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## Policy design of international ship registry (ISR) in the China (Shanghai) Pilot free trade zone (FTZ)

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**WORLD MARITIME UNIVERSITY**

Shanghai, China

**POLICY DESIGN OF INTERNATIONAL SHIP  
REGISTRY (ISR) IN THE CHINA (SHANGHAI)  
PILOT FREE TRADE ZONE (FTZ)**

By

**LU JIELING**

**China**

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

**MASTER OF SCIENCE**

**(INTERNATIOANL TRANSPORT AND LOGISTICS)**

2017

## 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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## **ABSTRACT**

Title of research paper: **Policy Design of International Ship Registry (ISR) in the China (Shanghai) Pilot Free Trade Zone (FTZ)**

Degree: **MSc**

Ship-owners have used the device of flying the flag of another country (usually in open register) for years for fiscal or political convenience. To change the phenomenon, China has followed the international trend to look for its own international ship registration, while the effect is not as expected yet.

This paper aims to discuss the representative policies for the execution and the attractiveness of Shanghai FTZ international ship registry. By investigating the factors of unexpected result, via a comparison with other registry systems and the SWOT analysis of Shanghai FTZ international ship registry, the recommendations for policy designer are proposed with regard to the extent of application, registration conditions, registration procedures, tax reduction and exemption, financing, legislation and other relative supporting measures.

**KEYWORDS:** international ship registry, ship registration, Shanghai Pilot Free Trade Zone, China, policy design.

# TABLE OF CONTENTS

DECLARATION .....	ii
ACKNOWLEDGEMENTS.....	iii
ABSTRACT.....	iv
TABLE OF CONTENTS.....	v
List of Tables.....	viii
List of Figures.....	viii
Chapter 1 Introduction.....	1
1.1 Background .....	1
1.2 Objective .....	3
1.3 Outline.....	4
1.4 Methodology .....	4
Chapter 2 Literature Review.....	6
2.1 International ship registry overseas.....	6
2.2 International ship registry in mainland of China.....	8
2.3 Summary .....	11
Chapter 3 Origin and Evolution of International Ship Registry.....	12
3.1 Origin and features of international ship registry.....	12
3.1.1 Concepts of ship registry .....	12
3.1.2 Background and features of international ship registry .....	15
3.2 Historical experiences of major marine countries.....	19
3.3 Development of China international ship registry .....	22
3.3.1 The necessity of China ISR .....	22

3.3.2	Evolution of China ISR.....	28
3.3.3	Constraints of China ISR .....	35
Chapter 4	Situation Analysis of International Ship Registry in Shanghai FTZ.....	43
4.1	Current policies .....	43
4.2	Comparative analysis with other registries .....	45
4.2.1	Case study of tax burden for ship registered in different registries	45
4.2.2	The overall comparison .....	51
4.3	SWOT analysis of ISR in Shanghai FTZ .....	56
4.3.1	Strength.....	56
4.3.2	Weakness.....	58
4.3.3	Opportunity.....	59
4.3.4	Threaten .....	60
4.3.5	Summary .....	60
Chapter 5	Considerations about ISR Policy Design in Shanghai FTZ.....	62
5.1	Extent of application /policy purpose.....	62
5.2	Trading limits .....	63
5.3	Crew manning .....	65
5.4	Safety supervision and administration .....	66
5.5	Taxes.....	66
5.5.1	Import tariff and value-added tax of ship .....	67
5.5.2	Business turnover tax.....	68
5.5.3	Corporate income tax.....	68
5.5.4	Personal income tax of seafarers .....	70
5.6	Financing and supporting laws and regulations .....	70
5.7	Registration service and procedures.....	71

5.8	Others .....	72
5.8.1	Impact on relative areas .....	72
5.8.2	Future directions .....	73
Chapter 6	Conclusions .....	74
Reference	.....	77



## **List of Tables**

Table 1 - Detailed policies of ISR in some countries.....	19
Table 2 - The change of Chinese owned fleet moving oversea from1997 to 2017....	23
Table 3 - Current policies of ISR in Shanghai FTZ.....	43
Table 4 – Results of the case study about tax burden in different registries.....	50
Table 5 – The evaluation result of overall comparison.....	56

## **List of Figures**

Figure 1 - The percentage of Chinese foreign flagged fleet, 2005-2017 .....	2
Figure 2 – The change of Chinese owned fleet moving oversea from2007 to 2017 .	35
Figure 3 – The SWOT points of ISR in Shanghai FTZ .....	61

# **Chapter 1 Introduction**

## **1.1 Background**

Ship registry is the process by which a ship is documented and given the nationality of the country to which the ship has been documented. Registering a vessel establishes the jurisdiction of that state over the ship to prescribe rules of conduct and enforce sanctions on the ship-owners (Hosanee, 2009). China is one of the countries that operate the traditional registration system (registry is open only to Chinese ships), which used to make a contribution to the china's shipping industry by ensuring the fulfilment the obligations of international conventions and establishing the responsible international image of a big marine country. However, with the development of international trade and system of "Flag of Convenience" (FOC), many ship-owners have increasingly flagged out, that is, register in the "open registries" rather than the ship-owning countries, to reduce the operating cost and increase competitiveness (An, 2016). According to the statistics of Clarksons Research, the Chinese owned fleet stood at 7,008 vessels of 140.4m GT, while only 51.6 m.GT capacity is flying national flag, that is, approximately 63% tonnage is foreign flagged as of 1st February 2017

The rapid expansion of open registries fleet and low performance of flag states raised the serious concerns about safety of shipping and marine environment. Since the lack of supervision and administration, the foreign flagged vessels cannot ensure to comply with the international safety standards, which greatly affected the status of Chinese fleet in the world. Also, as the third shipping fleet owner nation in the terms of dead-weight tonnage, it is hard to effectively gather the shipping elements- ships and capitals, which directly poses an obstacle to the development of Chinese shipping

economy and the premium end of shipping industry.

To deal with the phenomenon, Norway and other developed marine countries have started to operate the international ship registry in succession from 1980s, on the basis of continuing the traditional system. In order to attract vessels back home, the new system is relatively loose with dual characteristics of flexibility and strictness, complemented the closed registry for coastal transport. It proved to be an effective measure in some way and it becomes a trend in the marine countries.

China has tried to create her own international ship registry from 2007 as well. During the decade, from the special tax-free registration policy, bonded ships in Yangshan Free Trade Port Area, ISR in Dongjiang Free Trade Port Zone of Tianjin, to the ISR in Shanghai Pilot Free Trade Zone, till the latest Measures of the People's Republic of China for the Registration of Vessels about ISR applied in February 2017, the country never stops the steps of reform of ship registration. But indicated from the figure 1, there was little effect on the increasing portion of capacity under foreign flags.

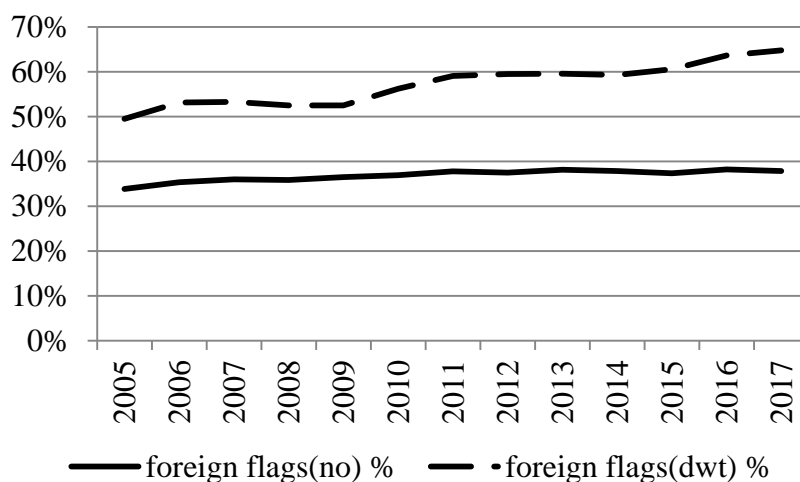


Figure 1 - The percentage of Chinese foreign flagged fleet, 2005-2017

Source: own presentation based on the data from World Fleet Register of Clarksons Research.

In recent years, ship operators in general running business under the strain of the economy crisis, therefore they concern more about the flag due to the fiscal obligations. From their views, they hope to enjoy not only the mutually beneficial agreements of the nation but also the cost reduction as more as possible (Chen, Liu, Wan & He, 2014). In that case, the currently policy may be not enough competitive among so many choices.

Definitely, it is a good opportunity for Shanghai to develop the international ship registry in the Pilot Free Trade Zone. Shanghai is striving to become one of the international shipping centers of the world. The system will help Shanghai to strengthen the soft power to develop shipping industry. Also, Shanghai Free Trade Zone is the best place to test the new policy in the country due to the bold and innovative spirit and the abundant international shipping experience.

Based on the above background, this paper would like to discuss the factors led to the phenomenon of Chinese flagged out ships and the little effect of past policies, then on the basis of practice before and current situation, combing the demand of ship-operators and requirement of registration function, and referencing the experience in other countries, design the own policies for Shanghai FTZ international ship registry system.

## **1.2 Objective**

This paper aims to discuss the representative policies for the execution with regard to the attractiveness of Shanghai FTZ international ship registry and put forward the

considerations and recommendations for future policy design accordingly. The suggestions will be provided mainly about the extent of application, registration conditions, registration service and procedures, tax reduction and exemption, ship financing, legislation and other relative supporting measures.

### **1.3 Outline**

First, in chapter 3, the research will begin with the definition and causes of international ship registry and the experiences of the international ship registry in some marine countries. Then, there will be an analysis of ISR in China, including the necessity of ISR, the evolution and effect of past policies, the factors of continuing “flagged out” ships, and the future it will be. Next, in chapter 4, through a calculating example of OPEX of the ship registered in different registries and the comparison of other supporting policies, I will analyze the strong and weak points of the current policies of Shanghai FTZ, and list the opportunities and threats of operating ISR in Shanghai FTZ. Based on the SWOT analysis, I will sum up the main considerations about the ISR of Shanghai FTZ. For each correspond issue, chapter 5 will throw out the recommendations for policy design towards to the practical application. Finally, the research will be end with a conclusion in chapter 6.

### **1.4 Methodology**

To achieve the mentioned purpose, this thesis will adopt the methods of documentary

analysis, comparative analysis, exemplification, comprehensive evaluation and SWOT analysis. Through analyzing the relevant literatures at home and abroad, the direction of this research was identified. And further study on these literatures established the basis of this paper. For better explaining the progress and lack of the China ISR in Shanghai FTZ compared with China national registry and open registries, the Chapter 4 will apply the comparative analysis via an exemplification of tax burden in different registries, and the comprehensive evaluation approach combining the quantitative and qualitative indexes. After comparison, the paper will use SWOT analysis method so as to discuss where we should pay attention to for ISR developing in Shanghai FTZ, according to its internal and external environments.

## **Chapter 2 Literature Review**

### **2.1 International ship registry overseas**

International ship registry came up in Norway in late 1980s, as a reform of the traditional registration to deal with the increase of ships flying flag of convenience, and then became popular in Europe, such as France, Denmark, and the Germany. There are numerous studies about relevant issues.

After the introduction of Convention on Conditions for Registration of Ships (1986), Bettink (1987) expounded the economic, legal and political background of that Convention and the events led to the Convention. Through the analysis of the main clauses, the article investigated the possible impact of the Convention on the open registration. In Ready's (1991) book, ship registry was discussed from macroscopic aspect. He explained the legal concept of ship registration and the flag of convenience, expounded the developing mode of ship-owners and the measures of the marine countries towards ship registration, and analyzed the factors of rapid growth of FOC ships, the measures taken by some organizations in order to prevent such a trend, as well as the offshore registration and bareboat charter registration established by the traditional maritime countries. Coles & Watt (2009) continued the line of Ready's book to explain the legal concept and practical application. Their book not only discussed the same issues as the former, but also the relevant procedural requirement of the ship registry. Besides, it provided a conclusion of ship registration system of most countries in the world.

