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WORLD MARITIME UNIVERSITY

Shanghai, China



**The influence of the China (Shanghai) Pilot Free
Trade Zone on the construction of Shanghai
International Shipping Center**

BY

LIU WENYI

China

A research paper submitted to the World Maritime University in partial fulfillments of
the requirements for the award the degree of

MASTER OF SCIENCE

ITL

2016

THE 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.

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Abstracts

Title of research paper: **The influence of the China (Shanghai) Pilot Free Trade Zone on the construction of Shanghai International Shipping Center**

Degree: **M.Sc.**

Abstract: Compared with the others international shipping centers, the Shanghai International Shipping Center is lack of an efficient free port or a free trade zone. The various policies of Shanghai free trade zone will not only enhance the function of Shanghai shipping center at port trade, offshore financial hub and logistics, but also at expand the transit trade and promote the international status of Shanghai. The Shanghai Free Trade Zone plays a vital role in the development of Shanghai international shipping center.

This dissertation is based on the analysis of the domestic and foreign research achievements on free trade zone and in combination with the current situation of the Shanghai international sipping center. Shanghai free trade zone will provide more open and more aggressive policies for the development of international shipping center, and it will simplify the formalities, reduce the shipping costs that will attract the foreign investments, expand employment, improve the economy of Shanghai and increase the international trade. We use data to do the comparative analysis to find out the impacts of establishment of Shanghai free trade zone on the Shanghai

international shipping center.

Key words: Free trade zone; International shipping center; Shipping services;
Shanghai; Government policy

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Chapter 1 Introduction

1.1 Backgrounds and purpose of the research paper

Shanghai is still not considered to be a shipping center. Shanghai's port cargo throughput has several times won the first in the world, not only that, in recent years, Shanghai port scale has also made remarkable achievements. Shanghai has only port facilities, throughput, shipbuilding and other hard power, soft power and the lack of shipping services, shipping finance, shipping and education, which is the reason why some distance exists between Shanghai shipping center and an international shipping center. The establishment and the development of Shanghai Free Trade Zone will give the port trade, offshore financial hub and various policy areas a large space to grow, which will benefit Shanghai international shipping center to improve and promote its soft power shortage.

Compared with the others international shipping centers, the Shanghai shipping center is lack of an efficient free port or a free trade zone. The various policies of Shanghai free trade zone will not only enhance the function of Shanghai shipping center at port trade, offshore financial hub and logistics, but also at expand the transit trade and promote the international status of Shanghai. The Free Trade Zone plays a vital role in the development of Shanghai international shipping center.

This dissertation is based on the analysis of the domestic and foreign research

achievements on free trade zone and in combination with the current situation of the Shanghai international shipping center. Shanghai free trade zone will provide more open and more aggressive policies for the development of international shipping center, and it will simplify the formalities, reduce the shipping costs that will attract the foreign investments, expand employment, improve the economics of Shanghai and increase the international trade. We use data to do the comparative analysis to find out the effect that establishment of Shanghai free trade zone impact on the Shanghai international shipping center. The effect will be divided into different factors and we will analyze the specific to put forward measures to improve the Shanghai international shipping center.

1.2 Research methodology

The purpose of the dissertation is to analyze and assess the influence of the China (Shanghai) Pilot Free Trade Zone strategy on the construction of Shanghai international shipping center. In the dissertation, qualitative analysis and quantitative analysis will be applied. Qualitative analysis of the study is to analyze the "quality" aspect of the matter. Specifically, it is the use of induction and deduction, analysis and synthesis as well as abstract concepts and methods. Quantitative analysis is to analyze the features of number, the relationship between numbers and the changes of number. Qualitative and quantitative analysis should be unified and complementary to each other, qualitative analysis is the premise of the quantitative analysis. Without

qualitative analysis quantitative will be unworthiness and quantitative will make qualitative deeper.

1.3 Literature review

The literature review of this paper had been divided into three parts. The first part is the concept and functions of free trade zone. The second part is the introduction and problems of Shanghai international shipping center. The third part is the methods of analyzing effects.

How to analyze the effect that free trade zone brings to the international shipping center is the key points to study the development of Shanghai international shipping center.

The following part of the literature review will clearly express the problems and advice in developing the international shipping center and what free trade zone contributed to.

1.3.1 The concept and functions of free trade zone

Free trade zone has two concepts, one refers to the special economic zones within a similar free port, the second refers to a country (region) through a free trade agreement between the form of economic and trade group, is a kind of organizational form of regional economic integration. The Shanghai Free Trade Zone is the first one.

In Ma shuo's article (2010), the definition of international shipping center is always

changed but it must satisfy certain standards like the basis of shipping business, shipping service and intelligent shipping. With the establishment of the free trade zone and the development of the international shipping center in Shanghai, their relationship and effect is need to be studied. The review is to conclude what the literature has found in this area.

1.3.2 The introduction and problems of Shanghai international shipping center.

The construction of Shanghai international shipping center faced many problems. Whether the establishment of Shanghai free trade zone will result these problems or benefit to the international shipping center is need to study.

The way of transportation system is too much rely on road transport and the system's cohesion is not enough. However, International water transfer has large benefit to improve the overall level of the shipping center and the function. After the establishment of free trade zone, the system may be pushed to improve to keep up with the rhythm.

Zhang ningjie, (2014), mentioned that shipping radiation has not reach the standard, the transportation system is not well and rely on the road transport. According to the experience of Korea, the establishment of free trade zone will improve the transport system to a certain extent. Liu meile, (2014), Shanghai free trade zone will improve the function of trade, logistics, processing, finance service and increase Shanghai port's capability of attracting cargo and expanding the volume of transit goods. Zong

chuanhong, (2014), the policy “will promote the development of transit consolidation business, allowing Chinese company owning or holding the flag ship, first try to develop coastal from business” that will attract the cargos back to Shanghai to transit.

Shipping financing, consulting, insurance, arbitration, average claims, shipping group, ship management, shipping agency and shipping service upstream industry in Shanghai is also backward, low degree of internationalization, which cause the large gap between Shanghai international shipping center and others. The establishment of free trade zone may attract foreign shipping companies that need high shipping services, so the gap need to narrow and the soft environment need to improve.

Liu meile, (2014), mentioned that our country’s shipping services is in a low situation, far away from the developed country. The shipping services need to be improved. Zong chuanhong, (2014), the policy will lead Shanghai to improve its shipping basic services. Free trade zone will change the structure and the function of shipping service.

The lack of shipping talent will has a great restriction on the international shipping center construction. Shipping talents in Shanghai cannot satisfy the need of international shipping construction. London is the number one on the amount of shipping talents, the following is Norway, Hong Kong and Singapore. There is obvious gap in port construction, shipping management, shipping finance and

maritime law. In the article of Zhang ningjie, (2014), we can see that the lack of shipping talent restricts the development of the shipping center and only has one-third of the number of talent compared with London. Liu meile, (2014), free trade zone will provide lower tax, standard management, complete supporting facilities, convenient financial services that attract domestic and foreign enterprises and rarely talent of shipping. Yuan xiang, (2013), mentioned that the international shipping center need to seize the moment of the establishment of Shanghai free trade zone, they can take measure to concentrate the shipping talent.

Nowadays, the policies and rules of shipping agency and ship registration were not complete and the referential tax remains to be further improved. The related policies have great influence to the international shipping center, it will attract shipping companies and maritime institutions to enter in. The free trade zone established will bring a lots of beneficial policies which will good to the development of international shipping center. Zhang ningjie, (2014), mentioned that supporting policies did not reach the designated position, and there is heavy tax burden for shipping company such as boat purchase tax, business tax and income tax. Liu meile, (2014), free trade zone will provide lower tax, standard management, complete supporting facilities, convenient financial services that attract domestic and foreign enterprises and rarely talent of shipping.

1.3.3 Effects evaluation methods.

Both scholars in China and abroad have done quite a lot of research on the influence of the China (Shanghai) Pilot Free Trade Zone strategy on the construction of Shanghai international shipping center.

First, abroad scholars mainly focus on the study of FTA in regional free trade region or national economic impact. Kim and Weston (1993) did the quantitative analysis for the influence of North American Free Trade Zone on China, Hong Kong, South Korea and Singapore and other countries. The result showed that the diversion effect would be reduced because the establishment of the north American free trade. At the same time, there were no data showed east Asia economy would be affected by the serious threat from north American free trade area. Shujiro Urate (2009) analyzed from the agreement of Japan free trade zone that he found establish free trade area is the most effective way to speed up the economy.

Domestic research on free trade zone is mainly divided into two aspects. One is that Chen langnan (2005), Sun dehong's (2007) study on the development of international free trade zone, including location choice of the free trade zone, customs management system, basic polices and regulations, the regularity and characteristics of management system,etc. Another is represented by Chen siwei (2003), San rangjun (2005), Li youhua (2006), Wang lijuan (2008), who did the research on the pattern that our country transformed comprehensive bonded zone to free trade zone and their point was the target pattern should be "outside the customs and within the

boundary”. Yang minghua (2008) put forward to adjust the existing free trade zone policy, trade policy, the foreign exchange management policy and the access policy of logistics industry.

Second, research on the construction situation of Shanghai international center is abundant. In the article of Zhang ningjie (2014), we can see that four factors affect the construction of international shipping center: geographical environment, economic development, technological innovation and macro policy. And in Liu siqi’s article (2015) we can know that the gap between Shanghai international center and other famous international shipping center is the soft power but the size of the gap is becoming small at the aspects of financial service and management.

Third is the methods of analyze influences. There are three mainly kinds of models to analyze the effects of free trade zone. One is Equilibrium model, Haaland and Noran (1992) studied the effects based on the Equilibrium model. They used it to forecast the effects. Another is the Balassa model that Balassa (1997) created to study on the change of demand elasticity before and after regional economic and trade cooperation. The third one is the trade gravity model. Amita Batra (2004) used it to analyze the volume of world trade and the potential for trade.

Chapter 2 The concepts related to free trade zone or international shipping center

2.1 The free trade zone

The first concept proposed of the free trade zone was European countries. With the development of the British capitalism, some Bourgeois thinkers started to discuss the internal relationship between foreign trade and economic development and tried to explain the benefits of free trade on economic growth. So it can say that the theories of free trade zone began from the Mercantilism in France then constantly enrich and develop. Nowadays, the theories of free trade zone have developed to a complete theory system.

2.1.1. The concept and functions of free trade zone

So far, the concept of free trade zone can be divided into two parts. The first definition is: Two or more countries or areas by signing the agreements of free trade to make up cross-border bilateral or multilateral economic and trade areas. This belongs to a kind of regional economic integration organization form. This form can promote each other market openness, elimination of trade barriers, improve market access conditions, and realize the role of trade and investment liberalization. Such as China - Asian free trade area. Another definition is: Certain country or region draws a special area within their borders where focusing on the trade and implementing special discount tax and regulatory policies. This special area always be established nearby the port or transportation hub. Foreign goods are exempted from import taxes in free trade zone and once domestic goods enter this area will be treated as export,

foreign goods need to pay tariff when they enter the jurisdiction of the national customs area. The characteristics of this area have the liberalization of trade and investment and the big flow of capital and person. And the free trade zone allows the service industry including storage, trade, manufacture and fabrication. Such as Singapore, Hong Kong and London free trade zone. The free trade zone established in Shanghai belongs to the second kind.

The free trade zone has its own functions and benefits acting on the country or area. The first is to enhance the import, export and transit trade and promote the free flow of goods thanks to the special policies implement in the zone. These conducive to become a commodity distribution center in the region and increasing competitiveness of the country or region in the international and increase foreign exchange earnings. The second is the establishment of the free trade zone will increase the attractiveness of foreign shipping companies, will attract high-end talent, advanced technology and foreign management experience to improve the level of shipping information that can speed up development of shipping industry. The third is the establishment can provide more employment opportunities because of the openness of service industry be expanded. The forth is settled free trade zone nearby the port and transport hub is benefit to the economy of port and stimulating the development of a country's public transport system that would improve the border region's economy.

