lianyungang. Besides Longhai—Lanxin railway, there are several other trunk lines such as Jinpu, Jingguang, Jiaozhi, Shangfu, Baolan (Baotou—Lanzhou), Lanqing (Lanzhou—Xining), and Baocheng (Baoji—Chengdu), all of them especially Jinpu and Jingguang will be improved before long. Although the correct passing through capacity of Longhai—Lanxin railway is still in short, and there are a number of bottle-necked sectors in the western part, it's certain that these problems will soon be solved. With the simultaneous progression of coastal harbours and rear railways, the containerized traffic can be developed very quickly in the eastern coastal areas of China. In a word, the new Eurasian Continental Bridge will exert a long and deep influence on the eastern coastal areas of China.

III. ACCELERATING THE ADJUSTMENT OF INDUSTRIAL STRUCTURE IN CHINESE EASTERN COASTAL AREAS

The new Eurasian Continental Bridge spans over the eastern, the middle and the western economic belts of China, and is situated in the centre area. The convenient communication enables it to have a new acting role in domestic economic interchange and affects the distribution of national economy to a certain extent while it gives servioe to international transport.

China has a varied topography. Her northeastern, northern, western and southwestern frontiers are all land, mainly mountains and plateaus; on account of lacking transport facilities, the external connection of these areas has long been hindered. Her eastern and southeastern frontiers are continuous seas, and can directly communicate with other coastal countries and regions in the world by unimpeded sea transport, and the topography of these areas is of flatlands and platforms. These superior natural conditions have formed a favorable investment environment. Since the reforming and opening at the beginning of the 1980s, 4 special economic zones in Chinese eastern coastal areas have been set up one by one, 14 coastal cities, the Zhujiang (Pearl) River delta, the Changjiang (Yangtze) River delta and the Xia-Zhang-Quan delta in south Fujian Province were opened too, and then Hainan special economic zone was founded. The sharply increasing economy in southeast China has attracted world attention, in the meanwhile, the vast interior areas especially the west-

ern areas remain little opened, the productive forces are still weak, and the long-standing disparity among the belts has been enlarged.

To coordinate the economic development in China, it should not be neglected to strengthen the productive forces in vast interior areas. The new Eurasian Continental Bridge has just provided new chance for the western areas, it expanded the connections between China and the former Soviet Union, Eastern Europe and Arab countries, broadened the way for the western and the southwest areas to be open to the external world, established a solid foundation for China to transform from unidirectional opening to all-round opening and gave a strong impetus to productive forces in the western areas. The vast western areas abound in natural resources, amassing most natural resources of China, possess the best condition to comprehensively exploit energy and raw materials and have tremendous latent energy to develop. The new Eurasian Continental Bridge will speed up the course of exploiting resources in the interior areas, the area along Longhai—Lanxin railway will be developed earlier, and then the whole western and the intermediate areas will be gradually developed too. In China at the current moment, natural resources are mainly used to meet domestic needs especially for the eastern areas, and quickened exploitation of the interior areas means that more energy and raw materials can be provided for the eastern coastal areas. With the policy superiority having been enjoyed by the eastern coastal areas for more than 10 years being reduced step by step, and the increasing of the opening level in these areas, if these areas can be supported and equipped with science and technology, more processing industries in addition to deep exploitation and primary processing of resources will be developed in newly-opened ports, cities with actual strength and special areas for frontier trade, and processing industrial areas for export will be built up too. So with the superiority of natural resources the western areas can become prosperous before long, and the exchanging pattern that energy and raw materials are exported from the western areas and industrial or consumer goods are imported to will be changed. To adapt this situation, the eastern coastal areas must accelerate the adjusting of industrial structure to advoid further imbalance of industrial structure all over the country.

Compared with the interior areas, the eastern coastal areas have a lot of superiority. The main manifestations are as follows: (1) Economic prosperity has been achieved in eastern coastal areas. Industries have been developed for a long time, and the urbanization level in these areas is higher. From south to north of China, come densely urbanized areas have been formed along the eastern coast, for example, the Zhujiang River delta urban group with Guangzhou as the center, the Changjiang River delta urban group with Shanghai as the

center and the Bohai Bay urban group with Tianjin as the center. These urban groups have solid economic basis, advanced science and technology, convenient transportation and communication facilities, and can return favorable investment benefit. (2) Large harbours concentrate in the eastern coastal areas for foreign trade of China. A hundred years of colonial and semi—colonial economy has established a close relation between these areas and developed capitalist contries in history; and a set of preferential policy given by the centre authorities of China has made these areas more attractive to foreign investment since the opening strategy was implemented. (3) Many of the eastern coastal cities and economic areas are the homeland of nationals residing abroad, and can easily receive support and investment from overseas Chinese. (4) To judge from chief target countries and regions that the eastern coastal areas are opened to, they are of medium income such as Singapore and the Philippines, or industrial countries of market economy such as Japan, Canada and the United States of America, or newly developed regions such as Taiwan and Hongkong, but most of the neighbour countries which are adjacent to the western areas are comparatively undeveloped. For the eastern neighbors are advanced, science and technology can be imported to the eastern areas from these countries and regions, and the eastern areas can go on holding a technical lead and rolling as a window of management and high-level technology in China.