Perkins (1998) made a comparison of open registry and secondary registry. In the

research, she pointed out that the open registry usually has a series of preferential treatments, like relaxed staffing requirement, less strict shipping regulations and lower taxes, while the measures taken by the latter one are some ship subsidies and investment incentives in usual. And Ng & Yip (2010) explained the evolution of Hong Kong's paradigm shifts in ship registry policy and the critical success factors of HK ship registry. The factors include structural change, survey mechanism, consultative platforms in connection to customers, and reengineering the bureaucratic system.

Suggesting establishing ISR was the topic in countries where operating traditional registry. Via a detailed investigation of international ship registration systems and shipping tax systems of the major countries, Knudtzon, Naas, Surlien & Thorsen (1999) proposed the relevant measures and steps for the establishment of the international registration system, especially the supporting policies such as the reform of tax system and the requirement of crew manning. Yang (2014) performed a comparative analysis of the competitiveness of the fleet of Taiwan, Korea and Japan, and then explored the performance of ship aid policies by employing grey relational analysis. The paper discovered Korean national fleet has the greatest competitive advantage, and advised government to review existing maritime regulations and measures, formulate specific and transparent policies, and adopt the best alternatives from other countries, such as tax reductions for seafarers, second-registration mechanisms, international ship registration in Korea and Japan.

For supporting policy, Galley (2014) explained the definition of closed, open and second ship registration, owner anonymity and sub-standard shipping to discuss a link between the registration of certain end-of-life ships and the question of liability by examining flag state responsibility.



Apart from the studies about policy, there are researches for performance and choice of registers. The discussion on the choice of flag states of Mansell (2009) began with the examination of motives of ship-owners in deciding to flag out and the history of FOC, and then it identified and categorized all active flag states into four groups: national, quasi-national, international, and pseudo-national flag states. To explain the content, it took Panama and Singapore as case study. It also categorized classification society into conventional and convenient. In order to select the most suitable shipping registry for worldwide ship-owner, Kandakoglua, Celik & Akguna (2009) took the advantages of the SWOT analysis, the AHP and the TOPSIS to build a multi-methodological approach as a relatively simple tool. Mitroussi & Arghyrou (2016) used a cross-sectional, multiple regression econometric approach to analysis the sample of 33 largest ship owning countries. They indicated that institutional performance determines the net flag-out ratio and may have a potential effect on ship registration.

## **2.2 International ship registry in mainland of China**

In China, numbers of scholars notice the heated topic within the marine countries. They investigated the factors affecting the phenomenon of flag-out in China, studied the experiences in other countries, proposed the government to invent the own policy for china to attract ships back, or put forward the suggestions for perfecting the existing system.

Fan, Luo & Yin (2014) discovered that high PSC inspections actually can increase the possibility of flag-out, through the empirical results.

Jia (2014) compared the policy and application of international ship registration system of Germany with Denmark's. Drawing on the experience in typical European countries, the paper concluded that China can simplify the service procedures and set up a series of supporting policies.

By comparing the ship registration system of China, Hong Kong and Singapore in aspects of process, fees, restrictions and encouraging policies, Chen & Zhang (2013) analyzed the shortages and put forward suggestions for China, like improve the service process, reduce the registration fees appropriately, reduce the registration restrictions and issue more attractive policies for ship-owners.

An (2016) analyzed the present situation and existing problems of ship registration system in our country, expounded the necessity for improvement from the views of economic development, public management and so on, and put forward some measures to establish the international ship registry in Fujian FTZ. The conclusion was that the registration innovation is not the attractiveness to affect the decision making of ship-owners, but the system based on a series of relevant supporting policies.

For the concrete policy content, Wang (2006) put forward the relevant legal suggestions for the secondary registration in Yangshan Free Trade Port Area, including ship registration, international shipping company establishment, taxes, ship safety and technical standards, and financing lease registration.

Ye (2013) considered that China should entirely relax the restrictions on the registration in the international ship registry, as open as Hong Kong and Singapore, and establish a quality fleet plan for registered ships. He also recommended that legislation should be enacted for the international ship registry system with regard to

the explicit application, which involves conditions, authority, navigation restriction, application, charges, liability and cancellation.

While Chen, Zhen, & Zong (2009) thought that the secondary registration in China need to be considered carefully. Since most of countries going to the unexpected result of that registration, like little effect, or most ships turn to the secondary from the closed, and that reform would be a blow to Chinese shipbuilding industry, the researchers should not oversell the advantages of modals in other countries, but investigate the Chinese factors, purpose and the effective measures to China.

Chen & Han (2012) researched the improving measures for Shanghai international shipping center's registration service. They listed the significances of registration service improvement with regard to establishing the Shanghai international shipping center, analyzed the situation and problems faced by Shanghai, and put forward the recommendation.

Tang's (2014) paper covered reform evolution of China's registration system and raised the issues about procedures and supporting policies that had not covered yet. Chen, Liu, Wan & He (2014) besides listing the problems, identified that China's international ship registry should develop aiming to solve the problem of unreasonable tax burden, and the development should consider shipbuilding and other industries as well. They proposed an interesting point that flying the flag of Hong Kong may be more helpful to deal with the problem.

Zhang (2015) focused on the cost of ships registered in different register. He compared the operating cost of one year of ships registered in China, Hong Kong and Singapore. Even though the cost of China is much higher than the open registries, he has great

expectation of the future of Shanghai Free Trade Zone.

Tian (2016) discussed the topic about financing lease registration in Shanghai FTZ. She pointed out the legal problem in the registration condition, type and registration system. The experience of relaxed conditions from Shanghai FTZ about was positive affirmed, while the answers to other problems need to be explored by Shanghai in the future. While Chen, Li, K., Liu & Li, H (2017) recommend that the China ISR in FTZs should employed the systematic supporting policy modification so as to be effective in mitigating the flag-out crisis.

## **2.3 Summary**

There were number of papers involving international ship registry from overseas to domestic, discussed from the policy design to effect assessment. Whereas there is no such a dissertation about Shanghai Pilot Free Trade Zone to investigate the latest policy for designing and updating the details of main policies in China. This paper would start on the basis of these studies.

## **Chapter 3 Origin and Evolution of International Ship Registry**

### **3.1 Origin and features of international ship registry**

#### **3.1.1 Concepts of ship registry**

Ship registration means the entry of vessel in the public records of a State, generally as the term to describe the attribution of nationality to a vessel (Coles & Watt, 2009).

According to the Article 91 of the 1982 United Nations Conventions on the Law of the Sea (UNCLOS), every merchant ship sailing in the open sea should have its nationality.

*1. Every State shall fix the conditions for the grant of its nationality to ships, for the registration of ships in its territory, and for the right to fly its flag. Ships have the nationality of the State whose flag they are entitled to fly. There must exist a genuine link between the State and the ship.*

*2. Every State shall issue to ships to which it has granted the right to fly its flag documents to that effect.*

Nationality is attributed to vessels flying the flag of a State where the vessel is publicly registered, which provides the ship with a particular State's protection and

provides the State with authority over it. A stateless ship does not enjoy the protection in international law and has no right to navigate freely on the open sea (Mansell, 2009, pp.91-115).

Ship registration is crucial not only for the vessels operating international trade as a precondition of possession the nationality, but also for the State to acquire government of registered ships. After registration, the vessel enjoy the rights and preferential policies provided by the flag State, while it is subject to the jurisdiction of that State and it assumes national and international responsibilities when sailing (Rogers, 2010).

Ship registry is the term describes the policy system which is operated in the register for ship registration. Every State may keep registers to grant its nationality to vessels through the own conditions. The ship registries are usually classified into three categories: close registry, open registry, and hybrid registry. These differences mainly lie in two aspects: the nationality of ship-owner or the proportion of the domestic capital, and the nationality of the seafarer (Chen & Han, 2012).

Close registry is the domestic registry, as the main form of ship registry which has the longest history operated in traditional developed marine countries. Since it normally requires the full ownership of the vessel by the country or a national person, it is regarded as a traditional or national registry (Fan, Luo, & Yin, 2014). In order to maintain the “genuine link” - the real connection between vessel and the State, close registry generally set out conditions such as at least 50% shareholders of vessel are nationals; all or majority of crew on board are nationals; ships must be registered at specific ports; shipping company or major office must settle down in the country.

Besides, some of State lay down a set of stringent requirements with regard to the age, technical performance and administration of the vessel, etc. At present, States operating close registry are China, America, South Korea, Japan, and so on.

National registries were preferable in the past, probably due to the globalization had not been the major feature of maritime commerce, and it helped to protect national interest such as the State's economic life, the national security and defense (Garcia-Correa, 1995). Whereas, with the boosting of international shipping derived from global trades, open registries grew up and became ship-owners' preference.

Open registers allow non-national ship-owner register a vessel in a particular flag State. These flag States like Panama, Liberia, Cyprus, Malta, Kampuchea, set up such a register for the reason of developing economy by collecting the registration fees and annual fees, also named "flag of convenience" (FOC). The most common characteristics of Open registries are lower input costs and more economically beneficial environments. In general, open registry requires little conditions for registration towards national ownership, national manning, management and administration (Xhelilaj, & Krisafi, 2013). Therefore, many ship-owners from traditional countries where have high labor cost and registration costs have flagged their ships in open registries as a method of taking advantage of international shipping. However, without the "genuine link", it is hard for FOC countries to supervise registered vessels to comply the national and international rules. Hong Kong, Singapore, and Philippines are regarded as the open registry regions or countries as well. They utilize the similar regimes to offer tax incentives for registered vessels while the supervision may be stricter than the real FOC nations (Negret, 2016).

Increasing number of flagged out vessels lead traditional maritime States create the hybrid registries to revitalize the diminishing national fleet. As a secondary registry developing on the basis of the original close registry, hybrid registry relaxes the registered conditions and provides preferential tax and maritime policies for ships of domestic or foreign ship-owner to register and fly its national flag (Rogers, 2010). According to the different places for registering, it can be divided into the offshore registry and international ship registry (ISR). Offshore registry is a new ship registration system implemented in an overseas register maintained in the dependent territory or the former colony of that State. Correspondingly, the registration system for domestic international shipping vessels operated by the secondary register situated within the territory of the mainland is international ship registry. Now such registration systems are implemented in many Europe countries such as Norway (ISR), England (Isle of Man), Germany (ISR), France (Kerguelen Island), Portugal (Madeira Islands), Denmark (ISR), Luxemburg (ISR), etc. Besides, other countries are also studying this regime like Japan, South Korea and Russia.

### **3.1.2 Background and features of international ship registry**

#### **3.1.2.1 Background and origin**

As mentioned before, ISR is one of hybrid registries targeted the domestic flag-out vessels as a tool to compete with FOC as well as a way to complete the traditional registry.

The early FOC can be traced back to the 16th century, when British ships flew the



Spanish flag in order to avoid the Spanish trade restrictions in the West Indies. Before the First World War, considering the reduction of operating cost, many foreign merchant ships registered in Panama after the implementation of its new maritime law, which is the modern FOC vessels. During the war, more commercial vessels joined FOC to pass through the maritime blockades and avoid the conflicts with hostile countries (Carlisle, 2009).

The flag of convenience became extensively used during the Second World War, when the United States ship operators registered a great number of domestic vessels in Panama and other countries for transporting strategic materials to the nations at war. FOC vessels can evade the fascist military strikes as well as constraints of the U.S. Neutrality Act. Subsequently, a batch of FOC countries emerged to rent flag to other countries to earn money (Piniella, Alcaide, & Rodríguez-Díaz, 2017).

After the Second World War, FOC vessels increase fast. On the one hand, FOC countries regard ship registration as a means of reaping profits, so they require looser conditions for registration and supervision and provide more preferential policies for registered vessels, like no requirement for manning nationality and lower tax for vessels. On the other hand, ship operators would like to take the advantage in the intensified competition due to the rapid growth of shipping capacity caused by the world economic development. Flying flag of convenience helps them to evade the strict supervision, the high taxation and high labor costs in their own nations (Chen, Zhen, & Zong, 2009).