2.1.2. The Shanghai free trade zone

Shanghai free trade zone has four functions. The first is the free trade of goods and it is the basic function of traditional free trade zone. The second is to promote China's service trade and investment facilitation and liberalization, which is the main force for regulating a new round of global trade rules. The third is through the offshore financial market to promote the development of China's financial liberalization, including interest rate marketization of exchange rate, internationalization of RMB and capital account opening, as well as the coordinated with Shanghai new international financial construction. The last function is organizing the relationship between government, enterprises, market and society.

Since it was established on September 29, 2013, the China (Shanghai) Pilot Free Trade Zone (SFTZ) has carried out institutional reform and innovation in areas of investment, foreign trade, finance and post-filing supervision to form a legal framework for investment and trade within the zone. It has adopted the negative list for investment management, simplified foreign trade supervision procedures, promoted financial system reform to realize RMB capital account convertibility, and advocated post-filing supervision as a way to transform government functions.

"Inside the territory while outside the customs" is the best feature of Shanghai free trade zone. "Inside the territory while outside the customs" means "open the first line and hold the second line". "the first line" means the hatchway between the free trade

zone and outside territory, “open the first line” means merchandise overseas or in free trade zone can import and export without customs supervision; “the second line” means the hatchway between the free trade zone and non-free trade zone, “hold the second line” means merchandise get in and out non-free trade zone from free trade zone must levy, the customs must collect the taxes.

2.2 The international shipping center

The definition of international shipping center is always changed but it must satisfy certain standards like the basis of shipping business, shipping service and intelligent shipping.

International shipping center is to set port berths, all kinds of transport, distribution, transshipment, business finance, international market and other functions into an organic whole, that have very strong leading role of the port city.

With the deepening of economic globalization and nationalization and the growing influence of shipping industry in the global economy, the international shipping center construction has become a key action for a country to preempt the high ground of the trade and economy.

From Amsterdam in the Netherlands in the early 17th century, to today's Singapore or Hong Kong of China, the international shipping centers held several alternate states between countries in the world.

When we review the evolution track of Amsterdam, London, New York, Singapore

and Hong Kong, China, those once or on active duty international shipping centers, certain logic of development behind the seemingly random replacement can be found.

2.2.1 The evolution track of international shipping center

Along with the transfer of the world trade center, the international shipping center roughly formed by the "plate" Western Europe to the North American plate to plate "East Asia".

In the 15th century Dutch with its superior geographical conditions of trade and the rapid development of shipbuilding industry, and then in the 17th century developed into a shipping center in Europe.

The outbreak of the first industrial revolution in the 1760 s, the rapid development of emerging industries such as textiles, export processing of colonial goods transportation and the production efficiency improved new technology together to create the day not fall empire reached its zenith and shipping center in London. At the same time, the United States seized the first and second world wars' chance, the merchant fleet size developed bigger than the UK in 1948. And the government in a planned way of cultivating talents of shipping is pushing New York on the seat of the international shipping center.

In the late 20th century, with the world trade center tilt to the East, Hong Kong, China, Singapore becomes the new international shipping centers.

2.2.2 The four factors that influence the international shipping center

Through a brief review of the development history of international shipping center, it is not difficult to find that the evolution of the international shipping center change has its own law of development. Overall, the development of international shipping center influenced by four sorts of restriction, which are the geographical environment, economic development, technological innovation and macro policy.

Firstly, the international shipping center need advantaged geographical environment as the foundation. In the 17th century, Amsterdam due to its geographical location is excellent, ocean currents bring a large number of fishery resources, gradually accumulated trade basis and shipbuilding industry, which established the position of the shipping center Hong Kong, Singapore and China also benefited from its special geographical location.

Second, the development of international shipping center needs the support of macro economy. With the development of world economy, world trade center migration, the shipping goods flow change constantly. Shipping centers of Amsterdam, London, New York were served as the world trade center attracted a large number of goods in and out. Freight volume as the appearance of macroeconomic, supporting the development of international shipping center.

The third is the technical innovation has a far-reaching influence on international shipping center. Whether Britain's industrial revolution, or the invention of the

container has a far-reaching influence on international shipping center. However after cargo throughput fell sharply, London can still maintain the status of international shipping center today, that also because the wide application of computer and internet technology in recent years that reshape the influence of each link of the shipping industry chain.

Fourth is the national policy support. It is necessary for the international shipping center. The rise of New York owe much to the 《Shipping law of 1916》 and 《Merchant law of 1920》 that issued by the government for support the shipping and specification of it.

At the same time, the government established maritime training institutions to cultivate talents for the shipping industry is one key of its success. By comparison, the government of Singapore goes even farther than on the inclination of shipping policy. The policy of free port popularity also shows the importance of national policy support.

2.2.3 The mode of the major international shipping center

There are three mainly kinds of representative models at present of the world's leading international shipping center.

One is major to provide shipping service as London mode, this kind of port is given priority to market trading and shipping services. Although from the hardware indexes such as the port throughput, London has lagged far behind East Asia's major ports,

London is still dominated the international shipping high-end services with the unmatched competitiveness of shipping agency , shipping freight index, shipping derivatives, shipping financial services, maritime insurance, maritime safety assessment service, law and arbitration service.

The second mode is focus on transit shipment such as Hong Kong of China and Singapore. Due to their economic hinterland and direct foreign trade volume is small, they take overseas hinterland as their economic hinterland and take the international trade goods of other countries or areas as main object of their services.

Third is the hinterland cargo service pattern in New York. This kind of mode is given priority to the heartland goods distribution service. Such ports undertake the large volume of trading because of its general back against the large economic hinterland and depend on its good geographical location.

2.3 The Shanghai international shipping center

As early as in 1995, the central government is formally put forward to build Shanghai into an international shipping center, the international shipping center construction become the important strategic target of economic construction in Shanghai. Released in May 2012, Shanghai international shipping center construct the first special “five-year plan”—《Speed up the construction of international shipping center of the twelfth five-year plan》. According to the plan, by 2015, Shanghai international shipping center need to form the core functions,

implementation and resources agglomeration factors of shipping.

Under the policy of actively promote, Shanghai shipping center construction has made remarkable achievements. In 2012, Shanghai port cargo throughput and containers throughput of 736 million tons and 32.529 million TEUs respectively, both win the first in the world. But in "soft power" such as shipping service industry, there is still a big gap with major shipping centers.

2.3.1 The situation of construction of Shanghai port

1) Steady progress of infrastructure construction

During the "Twelfth Five-year Plan", the Yangtze river and inland waterway renovation developed with steady steps, the number of sea port berths gradually increased, and the productive berth accounted for more than half with the scientific use of coastal resource, forming four open water areas, including the Yangshan deep-water port, area along Huangpu River, Shanghai section of Yangtze River, and north shore of Hangzhou Bay, 251seaports and 1220 sea port berth. A series of new port construction and renovation is also completed in Shanghai Port, which improves the carrying capacity of port container, chemicals and bulk cargo, and effectively relieves the insufficient capacity of specialized auto roll-on berth, further consolidating the position of Shanghai International Port.

2) Deepen "two-type" port construction

Shanghai is committed to building the intensive and efficient resource-saving and

environment-friendly ports, strengthening the environmental pollution prevention and environmental protection monitoring, increasing the clean energy use, using the wind power and solar energy, developing the low-energy auxiliary lighting system and natural air cooling system of travelling bridge electrical room, actively promoting the port resource saving, new environmental protection technology, new materials, new technology and new equipment, and promoting the oil saving of container gantry-type truck crane, “the change from oil into electricity” and "the change from oil into gas", etc.

2.3.2 Development of shipping business

By the end of 2014, the world's top 20 liner companies have branches or administrative bodies in Shanghai, there are about 250 foreign representative offices in Shanghai that are engaged in the international maritime transport and auxiliary industries, and 1836 international maritime transport and ancillary business units. In terms of shipping capacity, the total domestic waterway transport capacity of Shanghai increases steadily, the structural adjustment is further facilitated, the proportion of old ships is decreased, and the overall technology level of shipping is improved steadily. The shipping enterprises speed up the shipping upgrade, eliminate old low-capacity ships, enhance the shipping transport efficiency and optimize the vessel age structure.

2.3.3 Development of traditional shipping service industry

1) Actively explore the innovation of shipping registration system and the number of ship has increased steadily. The increase of shipping volume in Shanghai has redoubled the shipping registration business, and the shipping registration in Shanghai has also increased. Free Trade Zone International Ship Registration Pilot Plan was approved in 2014, further lowering the threshold of international ship registration, simplifying the operation process and playing a positive role in attracting Chinese FOC shipping return.

2) The scale of shipping agency increases steadily and the degree of opening to the outside world degree increased. Under the influence of slower cargo throughput growth and trend of larger-sized vessel, the shipping agency enterprises in Shanghai are faced with the more difficult management year by year, and the development scale of shipping agency enterprises is relatively stable. At the same time, the stock proportion for foreign shipping agency enterprises engaged in the international shipping agency is relaxed with the free trade test area to 51%.By the end of 2014, there have been a total of 151 international shipping agency enterprises in Shanghai.

3) The concentrated development of shipping agency industry; in recent five years, the freight forwarding business in Shanghai has accelerated the concentrated development, and Shanghai has been the place with the most registered shipping agent enterprises and the most concentrated business, accounting for 26% of the total

shipping agent enterprises around the country. By the end of 2014, Shanghai has had 9561 registered international freight forwarders and 2020 new comers in 2014.

2.3.4 Development of modern shipping services of Shanghai port

1) The development level of shipping trade is enhanced constantly

The shipping trade category becomes rich, the volume of business is developed steadily and the business type gradually becomes abundant. The trade category expands from the single bulk cargo ship, container ship, oil tanker, etc., to the refrigerated ship, dredger, working ship, and liquefied gas carriers. In 2014, the total ship trading value reached 1.83 billion yuan with the year-on-year growth of 39%.

2) Further standardization and opening of the ship management industry

In 2010, the clean-up and rectification of ship management market started, promoting the healthy and standard development of ship management industry in Shanghai. Based on the construction of free trade test area, the ship management field is further expanded, and the policy that allows the wholly foreign-owned ship management companies to be set up in the free trade test area also facilitates the concentrated development of international ship management companies. By the end of 2014, there are a total of 148 ship management companies in Shanghai, including 46 domestic ship management companies and 102 international ship management companies.

3) Normal operation of shipping agent access system

Shanghai tested the international shipping brokerage access system for the first time, and the business volume of Shanghai shipping brokerage has accounted for about 70% of the total volume around the country. By the end of 2014, Shanghai has had 22 shipping brokerage enterprises and 136 shipping brokers. There are three organizational forms of the shipping agency in Shanghai, including the Chinese representative office of foreign-invested enterprises, China-invested enterprises and private enterprises. The Chinese representative office of foreign-invested enterprises is the main body, accounting for 77.3%. Shipping agent needs higher professional degree, and the foreign-owned enterprises have the strong overseas institutions, so they occupy higher market share.

4) Constant growth of shipping research

At present, Shanghai has had a group of leading shipping research advisory organs, including Shanghai International Shipping Research Center, Shanghai Shipping Exchange and foreign international shipping research and development institutions. And some information products of the domestic shipping research advisory organs have had certain influence in promoting the international development.

5) Agglomeration effect of domestic and foreign well-known shipping organizations

The shipping factors in Shanghai accelerate the agglomeration and shipping service ability is constantly improved, attracting the international shipping organizations and

introducing more functional organizations. Well-known shipping organizations, such as BIMCO, Poland Exchange, World Maritime University and Shanghai Asia Classification Society, have settled successively, improving the right of speech and competitiveness of Shanghai in the international shipping industry.

