

Study on Port Economic Development of Tianjin

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Abstract. With the increasingly close economic and trade exchanges between regions, port economy plays an increasingly prominent role in driving a city's radiation. Taking Tianjin, the largest port city in northern China, as an example, based on clarifying the connotation of port economy, this paper sorted out the current development status of Tianjin port economy and analyzed the problems faced by the port economy in the process of development, such as port radiation level to be improved, shipping service system to be improved, and harbor industry to be optimized. Furthermore, specific countermeasures and suggestions were put forward according to the three dimensions of hub radiation economy, high-end shipping economy and harbor industrial economy, so as to further enhance the development level of Tianjin's port economy and inject new momentum for the port city to achieve higher quality development.

Keywords: Port economy, Shipping service, Harbor industry.

1. Introduction

As an important strategic resource and comprehensive transportation hub for national economic and social development, port has both the attributes and functions of transportation and economy, and plays a strong radiating role in promoting the overall opening level of the city and regional economic development. As a kind of economic development form with port as the core, port related industries as the support, port city as the carrier and land and sea hinterland as the support, port economy is becoming more and more the growth pole and important force to promote regional economic development. On the one hand, the production and operation activities and development of the port such as wharf construction, wharf operation and port logistics have created the output value, national income, employment opportunities and tax revenue for the regional economy. According to the relevant data, the throughput of Chinese coastal ports can create more than 100 million yuan of GDP and more than 2000 person-times of employment opportunities. On the other hand, the development of port economy will also produce strong multiplier effect, which can promote the construction and improvement of regional infrastructure, the agglomeration of regional harbor industries, the optimization of regional industrial structure and the development of hinterland economy, and enhance the competitiveness of cities and regions.

2. Current Situation of Port Economic Development in Tianjin

As the largest comprehensive hub port in northern China and a "core" strategic resource for the economic and social development of Tianjin, Tianjin Port has advanced and complete terminal infrastructure and the world's first "smart zero carbon" terminal, ranking among the world's top ten ports for many years. Tianjin Port has a strong ability to radiate internally and externally. It has 138 container routes to the sea and more than 550 flights per month. It has established close trade contacts with more than 800 ports from more than 200 countries and regions in the world. It is connected to all three Asia-Europe Land Bridge transport channels, and the land bridge freight train volume ranks first among coastal ports.

According to relevant statistics, in 2021, the added value created by Tianjin port economic activities sector is 173.8 billion yuan, accounting for 11% of Tianjin's GDP, and the number of jobs

created is 670,000. Among them, the direct added value created by port production and operation activities (port construction, cargo handling, storage services, shipping forwarding, piloting tugs, port equipment and machinery maintenance) was 61.35 billion yuan, accounting for 35%; The indirect added value created by basic shipping services and port industries was 41.56 billion yuan, accounting for 24%; The value added induced by economic activities of ports and related industries was 70.92 billion yuan, accounting for 41 percent. It can be seen that the port economy has played an important role in the economic and social development of Tianjin, and has gradually become an important support for the economic development of Tianjin.

Table 1. Proportion of economic added value of Tianjin port

Classification	Amount (Unit: 100 million yuan)	Proportion
Direct value added	613.5	35%
Indirect value added	415.6	24%
Induced increment	709.2	41%

3. The Problems Facing the Economic Development of Tianjin Port

3.1 The radiation level of the port needs to be improved

Tianjin Port is located at the western end of the Bohai Rim and belongs to the "far sea and near land" type port. As it is far away from the main international waterway, shipping companies need to sail more miles at Tianjin Port compared with other ports, which requires higher fuel cost and more days of shipping schedule cost. As a result, the density of international trunk liner docking at Tianjin Port is relatively low. The airline radiation network with wide coverage and strong organizational effect has not been formed, which has affected the efficient and smooth connection between Tianjin and other countries and regions to a certain extent, limited the function of the northern international shipping hub of Tianjin, and has not yet formed linkage and amplification effect on the high-quality development of Tianjin's open economy.

3.2 The shipping service system needs to be improved

Compared with international shipping centers such as Singapore and Shanghai, the whole industrial chain of shipping economy in Tianjin Port is not yet perfect, the gathering degree of regional headquarters of leading shipping enterprises at home and abroad is not high enough, the number of shipping companies such as tally companies, freight forwarding companies and ship brokers is small, the vitality of shipping market players is not fully displayed, and high-end shipping functions such as shipping trading and shipping consulting are missing. The economic value of port shipping created by this is low and fails to provide strong support for the development of Tianjin shipping economy.