Today, the most important reason why ship-owners and operators fly FOC is the pursuit of profit maximization. Compared to the open registry, the close traditional

registries are lack of competitiveness of costs and registration process. As a result, most of traditional maritime countries have faced the problem of increase of domestic flag-out vessels. In 1939, the vessels under flags of the major open-registry countries only accounted 1.2% of world total fleet in deadweight tonnage. While in 1980s, the share was 31.1% (mid-year figure); in the end of 1996, that figure grew to 44.8%; and it continuously rose to more than 70% by the end of 2016 (United Nations Conference on Trade and Development (UNCTAD), 1997-2016).

There is no doubt that the existence and development of flag of convenience has greatly promoted the globalization of trade and development of international shipping. However, due to the lack of effective measures of control, management and protection for FOC vessels, there were a lot of negative events, such as fraud, smuggling, maritime casualty and marine pollution, which have damaged the healthy development of international shipping industry. And the owner States of FOC ships also had a reputation for unsafe conditions that caused negative impact of the national politics, economy and security to these countries (Fan, Luo & Yin, 2014).

Europe countries have been aware of the disadvantages of FOC ships and trying to control and eliminate the flag-out ships from 1970s when the number of Europe domestic flagged ships greatly decreased. For this purpose, international ship registry and other policies for registered vessels towards tax was created (Chen & Han, 2012). Norway was the first country put forward ISR in 1987 and had control the uptrend of flagged out ships. United Nations also adopted the United Nations Convention on conditions for registration of ships in February 1986, which stressed that ships and flag States should have the “genuine link” in terms of nationality, and provided the flag countries should implement effective control and management of its flag fleet.

And many other countries followed Norway to develop its own system and today it is still a heated issue for traditional registry countries as a tool for combating flag of convenience.

### 3.1.2.2 Characteristics

For domestic ship-owners and ship operators in traditional maritime developed countries, flying the flag out of own nations mainly in order to reduce crew costs and tax costs. For one thing, if registering ships at home, they have to pay higher labor costs because of the domestic manning requirement and the strong bargaining power of local labor union for crew wages, while FOC vessels are free from crew restrictions. For another, most of these countries have the characteristics of high tax and high welfare, therefore the enterprise income tax, personal income tax and the social security tax burden are heavier, while registered vessels can enjoy the tax exemption in FOC nations (Coles & Watt, 2009).

As a system designed by close registry nations in order to combat open registry, international ship registry has both the characteristics of open registry and traditional registration system, which are listed below.

1. Extent of application: The vessels or vessels new built abroad owned by domestic owners can enter into the registry, which is similar to close registry.
2. Manning requirements: It has looser national crew requirement than closer registry, which allows some of non-national employment, thus ship owner can

pay for the wages according to the national standard of foreign crew.

3. Preferential tax policy system: It provides similar tax preferences and beneficial economic policies to open registry for decrease the registered vessels' operating cost, such as the reduction of crew's personal income tax, corporate income tax, ship fixed assets tax and registration charges and so on.
4. Supervision and inspection: Registered vessels must be subject to the jurisdiction of the flag State, which is in line with the concept of "genuine link". The jurisdiction of flag State over vessels makes the supervision and inspection effective and it has regulatory, fiscal and security benefits for the country.

### **3.2 Historical experiences of major marine countries**

International ship registry has developed in many marine countries for about 30 years. Here is the collection of typical detailed policies of ISR in some major marine countries in the table 1.

Table 1 - Detailed policies of ISR in some countries

Country	Norway (NIS)	Germany (GIS)	Japan
Year of establishment	1987	1989	1996
National manning requirement	Captain	Captain and 79% of crew	Captain and chief engineer
Foreign crew wages	Level of crew's State	Level of crew's State	Level of crew's State

Crew's personal income tax	Reduction	Levy tax	Reduction for national crew
Ship's fixed assets tax	Exemption	Exemption	Reduce to 1/15
Ship's registration charges	Levy tax	No charges	1‰-1.5‰ of ship's price
Others	Levy tonnage tax, and exempt the corporate income tax from shipping income		Special depreciation for ships

Source: Jia, Y. (2014). A brief analysis of the international ship registration system in typical European countries. *Pearl River Water Transport*, 2014(11), 81-82.

The table presents the variant policies adopted in different countries. But commonly, they permit ship-owners to employ foreign crew and pay for them with the level of crew's nation, which is the most attractive policy for ship-owners and ship operators. It is known that labor cost is the most important part of ship's variable cost. And normally the foreign crew is from low-income countries, like Philippines. As estimated, compared to registering in own national register, if a German ship flies flag of convenience, the German ship can save 30% of operating cost, and labor cost takes up about 90% of this part of cost (Coghlin, 1990). Therefore, majority of international ship registries had attracted flag-out ships back at the beginning of introduction. However, they did not achieve long-term success.

Norway is considered as the country has best effect of ISR implementation. Before introduced international ship registry, flagging-out became common and Norway's shipping industry was threatened with 49.3 million GT national fleet in 1976 declined to 0.97 million GT in 1987, according to UNCTAD. Facing this phenomenon, the government decided to respond to establish Norwegian

International Ship Register (NIS) in 1 July 1987, as a solution to the shipping cost problem. NIS had beneficial impacts on national shipping industry. After 4 years, 1151 vessels with 40.8 million GT were under Norway's flag by January 1992, and among which the number of ships registered in NIS amounted to 896 with 39.2 million GT. In 1997, the rate of domestic ships with foreign nationality decreased to around 42%, at a low level in European countries (Carlisle, 2009). However, in the long run, NIS did not stem the process of flagging out. In 2007, the total tonnage of Norway's fleet fell down again to 13.91 million tons. Besides, 90% of Norway's vessels were registered in the secondary registry, which means the original registry is almost non-existent. As of 1 January 2017, Norwegian owners only flagged about 22 percent of tonnage under Norwegian registry.

In Asia, the similar story happened in Japan. As the world's second largest ownership State of merchant fleet, though it has adopted the International Ship Registry since 1996, the flagging-out problem is still increasing serious (Zou, 2009). According to UNCTAD, the amount of Japanese owned fleet under foreign flag accounted about 74.66 percent of the total in terms of dwt in 1997, while today the number is 87.43%.

In addition, implementing ISR may encounter labor opposition. German International Register (GIS) got underway in 5 April 1989 and ran into trouble with German organized labor from the beginnings, because it allows ship owners to hire foreign crew at the local labor rates in that crew's country. As a result, ITF has classified the vessels registered in GIS as "flag of convenience" ships (Carlisle, 2009).

In 1989, the European Union had proposed to set up the European Register of Shipping as well, as the secondary ship registry open to the EU countries to compete

with FOC registries. But the member States and European ship-owners were lack of interest for it, and eventually the proposal came to nothing (Chen & Han, 2012).

It seems that ISR is not the panacea for traditional maritime countries (Brown-Humes, 1992, p.11). From all the examples of implement in other countries, in general ISR did support the diminishing domestic maritime fleets and their shipping industries in the short term, with the fiscal incentives and advantages similar to open registers. But these international ship registers did not achieve the desired results in the long run for the reason that they were still less competitive than FOC States in terms of economic consideration. And when operating an international ship register, that nation needs to be aware to the substandard ships as well as the opposition from local labor union.

### **3.3 Development of China international ship registry**

#### **3.3.1 The necessity of China ISR**

As the development of Chinese maritime industry, the same phenomenon arose in China as well.

The earliest foreign flagged Chinese fleet appeared in 1950s, when Chinese ships can only operate under the international cooperation and register abroad for international shipping due to some interference of political reasons, such as we did not establish diplomatic relation with Panama at that time (Chen, Zhen & Zong, 2009). Since the 1990s, the situation has changed greatly with a significant increase of the number

and quality of vessels registered abroad, as presented in the table 2.

Table 2 - The change of Chinese owned fleet moving oversea from 1997 to 2017

Year	Foreign flag vessels of total number (%)	Increase (%)	Foreign flag vessels of total dwt (%)	Increase (%)
1997	19.17	-	36.12	6.12
1998	21.54	2.37	41.76	5.65
1999	22.87	1.33	42.68	0.92
2000	25.37	2.50	43.50	0.81
2001	27.03	1.66	45.15	1.66
2002	29.16	2.13	48.30	3.15
2003	30.33	1.17	48.81	0.50
2004	32.63	2.30	48.93	0.13
2005	35.11	2.48	52.28	3.35
2006	39.06	3.95	54.45	2.16
2007	41.27	2.21	54.22	-0.23
2008	42.48	1.21	59.53	5.32
2009	44.44	1.96	59.91	0.38
2010	44.29	-0.15	60.72	0.81
2011	44.02	-0.27	57.20	-3.52
2012	43.24	-0.78	58.29	1.09
2013	49.84	6.60	64.79	6.49
2014	45.64	-4.20	63.41	-1.38
2015	40.19	-5.45	53.15	-10.25
2016	38.61	-1.58	53.36	0.21
2017	37.46	-1.15	53.97	0.61

Note: calculation is based on the data at begin of each year.

Source: own calculation and presentation, based on data from Review of Maritime Transport, 1997-2016, and DATA CENTER of UNCTAD on

([http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS\\_ChosenLang=en](http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS_ChosenLang=en) )



By January 1 2016, 53.36% Chinese owned fleet was under foreign flags in terms of dead-weight tonnage, while the national flag capacity was in the average age of 14.39 years old (Clarksons Research, 2017). Moreover, most of Chinese large and advanced containerships, tankers and bulk carriers for international shipping and most of domestic shippers' fleet fly the flag of convenience. Thus Chinese owned fleet is considered as with small tonnage, old age, and backward technical condition, while the abroad registered vessels are relatively larger, newer, and technologically advanced (An, 2016).

In that case, both the government and many Chinese scholars consider the regime of international ship registry as one way to approach the problem, since the following necessities for China's shipping industry.

#### 3.3.1.1 Attract Chinese owned fleet back home

China's economy depends on the domestic fleet to transport crude oil, coal and iron ore, etc. However most of domestic large and advanced containerships, tankers and bulk carriers and most of domestic shippers' fleet are not subject to the jurisdiction of China. As the third largest ship-owning country, the deadweight tonnage owned by China accounts about 8.87 percent of the world total, while more than 50% registered in other nations (UNCTAD, 2016). These vessels moving overseas has caused the bad influence on the development of China's shipping industry with regard to China's fleet construction, tax jurisdiction, judicial control, shipping safety and economic security. For instance, COSCO, the biggest national ship-owner of China, was one of the three largest fleet flying Panama's flag. To deal with this problem, the

government has to implement some measures to attract the Chinese owned fleet back home.

International ship registry is the good choice to achieve this goal. From government's side, due to the particularity of China's costal transportation, it needs to maintain the traditional registry. If setting ISR, the separated regime from the traditional one and between the open and close registries, it would help to build the "genuine link" with domestic flag-out vessels for supervision and administration, and get the recognition of international community. And it would not have the high risk of flag of convenience, like frequent traffic accidents and not guaranteed crew interests due to the difficulty of supervision (Quan, 2014). For domestic ship-owners, ISR aims to the flag-out vessels belong to them, so the design of fiscal policies would be similar to open registries from the views of their interests. Not only the economic preferences, it also reduces their safety risk through the better regular management and timely and effective diplomatic and judicial relief from the motherland when their interests are infringed abroad. Therefore, the implement of international ship registry is necessary for government to attract Chinese flag-out fleet.

#### 3.3.1.2 Supplement the traditional registration system

The flagging out phenomenon is not only caused by the fiscal factors. Ship-owners prefer open registries also because of the convenient, efficient and quick procedures.

In order to control the domestic fleet and implement the obligations international conventions and agreements better, China maintains the traditional registry with the

strict conditions towards to ownership, manning, inspection and so on. According to the Regulations of the People's Republic of China on Vessel Registration, in terms of ship ownership, only Chinese citizens or Chinese legal persons are allowed to own Chinese ships; for a Sino-foreign joint venture, the total amount of Chinese investment shall not be less than 50%. But the reality is that financial leasing is one of main means for purchasing ships and joint ventures, foreign-funded shipyards and shipping companies account for a large proportion in the market. If a new international shipping enterprise would like to be the legal person in China, it has to obtain the international shipping operation license before business registration (Zhao, 2016). These strict restrictions of ownerships limit lots of ships to apply Chinese nationality.