2.4 The relationship between Shanghai FTZ and international shipping center

From the international point of view, Hong Kong, Singapore, Rotterdam and other world class international shipping center, compared with our port the difference is an efficient free port policy or free trade zone. The establishment of the Shanghai free trade zone will narrow the gap between the development level of Shanghai international shipping center and the development level of other international shipping center, and continuously make Shanghai shipping industry become more perfect.

The establishment of the Shanghai free trade zone will promote intra-regional trade, logistics, processing, financial services and other functions further prefect, improve the appeal to the international goods, attract Lingang goods gathered themselves together constantly, expand the transit goods of the port, thereby raise the international popularity of Shanghai port and push the development of Shanghai international shipping center.

Shanghai free trade zone attract many foreign well-known enterprises to enter in the

free trade zone and conduct business in this area by its lower taxes, standardized management, complete facilities and convenient financial services. This enhance the volume of Shanghai shipping trade, attract shipping high-end talent, improve the level of shipping information and lay a foundation for the development of Shanghai shipping industry.

The establishment of Shanghai free trade zone will urge the government to constantly follow the regulatory model of market innovation, perfect the legal method and regulatory system, improve the policy environment. A sound legal system and policy environment will provide reliable guarantee for the healthy and rapid development of Shanghai international shipping center.

1) To promote port functions.

Various preferential tax and special regulatory policy in free trade zone will beneficial to the shipping industry development, embodied in: on the one hand, the volume of import and export trade will increase, thereby increase the utilization for loading and discharge at port and increase the attraction of the port by reducing the unit cost of loading and discharge and storage of goods. On the other hand, will attract more shipping companies to settle in the free trade zone, this will promote the regional industry development, thereby promoting harbor handing, transfer, storage, processing and other functions for further improvement.

2) Improve the competitiveness of the port.

Due to the free trade zone carry out the special customs supervision policy, will not only improve the volume of shipping goods, but will also attract the goods concentrate to the port and then improve the quantity of transit goods. At the same time, it will also improve the port's international awareness, the awareness will react on port throughput, thus to a virtuous cycle, it will constantly improve the port international competitiveness.

3) Promote the development of port hinterland economy

The establishment of free trade zone will promote the development of port logistics industry; it is benefit to improve the sorting, packing, handling, processing, and manufacturing of goods in the port. This can drive the other industries in port hinterland, increasing employment opportunities and raise the level of hinterland economy constantly.

Chapter 3 Evaluation on the existing policies in Shanghai Shipping Center

In order to assess all polices in Shanghai International Shipping Center and its overall implementation effect, by means of organizing expert forums, visiting related enterprises, institutions and other ways, we got 8 feedback of questionnaire related to the policy implementation effect in Shanghai International Shipping Center. In order to obtain the overall implementation effect of the policies in Shanghai International Shipping Center, we need firstly to determine the weight of all policies, then carry

out quantitative processing to the survey results of all policies, and finally conduct comprehensive assessment as a whole.

3.1 The weight of indexes in the impact evaluations

By studying on the policies deployed at Shanghai International Shipping Center, I designed policy evaluation system with 5 policy indexes in first-level and a 27 policy indexes in second -level(see table 3-1). The first-level policy indexes include the aspect of optimizing modern shipping and transportation system, developing modern shipping service system, exploring to establish comprehensive experimental zones of international shipping development, improving ancillary support policies for modern shipping development, promoting and standardizing the development of the cruise industry.

Table 3-1 Policies of Shanghai International Shipping Center: first-level and second-level policy indexes

First-level policy indexes	Second-level policy indexes
A: optimizing modern shipping and transportation system	A1: adapting to the requirements of regional integration, on the basis of continuously strengthening port infrastructure construction, integrating resources at the Yangtze River Delta, forming the port pattern in which cooperation is conducted in division of labor, advantages complement each other and competition is orderly, thus strengthening the comprehensive competitive ability of ports.
	A2: accelerating the infrastructure construction of

	<p>Yangshan Deep-water Port and others, expanding the throughput ability of ports.</p>
	<p>A3: promoting the construction of inland waterways, railways and airports, optimizing the allocation of transportation resources, appropriately increasing expressway channel, vigorously developing middle and remote air transportation, strengthening comprehensive transportation ability.</p>
	<p>A4: promoting the linkage development with inland waterways, making full use of the golden water channel of the Yangtze River, accelerating the research, development and promotion of “river-sea” nonstop shipping model, taking measures in aspects of ship technology and security management, pushing the direct reaching of Yangshan Deep-water Port, vigorous developing the transit shipment of waters.</p>
	<p>A5: fully playing the functions of Shanghai Luchao Port Container Center Station and the railway channel, doing a good job in the railway island planning and research of Yangshan Deep-water Port, improving the combined transport ratio of railways and waterways.</p>
<p>B:developing modern shipping service system</p>	<p>B1: actively study to take measures, reducing the transit costs of international containers, encouraging the foreign trade containers to be transported in Shanghai International Shipping Center.</p>
	<p>B2: bringing the regional advantage that Shanghai sits close to main international air routes into full play, as well as the comprehensive advantages of being an industrial base, having talent resources and business</p>

	<p>environment, etc., vigorously developing shipping service organizations such as ship trade, ship management, shipping agent, shipping consultation, and ship technologies, expanding the industrial chain of shipping services, extending to develop modern logistics and other related industries, improving shipping service functions constantly.</p>
	<p>B3: improving shipping service planning layout, further expanding the functions of Yangshan Bonded Port, developing the assembling shipping areas such as North Bund, Lujiazui and Rinko.</p>
	<p>B4: guiding and standardizing the healthy development of the shipping trading market, bringing the shipping trading and freight information release functions of Shanghai Shipping Exchange, accelerating the speed of building a national shipping trading information platform, and forming a demonstrative shipping trading market in Shanghai.</p>
	<p>B5: setting up a comprehensive information sharing platform</p>
<p>C: exploring to establish comprehensive experimental zones of international shipping development</p>	<p>C1: improving the international competitiveness of shipping enterprises in our country by using shipping supporting policies in advanced shipping countries (regions) for reference.</p>
	<p>C2: extending the deadline implementation date for cutting and freeing taxes of the special “Convenient Flag” ship case funded by the Chinese side from June 30th, 2009 to June 30th, 2011.</p>
	<p>C3: charging free business taxes to the incomes of</p>

	<p>those shipping enterprises that have registered in Yangshan Bonded Port and are engaged in shipping businesses. This is the same to the incomes of those service enterprises such as inventory and logistics that have registered in the Port and are engaged in transport, storage, loading and unloading.</p>
	<p>C4: it is permitted that enterprises can open offshore accounts, thus providing convenience for funds settlement of its businesses overseas.</p>
	<p>C5: under the premise of perfecting the related supervision systems and effectively preventing measures of defeating and refunding taxes, implementing quay tax reimbursement policies, encouraging to develop transit businesses in Yangshan Bonded Port.</p>
	<p>C6: exploring and innovating the management system in special customs supervision areas, and better playing the functions of Yangshan Bonded Port.</p>
<p>D: improving ancillary support policies for the modern shipping development</p>	<p>D1: accelerating the speed for developing shipping financial service, supporting to carry out shipping finance, shipping insurance and other high-end services. Actively developing many financing ways of shipping, exploring to provide financing services for shipping service and manufacturing industries through setting up equity-based investment funds and other ways.</p>
	<p>D2: it is permitted that large shipping manufacturing enterprises can take part in building financial rental companies, actively and steadily encouraging financial rental companies to lead funds and issue bonds by entering into markets among banks.</p>

	<p>D3: actively searching for financial institutions, shipping enterprises that have strength to set up professional shipping insurance institutions in Shanghai.</p>
	<p>D4: optimizing the environment for developing financial shipping services, and charging free business taxes for the incomes gained by those insurance enterprises who are engaged in international shipping insurance business and have registered in Shanghai.</p>
	<p>D5: doing research actively on the preferential taxation policy given to financing rental enterprises that are engaged in international shipping financing rental business. When the condition is ripe, we can firstly launch a pilot project in Shanghai.</p>
	<p>D6: doing research on the concerned taxation policy issues of premium for transporting goods by sea by import and export enterprises.</p>
	<p>D7: enriching financial shipping products, accelerating the speed for developing shipping freight rate index derivatives, and creating conditions for shipping enterprises in our country to control shipping risks.</p>
<p>E: promoting and standardizing the development of the cruise industry</p>	<p>E1: it is permitted that overseas international cruise companies can register and set up operational institutions, and carry out the approved international route cruise service businesses.</p>
	<p>E2: encouraging overseas large-scale cruise companies to anchor in Shanghai and other coastal ports having the conditions, thus we can gradually develop Shanghai into a mother port of cruises.</p>

	E3: providing convenient operational environment for operators of the cruise route to develop their businesses.
	E4: studying to establish a financial service system for developing the cruise industry, setting up special catalogs of the cruise industry in aspects such as insurance and credit, so as to promote the healthy and orderly development of the cruise industry.

The layered analysis method is a thinking way that can simulate people's decision-making process. It has certain advantages in dealing with problems that are strong in weight subjectivity, so we chose the layered analysis method to determine the weight of all policies in Shanghai International Shipping Center. The relative importance among all polices can be shown with numbers, and the proportional criteria method is generally adopted, the meaning of which is shown in table 3-2

Table 3-2: Proportional criteria method

Grades	1	2	3	4	5
The relative degree of importance	Equally important	Slightly important	Important	Very important	Absolutely important

Table3-2 reflects the grading of the relative importance degree of policies. If some policy is not important to another policy, then we use reciprocals such as 1/2, 1/3 and 1/4. After sorting out the expert survey questionnaire, we can get the comparable results of the importance degree of all policies at Shanghai International Shipping Center. For this questionnaire survey, it sent out a total number of 15 copies of

questionnaires to the related shipping enterprises, research institutions and government organs, and it recovered 8 copies of them, the recovery rate is 53%. For the first-level policy indexes of Shanghai International Shipping Center, after the investigation by experts, they are equally important. Below, we mainly compare the degree of importance of the second-level policy indexes under the first-level ones. The comparable results are seen form table3-3 to table3-7.

Table 3-3 The comparable results of the policies of optimizing modern shipping and transportation system

	A1	A2	A3	A4	A5
A1	1	2	3	2	2
A2	1/2	1	2	1	1
A3	1/3	1/2	1	1/2	1/2
A4	1/2	1	2	1	1
A5	1/2	1	2	1	1

Table 3-4 The comparable results of the policies of developing modern shipping service system

	B2	B3	B4	B5
B1	2	3	3	2
B2	1	2	2	1
B3	1/2	1	1	1/2
B4	1/2	1	1	1/2
B5	1	2	2	1

Table 3-5 The comparable results of the policies of exploring to establish comprehensive experimental zones of international shipping development

	C1	C2	C3	C4	C5	C6
C1	1	5	3	3	3	2
C2	1/5	1	1/2	2	1/2	1/3
C3	1/3	2	1	3	5	1/2
C4	1/3	1/2	1/3	1	1/3	1/2
C5	1/3	2	1/5	3	1	1/3
C6	1/2	3	2	2	3	1

Table 3-6 The comparable results of the policies of improving ancillary support policies for the modern shipping development

	D1	D2	D3	D4	D5	D6	D7
D1	1	3	2	3	3	3	2
D2	1/3	1	1/2	1/2	1/2	1	1/2
D3	1/2	2	3	2	2	2	1
D4	1/3	2	1/2	4	1	1	1/2
D5	1/3	2	1/2	1	1	1	1/2
D6	1/3	1	1/2	1	1	1	1/2
D7	1/2	2	1	2	2	2	1

Table 3-7 The comparable results of the policies of promoting and standardizing the development of the cruise industry

	E1	E2	E3	E4
E1	1	2	3	3
E2	1/2	1	2	2
E3	1/3	1/2	1	1
E4	1/3	1/2	1	1

According to the layered analysis method we can calculate the weight of the second-level policy indexes under the first-level ones, it shows in table 3-8.