3.3 The harbor industrial cluster needs to be optimized

The interactive and integrated development of port industry and city is an important way to promote the high quality development of port economy. Internationally renowned ports generally rely on the basic functions of ports to actively develop large-scale industries in the harbor. For example, the port of Singapore mainly relies on Jurong Industrial Zone to build a very influential industrial cluster in the harbor. Rotterdam Port is a large industrial complex represented by oil refining and ship repairing. There are some problems of small scale and low overall level of Tianjin port industry, and no network industry cluster has been formed.

4. Countermeasures and Suggestions of Tianjin Port Economy Development

4.1 Speed up the development of hub radiation economy and enhance the level of Tianjin's opening to the outside world

In order to improve the hub organization and radiation capacity of Tianjin Port regional network, actively expand and extend the coverage of Tianjin Port route, further consolidate and strengthen the advantages of Japan, South Korea, Southeast Asia and other offshore routes, strengthen the organization and collection of ocean-going cargo for the South Pacific, North America, Latin America and other regions, and make up for the shortcomings of Tianjin Port's ocean-going route layout. At the same time, an internal branch network around the Bohai Sea with Tianjin Port as the core is woven to stimulate the positive circulation kinetic energy of route and cargo, and enhance the "sea-direction" radiation force of Tianjin Port. Further optimize the waterless port marketing system in the inland hinterland of Tianjin Port, vigorously develop the sea-rail combined transport focusing on container sea-rail combined transport, and improve the "land-direction" radiation force of Tianjin Port. Strengthen exchanges and cooperation with international well-known shipping enterprises such as Maersk and Mediterranean, actively introduce international and domestic liner companies to set up shipping bases in Tianjin, create an ecological system of in-depth cooperation and win-win cooperation between port and shipping, constantly enhance the two-way radiation function of Tianjin Port on sea and land, expand and strengthen the port hub economy, and provide strong support for Tianjin to upgrade the level of openness and development.

4.2 Accelerate the development of high-end shipping economy and enhance the influence of Tianjin shipping

Based on the construction of the national shipping hub in northern China, Tianjin should increase the development of modern shipping business such as port and navigation information, commerce and trade, finance and insurance, actively develop the headquarters economy of shipping, attract the headquarters or regional centers of leading shipping companies at home and abroad, logistics companies, freight forwarding companies, shipping economic companies and other enterprises to settle in Tianjin, and further stimulate the vitality of Tianjin's shipping market. Accelerate the introduction of high-end upstream industries with high value-added shipping services such as shipping financing, shipping consulting, shipping finance, ship chartering, maritime arbitration, credit rating, shipping insurance, average claims settlement, shipping brokerage. Fostering and developing the economy of the cruise industry. Actively expand the cruise headquarters economy, cruise maintenance and manufacturing and other upstream and downstream industries, extend the cruise industry chain. Make full use of Tianjin's unique port and shipping strategic resources, formulate special support policies for shipping economy, increase financial incentives and resource guarantee for port and shipping enterprises, maximize the influence of Tianjin's shipping market, and provide strong support for Tianjin's port economy to achieve higher quality development.

4.3 Accelerate the development of high-end shipping economy and enhance the influence of Tianjin shipping

Guided by improving the integration level of Tianjin port industry and city, we will focus on cultivating the port-front logistics industries such as shipping logistics, cold chain logistics, automobile logistics, bonded logistics, and actively expand the port-front manufacturing industries such as marine equipment, new petrochemical materials, aerospace, grain and oil processing, and refined and deep processing of frozen goods, and expand and strengthen the port-front service industries such as shipping leasing, shipping trade, bulk commodity trade, and form a diversified port-front industry community. Do a good job in attracting investment for key industries near the port, accelerate the improvement of supporting conditions for upstream and downstream industries of the port industry chain, promote the agglomeration of high-end port industries, build and extend the port industry chain, and form a port industry cluster with unique competitive advantages, so as

to enhance the driving and radiation capabilities of the port industry of Tianjin, and provide a strong impetus for the high-quality development of the port economy of Tianjin.

5. Conclusion

Based on the upgrading of the energy level of the port hub, focusing on the gathering of high-end shipping services, and taking the upgrading of the port industry as a breakthrough, build Tianjin as a port economic ecosystem, and promote the high-quality development of Tianjin's port economy.

Acknowledgment

This work was financially supported by “Research on port node cities promoting the joint construction of the "the Belt and Road"(Basic scientific research business expenses of central public welfare scientific research institutionsTKS20220404).

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