

The Discussion of Regional Port Cooperation —With Port of Shanghai and Ningbo as an Example

XU Dazhen

School of International Studies
Shanghai Maritime University

Abstract

This paper is the attempt to find the suitable approaches of the port cooperation between Shanghai and Ningbo. The purpose of this research is that China's rapid growth of its economy and foreign trade demands a strong support from the port service. But currently, the capacity of China's seaports is still insufficient and lack of an international transshipment hub port.

As the two biggest ports in China, Shanghai and Ningbo have a great impact on the national port industry. However, the over competition in container handling is very serious between Shanghai port and Ningbo port. When Yangshan port came into operation and Ningbo port combined with Zhoushan port into a single entity, the competition had become more and more fierce in 2005.

In fact, Shanghai and Ningbo are having mutual benefits. Ningbo port has an advantage of cost, nature deepwater berth and major bulk handling service. Shanghai port enjoys an advantage of management, finance and container handling service. Therefore, it is necessary to study the possibility of ports cooperation between these two ports.

Key words: Port of Shanghai and Ningbo, Competition, Cooperation.

1. Background

According to the forecast, the container throughput and goods throughput in Shanghai will have respectively reached 29 million TEU and 710 million tons by the year of 2010. The container throughput and goods throughput in Ningbo and Zhoushan ports will have arrived at 10,000,000 TEU and 530,000,000 tons

(including 180,000,000 tons in Zhoushan). At present, the container throughputs of the two ports are 18,090,000 TEU and 5,200,000 TEU while total throughputs are 44,000,000 tons and 35,800,000 tons respectively.

There is a huge gap between the set goals and the real situation for these two ports. Against the backdrop of China's economic reform and opening-up policy, the domestic ports are confronted with competition not only from domestic ports but also from their counterparts in other countries, especially in neighboring countries, for example, Pusan, Singapore, and Tokyo. If Shanghai and Ningbo ports could not satisfy the demand of goods transport, it would be unable to attract international transit goods and its own good resources would be diverted to other ports. In such circumstances, national transportation security would be threatened. Therefore, Shanghai Port and Ningbo Port should join hands to reasonably develop the resource in Zhoushan and achieve a regional scale economy, so that the entire ports region of the Yangtze Delta will have a better competitive power.

Furthermore, since Yang Shan Port in Shanghai is located at open sea, it has to be out of operation for about 70 days in a year due to high winds and huge waves, during which period the transportation security of Shanghai port will be in threat. Shanghai port and Ningbo port must cooperate to deal with such a problem. In addition, the establishment of International Shipping Center in Shanghai can not be realized by one single port of Shanghai but through the joint efforts made by all the ports in the Yangtze Delta. Therefore, Shanghai port and Ningbo port have no choice but to conduct coordinated development.

2. The ports cooperation modes

2.1. Government based mode

The government sector is playing a major role in the cooperation. The advantage of this mode is that the government can do the macro-management by means of right and policy to coordinate various relations so that the port will be developed in an ideal environment.

2.1.1. Two ports completely coalition (Marseilles-Fos mode)

This mode require a completely coalition between two ports. The bigger port will merge the smaller one. This coalition is not only about the port facilities, but also the management authority. After the cooperation and coalition, two ports will combine into one entity and the shipping industry will treat these two ports as one. A port authority will manage the operation and business of both ports. The typical example of this mode is Marseilles-Fos port.

Today's Marseille port is the largest port in France and the second largest European port next to Rotterdam. But the port was not such big at beginning. The coalition leads to the economic of scale of Marseilles port. The port had a coalition in 1966. In April 1966, Marseille port had merge Caronte port, Lavera port, Fos port and Port-Saint-Louis-du-Rhône as well as the Fos and Lavera industrial zones. As the only port authority had been reserved, the Port of Marseille Authority control and manage these ports and industrial zones' facilities and operation. After the coalition Marseille port has enough coastline and hinterland resource. The development of Marseilles-Fos port is visible.