Table 3-8 The weight of the second-level policy indexes under the first-level ones

First-level policy indexes	The weight of First-level policy indexes	Second-level policy indexes	The weight of Second-level policy indexes
A	0.200	A1	0.349
		A2	0.185
		A3	0.098
		A4	0.184
		A5	0.184
B	0.200	B1	0.369
		B2	0.206
		B3	0.109
		B4	0.109
		B5	0.207
C	0.200	C1	0.341

		C2	0.079
		C3	0.187
		C4	0.069
		C5	0.110
		C6	0.214
D	0.200	D1	0.300
		D2	0.078
		D3	0.159
		D4	0.092
		D5	0.103
		D6	0.092
		D7	0.176
E	0.200	E1	0.455
		E2	0.263
		E3	0.141
		E4	0.141

3.2. Evaluation on current policies carried in Shanghai International Shipping Center

3.2.1 Evaluation on policies of optimizing modern shipping and transportation system

(1). The implementation effect of all policies for optimizing modern shipping and transportation system's policies

In the evaluation on policy implementation effect of Shanghai International Shipping Center, it is very difficult for us to quantify the implementation effect of the policy, thus we let experts evaluate it by using descriptive language, then analyze it by

converting it into accurate quantitative data. We categorize the implementation effect of policies into five levels, namely: good, relatively good, ordinary, relatively poor and poor. We give values to each level, (the scope of the point values is from 1 to 5). (seen in table 3-9).

Table 3-9 The score table of effect

The implementation effect	Good	Relatively good	Ordinary	Relatively poor	Poor
The corresponding points	5	4	3	2	1

After sorting out the questionnaires graded by experts, we can get the points on the implementation effect of all second-level policies at Shanghai International Shipping Center. The implementation effect of all policies in the policy for optimizing modern shipping and transportation system (A) is seen in table 3-10.

Table 3-10 Evaluation on policies of optimizing modern shipping and transportation system

Policy	Good	Relatively good	Ordinary	Relatively poor	Poor
A1	0.235	0.471	0.235	0.059	0
A2	0.529	0.294	0.177	0	0
A3	0.588	0.294	0.177	0	0
A4:	0.176	0.588	0.177	0.059	0

A5	0.059	0.471	0.353	0.117	0
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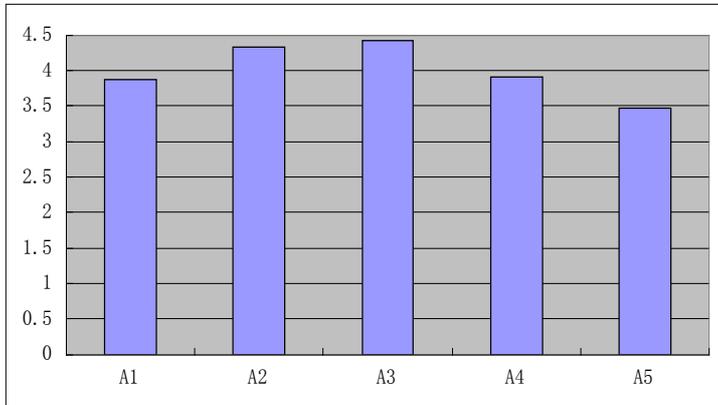


Figure 3-1 The mean value of evaluation on policies of optimizing modern shipping and transportation system

We can see from figure 3-1 that the implementation effect of all policies in the policy for optimizing modern shipping and transportation system is very good. The implementation effect of the policy in A5 (fully playing the functions of Shanghai Luchao Port Container Center and railway center, doing a good job in the island planning and research of Yangshan Deep-water Port's railways, improving the combined transport ratios of railways and waterways.) is the poorest, and the mean value reaches 3.417. While the implementation effect of the policy in A3 (promoting the construction of inland waterways, railways and airports, optimizing the allocation of transportation resources, appropriately increasing expressway channel, vigorously developing middle and remote air transportation, strengthening comprehensive transportation ability.) is the best, and the mean value reaches 4.471.

(2). The overall comprehensive evaluation for optimizing the policy implementation effect of modern shipping and transportation system

It is relatively complex to optimize the policy implementation effect evaluation of the modern shipping and transportation system, and different experts view differently on the implementation effect of the same policy. Therefore it has strong instability. Fuzzy synthetic evaluation method is a comprehensive evaluation method based on fuzzy mathematics, which can better solve uncertain problems that are difficult to quantify, so it is suitable for solving all uncertain questions. In order to better assess the overall implementation effect of policies for optimizing modern shipping and transportation system, we made comprehensive evaluation to it by using the fuzzy synthetic evaluation method. The comprehensive fuzzy evaluation result of policies for optimizing modern shipping and transportation system is as follows:

$$[0.349 \quad 0.185 \quad 0.098 \quad 0.184 \quad 0.184] \begin{bmatrix} 0.235 & 0.471 & 0.235 & 0.059 & 0 \\ 0.529 & 0.294 & 0.177 & 0 & 0 \\ 0.588 & 0.294 & 0.118 & 0 & 0 \\ 0.176 & 0.588 & 0.177 & 0.059 & 0 \\ 0.059 & 0.471 & 0.353 & 0.117 & 0 \end{bmatrix}$$

$$=[0.281 \quad 0.442 \quad 0.224 \quad 0.053 \quad 0]$$

We can see from chart 4-2 that, the implementation effect of policies for optimizing modern shipping and transportation system (A) belongs to the categories of good, relatively good, ordinary, poor and relatively poor, and the degree of membership is

0.281, 0.442, 0.224, 0.053 and 0 respectively, the maximum value is 0.442. Therefore, the implementation effect of policies for optimizing modern shipping and transportation system is the best.

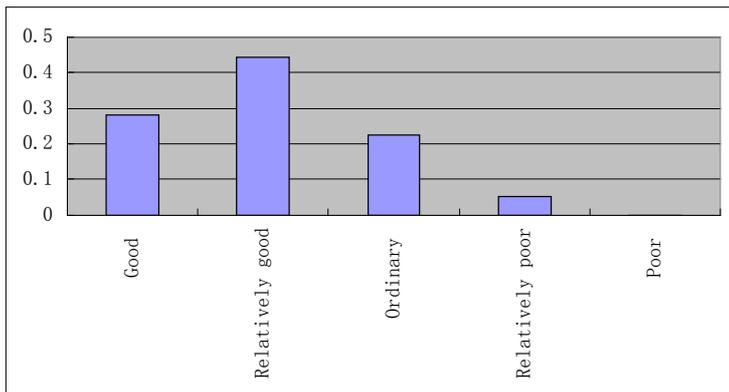


Figure 3-2 The overall implementation effect of policies for optimizing modern shipping and transportation system

3.2.2 The evaluation on policies of developing modern shipping service system

(1). The implementation effect evaluation on all policies of developing modern shipping service system

After sorting out the questionnaires graded by experts, we get the implementation effect of all policies for developing modern shipping service system (B) (see table 3-11).

Table 3-11: Evaluation on policies for developing modern shipping service system

(B)

Policy	Good	Relatively good	Ordinary	Relatively poor	Poor
B1	0.117	0.412	0.412	0.059	0
B2	0.117	0.471	0.412	0	0
B3	0.353	0.294	0.353	0	0
B4	0.176	0.412	0.412	0	0
B5	0.117	0.235	0.471	0.118	0.059

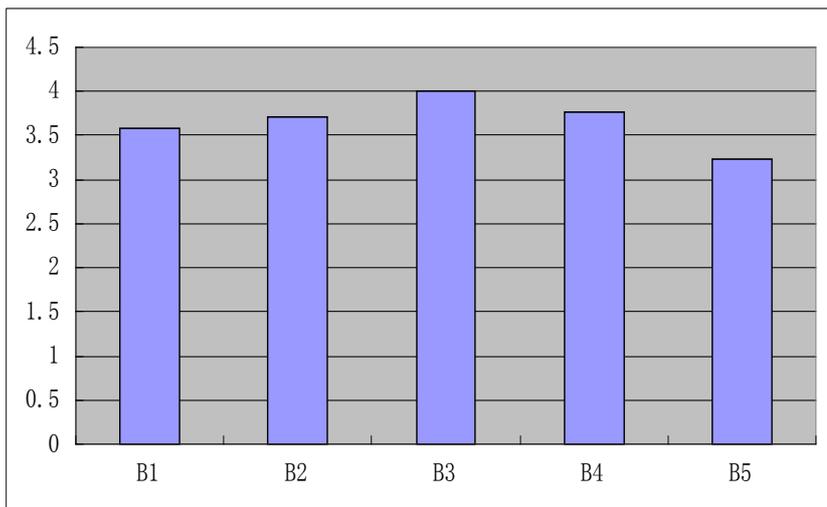


Figure 3-3 The implementation effect of policies for developing modern shipping service system

It can be seen from figure3-3 that the implementation effect of policies for developing modern shipping service system (B) is ordinary. The implementation effect of policy B5 (setting up a comprehensive information sharing platform in Shanghai International Shipping Center, facilitating the forming of a convenient and

efficient Yangtze River Delta Area and the exchange system between main ports in the Yangtze River and shipping information.) is the poorest, and the mean value of it is 3.235; while the implementation effect of policy in B3 (improving shipping service planning layout, further expanding the functions of Yangshan Bonded Port, developing the assembling shipping areas such as North Bund, Lujiazu is the best, and the mean value reaches 4.000.

(2). The overall comprehensive evaluation of developing the policy implementation effect for modern shipping service system

As previously, we made the evaluation by using fuzzy synthetic evaluation method.

The comprehensive fuzzy evaluation result of the policy for developing modern shipping service system is as follows:

$$[0.369 \quad 0.206 \quad 0.109 \quad 0.207] \begin{bmatrix} 0.117 & 0.412 & 0.412 & 0.059 & 0 \\ 0.117 & 0.471 & 0.412 & 0 & 0 \\ 0.353 & 0.294 & 0.353 & 0 & 0 \\ 0.176 & 0.412 & 0.412 & 0 & 0 \\ 0.117 & 0.235 & 0.471 & 0.118 & 0.059 \end{bmatrix}$$

$$=[0.150 \quad 0.375 \quad 0.417 \quad 0.046 \quad 0.012]$$

We can see from figure 3-4 that, the implementation effect of the policy for developing modern shipping service system (B) belongs to the five levels of good, relatively good, ordinary, relatively poor and poor, and the degree of membership is 0.150, 0.375, 0.417, 0.046 and 0.012 respectively, and the maximum value is 0.417.

Therefore, the implementation effect of the policy for developing modern shipping service system (B) is ordinary.

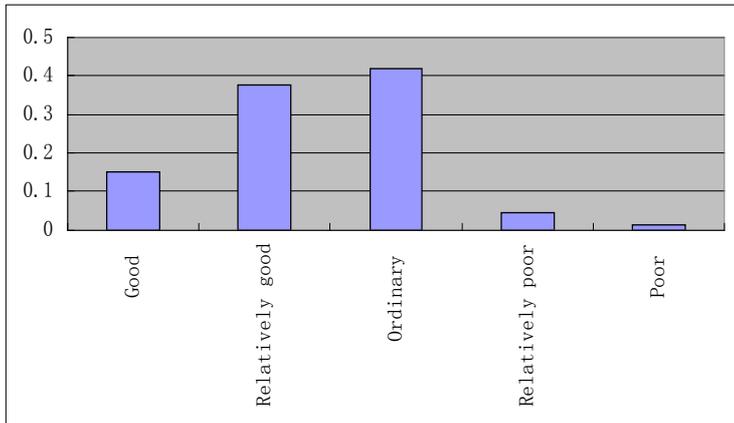


Figure 3-4 The overall implementation effect of the policy for developing modern shipping service system

3.2.3 The evaluation of the policy of exploring to establish comprehensive experimental zones for international shipping development

The implementation effect of all policies for exploring to establish international shipping development comprehensive experimental zones

After sorting out the questionnaires graded by experts, we get the implementation effect of all policies in the policy for exploring comprehensive experimental zones of international shipping development (C) (seen table3-12).