In addition, for examining such strict registration, there are many matters need to be approved by a number of departments, which affects the operation of ship enterprises. For instance, it may take nearly half a year for a ship to run from purchase to get into operation under China's flag. While usually open registries regard ship registration as a service industry with good service attitude, high efficiency and short registration time, like in Hong Kong registering only takes 2 hours (Zhang, 2015). So numbers of ship-owners fly vessels under other flags in order to avoid the long time cost in approvals. Consequently, the administration and management of domestic fleet are getting more difficult, and even the detention due to port state control become more frequent. At the same time, these vessels under foreign flag cannot enjoy the policies offered by mutually beneficial agreements of the nation as well as Chinese crew on these vessels cannot get the protection in the traditional system.

That's why China's ship registration system needs ISR to be the supplement for the

defects in the close registry.

### 3.3.1.3 Strengthen the shipping soft power

Besides the above impacts on Chinese maritime industry, developing international ship registry will help to strengthen the Chinese shipping soft power as well.

China is a big shipping nation, as mentioned before, ranking world's top 3 ship-owning countries in terms of deadweight tonnage. However, it is not considered as a strong maritime country. For accelerating the transition, the government issued Opinions of the State Council on Promoting the Sound Development of Maritime Industry, with the goal of building up a modern shipping system in 2020 which adapt to the national economy safety and foreign trade's development.

To develop a strong maritime country and modern shipping system means improving the shipping competitiveness and influence in the world. China's port and companies has strong competitive of hard power in several aspects, such as infrastructure, but do not have the competitive of soft power as developed countries that is high-end services, like ship financing, insurance, inspection, etc. (Wang, Yang & Li, 2015).

Fleet development is the foundation of shipping industry and economy development, and the crucial support for maritime soft power. Objectively, the diminishing domestic fleet restricts the development of ship finance, such as ship loan, ship lease, ship insurance, ship freight derivatives and so on. Only attracting owned fleet back home will the nation has greater voice in the world's shipping industry and the better

future in strengthening its shipping hard and soft power.

### **3.3.2 Evolution of China ISR**

Following the experience of the traditional developed countries, China has tried to set up the own secondary registry for 10 years.

#### 3.3.2.1 Special tax-free registration policy

On June 12, 2007, the Ministry of Transport of China issued an announcement decided to implement preferential tax deduction and exemption for Chinese international shipping vessels from July 1, 2007 to June 30, 2009, with the purpose to encourage Chinese vessels under foreign flag change to Chinese nationality. If these vessels with foreign nationality attending to entry China ship registration in port of Shanghai, Tianjin, or Dalian, this policy would exempt the import duty and import value-added tax for them. It was only applicable for ships had registered in other registries before December 31, 2005, which includes 4-12 year old oil tanker (including asphalt ship) and bulk chemical tanker, etc.; 6-18 year old bulk cargo ships, ore carriers, etc.; 9-20 year old containerships, general cargo ships, multi-purpose ships, bulk cement ships, etc.<sup>1</sup>.

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<sup>1</sup> Announcement on the implementation of the special tax-free registration policy for the international shipping ships of shipping enterprises with Chinese investment, Ministry of Transport, P.R.C. (2007).

In 2009, the State Council extended the deadline of implementation of this policy to June 30, 2011. And then on October 19, 2011, the Ministry of Finance, General Administration of Customs and State Administration of Taxation joint issued the Notice on Import Tax Levy Policy of Chinese Ships under Flag of Convenience during the Period of 12<sup>th</sup> Five-Year (2011), which extended the applicable period of the special policy to December 31, 2015, and expanded the applicable registry ports to all ports with the right to register international shipping vessels.

The key point of this policy is to break through the levy of the tariff and value-added tax for ships returning China, nevertheless, the effect was limited. Since the implementation till June 2009, only 39 vessels had registered into the special tax-free registration, and Shanghai port, one of the first applicable ports, has attracted only 27 vessels up to 2015(Tang, 2014). And the total capacity of these “flag-back” vessels was less than 40,000GT, which means almost all large tonnage international ships were still on the sidelines. That may be because this policy was an exceptional provision that does not involve a fundamental and detailed change in the existing ship registration system, tax collection system and ship financing system. And the other reasons might be it required complicated and time consuming approvals and limited service frequency.

### 3.3.2.2 Yangshan Bonded ships registration

In the case of the undesirable result of special tax-free registration policy, the State Council issued Opinions of Promoting Shanghai’s Development of Modern Service Industry and Advanced Manufacturing Industry and Building the International

Financial Center and International Shipping Center (2009), identifying the major task of developing international shipping center in Shanghai was to set up a comprehensive experimental area for international shipping in Yangshan Bonded Port Area. Under this background, the bonded ship registration system of Yangshan Harbor came into being. Yangshan Harbor was a new registry port, providing registration service for the enterprises registered in Yangshan Bonded Port Area to register the ships owned by them or bareboat chartered from abroad. It was the first area operating such ships registration in China, which begun with the introduction of Regulations for the Administration of Vessel Registration in Yangshan Harbor of China (2012) for internal supervision.

The applicable ships are divided into two categories: tax refunded vessels and bonded vessels. If the ship built in China, it can receive the tax refund when exporting or enter into the Yangshan Bonded Area, after that it can be registered in the Yangshan register as the tax refunded vessel. If the vessel imported overseas, its import duty and import value-added tax will be exempted, and it will be registered as bonded vessel. Besides, both of vessels can be traded freely in the harbor area or abroad.

Compared with the special tax-free registration policy, there were several improvements in Yangshan Bonded registration system. First, ship-owners could get tax preference both in imported vessels and domestic made vessels. Second, there were a series of substantial supporting policies, such as the separate procedures for applied ships offered by China Classification Society, the safety technical condition assessment referred to ship financing offered by Shanghai Maritime Safety Administration, etc. Third, the registration cost was lower and the efficiency is higher,

for examples, it provided one-stop service to reduce the registration time and green channel for registered vessels in respects of entry and exit, navigation, security check, etc.

### 3.3.2.3 Dongjiang Bonded Port Area of Tianjin

On the basis of Yangshan, the first port of international ship registration of China set up in Tianjin, the Dongjiang Free Trade Port Zone. In 2011, National Development and Reform Commission issued the Construction Plan of the Core Functional Area of Tianjin North International Shipping Center (2011), which put forward that the innovation pilot of international ship registry should be operated in the “core functional areas of the Chinese northern international shipping center” (i.e. Dongjiang Bonded Area). Then on June 26, 2013, the Ministry of Transport issued the Reply to the Innovation Pilot Plan of International Ship Registration System in Tianjin’s Dongjiang Bonded Port Area (2013) (hereinafter referred to as the Tianjin Plan) and agreed to the plan in principle.

Unlike the policies mentioned before, with the existed preferential tax policies in Dongjiang Bonded Area, Tianjin Plan put more emphasis on the reform of conditions for registration, such as manning requirements, ship age limits, type of registration, etc. The registered subjects are limited in tonnage, above 1,600 GT, including cargo ships, tramp passenger ships, drilling platforms and other moving devices in water. And ships such as engineering ships and offshore oil drilling ships may be able to work in the domestic waters, if with the approval of Ministry of Transport. For ship-owners, it added that the investment of overseas Chinese funded enterprises can



be identified as Chinese capital proportion by the State-Owned Asset Supervision and Administration Commission in the basis of the requirement of at least 50% national capital of the registered capital of ship's legal person. As for the foreign invested companies set up in Dongjiang Area, there is no limit in contribution ratio. In terms of manning, this plan provides that, except the master, chief engineer and other positions required by competent authority have to be held by Chinese crew, the registered vessel may employ foreign senior crew which is less than 30% over the total, and the corresponding approval power has been devolved to Tianjin Maritime Safety Administration from Ministry of Transport. As for ship age, the limits of all types of imported ships are relaxed for two years more. In Addition, the ship finance lease has also been one type of registration.

It seems that Tianjin Plan was quite complete, but it needs more supporting measures and policies implemented by other relevant authorities to achieve its goal.

#### 3.3.2.4 Shanghai Pilot Free Trade Zone ISR

In the Circular on Printing and Distributing the General Plan of China (Shanghai) Pilot Free Trade Zone (2013), State Council pointed out the international ship registration should be explored in the Shanghai Pilot Free Trade Zone based on Tianjin's experience, and Shanghai should simplify the procedures and form an efficient system. Later in January 2014, the Pilot Program of international ship registration in China (Shanghai) Pilot Free Trade Zone (hereinafter referred to as

Shanghai Program) was approved by the Ministry of Transport<sup>2</sup>.

Shanghai Program was basically similar to the Tianjin Plan from the structure of the document. While comparing the specific contents, we can find that Shanghai Program was a step forward in the innovation of the supervision system and the simplification of registration process, which embodied in the followings.

First, though the application of entity in both of plans included the duty-paid ships, tax-refunded ships and bonded ships, Shanghai set up two ports of registry creatively. That is, if the ships are in bond or tax refunded, it would be registered in “Yangshan Port of China”; and if it was duty-paid, its port of registry would be “Shanghai, China”. Both of ports of registry provided the preferential policies of international ship registration.

Second, Shanghai enlarged the applicable ship’s legal persons for registration, as where the registered ship belongs to. It provided that if the foreign international shipping enterprise established in Shanghai Pilot Trade Zone, the proportion of foreign capital is no longer limited to 49%, the restriction on the Provisions on Administration of Foreign Investment in International Maritime Transportation (2004).

Third, in terms of the employment of foreign seafarers, Shanghai cancelled the restrictions on the ratio in Tianjin Plan, and changed the supervision from prior approval to afterwards filing, which would give a great freedom to the registered

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<sup>2</sup> Pilot Program of international ship registration in China (Shanghai) Pilot Free Trade Zone was approved. (2014, January 22). *Ship.sh*. Retrieved May 23 2017 from [http://www.ship.sh/news\\_detail.php?nid=11554](http://www.ship.sh/news_detail.php?nid=11554)

ship-owners in the manning of crew.

And, Shanghai Program did not require the import technical assessment for used bonded ships, which further simplified the process of registration. Before that, the import used ships must have this assessment result provided by China Maritime Safety Administration, according to Administrative Measures for the Import of Key Used Mechanical and Electrical Products (2008).

In addition, it enlarged the restricted area in navigation. Majority of foreign flagged ship-owners considered that the cabotage is the most important competitive for national flagged vessels. Shanghai Program was the first plan provided that allowing Chinese companies owned or held non-national flagged international shipping vessels to operate the container shipping between coastal ports and port of Shanghai. It not only supported the coastal shipping of Chinese international shipping companies, but also attracted cargo to transit in China instead of in other countries thus to increase the amount of transit service in domestic ports. Besides, it also put forward the relevant provisions with regard to relaxing the ship's age, establishing the registration of vessel financing lease, adding types of registration if necessary, etc.

Compared with the previous systems, Shanghai Program was more open and flexible, showing the greater determination of government to reform the ship registration system.

Following Shanghai FTZ, the province of Guangdong and Fujian tried to build up their international ship registry as well. In order to further supporting the establishment of ISR, Measures of the People's Republic of China for the

Registration of Vessels (2016) came into effect on February 10 2017. It contains the special regulations on international ship registration in the free trade zone in Chapter VIII, with regard to applicant, navigation areas, application documents, application procedures and relevant matters.

### 3.3.3 Constraints of China ISR

With the mentioned policies and pilot plans, China has spent ten years on approaching the flag-out problem, but the result is not satisfactory yet. During this decade, though both the number and capacity of foreign flagged vessels have experience the fluctuations as shown in the figure 2, there are little difference between the final proportions and the initial figures. It seems we failed to take effect. In terms of dwt, 41.27 percent of total Chinese owned vessels were flying foreign flags ten years ago, while the share now is 53.97.