2.1.2. Aggregated ports (New York-New Jersey mode)

This mode is a typical port cooperation mode. But this cooperation is not as easy as we though, because in this cooperation it concerns the profit of each port. In this mode ports could belong to different district area, but they have a similar geography condition and close to each other. If ports want to adopt this mode, the coalition of these ports is inevitable. After the coalition, these ports have a single port authority to manage their operation, but the right is still belonging to the local area. In this cooperation mode, we cannot find one merge the other. This is business cooperation; the port authority, which is established after the coalition, manages all the operations, which did by the ports before the coalition. In this cooperation, the port can get what they want but without from the other port. For example, if one port has competitive advantage in capital and management experience, the other port has competitive advantage in harbor resource and hinterland; they can choose this cooperation mode to have the mutual benefits. The typical modes of this cooperation are New York/New Jersey port and Ningbo/Zhou

Shan port.

“NY/NJ port is the biggest port in the east coast of United States. In the history, New York and New Jersey had an endless dispute over their shared harbor and waterways. The impasse eased when the two states agreed that the port area was, in effect, one community and that conflict squandered the port's potential.” So on April 30, 1921, The Port of New York Authority was established to administer the common harbor interests of New York and New Jersey. In 1972, the organization's name was changed to The Port Authority of New York and New Jersey. Now the Port Authority of New York and New Jersey manages and maintains the bridges, tunnels, bus terminals, airports and seaport that are critical to the dictate region's trade and transportation capabilities. After these two ports combine into one unite, the development of NY/NJ port is very quick. It was definitely a mutual benefit business cooperation.

2.1.3. Entire propaganda to the public (Tokyo Gulf mode)

This mode is not a typical mode for the port cooperation. In this mode, every port has its own port authority to manage their operations and they have different port policies. But in ports' layout and ports' propaganda to the public, these ports have cooperation. As to geography, these ports are very close to each other and they have similar hinterland. So the publics always regard these ports as a single port aggregate. But these ports could be located in different district. The government doesn't make any compelling policy to restrict the development of these ports or guiding these ports to do the cooperation. But the government promotes the cooperation among these ports and offers them some preferential policies to their cooperation. As to the ports themselves, in their development planning, they think much of intercross cooperation. They offer different services. When they service the customer, they work as one entity and they attract the cargo together. In this way, they can promote the competitive power of all these ports and develop the economy of the region, which they located in.

2.2. Enterprise based mode

The two parties are independent of each other, whose cooperative behavior is

completely equal to the enterprise behavior. The advantage of this mode is that enterprises respond quickly, voluntary, actively and reliably to the market economic development rules in the flexibility.

2.2.1. Independent Competition (Bremen-Hamburger mode)

Independent competition refers to the relationship that is dominated by the competence in the form of local interests and individual interests. The competition is focus on the control of hinterland and cargo resources. Actually, the coordinate mechanism was already built between Bremen and Hamburger port in Germany. These two ports are developing independently and complementary so that their competition has been contributed to their common development in the end.

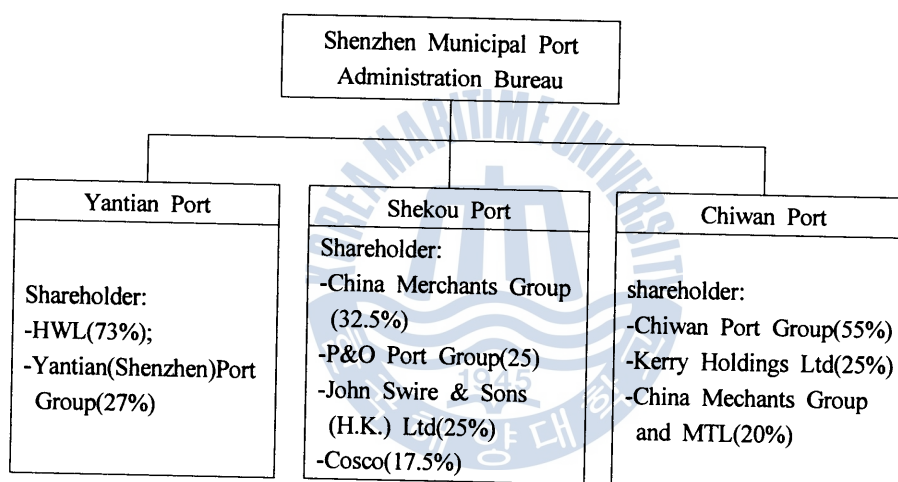
Hamburger port is the largest port in Germany and Hamburger is the second largest city in this country. The growing rate of container throughput in Hamburger port is fastest in the Europe. Far away from more than 80 kilometers, there is also a big port in the Europe, Bremen port. Its water depth can be afforded to call the largest container boat, weighing above 8000TEU. Despite of the sharp competition between these two ports, the throughput of the two ports are increased without any restrict influence, which is attribute to their long coordinated competition and relatively stable hinterland environment. In 2004, the container throughput in Bremen and Bremen Haven achieved 3200,000 TEUs, with a growth rate of 6.4%. The container throughput in Hamburger reached 5300,000 TEUs, with a growth rate of 14%.