Table 3-12 Evaluation on policies of exploring to establish comprehensive experimental zones for international shipping development.

Policy	Good	Relatively good	Ordinary	Relatively poor	Poor
C1	0.059	0.294	0.353	0.294	0
C2	0.177	0.294	0.294	0.235	0
C3	0.353	0.411	0.118	0.118	0
C4	0.412	0.470	0.118	0	0
C5	0.294	0.471	0.176	0.059	0
C6	0.059	0.529	0.294	0.118	0

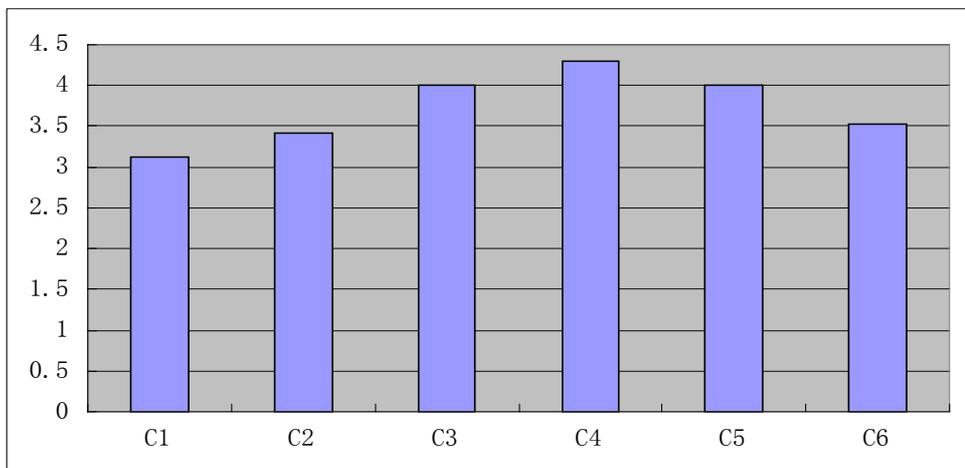


Figure 3-5 The mean value on the implementation evaluation of all policies in the policy for exploring comprehensive experimental zones of international shipping development

We can see from figure 3-5 that, the implementation effect of all policies in the

policy for exploring comprehensive experimental zones of international shipping development is ordinary (C). The implementation effect of the policy in C1 (improving the international competitive edge of shipping enterprises in our country by using policies supporting shipping in advanced shipping countries (regions) for reference.) is the poorest, and the mean value is 3.118; while the implementation effect of the policy in C4 (it is permitted that enterprises can open offshore accounts, thus providing convenience for funds settlement of its foreign businesses.) is the best, and the mean value reaches 4.294.

(2). The overall comprehensive evaluation on the implementation effect of the policy for exploring to establish comprehensive experimental zones of international shipping development

Through using comprehensive fuzzy evaluation method, the comprehensive fuzzy evaluation result of the policy for exploring to establish comprehensive experimental zones of international shipping development is shown below:

$$[0.341 \quad 0.079 \quad 0.187 \quad 0.069 \quad 0.110 \quad 0.214] \begin{bmatrix} 0.059 & 0.294 & 0.353 & 0.294 & 0 \\ 0.177 & 0.294 & 0.294 & 0.235 & 0 \\ 0.353 & 0.411 & 0.118 & 0.118 & 0 \\ 0.412 & 0.470 & 0.118 & 0 & 0 \\ 0.294 & 0.471 & 0.176 & 0.059 & 0 \\ 0.059 & 0.529 & 0.294 & 0.118 & 0 \end{bmatrix}$$

$$=[0.174 \quad 0.398 \quad 0.256 \quad 0.172 \quad 0]$$

We can get from figure3-6 that, the implementation effect of the policy for exploring

to establish comprehensive experimental zones of international shipping development (C) belongs to the five categories of good, relatively good, ordinary, relatively poor and poor, the degree of membership is respectively as 0.174, 0.398, 0.256, 0.172 and 0, the maximum value is 0.398. Therefore, the implementation effect of the policy for exploring to establish comprehensive experimental zones of international shipping development (C) is ordinary.

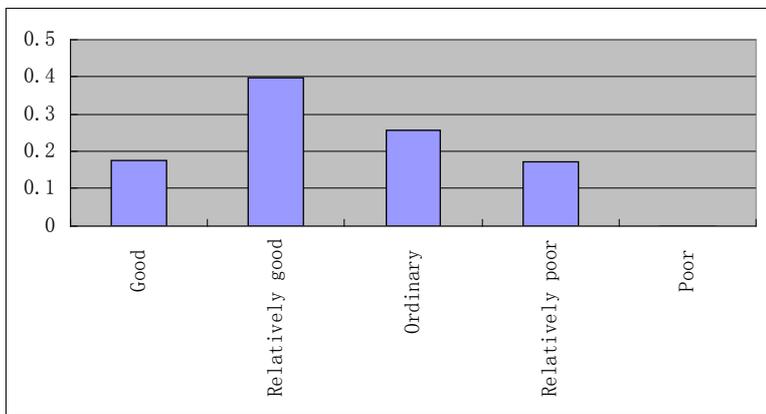


Figure 3-6 the overall implementation effect of the policy for exploring to establish comprehensive experimental zones of international shipping development

3.2.4. The implementation effect evaluation of ancillary support policies for perfecting modern shipping development

(1). The implementation effect evaluation of ancillary support policies for perfecting modern shipping development

After sorting out the questionnaires graded by experts, we get the implementation effect of all policies in the ancillary support policy for perfecting modern shipping

development (D) (seen table 3-13).

Table 3-13 Evaluation on policies in the ancillary support for perfecting modern shipping development (D)

Policy	Good	Relatively good	Ordinary	Relatively poor	Poor
D1	0.118	0.529	0.294	0.059	0
D2	0.294	0.412	0.235	0.059	0
D3	0.176	0.294	0.412	0.118	0
D4	0.412	0.412	0.059	0.117	0
D5	0.294	0.471	0.235	0	0
D6	0.353	0.176	0.412	0.059	0
D7	0.471	0.412	0.117	0	0

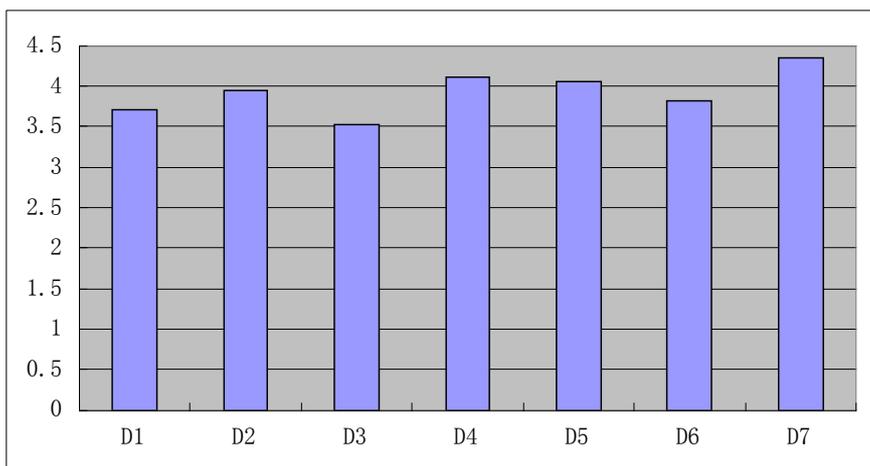


Figure 3-7 The average of the implementation effect of all policies in the ancillary support policy for perfecting modern shipping development

We can see from figure 3-7 that, the implementation effect of all policies in the ancillary support policy for perfecting modern shipping development (D) is relatively good. The implementation effect of the policy in D3 (searching for financial institutions, shipping enterprises that have strength to set up professional shipping insurance institutions in Shanghai.) is the poorest, the mean value is 3.529; while implementation effect of the policy in D7 (enriching financial shipping products, accelerating the speed for developing shipping freight rate index derivatives, and creating conditions for shipping enterprises in our country to control shipping risks.) is the best, and the mean value reaches 4.353.

(2). The overall comprehensive evaluation on the implementation effect of ancillary support policies for perfecting modern shipping development

The comprehensive fuzzy evaluation result of the ancillary support policies for perfecting modern shipping development (D) that we get through the fuzzy synthetic evaluation method is shown below:

$$\begin{aligned}
 & [0.300 \ 0.078 \ 0.159 \ 0.092 \ 0.103 \ 0.092 \ 0.176] \begin{bmatrix} 0.118 & 0.529 & 0.294 & 0.059 & 0 \\ 0.294 & 0.412 & 0.235 & 0.059 & 0 \\ 0.176 & 0.294 & 0.412 & 0.118 & 0 \\ 0.412 & 0.412 & 0.059 & 0.117 & 0 \\ 0.294 & 0.471 & 0.235 & 0 & 0 \\ 0.353 & 0.176 & 0.412 & 0.059 & 0 \\ 0.471 & 0.412 & 0.117 & 0 & 0 \end{bmatrix} \\
 & = [0.270 \ 0.413 \ 0.260 \ 0.057 \ 0]
 \end{aligned}$$

We can see from figure3-8 that, the implementation effect of the ancillary support

policies for perfecting modern shipping development (D) belongs to the five categories of good, relatively good, ordinary, relatively poor and poor, the degree of membership is 0.270, 0.410, 0.260, 0.057 and 0 respectively, the maximum value is 0.410. Therefore, the implementation effect of the ancillary support policies for perfecting modern shipping development (D) is relatively good.

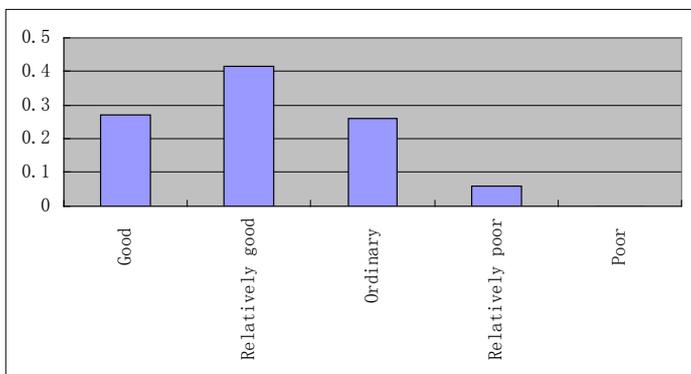


Figure 3-8 The overall implementation effect of ancillary support policies for perfecting modern shipping development (D)

3.2.5 Evaluation on the policies for promoting and standardizing the development of the cruise industry

Table 3-14 Evaluation on policies for promoting and standardizing the development of the cruise industry

Policy	Good	Relatively good	Ordinary	Relatively poor	Poor
E1	0.294	0.471	0.176	0.059	0
E2	0.353	0.353	0.176	0.059	0.059
E3	0.294	0.294	0.412	0	0
E4	0	0.235	0.706	0	0.059

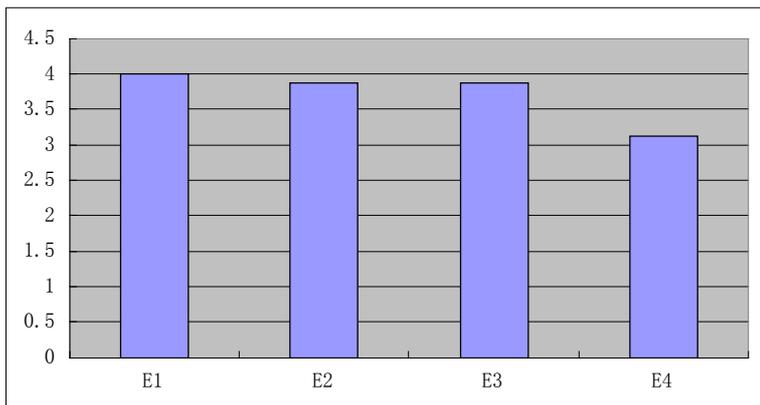


Figure 3-9 the mean evaluation value of the implementation of all policies for promoting and standardizing the development of the cruise industry

(1) We can see from figure3-9 that, the implementation effect of all policies for promoting and standardizing the development of the cruise industry (E) is relatively good. The policy implementation effect in E4 (studying to establish a financial service system for developing the cruise industry, setting up special catalogs of the cruise industry in aspects such as insurance and credit, so as to promote the healthy

and orderly development of the cruise industry.) is the poorest, the mean value is 3.118; while that in E1 (it is permitted that overseas international cruise companies can register and set up operational institutions, and carrying out the approved international route cruise service business.) is the best, and the mean value reaches 4.000.