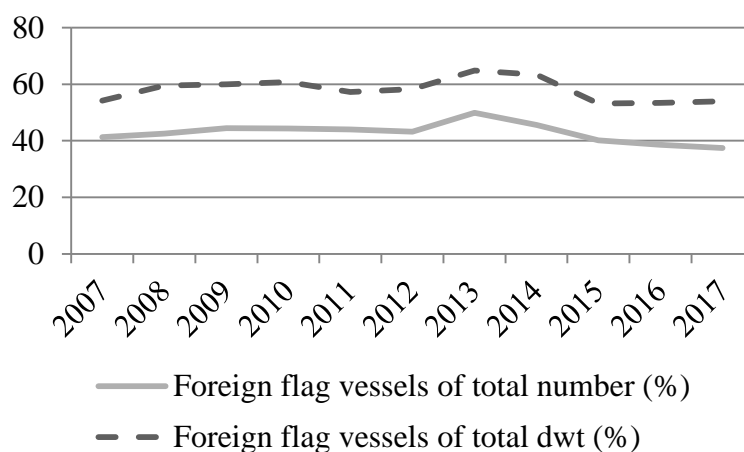


Figure 2 – The change of Chinese owned fleet moving oversea from 2007 to 2017

Source: own presentation on the basis of data from Review of Maritime Transport, UNCTAD,

2007-2017.

Maybe effectively control the rising of flag-out vessels cannot be achieved by a single item of preferential policy. To design a system having the capacity of competing with open registries, we should identify the constraints of the development of international ship registration in China.

### 3.3.3.1 High taxes and fees

The first constraint influencing the attraction to Chinese foreign flagged ships is that, China has more kinds of taxes and higher fees for international shipping enterprises. For ship owners, the choice of ship's registry is a crucial consideration about economic cost. Unlike the traditional developed marine countries, Chinese labor cost is relatively lower, and most of Chinese flag-out ships like employing domestic crew. Therefore, they care more about the taxes and charges in the fiscal aspect, which decided by the registry place mostly.

Compare to flying national-flag, vessels registered in most of open registries can save high amount of fees and taxes, and pay only the registration fee and annual examination fee according to the tonnage each year, exempting or not levying income tax and turnover tax, etc. If one overseas newbuilding or secondhand ship would like to register in China, at first, it will face the levy of import tariff (9%) and import VAT (17%) summed up to 27.53% ( $9\% + (1+9\%) * 17\%$ ) of ship's price, while flying other flags can reduce or avoid such a large amount of cost. If the ship built by domestic yard enters in foreign registry, the ship builder can enjoy the export rebate

(17%) and ship-owner can reduce the price as well. After registration, the taxes in the businesses are also counted great importance. For enterprises in China, though the income from international shipping is exempt from value-added tax and enterprise income tax (exemption or reduction (at the origin rate of 25%) according to the relevant agreements concluded between China and other countries), that part of income needs to be declare separately, which is not easy to identify and calculate and may be repeat levied in actual operation. For other part of income, the companies enjoy no tax preference. And if the company want to sell its owned used ship, it have to pay the value-added tax (2% as half) no matter whether the price is lower than the purchase price, and the income from selling will be also accounted into income tax. Besides, shipping enterprises in China have to pay the vessel tonnage dues or vehicle and vessel tax, stamp tax, and so on (Chen, Zhen & Zong, 2009).

However, the ISR implemented in Chinese free trade zones and areas, exempts only the import duty and import VAT for registered ships, which is just relived the tax burden for registration. The tax preferential policies in China international ship registry did not consider the tax problems after foreign flagged ships return home. That is the major reason why domestic ship-owners still prefer register vessels in open registries even with ISR policies in China.

It is hard to reform Chinese complicated tax system involves lots of related laws, regulations and specific policies. If without some protective taxations, the domestic companies may encounter difficulty. For instance, domestic ship-building industry with low labor cost relying on some imported technical equipment, it may lose the price competitive from export tax refund when foreign built ships enjoy import tax bond under ISR. And other industries may feel unfair if giving too favorable policies

for shipping industry. But only gradually and systematically break the limitation of taxation and fees can registration improve its competitiveness for flag-out vessels.

### 3.3.3.2 Backward ship financing environment

The ship financing difficulty is another factors caused Chinese owned fleet moving abroad. Because ships are highly capital intensive, many ship-owners need raise money from others during the period of ship building or purchase, as ship financing.

Compared with domestic financing, ship-owners can get adequate loan support and enjoy more preferential conditions from abroad financiers, such as lower interest rates, more amount of loan, longer loan term, favorable ship insurance, less procedures and period of the loan, etc., which are the key considerations from ship-owner's view (Zhang, 2015). Commercial loans are the most widely used financing products in various sources of funds. While Chinese commercial loan market is not completely free and open, thus the environment is unfavorable, like interest rates are too high, and the credit line and due time are limited. At the same time, current modes of ship financing in domestic market are limited with many restrictions on overseas capital. As for the abroad popular methods like ship financing lease and leaseback, they are still need to be further developed and standardized in China (Guo, 2014). For example, since ship financing lease registration has been added into international ship registry from Tianjin Plan, it is still complicated and without clear provisions in China.

Due to these domestic financing difficulties, many shipping companies have to loan

abroad instead of financing at home. But the precondition for enjoying the preferences abroad is to establish a single-vessel company and register the vessel where financiers or banks designate. Financiers usually specify the place where English law is applicable, in order to supervise the profitability of that vessel better and avoid the conflicts due to different laws. As a result, those enterprises financing abroad, building ships abroad and then register ships abroad, which cause a vicious circle (Wang, Yang & Li, 2015).

It is crucial for international ship registry to break through this constraint and improve the environment of domestic ship financing for attracting these flagged out ship-owners back.

#### 3.3.3.3 Tedious registration procedures

Time cost and economic cost lead by registration procedures and period are the reason as well, though the authorities have been dedicated in simplify for several years.

In the past, government regarded ship registration as the way to supervise national capitals and protect national safety, and thus, there were numbers of processes for licensing and approvals. According to the Procedures for Ship Registration (2015) issued by China Maritime Safety Administration, the registration procedures include application, acceptance, preliminary examination, re-examination, approval, and issuing certification, which usually cost 7 working days, involving many documents with strict requirements. And there is no special provision for ISR. In comparison,



most open registries consider ship registration as a service industry to create profit, so that they provide very convenient and considerate service for users in common, such as Hong Kong, established 24-hour service system and only taking 2 hours for registration (Zhang, 2010).

However, ship-owners felt much troubled to the relevant licenses and approvals rather than registration itself. For example, the first vessel registered in Yangshan Bonded Area, Vessel Guanhai Zhaoyang applied in June, 2012 while officially put into on November 7, 2012. Actually, it only took one week staying in Yangshan port for inspections from customs, maritime authority and classification society, and one month for business and ship certificates, but it spent four months to get the Certificate for International Shipping Ship in order to pass the customs (Shi, 2013).

Another example, in all mentioned policy systems, applicants for international ship registration have to set up a new company or branch in free trade zones or bonded areas. In China, before the Amendment of Regulation of International Shipping (2017) implemented in March 2017, new international shipping companies (or adding international shipping into business content) should apply the International Shipping License at maritime authorities firstly, and secondly they have to register in business authority with the license approval documents, and then they can get the license finally. The whole period was about one month<sup>3</sup>.

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<sup>3</sup> Mao, J. (2017 March 12). Amending the Detailed Rules for the Implementation of the Regulation of the People's Republic of China on International Maritime Transportation, shipping field promote the reform to facilitate enterprises. *China Transport News*. Retrieved May 27 2017 from [http://www.zgjtb.com/2017-03/12/content\\_108883.htm](http://www.zgjtb.com/2017-03/12/content_108883.htm)

These processes were very time-consuming, and even enterprises established in free trade zones and bonded areas cannot avoid it. Besides, different port of registry has different procedures for ISR, and the unclear procedures confused many ship-owners. Therefore, under this registration conditions, Chinese international shipping enterprises with great capacity prefer registering their fleet in the FOC States where without such complicated requirements and time cost, like Rizhao Steel, Shougang Group, China Oil & Foodstuffs Corporation. Since China did realize the need to change service attitude, the procedures is remaining to be more efficient and more considerate for competing with open registries.

#### 3.3.3.4 Lack of related legal supports

The dissatisfying implementation of mentioned policies was also caused by the lack of relevant laws about international ship registration.

Before this year, there was little legal support to international registration procedures and policies. And majority ship-owners and ship operators remained on the sidelines due to the worry about uncertainty of policies and no guarantee for their interests. Additionally, as mentioned in the financing part, international financiers have no confidence in the Chinese registration system and laws. This is also because the lack of understanding of procedures and clear provisions in laws (Zhang, 2015).

Since February 10, 2017, Measures for the registration of Vessels (2016) has come into effect. It added the provisions of international ship registration in free trade zones in the Chapter 8, with regard to applicable subjects, trading limit, and solutions

for improving service efficiency. Referring the experience in other countries, it highlighted the service concept, such as allowing applicants register online, providing one-stop service for users. While there is no detailed provisions for the requirements and procedures that ship-owners concern most. That may be due to the different registration authorities in each free trade zones. Even though, maritime authorities should establish the legal form for registration procedures and relevant conflicts after registered as soon as possible.

## Chapter 4 Situation Analysis of International Ship Registry in Shanghai FTZ

### 4.1 Current policies

International ship registry in Shanghai FTZ is in charge of Shanghai Maritime Safety Administration, while the competent authority is China Maritime Safety Administration. Basing on the policies used in Yangshan Bonded Area and the provisions of State Councils and Ministry of Transport, Shanghai intends to develop this regime to support the development of international shipping center. The detailed policies system of ISR in Shanghai Pilot Free Trade Zone is collected as followed in comparison with the used registration systems.

Table 3 - Current policies of ISR in Shanghai FTZ

Policy factor	Current detailed policies in Shanghai FTZ	Progress or lack compared with other used policies
Port of registry	Duty paid vessels registered in “Shanghai, China”, and bonded and tax-refunded ships registered in “Yangshan Port”	Create two registry ports
Navigation Area	International shipping routes and routes to and from Hong Kong, Macao and Taiwan.	No coastal shipping, while Tianjin used to allow engineering vessels work on domestic waters after approval by the Ministry of Transport.

Applicable subject	Ships owned or controlled or bareboat chartered by international shipping enterprises established in Shanghai FTZ (including Chinese funded enterprises, Sino-foreign joint ventures, Sino-foreign cooperative companies and wholly foreign-owned enterprises).	Break through the limit to the legal person's foreign capital ratio (50%).
Ship's age	No limit	Cancel the age limit
Manning	No requirement of the ratio of national crew; the employment of foreign crew shall report to registration authority afterward.	Give freedom to manning, while Tianjin requires the certain ratio of national senior seafarers.
Registration fee	Cancel	Used to charge
Import tariff and import VAT	No charge for ships import	No change
Crew personal income tax	Exempt for ocean seamen if his monthly salary is less than 4,800yuan.	No change
Corporate income tax	Exempt the part of income from international shipping business involving the countries have relevant maritime agreements with China.	No change

Value Added Tax <sup>4</sup>	Exemption for companies set up in Yangshan Bonded Area. And for other companies, there is no levy on the income from international shipping business, except the income from time charter and bareboat.	Totally exemption for companies set up in Yangshan Bonded Area
Tonnage dues /vehicle and vessel tax	Levy tonnage dues for ships not belong to Chinese-funded enterprises according registered net tonnage. Levy vehicle and vessel tax for ships of Chinese-funded enterprises.	No change
Ship depreciation	Straight line method with 10 years period	No change

Source: own presentation based on relative literatures.

## 4.2 Comparative analysis with other registries

### 4.2.1 Case study of tax burden for ship registered in different registries

Based on the above analysis of factors causing flag-out situation and constraints of ISR implementation, we know that the choice of registry is a critical decision-making process for shipbuilding and ship purchase, and cost competitive is the most attractive advantage of open registries from the view of ship-owners, while shipping

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<sup>4</sup> Value Added Tax has replaced the business tax for shipping industry in China from 2013.

companies operating in China are usually concerns the heavy tax burden.

With the purpose to attract domestic owned fleet return, the future ISR in Shanghai FTZ must realize the gap with open registries and change that situation. In order to evaluate the tax problem more intuitively, the author would like to make the case study for comparing the tax burden on Chinese owned ships registered in China national registry, ISR of Shanghai FTZ, and Panama. Panama is the largest flag of registration, one of FOC States, with 18.51 percent of world dwt tonnage (UNCTAD, 2016).