2.2.2. Co-manager (Hong Kong- Shenzhen mode)

This mode is totally controlled by enterprises, consisting of common managers and shareholders between these two ports. The co-manager adjusts the business activities between these two ports. In relevant to their own interests, they will be bound to conduct reasonable resource arrangement. In this fashion, this mode will intangibly reduce the excessive competition and overlapping construction. The co-manager can realize the maximum efficiency by means of adjusting the production in these two ports.

The cooperative mode in Hong Kong and Shenzhen is one of cases that are

conformed to the above method. Yantian port, Shekou port and Chiwan port are located in Shenzhen. As we all known, Yantian port that and Hong Kong port are coordinated developed. They are developing in the cooperative relation with a co-manager, that is, HWL (Hutchison Whampoa Limited). At the same time, Hong Kong and Shekou are developing hand in hand with a common shareholders-COSCO. Hong Kong and Chiwan are developing together with a common manager-MTL. These two ports are coordinated in the inner structure of these enterprises. To some extent, this kind of mode will also lead to the maximum social interests and to avoid resource waste.



2.2.3. Resource Share (Seattle-Tacoma mode)

I think this mode is the most adoptable mode for port cooperation between Shanghai port and Ningbo port. This mode is formed by the cooperation between the port managers. Meanwhile, the government is playing the role of coordination and communication in this cooperation. In order to compete against other ports, they have to cooperate with each other. Under this mode, the port enterprises share some infrastructure and information that is essential in the process of production. They will unite together to produce cohesion for the one goal, that is, to develop by means of common resources. The typical example of this mode is the cooperation between Seattle and Tacoma ports.

The two ports are cooperated with each other in the following 2 aspects:

Firstly, they will realize the infrastructure cooperation between both ports. They will breakthrough the regional and area restriction and form cohesion in order to respond with the sharp international competition. They will relieve the regional traffic pressure by means of building more tunnels, bridges and other transportation routes. For examples, these two ports have invested together to build railways, linking terminals with cities, so as to promote the multi-model transportation development. At the same time, the improved efficiency in the ports attracts a lot of shipping companies and cargo owners. As a result, the throughput of these two ports has seen dramatic increase.

Secondly, they will realize the cooperation to raise funds. According to the forecast, the container throughput in the public ports of Washington State in the near future will grow at the speed of 4-5%. In order to meet the future market demand, the cargo passing capacity between these two ports needs to be improved by means of enlarging of harbor scale. The income from these two ports is far from enough for the cost of the huge building funds. Therefore, under the coordination of Port Association in the Washington State, the two ports, beyond their individual interests, have raised funds together by other channels to resolve the shortage of funds.