(2) The overall comprehensive evaluation on the implementation effect of policies for promoting and standardizing the development of the cruise industry

The comprehensive fuzzy evaluation result of the policies for promoting and standardizing the development of the cruise industry (E) that we get through the fuzzy synthetic evaluation method is shown below:

$$[0.455 \quad 0.263 \quad 0.141 \quad 0.141] \begin{bmatrix} 0.294 & 0.471 & 0.176 & 0.059 & 0 \\ 0.353 & 0.353 & 0.176 & 0.059 & 0.059 \\ 0.294 & 0.294 & 0.412 & 0 & 0 \\ 0 & 0.235 & 0.706 & 0 & 0.059 \end{bmatrix}$$

$$= [0.268 \quad 0.382 \quad 0.284 \quad 0.042 \quad 0.024]$$

We can get from figure 3-10 that, the implementation effect of policy for promoting and standardizing the development of the cruise industry (E) belongs to the five categories of good, relatively good, ordinary, relatively poor and poor; the degree of membership is 0.268, 0.382, 0.284, 0.042 and 0.024, the maximum value is 0.382. Therefore, the implementation effect of the policy for promoting and standardizing the development of the cruise industry (E) is relatively good.

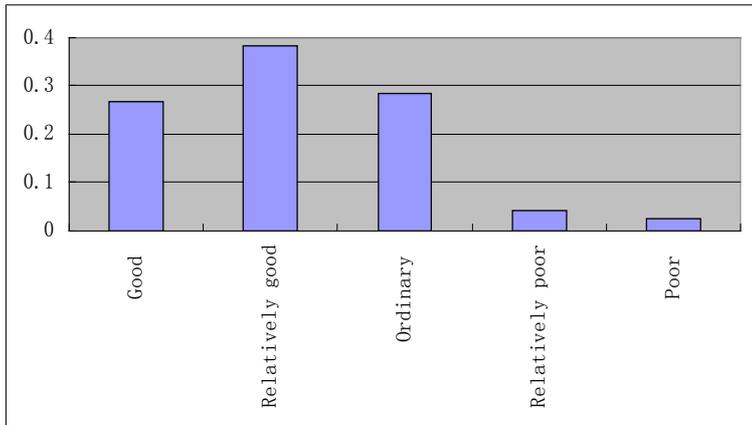


Figure 3-10 the overall implementation effect of the policy for promoting and standardizing the development of the cruise industry

3.3 The overall evaluation on the policies of Shanghai International Shipping Center

Through fuzzy synthetic evaluation method, we get the evaluation results of policies on optimizing modern shipping and transportation system (A); policies on developing modern shipping service system (B); policies on exploring to establish comprehensive experimental zones of international shipping development (C); improving the ancillary support policies for modern shipping development (D); policies on promoting and standardizing the development of the cruise industry (E). Therefore, we can also calculate the overall evaluation result of the policy implementation effect at Shanghai International Shipping Center, which is shown below:

$$[0.200 \ 0.200 \ 0.200 \ 0.200 \ 0.200] \begin{bmatrix} 0.281 & 0.442 & 0.224 & 0.053 & 0 \\ 0.150 & 0.375 & 0.417 & 0.046 & 0.012 \\ 0.174 & 0.398 & 0.256 & 0.172 & 0 \\ 0.270 & 0.413 & 0.260 & 0.057 & 0 \\ 0.268 & 0.382 & 0.284 & 0.042 & 0.024 \end{bmatrix}$$

$$= [0.281 \ 0.442 \ 0.224 \ 0.053 \ 0]$$

We can get from figure3-11 that the policy implementation effect at Shanghai International Shipping Center belongs to the five categories of good, relatively good, ordinary, relatively poor and poor; the possibility of them is 0.281, 0.442, 0.224, 0.053 and 0 respectively, the maximum value is 0.442. Thus, the implementation effect of Shanghai international shipping center policy is relatively good.

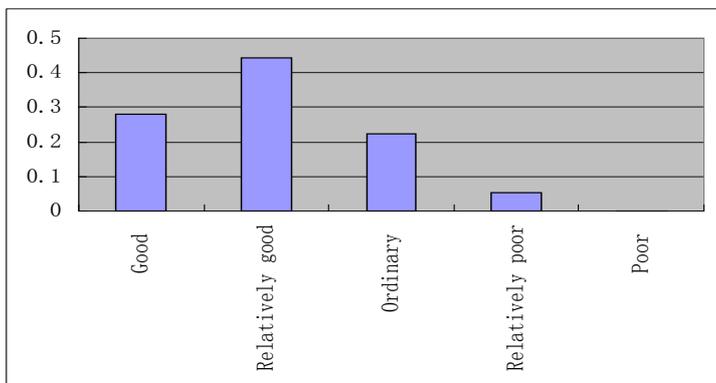


Figure 3-11 The overall evaluation result of the policy implementation effect at Shanghai International Shipping Center

3.4 Existing problems of Shanghai International Shipping Center

3.4.1 The port development

(1) The status is not higher as international central terminal station

Since the transit consolidation business of Shanghai Port started in 2012, the

international transit business of Shanghai Port has grown rapidly, but compared to Singapore, Hong Kong, Busan and other traditional international pivotal ports, it also lags behind in terms of the volume. In 2014, the international container transit amount of Shanghai Port was 2.504 million TEU with the year-on-year growth of 5.9%, accounting for 7.1% of the total throughput, so there is still large climbing space in transit service ability.

(2) The management level of port remains to be strengthened

Shanghai Port's overall hardware strength has been significantly improved, but the soft strength is slightly weak. The port lags behind the international ports in the efficient operation, information management and intelligence operation, and the port has little independently-developed scientific and technological achievements.

3.4.2 Disadvantages of developing the shipping business

(1) Insufficient innovation ability for new challenges of shipping companies

In recent years, Shanghai shipping and port have gradually opened to foreign merchants, and the trend of larger-sized vessel, green and federal trend produce the new challenges to shipping enterprises. Large domestic shipping companies, limited by system and mechanism, have insufficient innovation in the face of the upcoming fierce market competition and lack the core competitiveness.

(2) Difficult "going out" strategy for private shipping enterprises

Most private shipping enterprises in Shanghai are started late, so there is large gap

between it and overseas investment in the capital, technology, management, human resources, international operations and anti-risk capability, etc, combined with the complex international politics and economic situation, the investment risk for some regions and industries increases, so they are at a disadvantage in the competition of international shipping market.

(3) Less attractive business environment for domestic and foreign shipping companies

There is still a certain gap in the overall shipping business environment between Shanghai International Shipping Center and Singapore, Hong Kong and other countries and regions, and deficiency in the legal environment, market access, taxation system, government services, shipping talents, etc, which directly affects the operation of domestic shipping companies, and also indirectly inhibits the settlement of foreign-funded enterprises.

3.4.3 The obstacles in the shipping industry development

(1) Local fixed service industry occupies too large proportion

Shanghai shipping services usually focuses on the harbor handling and coming ship, fluctuates with the cargo quantity, and the international liquidity business not subject to regional restriction has small proportion. On one hand, the industrial base of modern shipping service industry in Shanghai is weak, lacking the corresponding shipping environment and historical accumulation of the worldwide shipping service

industry; on the other hand, it has deficiency in the connection to the foreign business environment, legal system and general rule.

(2) International shipping service level remains to be promoted

There is still large gap in the shipping service level between Shanghai and London, Singapore, Hong Kong and other international shipping centers. For example, it lays particular stress on traditional legal services with excess supply ability and insufficient modern legal service for the shipping center, and it also has deficiency in the international shipping rules and standards.

Chapter 4 The influence of Shanghai FTZ on Shanghai International Shipping Center

4.1 The Opening Policy of Shipping Industry in Shanghai FTZ

According to Framework Plan for the China (Shanghai) Pilot Free Trade Zone, Measures on Further Opening of China (Shanghai) Pilot Free Trade Zone, Catalogue of Industries for Guiding Foreign Investment (Revision 2011) and Special Management Measures on Foreign Investment Access of China (Shanghai) Pilot Free Trade Zone (Negative List) (2013) approved by the State Council as well as related laws and regulations, further opening policies were implemented as follows for shipping industry of China (Shanghai) Pilot Free Trade Zone:

- 1) Relax restrictions on foreign investment proportions in Sino-Foreign Joint and Sino-Foreign Cooperative International Shipping Enterprises;
- 2) Allow non-Chinese flag ships owned by Chinese companies prior to carry and try the Coastal

Piggyback Business by foreign trade import and export containers between domestic coastal ports and Port of Shanghai;

3) Allow the establishment of wholly foreign-owned international ship management enterprises.

In 2015, the negative list was revised again at China (Shanghai) Pilot Free Trade Zone, including:

1) As to the public international shipping agency business, change from Chinese Holding to not more than 51% of foreign investment proportion.

2) Allow the foreign-funded enterprises to engage in international ocean shipping cargo handling, international marine container station and yard business.

4.2 Opportunities that Shanghai FTZ brings to the Shanghai international shipping center

The opportunities for the Shanghai international shipping center shown in the following aspects:

(1) The free trade zone is conducive to further consolidate the trade basis of the shipping center.

The construction of the free trade zone will improve the volume of port cargo from two aspects, the trade goods of hinterland and international transshipment cargo.

First of all, with all the preferential conditions to carry out in the free trade zone, the function of bonded zone will change from simple ‘bonded warehousing, primary processing, transit trade to ‘commodity storage and transport, and related industrial, trade, transportation, finance and tourism all-in-one business.’ Due to customs

clearance procedures become more convenient, the establishment of the free trade zone will attract more hinterland traders decelerate export good in Shanghai port, hinterland trade goods is expected to be improved.

Second, with the service industry of free trade zone open door to the outside and the transformation and upgrading of the way of trade, coastal piggybacking, tax rebates of departure, and international transit consolidation in the free trade zone will directly promote the portfolio of the port.

At the same time, the opening of business services as commodities, cross-border e-commerce, bonded exhibition, and the development of financing lease, ship registration and other business will open the new space for the future development of Shanghai port operations. A series of dividend that mentioned business brings will further attract international transshipment cargo gathered in Shanghai port, the transfer ability of Shanghai port will be improved.

(2) The establishment of free trade zone will promote the infrastructure construction on the shipping center

Although Shanghai has the world first-class hardware facilities, but in storage facilities, transportation system and other hardware, there is still a gap with the international first-class port, the establishment of free trade area will promote the shipping center of infrastructure construction.

First of all, free trade area will promote the level of warehousing facilities.

According to the logistics performance index released in 2012, China ranked 26, in terms of storage quality, storage infrastructure significantly lower than the surrounding developed areas and countries. In Shanghai, for example, there is traditional warehouse storage supply excess, unreasonable warehouse layout, storage facilities cost on the high side, container yard layout is unreasonable and so on. At the same time, Shanghai's level of storage charges and fees also has a gap with the international mainstream shipping center. According to statistics, at present the Shanghai warehouse property price is only 1/5 of the Singapore, wide spread and free trade policy for the future are likely to attract the international first-class warehousing enterprises, and promote Shanghai shipping center storage facilities.