Assume that there is a Handysize bulk carrier, whose actual owner is a Chinese citizen, would like to be engaged in international shipping. The vessel is 7-year-old with 20,000DWT, 18,000NT, and the ship price is \$20 million. And suppose the average daily earning of Handysize bulker is \$15,000(Voyage charter) and its average daily operating cost is \$10,000. Thus, the annual income of that vessel is \$5,475,000, the annual OPEX is \$3,650,000, and the annual profit is \$1,825,000 (before taxes). Besides, it is assumed that half of all voyages in one year are shipping cargo from Chinese ports to other countries, and the income from that half of voyages equals to half of annual income.

The followings are the different tax burden of the ship in three different situations.

#### 4.2.1.1 Register in Panama

Suppose the ship is owned by a single ship company set up in Panama, which is

wholly controlled by the actual ship-owner.

Flying the flag of Panama, the registered vessel needs to pay the first registration fee and annual fees. The calculation of the first registration fee is based on the GRT of vessel registration, which is in the range of \$500-\$6500. If this vessel registered as 20,000 GRT, the registration fee is  $(\$3000 + \$0.10 * (20000 - 15000)) = \$3,500$ . The annual fees in Panama include annual tonnage dues, annual fee and annual inspection fee. The tonnage due for this vessel is  $\$0.10 \times 18000 = \$1800$  (\$0.1 per NT). According to GRT, the annual fee is divided into 5 levels and each level has a corresponding fixed amount. The vessel with 20,000 GRT should pay \$3,000 for the annual fee. As for the annual inspection fee, it is determined by the GRT and ship's type. For this bulk carrier it should be \$1,200. Except above charges, vessels are exempt from all kind of taxes in Panama. So the actual ship-owner only needs to pay \$9,500 at the first year after registration and \$6000 for the annual fees from second year in registry country.

However, due to half of voyages departure from China, where the Measures for the Collection of Tax on the Shipping Income of Foreign Companies (2011) is applicable, the VAT tax and corporate income tax should be levied as 4.65% of the income derived from China (3% for VAT tax and 1.65% for corporate income tax). For this Panamanian company, each year the total amount of VAT tax and corporate income tax is  $(\$5,475,000/2) * 4.65\% = \$127,293.75$ .

Besides, foreign vessels entering Chinese ports from abroad ports should pay the vessel tonnage tax in China, which is 27.6yuan per NT for ships between 10,000NT



and 50,000NT<sup>5</sup>. In this case, the ship should be levied about \$73,058.82(\$1=6.8yuan) for one year.

As China and Panama have not concluded relevant maritime agreements yet, it cannot enjoy the exemption from these taxes as provided in Panama and preferential rate of vessel tonnage tax in China. But after the establishment of diplomatic relations between the two States in June 2017, perhaps the situation may be change in the future, like Liberian vessel can enjoy the preferential rate of vessel tonnage tax (General Administration of Customs, 2016).

#### 4.2.1.2 Register in ISR of Shanghai FTZ

If the ship has been registered abroad (such as in Panama) before, and after the policy of ISR in Shanghai FTZ published, the ship-owner chooses to return home now. In this case, the ship-owner has to establish a single-vessel company in Shanghai FTZ for flying national flag.

As mentioned before, registration fee is free in China now and flagged-out vessels registering in can enjoy the exemption of import tariff and import VAT. Besides, Chinese funded company's income obtained from international shipping is exempted from value-added tax. Therefore, the ship-owner should pay corporate income tax and vehicle and vessel tax after returning.

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<sup>5</sup> Interim Regulation of the People's Republic of China on Vessel Tonnage Tax, State Council, P.R.C. (2011).

The calculating method of corporate income tax for shipping companies in Shanghai FTZ is the same as that for other Chinese shipping companies. In accordance with the law of corporate income tax, the resident enterprise should pay this tax on the income derived from both territory and outside the country. So, this single ship company should pay corporate income tax on its global income. For this single-vessel company, 25% of annual profit, this is \$456,250 ( $\$1,825,000 \times 25\%$ ). Perhaps, ship-owner may get the obtain tax credits for this part of payment, since China and other countries have signed some tax treaties and relevant maritime agreements to avoid double taxation, if it has paid in the contracting States.

As for vehicle and vessel tax paid by national flagged vessels, this is like the vessel tonnage tax levied on foreign and Sino-foreign vessels while much lower, which is \$15,882.35 ( $\$1=6.8\text{yuan}$ ) for this ship (6yuan/NT). In addition, vessel flying national flag can pay less port charges than foreign ships such as handling fees.

#### 4.2.1.3 Register in traditional registry

If the ship registered in the national registry, besides the turnover tax in the stage of ship purchase or shipbuilding, its tax burden is basically the same as the last case, registering in the ISR of Shanghai FTZ. If this vessel is built or bought at home, the turnover tax will be \$3,740,000 (including 17% as VAT, 10% as urban construction and maintenance tax and educational surtax on the ship price). If the ship is built or purchased abroad, the import tariff and import VAT should be levied on ship-owner upon import as US \$5,506,000 ( $\$20,000,000 \times 27.53\%$ ).

#### 4.2.1.4 Summary

Here is the table of calculation result of tax burden comparison.

Table 4 – Results of the case study about tax burden in different registries

	Panama	ISR of Shanghai FTZ	China national registry
Registration fee	\$3,500	0	0
Annual fee	\$6,000	0	0
import tariff and import VAT (if import)	0	0	\$5,506,000
Vessel turnover tax (if not import)	0	0	\$3,740,000
Business turnover tax	\$127,293.75 <sup>[A]</sup>	0	0
corporate income tax		\$456,250 <sup>[B]</sup>	\$456,250 <sup>[B]</sup>
Vessel tonnage tax /vehicle and vessel tax	\$73,058.82	\$15,882.35	\$15,882.35
Total (first year)	\$209,853	\$472,132	\$4,212,132(not import) or \$5,978,132.35(import)
Total (10 years)	\$2,067,025.70	\$4,721,323.5	\$8,461,323.50(not import) or \$10,227,323.50(import)

Notes:

[A] The other half of income derived from other countries or regions is not counted for turnover tax in China.

[B] This amount may be lower due to the tax credits of maritime agreements or mutually beneficial agreements.

Source: own calculation of case study in this thesis.

As shown in the table, registering in different registries has obvious difference in terms of tax burden. The total amounts of vessel registered in Panama are lowest both for the first year and ten years, following by vessel re-registered in the International Ship Registry of Shanghai FTZ, and the originally national flagged vessel bears the heaviest tax burden, which is at least 8.9 times as much as vessel under ISR and about 20 times as much as Panamanian vessel in first year. In the long term, the ISR in Shanghai FTZ can help ship-owner save at least about 44% cost on taxes compared to the national registry after registered. Nevertheless, the cost in ISR is still more than the double amount of vessel flying flag of Panama in the first decade.

In this case, the merchant vessel is engaged in the international shipping to and from Chinese ports. If the operation does not involve domestic ports, there is no Chinese tax levied on Panamanian ship. If the ship-owner would like to engage that vessel in the business between China and other countries or regions, registering in open registries is the best choice to reduce the tax burden in home. Shanghai FTZ is a good choice of registry as well, because not only national flagged ships can enjoy better treatment in domestic ports, but also the cost gap with FOC is narrowing now. With the introduction and clarity of supporting initiatives for China ISR gradually, it is believed that the difference with open registries will be less obvious.

#### **4.2.2 The overall comparison**

As mentioned, besides tax burden, there are other key factors influencing the choice of flag for Chinese owned fleet, such as registration conditions, reputation of safety

management, registration service, ship financing environment and legal supports, which are hard to quantify. To evaluate the current policies in Shanghai FTZ, the comparison with open registries should be systematical and comprehensive. Here is the analysis with regard to these aspects.

#### 4.2.2.1 Registration conditions

Registration conditions are the requirements for granting nationality to vessels with regard to the ownership, age and crew manning of the ship, etc. The current requirements for the ISR in Shanghai are almost without any restricts in the traditional registry. Compared with open registers which are open for the ownership of every States, the only difference is that China ISR is mainly for vessels involving the Chinese capital. Because the original purpose of this regime is attracting Chinese owned vessels back home, while open registers operating for profits. In this regard, there is no sense to make the comparison of registration conditions with open registries.

#### 4.2.2.2 Safety supervision and management

Currently, since the costs are becoming similar, the competition among open registries is due more relating to the safety reputation of the flag. As mentioned, the international society has worried about the safety quality of FOC fleets for many years. For example, the Pre Registry Surveys are not mandatory in open registries

such as in Panama, except for vessels with over 20 years since construction, in order to improve their efficiency and convenience (Piniella, Alcaide & Rodríguez-Díaz, 2017). As a result, vessels flying flags of convenience are often considered with lower safety management and thus they have to face more frequent PSC inspections compared to national flagged ships. Comparing with most of FOC countries, Chinese national registry is doing better with regard to the safety and quality supervision and management. Though vessels registered in ISR have also “genuine link” with country, if the ship inspections before and after registered are cancelled or skipped for the reason to simplify processes or reduce time cost for ship-owners, it may cause the supervision to be less effective. As expected by author, the management and supervision for safety of ISR in Shanghai FTZ will remain good quality with less unnecessary procedures.

#### 4.2.2.3 Registration service

In terms of registration procedures and service attitude, Shanghai FTZ has tried its best to cut the time period but as the mentioned example of Vessel Guanhai Zhaoyang, the relevant procedures headed by other authorities like custom formalities, business registration still take applicants several months. To be more convenient for applicants, the latest Measures for the Registration of Vessels (2016) provides that the authority of registry, that is Shanghai Maritime Safety Administration, shall offer the online service and one-stop service, and materials can be found in the internal information system or have been submitted shall not be required again. Thus in the future, when applying ship nationality, the ship-owner

may also submit the materials for other relative certificates at the same time, and these certificates will be granted uniformly. However, these provisions are remaining words on paper, and ship-owner cannot find the detailed steps of ISR in Shanghai FTZ in actual. So the effect in practice is unknown now.

Comparatively, open registries have developed great detailed and considerate procedures for ship registration. Take Panama as an example, it has more than 64 maritime private consulates and 9 technical offices worldwide, operating on a 24-hour basis, and the automated and simple process in this registry only takes four hours as the maximum registration time (Piniella, Alcaide & Rodríguez-Díaz, 2017). In China, with all procedures and required documents clearly presented online, ship-owners can apply the Panamanian Provisional Patent and permanent or full term patent through Panama Maritime Authorized Companies -United Maritime Service Inc.

#### 4.2.2.4 Ship financing environment and legal supports

Chinese ship financing is in the initial state of development and the environment in Shanghai FTZ needs to be more free and open. Currently, it provides that financing lease enterprises set up in Shanghai FTZ may operate leasing business in all directions, the SPV for ship financing lease can be established without the minimum registered capital limit and enjoy the relevant preferential policies, and so on<sup>6</sup>. But

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<sup>6</sup> Tianjin Municipal Bureau of Financial Affairs. (2017, February 27). *Detailed interpretation of the financing lease policies in four major FTZs*. Retrieved June 15, 2017 from

there have not published the detailed supporting policies for taxes like import tariff, import VAT and corporate income tax yet. In addition, the development of financing business in Shanghai FTZ needs not only the encouraging policies, but also time to build reputation and laws to protect rights for operators. On the contrary, open registries like Hong Kong and Singapore, are highly rated in financial institutions around the world due to its efficient service and well-known free environment (Chen & Zhang, 2013).

As for the legal support of Shanghai FTZ, which has also been discussed in the Chapter 3, the situation is the same as before. The departmental rules of ship registration, Measures for the Registration of Vessels (2016) just came into effect this year, which contains the extent of application and navigation area for China ISR. But the operation is mainly regulated by normative documents now. Therefore, ship-owners would worry that normative documents may not protect their lawful rights and interests due to the relatively low legal hierarchy in the case of dispute. In this regard, the ISR in Shanghai FTZ and traditional registry in China are both remaining lack of enough legal supports in comparison with the relatively more developed legal system adopted in most of open registries based on English law.