From above-mentioned facts we can see that adjusting industrial structure in the eastern coastal areas is not only necessary but also possible. From now on, in order to strengthen proliferating effect and lessen the dependence of energy and raw materials on the interior areas, the eastern areas should transfer some processing industries to the interior areas, lay stress on developing own superiority, constantly improve the investment environment, make full use of the latest achievements in technology to initiate new industries and remould old industries, and then can achieve more economic benefit.

IV. SPEEDING UP THE THRIVING OF LIANYUNGANG CITY

In continental bridge transport, harbour are transfer stations for land-and-water transport, and have crucial importance. Continental bridge transport is dependent on harbours and can impel the development of Harbours too. Among all harbours in the eastern coast of China, Lianyungang Harbour that is the starting point of Longhai—Lanxin railway will be most influenced.

Lianyungang Harbour is located at the middle point of the Pacific Ocean coast in Asia, and is the umbilical part of the eastern coast of China. The new

Eurasian Continental Bridge, starting from Lianyungang and passing through Longhai—Lanxin railway, goes a longer distance as 4,131 kilometers in China, being more beneficial to China; furthermore Lianyungang and its hinterland is situated in the economy valley between the two developed areas, south of it is the Changjiang River delta area with Shanghai as the center, north of it is Jing—Jin—Tang (Beijing—Tianjin—Tangshan) and the developed area along Jiaoji (Qingdao—Jinan) railway, and through developing Lianyungang, the most convenient and economic port for imports and exports of the intermediate and northwest areas, behalf will be done for these comparatively undeveloped areas.

To be judged in the light of natural and technical conditions, Lianyungang Harbour deserves to be called a fine harbour too. There's Yuntai Hill to the south of it, and a joint island which is 6 kilometers long from east to west is close to the north of it, forming a strait of 1.5 kilometers wide from north to south. The strait has a broad water area, placid waves can be used all the year round. Previously on the condition of Lianyungang, it was said that this harbour would become silted up easily, the land area of the harbour was narrow and properties of the ground basis was complex, but after a quantity of investigation, the view has been proved to be wrong, consequently, Lianyungang can advance normally. Now this harbour has become one of the 8 foremost harbours in the eastern coast of China, with more than 20 docks over 10,000 tonnage, and having trade contacts with 516 harbours in 99 countries and regions. The volume of freight handled in 1992 was 11.37 million tons, it will reach to 25.45 million tons in 2000, and its ultimate aim is to amount to 60 million tons with more than 100 docks. The handling capacity of containers has gotten to 3,000 every year. To take concerted action with the new Eurasian Continental Bridge a dedicated dock that can handle 200,000 standard containers a year is now under construction. The dedicated dock that is connected with 4 railways will be managed by computer system and have all the necessary fitting to become a modern dock. The route of containerized traffic has so far arrived in Japan, Hongkong, Malaysia, Thailand, Singapore, the Republic of Korea and so on.

The flourishing and thriving of the harbour will bring about economic prosperity to Lianyungang City. A host of facts at home and abroad have proved that distributing industries near harbours to form industrial harbours can quicken circulation, reduce transportation expenses and achieve better economic result. From now on, Lianyungang should enhance service to the harbour as well as rely on the harbour and make the most of the privilege of being close to the sea, develop industries of large freight volume of industries related

to the new Eurasian Continental Bridge, such as making containers and making loading and unloading machines, and exploit marine resources to a deep degree. And exports processing districts for provinces along Longhai—Lanxin railway can be set up in Lianyungang too. To speak shortly, the opening of the new Eurasian Continental Bridge will foster a lofty ideal for Lianyungang Harbour as a large international transfer harbour, and by taking advantage of the harbour's position as the eastern end of the new Eurasian Continental Bridge, the development of the city can be hastened. Lianyungang City which has about 300,000 people now will grow to be a metropolis having 600,800—800,000 people, and another "bright pearl" in the eastern coast of China.

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