Second, the free trade area will be beneficial to optimize the structure and efficiency of transportation system. The improvement of the transportation system is an important assurance for efficient operation of port, and according to international experience, the construction of free trade area will help to improve the transportation system of shipping center.

Finally, the establishment of free trade area is conducive to attract the transit passengers and create passenger and cargo hub. The overall concept of free trade zone put Pudong airport as part of a free trade area and clearly pointed out that "the active play to Waigaoqiao port, Yangshan deep-water port, Pudong airport international hub port linkage effect, explore the formation of internationally

competitive shipping development system and operation mode.” Shanghai airport now transit goods accounted for only 5%, far lower than other competitors. Free trade zone extended Shanghai Pudong airport and powerful throughput will attract more air freight transit goods, and develop sea-air mode freight, to help the Shanghai shipping center development.

(3) The establishment of free trade area will promote the further perfect policy system

From national regional experience, the development of free trade cannot do without the positive support of policy, and free trade area of the positive policy will accelerate the construction of shipping center. The establishment of the Shanghai free trade zone for the construction of Shanghai shipping center also brings a series of favorable policies.

First of all, the measures for the administration of China (Shanghai) free trade area put forward the “open the first line, hold the second line” inbound and outbound supervision system innovation, this internationally compatible policy will greatly improve efficiency of goods flow, and will improve the overall appeal of Shanghai shipping center.

Second, the future free trade policy may also aim at custom fees and the adjustment space of shipping companies related tax. This can reduce the cost of shipping companies and attract international shipping enterprises’ regional headquarters enter

in the free trade zone.

Finally, the related laws in the free trade zone and various systems gradually improved will also attract financing, arbitration, assessment, consulting, etc. in a large part of the high-end shipping service. In late October 2013, the arbitration institute of the China (Shanghai) free trade zone inaugurated, the Baltic exchange has also set up the first branch in Shanghai. With the improvement of the legal system and class shipping derived varieties of rich, Shanghai shipping center will enhance to attract high-end shipping industry, and improving customer viscosity.

(4) The construction of free trade zone helps the development of shipping financial market

According to the recently released reforms in the free trade zone, the offshore business will become an important development direction, offshore marine shipping financial business such as loan will benefit and have great opportunities for development. Regulation of off-shoring always been regarded as one of the main reasons for hindering the development. Since most of ships that engaged in international shipping suspended flag of convenience, registered in overseas operations, domestic financial institutions in providing the ship financing service is necessarily involved in offshore business, but now the limited of setting up special purpose single ship and foreign exchange control restricts the domestic financial institutions to develop ocean ship financing business. Off-shoring control affected

the competitiveness of domestic financial institutions in the shipping finance.

Released on September 29 last year, the article five of 《The notice of China banking regulatory commission about China (Shanghai) free trade zone of banking regulation》 points out : ‘To encourage cross-border investment and financing service. Support the development of the banking financial institutions in cross-border financing business, including but not limited to the commodity trade financing, the whole supply chain financing, offshore ship finance, modern service industry, the financial support, guarantee loans, commercial paper, etc.’ Clearly put forward that financial institutions in Shanghai free trade zone can be involved in offshore finance business of the ship.

To encourage offshore financial business, the future free trade may also introduce more financial supporting policies, including under that RMB not achieved capital account convertibility conditions, can only implementing flexible exchange controls to the comprehensive experimental zone of ship financing and other financial business, carry out a conditional free foreign exchange policy. All this within the free trade area has cash and has not yet been launched offshore financial policy will no doubt accelerate the development of Shanghai shipping center, and brings the bigger development opportunities to commercial Banks and other financial institutions to carry out the shipping financial business.

4.3 Challenges that Shanghai FTZ brings to the International Shipping Center

(1) The regulatory risk of government aggravate

The free trade zone implements the supervision service mode ‘the first line gradually open completely, second line safe efficient control, free flow of goods in the area’, this mode poses challenges to the government regulation ability. ‘the first line gradually open completely’ not only involving high coordination between the various ministries and commissions under the state council, but also require collaboration and mutual recognition of law enforcement result from the customs, industry and commerce, quality inspection, frontier defense, foreign exchange and other relevant regulatory collaboration. “Second line safe efficient control” also poses challenges to the government regulation ability. Free trade area are faced with the problem is how to set up in the complex economic activity effective barrier to prevent risks that both can make the free trade zone operate healthy and not constitute a negative impact from outside economy.

After operation of the free trade zone, with innovative and functional expansion of shipping system, some regulators may even beyond its own ability, this request the coordination with other departments. When the free trade zone put forward ‘second line safe efficient control’, the spillover effects need to reflect outside the area at the same time. On the purpose of the reform is to achieve the port navigation system in

the area can replicate and promote outside, therefore, on the basis of ‘second line safe efficient control’, further realizes the zone and zone port shipping industry linkage, utilize the overflow effect of free trade area, is also another challenge for the government in the regulatory process.

(2) The competition pressure of domestic port and shipping enterprise enhanced

With the China (Shanghai) free trade area came into operation, the relevant system and policy in succession fall to the ground, the service sector opening wider to the outside, and negative listing management mode and foreign investment access before the implementation of national treatment of foreign ports such as ship management enterprise will further check in China (Shanghai) free trade zone, this in the reversed transmission ports in our country enterprise management level of ascension and improve operation mode at the same time, also brought them a competitive pressure.

(3) The requirement of improvement of technology innovation of port and shipping enterprise and the change of business mode raised.

System innovation is the core of the construction of the China (Shanghai) free trade zone, through promoting investment, finance, trade, government management and a series of institutional change, cultivate new advantages for global competition, building development cooperation with all countries on the new platform. One of the main purpose of construct Shanghai free trade zone is to promote enterprise technology innovation and business model innovation.

First of all, technical regulations and standards of port and shipping enterprises according to certain standards for management and operation, so the port shipping companies not only to have a thorough understanding of the current standards, including the international standards and industry standards, also needs to be equipped with standardized personnel and equipment, standard operation, improve the added value of service, improve the efficiency of operations. And the current domestic ports and shipping companies generally lack of full-time standardization and standard of technical experts, there is a still a gap with the international prevailing standard.

Secondly, extensive management, for now many do not meet the emission standards or the standards of the industry environment of port and shipping companies, environmental and ecological protection means that they have to spend a lot of time, manpower and capital enterprise reform, improve marine technology and terminal equipment, this will not only increase the cost of port and shipping companies, can also affect the port and shipping companies' implementation of the strategic planning, etc. at this stage.

Thirdly, Shanghai free trade zone system innovation requires port and shipping enterprises meet the demand of internationalized operation, build internationally compatible environment of trade facilitation. Therefore, Shanghai port shipping enterprise is faced with new business model change requirements and new challenge,

must break the traditional business model, innovative new service forms and business model, business model innovation as the core power of enterprise development and the new profit growth point.

Chapter 5 Suggestions to improve Shanghai International Shipping Center

(1) Perfect the coordination mechanism in Yangtze River Delta, and expand the scope of influence

In the initial construction process, Shanghai International Shipping Center obtained the support of Zhejiang Province and Jiangsu Province. In order to further promote the construction of Shanghai International Shipping Center and complete the goal in 2020, Shanghai still needs to win the support of surrounding provinces and cities in Yangtze River Basin; at the same time, it is necessary to strengthen the cooperation coordination mechanism with Yangtze River Delta and provinces and cities in Yangtze River Basin, and expand the scope of influence, such as further promotion of entry cooperation with Yangtze River Delta, six provinces of central China and Sichuan and Chongqing region, and speed up the port service facilitation; enlarges the overflow effect of the construction of Shanghai International Shipping Center, and let the surrounding areas share the achievements of shipping center construction.

(2) Facilitate the construction of deep water port and optimization of collecting and distributing system

In terms of the hardware facilities, in order to meet the increasing port throughput requirements, ease the productivity bottleneck of Waigaoqiao Port Area and guarantee the status of Shanghai international hub port, it is needed to promote the construction of deep water port in Shanghai, and actively research the development and construction of New Hengsha Port or Dayangshan Island on the existing function layout. In terms of the optimization of collecting and distributing system, it is necessary to accelerate the construction of port railway and channel, promote the transformation of collecting and distributing mode from the road to the rail and waterway, vigorously enhance the level of supporting facilities and ensure the smooth harbor transport.

(3) Accelerate the cultivation of high-end shipping service industry

At present, the weakness of Shanghai International Shipping Center construction is the high-end shipping service industry, so it should speed up the cultivation of ship trading, ship management, maritime arbitration, shipping finance and shipping consultancy services and other high-end shipping service industries. For example, build the national ship trading platform, standardize the shipping trade service process system, promote the ship management professional development, and encourage the establishment and introduction of third-party professional ship management companies; further perfect "Arbitration Act", "Maritime Law" and other relevant laws, promote the international standards of maritime arbitration clauses;

attract international-level shipping financial elements, develop the shipping industry; cultivate a group of shipping consulting enterprises with strong consulting and business innovation ability, and strengthen the shipping consulting service ability, etc.

(4) Develop the shipping e-commerce and wisdom shipping

The rise of shipping e-commerce and wisdom shipping is beneficial to reduce the cost of both parties in shipping services trade, improve transaction efficiency and increase the data analysis application. The construction of Shanghai International Shipping Center should take advantage of the shipping information and intelligent development opportunities, make breakthrough in the shipping information soft power, develop the shipping e-commerce platform and train high-end composite talents of international trade payment platform and shipping e-commerce, build the wisdom port, enhance the intelligent level of port equipment and the storage and utilization efficiency of big data; promote the electronic port service level, improve the electronic data networking between ports, shipping, owner, agent, and port regulators, etc.

Chapter 6 Conclusion

In this article, we assessed all polices in Shanghai International Shipping Center and its overall implementation. We through the expert scoring get judgment matrix method, using the analytic hierarchy process (AHP) to calculate the index weight.

Finally, according to the results of the analysis, the policy implementation effect at Shanghai International Shipping Center belongs to the five categories of good, relatively good, ordinary, relatively poor and poor; the possibility of them is 0.281, 0.442, 0.224, 0.053 and 0 respectively, the maximum value is 0.442. Thus, the implementation effect of Shanghai international shipping center policy is relatively good. But we also can find many problems of the shipping center, such as the status is not higher enough, the management level need to be strengthened, many new challenges appeared, etc.

Then under the construction of the Shanghai Free Trade Zone, both opportunities and challenges showed up.

The opportunities are summarized as follow:

- 1) The free trade zone is conducive to further consolidate the trade basis of the shipping center.
- 2) The establishment of free trade zone will promote the infrastructure construction on the shipping center
- 3) The establishment of free trade area will promote the further perfect policy system
- 4) The construction of free trade zone helps the development of shipping financial market

The challenges are summarized as follow:

-
- 1) The regulatory risk of government aggravate
 - 2) The competition pressure of domestic port and shipping enterprise enhanced
 - 3) The requirement of improvement of technology innovation of port and shipping enterprise and the change of business mode rose.

So we should seize the opportunities to promote the development of Shanghai International Shipping Center and focus on the challenges to put forward suggestions to overcome them.

However, due to the ability of author is limited, there are still some deficiencies in the thesis.

(1) Due to the policy implementation effect in Shanghai International Shipping Center is multifarious, combined with the author's ability is limited, although after serious thinking about the influence of the indicator system, but it is still difficult to guarantee the perfect quality, so there are some shortcomings.

(2) There are some errors in the data itself. This paper uses the method of questionnaire survey to collect information and related data; it is difficult to avoid free existence individual subjectivity, resulting in a certain error.

(3) Evaluation methods have limitations. Text chooses the analytic hierarchy process (AHP), the method itself has certain deficiency, cannot avoid.