2.2.4. Stock Ownership Participation (The Yangtze River Strategy of Shanghai)

This mode is a much close cooperative method. In this kind of cooperative mode, port enterprises could establish cooperative relationship in the form of capital movement like investment and mutual share holding to realize resource integration in a wider sphere. Besides, the larger-scale port enterprises with relatively equal strength can build new operating entity by cooperation and establish mutually conducive cooperative relations by holding the small proportion of the other party's shares, mutual share-holding by the third party, forming strategic alliance to deal with competition and to acquire individual development. At the same time, the other business outside the alliance could also take up competition among them. Under the present condition, the strategic alliance in the form of stock ownership

participation will be the main methods to realize coordinated development strategy.

At present, the country's large-scale port enterprises have begun to make use of their own strength and to adopt investment, mutual share-holding to establish strategic cooperation with neighboring port enterprises, such as the mode of Shanghai port and Yangtze River valley ports. Shanghai utilized its capital advantage to realize its "Yangtze River Strategy".

As far as present concerned, the cooperative mode between Shanghai port and Yangtze River valley ports is realized by the mutual share holding and the establishment of joint ventures. Shanghai port has successively signed cooperative agreement with ports of Chongqing, Wuhan, Wuhu, Nanjin, Nantong, Yangzhou to establish cooperative container terminal companies and logistics companies and internal feeder line transportation companies. In this way, it will form the feeder transportation network and complementary port groups in the integrated service of container handling, transportation and agency across the upstream to downstream of the Yangtze River so that Shanghai Port will enjoy the increasing core competitive power. As an illustration, after the cooperation between Shanghai port and Wuhan port in July of this year, the container throughput of Wuhan port has increased by 1/3 fold and the container resources in Shanghai has also enhanced.

3. The approach to realize the ports cooperation between Shanghai and Ningbo

3.1. The functional localization of Shanghai port and Ningbo port in Yangtze River Delta

When we discuss the functional localization of Shanghai port and Ningbo port in Yangtze River Delta, we should carry out the nation's macro policy. According to *The construction program for ports within Yangtze River Delta (2004-2010)* done by The Ministry of Communications and Shanghai aggregated ports policy, the Shanghai international shipping center will be established under "four development system" and "one rule". The four systems are as followed:

- To establish the container transport system —as Shanghai port in the core.
- To establish the iron ore transshipment system—as Ningbo -Zhoushan port in the core.
- To establish the crude oil transshipment system—as Ningbo -Zhoushan port in the core.
- To establish the coal transshipment system— as Shanghai port and Ningbo port in the core.

Yangtze River Delta should major construct the transshipment systems of container, iron ore ,crude oil and coal cargos. In order to establish Shanghai International Shipping Center, Shanghai should to be the center of this region, Jiangsu and Zhejiang to do the role as the supporters. Jiangsu to be the role as the north limb of Shanghai International Center and Zhejiang to be the role as the south limb are the rule of Shanghai aggregate ports.

3.2. Information and port resources sharing

If Shanghai port and Ningbo port want to cooperate with each other, the first phase is to realize the information and port resource sharing that was adopted by Seattle-Tacoma port cooperative mode. Both ports of Shanghai and Ningbo should share the information, port resources and facilities, technique resources and the human resources. Then both ports should communicate in port engineering technique, container management and cargo handling technique. Through resources sharing and ports communication, both ports can reduce the cost and achieve the mutual benefits.

Two ports should establish an extensive platform for ports information sharing. The information sharing is incarnated in integration of the network including customs, inspection, shipping companies, cargo owners, shipping agencies and so on. This activity will build a solid basis for the future cooperation between these two ports. In addition, Shanghai and Ningbo has basis for cooperation in information sharing aspects. These two ports sing an agreement on customs integration in 2005. In the future, the integration of EDI system, which has been done between Shanghai and Ningbo, can be adopted between these two ports.

3.3 Business cooperation between port enterprises

In the aspects of ports cooperation between two port enterprises, these two ports are both have experience. In recent years, Shanghai International Port (Group) Co., Ltd (SIPG) has utilized its capital advantage to cooperate with the other ports, such as Nantong port, Wuhan Port, Nanjing port and Chongqing port. Nowadays, SIPG has 20 cooperative projects along Yangtze River Valley. In the ports cooperation policies of Shanghai, the SIGP has become the executant of these policies. With several years' operations, the SIGP has rich experience in capital operation and external operation with the other ports. In business cooperation between port enterprises aspects, Ningbo is also not lag Shanghai. Ningbo Port Group co., Ltd cooperates with HWL in the second phase of Beilun port construction project. In addition, Ningbo Port Group co., Ltd will combine some othet shipping companies to construct the fourth phase of Beilun port.