#### 4.2.2.5 Summary

In summary, the synthetically comparison results are expressed as below on a scale from 0 to 5 from my opinions (5 is the best). According my analyses, the ISR in Shanghai FTZ is generally better than the national registry especially in the reduction

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<http://www.tjjr.gov.cn/ztjj/hbhqyhz/20170227091527528U27.shtml>



of cost. And Chinese registries both have an advantage in regard of safety supervision and management compared to open registries.

Table 5 – The evaluation result of overall comparison

Evaluation index	ISR in Shanghai FTZ	China traditional registry	Open registries
Registration conditions	4	2	-
Registration cost(including taxes)	3	1	5
Safety supervision and management	4	4	2
Registration service	3	2	5
Ship financing environment	2.5	2	5
Legal supports	2	2	4

Source: own evaluation based on the analyses in this paper.

### **4.3 SWOT analysis of ISR in Shanghai FTZ**

After the comparative analysis with other registries, the paper is going to further analyze the regime of ISR implemented in Shanghai FTZ based on its internal and external environment through SWOT method.

#### **4.3.1 Strength**

From the comparison analysis in 4.2, we can easily identify the advantages of ISR as the characteristics both of open and close. It not only relaxes the strict conditions in

closed registry while avoiding being too open, but also offers preferential tax policies to narrow the gap with flag of convenience while remaining the high standard of safety supervision and management.

Apart from the advantages of international ship registry, the greatest strength of the ISR developing in Shanghai FTZ is the policy background, Shanghai Pilot Free Trade Zone, which promotes the reform process of ship registration system. Shanghai FTZ was officially established in September 2013. As the leading edge of China's reform and open, it has the characteristics of openness, flexibility and high efficiency whether in the formulation of the overall program or in the implementation of specific policies (Quan, 2014). As we can see from the sections introduced the policies, in the free trade zone, the facilitation of trade and the liberalization give the shipping industry more agility and greater space for tax adjustment and breakthroughs in tradition. And the change of the government role to service-oriented government in Shanghai FTZ helps innovate administrative management and enhance administration efficiency, which is beneficial to overcome the disadvantages of inefficient registration service, such as simplify procedures to offer one-stop service. Additionally, testing the new regime in a limited area can greatly reduce the reform costs and risk.

The experience of building Shanghai shipping center for many years is another great advantage for the ISR in Shanghai FTZ. As Chinese economical center and the most famous shipping port, with the regional polarization effect in the Yangtze River Delta and Yangtze River Basin, Shanghai has accumulated rich experience of developing maritime industry and attracted numbers of famous relevant enterprises settled down. With the unique superiority of maritime experience and reputation, the new

secondary registry is developing better in Shanghai than other free trade zones in China.

#### **4.3.2 Weakness**

From the comparison results, the service, ship financing environment and relative legal supports are the issues need to improve, which can be summarized as slow reform process and less motivated attitude.

In terms of the development of ISR in Shanghai FTZ, the lack of reference model is a big problem. Unlike other secondary registries in Europe, this country has different national conditions. And as the leader of free trade zones in China, Shanghai often play the role to provide matured experience for others. With limited useful experience for referring, many controversial and innovative regulations and provisions can only rely on own experiments, such as cabotage, foreign capital limits, special fiscal aid policies, etc.

On the other hand, we have maintained the close registry at home for many years. Rome is not built in a day. Correspondingly, the reform advancement is relatively slow and the regime in Shanghai FTZ is still relatively conservative. Thus the relative supporting policies for ship financing and relevant laws cannot match the development, as the comparison results demonstrated.

Besides, the international ship registry implemented in Shanghai FTZ is lack of publicity to some extent. The purpose of ISR is not making profits, but attracting

Chinese capital fleet back. For these flagged out ship-owners, the convenience and benefits for ship's operation are the major concerns about flag. However, there is insufficient promotion to them about the registration procedures, initiatives and implementation achievements. Without enough information of ISR, they will remain hesitate to fly national flag.

### **4.3.3 Opportunity**

The development of Shanghai FTZ is also the opportunity for ISR regime. Apart from the assistance of promoting system reform and improving service efficiency, the development of free trade zone can promote the improving process of legal environment as well, such as formulating the own regulation for ISR in Shanghai FTZ. Moreover, as one of the highlight reforms, the continuous improvement and development of financial system will surely ameliorate the shipping financing environment (Wang, Yang & Li, 2015).

Another opportunity is the development of Shanghai shipping center. With the further opening and national concern, Shanghai will gather more international leading companies in shipping industry especially in the high-end shipping service areas due to the vast development space (Quan, 2014). For seizing this opportunity, more vessels would like to engage in the Chinese business. This will be the great chance of the ISR development in Shanghai.

#### **4.3.4 Threaten**

One of major threats is the greater concern about ship safety and security from open registries. In recent years, ship-owners would like to avoid the flags with bad reputation to save unnecessary cost due to PSC. So more open registries are paying attention to the measures to increase the power of safety supervision in order to improve competitiveness, such as Hong Kong utilizes the Flag State Quality Control (FSQC) system to ensure the quality of registered vessels (Zhang, 2009). These measures attempt to fill the gap of safety management with national flags, which is definitely a treat for China ISR.

The other one is from other free trade zones where also implement ISR in China. They are in different regions. Tianjin is in the north on the back of Beijing and Hebei province, going to be the northern international shipping center. Fujian and Guangdong is in the south corresponding to the business with Hong Kong and Macao, and Taiwan respectively, while Shanghai is in the middle region. Along with the advancement of ISR system, the competition among different ports of registry is becoming fierce. For example, Fujian Maritime Safety Administration reduced the period of service procedures from 7 working days to 1 working day for the first vessel registered in the Fujian ISR, which is attractive for ship-owners (Ifeng, 2017). Certainly, the attraction will be depending on how free trade zone can match with and keep space with the need of Chinese ship-owners in the future.

#### **4.3.5 Summary**

The figure below shows the major points of above SWOT analysis.

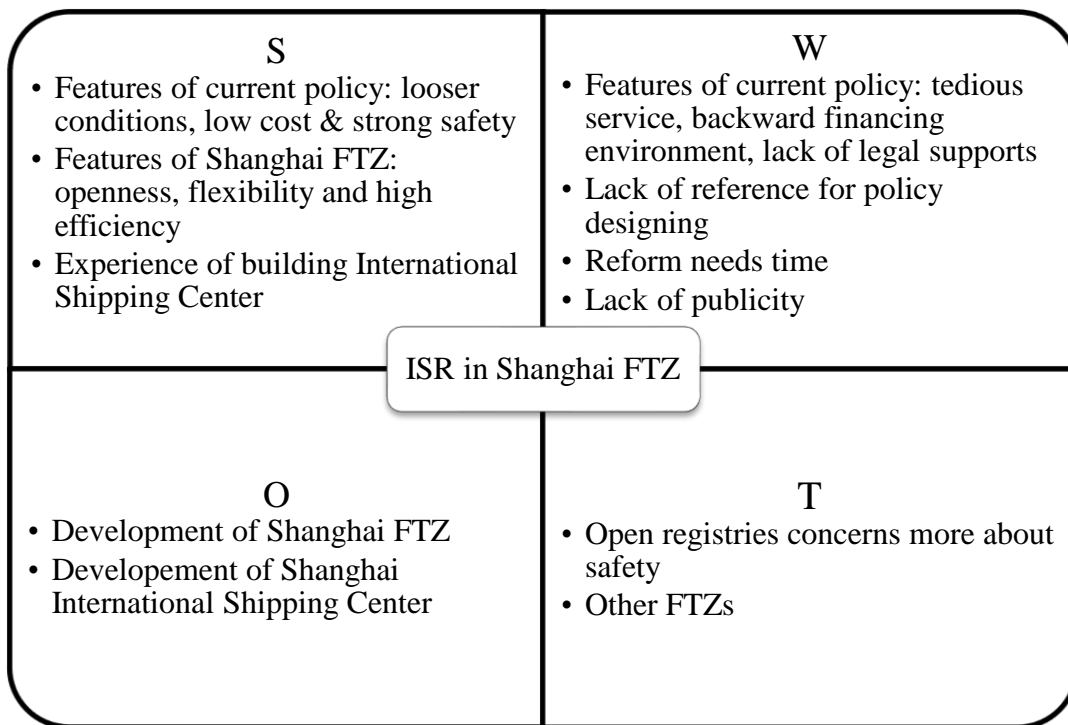


Figure 3 – The SWOT points of ISR in Shanghai FTZ

Source: own presentation based on own analysis.

## **Chapter 5 Considerations about ISR Policy Design in Shanghai FTZ**

Based on the above analyses, here is the summary of all considerations and the corresponding suggestions for designing the ISR policies in Shanghai FTZ.

### **5.1 Extent of application /policy purpose**

A registry should have definite initial orientation so that the policies designed subsequently can be worked out. Only with the certain target, the unique operating mode for that market can succeed.

After analyzing the reasons why international ship registry is necessary for China and Shanghai, the purpose of ISR in Shanghai FTZ is explicit- aiming to prevent the flag-out trend of Chinese owned fleet and attract those vessels under foreign flags return, for the sake of the development of shipping industry and the protection of economic and national security.

For attracting FOC vessels back, the vessels registered in open registries by shall be the main registration subjects. And to stop the increasing flag-out phenomenon, the potential newbuilding and new purchased ships own (or controlled) by Chinese capital should be considered as well. In order to protect the economic and national security better, the target of ISR should be the certain types of merchant fleet with large size and advanced technology which are mainly own by the big state-owned

enterprises.

As for Shanghai government, it expects that regime can promote the development of the free trade zone and thus the Shanghai international shipping center. So the current extent includes foreign capital companies as registered ship's legal person and cancels the limit of Chinese capital ratio in order to embody the openness in Shanghai FTZ.

However, we must be aware that this breakthrough may lead this registry sliding to the side of open registry. Unlike the capital from Hong Kong and Macao in Guangdong free trade zones, which are Chinese ships at heart, there must be some difficulties when dealing with the disputes or lawsuits involving these wholly foreign funded vessels in Shanghai FTZ. And if increasing the degree of supervision and administration for these registered ships, such as higher standard or more frequent surveys, the registry will lose attraction to them. In this regard, the policy designer should consider that whether the benefits from foreign capital registering into national flag will outweigh the disadvantages. And from author's view, testing the enlargement in Shanghai should remain some cost for foreigners.

## **5.2 Trading limits**

For luring Chinese vessels flying other flags back, we should find out their needs. Compared to the Chinese flagged vessels, when operating business in china, though they can save a great amount of money in taxes, they have a great shortage in cabotage. So they have hoped the right of cabotage for many years. Though the



special tax-free registration policy continuing implemented now allows FOC vessels to apply to engage in domestic shipping after registered back, these vessels have to register in the national registry that cannot enjoy the relative preferential policies in the ISR maintained in each free trade zones.

According the current provisions in “Measures for Registration of Vessels”, ships registered in the ISR of Shanghai FTZ can trade in the international shipping and routes to and from Hong Kong, Macao and Taiwan, but they cannot engage in the coastal shipping.

The break of trading limit is the change flag-out ship-owners expect most. But for the original national flagged vessels, it will be not fair for them if the new comers in ISR can enjoy both cabotage and tax initiatives. Besides, if there is no difference on the navigation area, with lighter taxes burden under the ISR, the newbuilding and newly purchased vessels may abandon the old registry for the new. And thus the close registry may be totally replaced by ISR as the Norway’s experience.

From this consideration, author suggests that allowing the registered vessels under ISR of Shanghai FTZ to apply the limited right of coastal shipping within several ports which have free trade zones to may be a better choice, which can not only embody the value of openness in free trade zones, but also really meet the need of flag-out ships.

### **5.3 Crew manning**

In the current policy, vessels can freely employ foreign crew and the employment does not need pre-approved by authority but only report to Shanghai Maritime Safety Administration afterwards, which brings more freedom and convenience for the crew manning.

But it may also cause some problems in safety of Chinese flagged vessels, with the unclear qualities of foreign seafarers on board. And without Chinese senior crew, the goal of protecting economic and national security may be hard to achieve. Additionally, Chinese crew may face unemployment to some extent. There are some countries has lower cost than us, such as Philippines, though Chinese crew is quite competitive due to the relative low labor cost at home that is different from the situation in the developed maritime countries.