Reference

- [1] Zhang ningjie, (2014), The study of the free trade zone impact on Shanghai shipping center construction, *New finance*, P33-37
- [2] Liu meile, (2014), Research of the effect of a FTA to shipping industry in Shanghai
- [3] Wang xuefeng, Chen yang, (2013), The changes of the international shipping center and development mode, *The scientific development*, P28-43
- [4] Wang zehua,(2013), The analysis of Shanghai international shipping center construction and development situation in 2012, *Science and practice of statistics*, P35-37
- [5] Liu siqi, (2015), The study of the free trade zone impact on Shanghai shipping center construction, *International trade*, P87-89
- [6] Zong chuanhong, (2014), The construction of Shanghai international shipping center under the background of free trade zone, *Opinion*, P42-45
- [7] Tan na, (2015), Study on the economic growth effect of Shanghai free trade zone, *International trade issues*, P14-23
- [8] Zhang shiyun, (2015), Study on the function of shipping service trade in FTZ
- [9] Kong lei, (2014), Documentary on “Jinqiao industry technology innovation conference” and “International port and shipping information forum”, *Shanghai economy*, P50-51
- [10] Li qiang, (2014), The development, plan and suggestion of service innovation in

international shipping in free trade zone, China's circulation economy, P16-25

[11] Zhang yin, (2013), The Shanghai international shipping center become more powerful for the establishment of free trade zone, East China news, vol 5

[12] Yuan xiang, (2013), Shanghai free trade zone brings opportunities and challenges to China's shipping industry, Transportation enterprise management, P7-9

[13] Yu wei, (2014), Research on development pattern of Shanghai international shipping center

[14] Wang ziming, (2016), Study on the influence of Shanghai free trade zone on the development of logistics, Logistics management, P10-11

[15] Mao boke, (2014), The new opportunities and new mission of the construction of Shanghai international shipping center, Port economy, P5-8

[16] Rong weicheng, (2014), Research on construction of Shanghai international shipping center

[17] Jin zhendong, (2010), Research on the construction and evaluation of soft power index system of international shipping center

[18] Gao jie, (2009), Comprehensive evaluation of talent convergence level of Shanghai international shipping center, Journal of Shanghai Maritime University, P46-51

[19] Ji xiaoqing, (2011), Financial-aid policy on the construction of Shanghai as an

international shipping center, Journal of Shanghai university of finance and economics, P90-97

[20] Wu xiaohui, (2004), The soft environment construction and the role of the government of Shanghai international shipping center

[21] Su qi, (2007), Research of competitive power of Shanghai international shipping center

[22] Kong jiongiong, (2012), Empirical research on interaction between Shanghai international trade center and international shipping center, Special zone economy, P52-54

[23] Tang xiumin, (2005), On the evolution of the relation ship between ports and cities and the building of Shanghai international shipping center

[24] Zhu hui, (2008), Correlation research of the international shipping center and financial center

[25] Guo hubin, (2013), Experience and enlightenment of Singapore in building international shipping center, Logistics technology, P17-21

[26] Wang jie, (2007), Study on the theory of international maritime cluster formation and development

[27] Jin jiachen, (2010), Experience and enlightenment of overseas international shipping center in building soft environment, Water management, P11-14

[28] Yu xiaojing, (2009), International shipping center's transportation system, Water

management, P11-14

[29] Chen jihong, (2009), The research on improve soft environment development of Shanghai international shipping center, Water management, P18-26

[30] Li quan, (2013), Element agglomeration, value transformation and construction of Shanghai international shipping center

[31] Dong gang, (2012), The experience of the London international shipping center to tackle the financial crisis for reference and enlightenment to Shanghai, The scientific development, P101-107

[32] Ma shuo, (2010), What is the international shipping center, Water management, vol7, P1-5

[33] Zeng jiawen, (2013), Research on the transformation and upgrading and impact factors of Hong Kong international shipping center

[34] Guo hubin, (2013), Experience and enlightenment of the form and development of the world class international shipping center, China's economic and trade, P21-24

[35] JeffreyD. Wilson, (2012), Resource security: a new motivation for free trade agreements in the Asia-Pacific region, The Pacific Review

[36] Jung Hur, (2011), Do Free Trade Agreements Increase Economic Growth of the Member Countries? World Development

[37] Shujiro Urata, (2009), Japan's Free Trade Agreement Strategy, Japanese Economy

[38] Liu qianwen, (2015), The comparison of four international shipping center, Observation, P36-38

[39] Wu chao, (2015), The study on the influence of the free trade zone construction on the flow of human capital, Journal of Mudanjiang Normal University, vol6, P32-34

[40] Shao qiang, (2011), The current operational situation and cluster developing strategies of advanced shipping service business in Shanghai international shipping center

[41] Fan yifan, (2014), The implication of Singapore free trade mode to China (Shanghai) Pilot Free Trade Zone

Appendix I - Questionnaire

Dear Sir,

I am doing an evaluation research of the impacts of Shanghai Free Trade Zone on Shanghai International Shipping Center. To justify the relative weights of the policies deployed at Shanghai International Shipping Center, I need experts' opinion on them.

May I have your opinion on these relative issues.

Hereafter is a designed index system for the evaluation with first-level 5 policy indexes and second-level 27 policy indexes. The results that you filled reflect the relative important of the indexes. Please grade the weight for the target layer and rules layer.

Thank you very much for your support and cooperation!

Table1: Policies of Shanghai International Shipping Center: first-level and second-level policy indexes

First-level policy indexes	Second-level policy indexes
A: optimizing modern shipping and transportation system	A1: adapting to the requirements of regional integration, on the basis of continuously strengthening port infrastructure construction, integrating resources at the Yangtze River Delta, forming the port pattern in

	<p>which cooperation is conducted in division of labor, advantages complement each other and competition is orderly, thus strengthening the comprehensive competitive ability of ports.</p>
	<p>A2: accelerating the infrastructure construction of Yangshan Deep-water Port and others, expanding the throughput ability of ports.</p>
	<p>A3: promoting the construction of inland waterways, railways and airports, optimizing the allocation of transportation resources, appropriately increasing expressway channel, vigorously developing middle and remote air transportation, strengthening comprehensive transportation ability.</p>
	<p>A4: promoting the linkage development with inland waterways, making full use of the golden water channel of the Yangtze River, accelerating the research, development and promotion of “river-sea” nonstop shipping model, taking measures in aspects of ship technology and security management, pushing the direct</p>

	<p>reaching of Yangshan Deep-water Port, vigorous developing the transit shipment of waters.</p>
	<p>A5: fully playing the functions of Shanghai Luchao Port Container Center Station and the railway channel, doing a good job in the railway island planning and research of Yangshan Deep-water Port, improving the combined transport ratio of railways and waterways.</p>
<p>B:developing modern shipping service system</p>	<p>B1: actively study to take measures, reducing the transit costs of international containers, encouraging the foreign trade containers to be transported in Shanghai International Shipping Center.</p>
	<p>B2: bringing the regional advantage that Shanghai sits close to main international air routes into full play, as well as the comprehensive advantages of being an industrial base, having talent resources and business environment, etc., vigorously developing shipping service organizations such as ship trade, ship management, shipping agent, shipping consultation, and ship technologies, expanding the industrial chain of</p>

	<p>shipping services, extending to develop modern logistics and other related industries, improving shipping service functions constantly.</p>
	<p>B3: improving shipping service planning layout, further expanding the functions of Yangshan Bonded Port, developing the assembling shipping areas such as North Bund, Lujiazui and Rinko.</p>
	<p>B4: guiding and standardizing the healthy development of the shipping trading market, bringing the shipping trading and freight information release functions of Shanghai Shipping Exchange, accelerating the speed of building a national shipping trading information platform, and forming a demonstrative shipping trading market in Shanghai.</p>
	<p>B5: setting up a comprehensive information sharing platform</p>
<p>C: exploring to establish comprehensive experimental zones of</p>	<p>C1: improving the international competitiveness of shipping enterprises in our country by using shipping supporting polices in advanced shipping countries</p>

international shipping development	(regions) for reference.
	C2: extending the deadline implementation date for cutting and freeing taxes of the special “Convenient Flag” ship case funded by the Chinese side from June 30th, 2009 to June 30th, 2011.
	C3: charging free business taxes to the incomes of those shipping enterprises that have registered in Yangshan Bonded Port and are engaged in shipping businesses. This is the same to the incomes of those service enterprises such as inventory and logistics that have registered in the Port and are engaged in transport, storage, loading and unloading.
	C4: it is permitted that enterprises can open offshore accounts, thus providing convenience for funds settlement of its businesses overseas.
	C5: under the premise of perfecting the related supervision systems and effectively preventing measures of defeating and refunding taxes, implementing quay tax reimbursement policies, encouraging to develop transit

	businesses in Yangshan Bonded Port.
	C6: exploring and innovating the management system in special customs supervision areas, and better playing the functions of Yangshan Bonded Port.
D: improving ancillary support policies for the modern shipping development	D1: accelerating the speed for developing shipping financial service, supporting to carry out shipping finance, shipping insurance and other high-end services. Actively developing many financing ways of shipping, exploring to provide financing services for shipping service and manufacturing industries through setting up equity-based investment funds and other ways.
	D2: it is permitted that large shipping manufacturing enterprises can take part in building financial rental companies, actively and steadily encouraging financial rental companies to lead funds and issue bonds by entering into markets among banks.
	D3: actively searching for financial institutions, shipping enterprises that have strength to set up professional shipping insurance institutions in Shanghai.

	<p>D4: optimizing the environment for developing financial shipping services, and charging free business taxes for the incomes gained by those insurance enterprises who are engaged in international shipping insurance business and have registered in Shanghai.</p>
	<p>D5: doing research actively on the preferential taxation policy given to financing rental enterprises that are engaged in international shipping financing rental business. When the condition is ripe, we can firstly launch a pilot project in Shanghai.</p>
	<p>D6: doing research on the concerned taxation policy issues of premium for transporting goods by sea by import and export enterprises.</p>
	<p>D7: enriching financial shipping products, accelerating the speed for developing shipping freight rate index derivatives, and creating conditions for shipping enterprises in our country to control shipping risks.</p>
<p>E: promoting and</p>	<p>E1: it is permitted that overseas international cruise</p>

standardizing the development of the cruise industry	companies can register and set up operational institutions, and carry out the approved international route cruise service businesses.
	E2: encouraging overseas large-scale cruise companies to anchor in Shanghai and other coastal ports having the conditions, thus we can gradually develop Shanghai into a mother port of cruises.
	E3: providing convenient operational environment for operators of the cruise route to develop their businesses.
	E4: studying to establish a financial service system for developing the cruise industry, setting up special catalogs of the cruise industry in aspects such as insurance and credit, so as to promote the healthy and orderly development of the cruise industry.

Table2: Proportional criteria method

Grades	1	2	3	4	5
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The relative degree of importance	Equally important	Slightly important	Important	Very important	Absolutely important
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Table3: The comparable results of the policies of developing modern shipping service system

	A1	A2	A3	A4	A5
A1					
A2					
A3					
A4					
A5					

Table4: The comparable results of the policies of developing modern shipping service system

	B2	B3	B4	B5
B1				
B2				
B3				

B4				
B5				

Table5: The comparable results of the policies of developing modern shipping service system

	C1	C2	C3	C4	C5	C6
C1						
C2						
C3						
C4						
C5						
C6						

Table6: The comparable results of the policies of improving ancillary support policies for the modern shipping development

	D1	D2	D3	D4	D5	D6	D7
D1							
D2							
D3							
D4							

D5							
D6							
D7							

Table7: The comparable results of the policies of promoting and standardizing the development of the cruise industry

	E1	E2	E3	E4
E1				
E2				
E3				
E4				

The list of respondents:

1. Lu zhangqiang from East sailing company
2. Yang jiawei from East sailing company
3. Liu jian from East sailing company
4. Gu xiangfeng from Hongfa shipping company
5. Yi ming from Hongfa shipping company
6. Gao yuan from Hongfa shipping company
7. Li sheng from HIT marine company
8. Ma sibeï from HIT marine company