Since these two ports can cooperate with the others in order to achieve the business benefits, they can also cooperate with each other. Especially, the development project of Zhoushan Island affords a good opportunity for the port enterprises of Shanghai and Ningbo to do the business cooperation. In the market economy the business cooperation between two port enterprises is the best mode for ports to achieve coordinated development.

3.4. The cooperation between local governments

Nowadays, the biggest issue of the ports cooperation between Shanghai and Ningbo is from the local governments. In the market economy, the management and operation of port should be done by the port enterprise. The management of port should be guided by the market and focus on achieving the maximization of profit and improvement of competitive power. Both Shanghai port and Ningbo port has separated governmental functions from enterprise management. The Port Groups Companies manage the ports' operation and business and the port authorities are doing the office services. But these two cities are both adopting the policies as "Prosper the city through port development ", both of the governments are pay

more attention on their port industries and want to become the shipping centers. So this condition conducts an obstacle, intangibly, in the cooperation process between these two ports.

With the development of China's market economy and the pressure for outside of region, both governments will realize the importance of ports cooperation. In today's social environment, we couldn't ignore the function of government in making the port's strategy layout and coordinating with the other ports. So within the process of ports cooperation between Shanghai and Ningbo, the governments should do the strategy planning in terms of developing the national and regional economy, not only the city's economy. In order to utilize the limited investment funds and natural resources to the maximum, the ports cooperation between Shanghai and Ningbo should be under planning against the backdrop of the developing trend of the Yangtze Delta regional economy, national economy and Asian-Pacific areas' economy. In addition, the ports cooperation should be supervised by the central government. In today's society, the cooperation between governments is not only the basic foundation and but also the firmest insurance for port cooperation.

4. Conclusion

As analysis above, regarding the choice of cooperation mode, there is no existing mode totally conforming to the cooperation between Shanghai port and Ningbo port. As a matter of fact, there are a variety of modes in the port cooperative development.

The cooperation of Shanghai port and Ningbo port will be realized by various cooperative modes and allying methods in different periods. While at present great attention should be attached to the cooperation project in Daxie port, the future cooperative direction of both ports will be diverted from governmental orientation to enterprise orientation.

Meanwhile, the mode of resource sharing in Seattle-Tacoma port and the mode of enterprise cooperation in Hong Kong-Shenzhen port are suited to the coordinated

development of Shanghai-Ningbo port. Nevertheless, we could not underestimate the importance of cooperation between the local governments of these two ports, for governmental cooperation means a solid foundation for the cooperative development of the ports.

The most important issues of the port cooperative methods are diversified service and hinterland division. The profit of these two ports can be made to the maximum. Undue competition and resource waste could be avoided by means of the above two methods. Besides, the complementary port handling capacity and joint development of Zhoushan resources are also a feasible method in the port cooperation.

Reference

1. Chen Xiu Shan.(1997) The competition theory and competition policy. The Commercial Press
2. Chen Chang Geng.(2005). Forecasting the throughput of China's container ports. China Port(9)
3. Hu Liang De.(2005). The analysis of the market of Yangtze River container transport. China Ports(2)
4. Jia Da Shan.(2005). The approach of China's seaports' strategic. Shipping Exchange Bulletin (48)
5. Shao Zhan Wei.(2005). Port the biggest advantage of Ningbo.Waterway Transportation Digest(4)
6. Tu De Ming. (2002). The tendency of the world container ports' competition. China Ports(8)
7. Wang Tao.(2002). The advance of competition. Wu Hang University Press
8. Wu Ming Hua. (2005).Mutual benefit for the ports of Yangtze River Delta through cooperation. Maritime China (12)