So in this respect, the pursuit of openness and convenience for ship-owners' side may not be the best choice. There should be some measures to ensure the quality of foreigner crews, such as high standard requirement of relevant crew certificates for registration, and the free overall test of crew quality after registered as a benefit for ship-owners. Besides, for vessels hiring over a certain ratio of senior Chinese crew for years, the administration authority can give some initiatives for several years, such as free crew trainings, special reduction of income tax, etc.

## **5.4 Safety supervision and administration**

High standard of safety and security on board and strong power of safety supervision and administration are the greatest advantage in China. The ISR in Shanghai FTZ should develop this consistent strong point as one of attractiveness to vessels flying the flags with bad reputation on this aspect. Besides, as the registration attitude turning to service-oriented, the corresponding change should be made in the supervision and administration. It can take Hong Kong as the example, canceling the unnecessary and repetitive surveys, offering more service as consultant instead of enforcer, while strict supervise the accidents rates and PSC rates with effective punishment for the break of national and international regulations.

In addition, to maximize the propaganda of this strength, the authority should more advertise the effect and achievements of relative policies and measures, utilizing not the examples of ISR vessels but the past performances with aiding Chinese FOC vessels in trouble. In the relative international conferences and forums, this advantage should be more presented as well.

## **5.5 Taxes**

For potential vessels registering in ISR, the high cost of taxes is their major concern. To improve the attractiveness, it is urgent and crucial to reform the relevant taxes in Shanghai FTZ.

### **5.5.1 Import tariff and value-added tax of ship**

When registering in ISR, import foreign vessels and export domestic vessels are exempt from the import tariff and value-added tax in Shanghai FTZ. This policy is derived from the bonded area without any change for many years. It is obviously unfair for ships originally registered in China. With more VAT, the competitiveness of vessels under close registry is weakened in the international shipping market (Zhang, 2015). From my opinion, the possible solution is refunding or exempting the VAT for international shipping vessels under traditional registry as well. Because their business is mainly taking place outside the country, the domestic building, purchase or import ships for international shipping shall be regarded as export. And for those vessels are willing to engage in coastal shipping under ISR, the VAT should be levied correspondingly. In this way, the traditional registry can continue the function of protecting domestic shipping safety as well as not be completely replaced by the ISR.

Another problem is that the import equipment and accessories for ship building, repair and maintenance are still levy on import tariff and VAT. For imported vessels, it is an extra cost compared to flying flag of open registries. As for vessels made in China, it is hard for them to compete with vessels built abroad in the international market, because their low labor cost and the tax refunded cannot compensate the high VAT and import tariff of import technical equipment in building, repair and maintenance (Chen & Han, 2012). It is suggested that adding the equipment and accessories of international shipping vessels into the applicable subjects of this exemption in order to eliminate this inequality for domestic ship yards.

### **5.5.2 Business turnover tax**

According to the relevant provisions, the income derived from international shipping of vessels flying flag of China is exempt from value-added tax (as the major component of turnover tax). However, to calculating and declaring the certain part of income separately is a big nuisance for shipping enterprises and the double taxation is inevitable in practice. Besides, the international shipping companies have to pay 3% or 5% for the income from charter (3% for voyage charter, 5% for time charter and bareboat), which is also an important part of their business (Chen, Zhen & Zong, 2009). To approach that problem, I consider the international shipping companies established in Shanghai FTZ can be exempted from VAT on all incomes, as the enlargement of current preferential policy implemented in Yangshan Bonded Area. Instead of the free levy on particular part of income, this change may better embody the convenient and considerate attitude for international shipping enterprises.

### **5.5.3 Corporate income tax**

The corporate income tax is the main tax burden for companies running business in China. Currently, the part of income involving the business of countries or regions which has double taxation agreements or relevant maritime agreements with China may be reduced or exempted from this tax. But this part of income has to be separately calculated and declared as the exemption of VAT. In addition, for the companies established in Shanghai FTZ, all of the incomes shall be subject to the

corporate income tax no matter where it generated from, apart from the mentioned parts, without any other preference at the rate of 25%. Actually, Shanghai FTZ provides the preferential policy in corporate tax for specific industries (at rate of 15%), such as high-tech industries, while the shipping industry belongs to the traditional industries that cannot be included in the scope of benefit<sup>7</sup>. Compared with these corporates, shipping companies grow more aware of the heavy tax burden of vessels under ISR.

To relieve this tax burden for shipping companies, some scholars propose the Shanghai to raise tonnage tax system as the substitute of income tax for vessels under ISR. But the tonnage tax system is not belonging to income taxes, it seems more like property tax. And such an innovation means the reform of the whole corporate tax system for a particular industry, which is difficult to put into practice in the short run.

Comparatively, the reduction of corporate income tax and accelerated depreciation for ships under ISR is more practical for our conditions. Apart from the lower tax rate for international shipping enterprises set up in Shanghai FTZ, if the ship can increase the annual depreciation, it can reduce the taxable income in that year and thus to defer the tax payment.

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<sup>7</sup> Shanghai FTZ: 15% corporate income tax benefits. (2016, December 2). *Cngold*. Retrieved June 29, 2017 from <http://forex.cngold.org/c/2016-12-02/c4647300.html>

#### **5.5.4 Personal income tax of seafarers**

Most countries provide personal income tax reduction for crew or offer individual social security allowances for ship-owners so as to reduce the tax burdens of crew and ship-owners. On the base of current personal income tax policy, Shanghai FTZ can increase the exemption threshold of monthly wage on crews on the vessels under ISR. Though the labor cost of domestic shipping enterprises is not high compared to developed countries, the appropriate relief of tax burden can help to attract more vessels return.

As mentioned, offering special reduction for vessels hiring over a certain ratio of senior Chinese crew for years is also helpful for encouraging ship-owners employ more nationalities, such as offer the allowance of crew's social insurance premiums.

### **5.6 Financing and supporting laws and regulations**

Beside tax reform, the supporting policies about improving the environments of ship financing and the laws for disputes settlement under the ISR are the important considerations as well.

In the background of Shanghai FTZ, the methods and sources of ship financing can be further open, such as looser limit of foreign capital. And there can be some preferences for ship financing companies settled down in free trade zone, such as corporate income tax reduction. Additionally, establishing a new legal frame work of ship financing lease is also feasible in the free trade zone.

As for the laws and regulations for ISR, the provisions can be more detailed in Shanghai FTZ, so as to ensure the rights and interests of relevant ship-owners, shipping enterprises and employees, and thus to enhance the international community's confidence in China ISR. Besides, the relative perfect legal supports can become one of competitiveness in the competition with other free trade zones.

In combination with the legal framework, both the development of ship financing and ISR in Shanghai will be one step closer to the goal.

## **5.7 Registration service and procedures**

In terms of registration service and procedures, the short of information and the relative inefficiency have been the disadvantages of ISR for some time.

To approach the problem of insufficient information, Shanghai Maritime Safety Administration should publish the detailed process and requirements for ISR as soon as possible, including the other procedures offered as the one-stop services. Subsequently, the relevant performance evaluation and supervision mechanism should be established as well for the sake of effectively translating the policy of facilitation on paper into actions.

In order to further improve the service efficiency, I recommend the system in free trade zone may test the policy like Hong Kong, that is, as long as the applicants can provide the guarantee in conformity the requirements and prove it has canceled the foreign nationality, even if they are unable to submit all required documents at the



application stage, the Shanghai Maritime Safety Administration may first register the ship and issue the relevant licenses and certificates for it. In this way, the time period must be great shortened.

Besides the internal process, the relevant procedures such as business registration and customs formalities are also influence the time cost of ship registration. In free trade zone, it is suggested that create an office to gather these related authorities and build a system for information sharing and online progress supervision.

Moreover, the authority should add more consultant services for registered vessels and potential subjects into working content and make more information campaigns, so as to change the public image of its attitude and expend the publicity of ISR in the industry.

## **5.8Others**

### **5.8.1 Impact on relative areas**

The international ship registries usually are implemented with market opening and requirements relaxing, which may lead to the opposition and obstruction from domestic policy objects. For instance, the domestic shipbuilding industry may feel unfair about the import VAT policy as mentioned. Besides, if there are too many favorable policies for vessels under new registry, the vessels registered in traditional one before will feel unjust as well. In general, although the reform and openness of this system will cause the temporary fluctuation in the Chinese shipping market, in

the long run, such volatility will be converted to the power of continued reform and finally benefit to the maritime industry of China.

### **5.8.2 Future directions**

From the historical experiences abroad and at home, we can see that the preferential policies of new regime are probably the momentary attractions for ship-owners. The future emphasis should be on the reforms and improvements with regard to taxation, service, ship financing, laws and regulations. Besides, the policy designers need to pay close attention to the situation of open registries and the change of ship-owners concerns, so as to adjust the policies timely and effectively. Only in this way can we attract increasing Chinese fleet return home, and thus to drive the development of upstream services of international shipping in China.

## **Chapter 6 Conclusions**

The shipping capacity is an important index for maritime industry. And the capacity of national fleet shows the current situation and development trend of that State's maritime industry. Due to ship operator's pursuit of profit maximization, open registries quickly developed as the major registration of the world, now occupying about 63 percent of world fleet in terms of GT (Clarksons Research, 2017). As a result, the phenomenon of diminishing national fleet emerged in many traditional maritime countries. For combat with these flags, European developed maritime countries first established the secondary registries as the respond to flag-out phenomenon. International ship registry is one kind of secondary registries be popular in the world, set up in the territory of that country with the characteristics between the open registry and close registry.

Similar to other traditional maritime countries, as a big State of ownership, China has faced the situation of more than 50 percent of fleet capacity under foreign flags for years and the trend seems to be continued, which is not conducive to the development of China's shipping industry, tax jurisdiction, judicial control, shipping safety and economic security. In order approach this problem, China has attempted to build its own international ship registry since 2007, so as to supplement the close registry and strengthen the State's shipping soft power, while the result has not achieved the expectation yet. After analyzing the historical examples, the author concluded that the high taxes and fees, backward ship financing environment, tedious registration procedures and the lack of related legal supports are the constraints of ISR implementation in China.

On the basis of Yangshan Bonded Area, Shanghai Pilot Free Trade Zone has operated the ISR from 2014 but no much effect on the unsatisfactory result. In order to discuss the progress and lack of the ISR system in Shanghai, this paper made a comparison among the International Ship Registry in Shanghai, China national registry and open registry. After the case study on tax burdens and systematic evaluation of current policies, the dissertation identified the SWOT factors of the ISR implemented in Shanghai FTZ. For this regime, though facing the increasing competition with open registries abroad and ISRs in other domestic free trade zones, Shanghai can offer it great space and help as the development of Shanghai FTZ and Shanghai international shipping center, because of not only its richer experience and national concerns in shipping industry, but also the free, flexible and open environment.

Combining the current status and SWOT analysis of the ISR developing in Shanghai FTZ, this paper put forward the considerations and corresponding recommendations with regard to the policy purpose, registration conditions, relative supporting policies and future directions. The purpose of China ISR in Shanghai FTZ was first identified as to attract flagged out Chinese own vessels back home and potential registering vessel flying national flag. In the future, though the tax cost is crucial concerns influencing ship-owners' choice of registry, the ISR shall maintain the advantage of safety supervision and administration as well as provide the fiscal cost in operations for ship-owners as competitive as possible. Despite it may lead to some fluctuations, the reform progress of ship registration would be more advanced in the long run in the aspects of fiscal initiatives, service attitude, ship financing environment and legal supports.

Due to the limited time and conditions, this paper cannot study deeply and propose

the specific policies for each aspect. In conclusion, the policy design of ISR is not only the matter of ship registration system, and the effective implementation needs lots of supports and cooperation from relative areas. ISR is not the panacea. While adjusting the policies of international shipping and improving the efficiency of internal services, it is also important to constantly improve the relevant business system, ship finance and legal environment, etc. Only in this way can we enhance attractiveness of this regime in Shanghai FTZ and promote the sound development of Chinese shipping industry.

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