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A study of the critical success factors of international ship finance centre The case of Shanghai

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Abstract

Purpose – The purpose of this study is to identify the critical success factors to international ship finance centre (ISFC) and to understand the reasons behind ship financing decision by shipowners and their views on the potential of Shanghai to become an ISFC in the near future.

Design/methodology/approach – Survey questionnaire and follow-up interviews were conducted. The survey of this study was conducted by firstly sending online questionnaire with interview questions via email and then carrying out interview either on telephone or in-person with the interview questions to collect factual data and views from individual interviewees.

Findings – This study identified governmental support and stable policy, sound and favourable legal system, advanced maritime cluster and dynamic source of finance as critical success factors which can help Shanghai to evolve into an international maritime centre with dual function as an ISFC which is a synthesis with the maritime sector of an international finance centre.

Originality/value – This paper is known to be the first to link international maritime centre with ISFC. Keywords Critical success factors, International maritime centre, International ship finance centre Paper type Research paper

1. Introduction

Since its open door policy in 1978, mainland China has emerged as the world's largest exporter and second largest importer. Along its path, mainland Chinese shipyards have developed and surpassed other competitors in rapid speed. In this remarkable development, the Chinese Central Government has played an immense role by running state-owned enterprises (SOEs) and strategically promoting national ports, especially Shanghai port. As a result, Shanghai port has become the busiest port in the world in terms of container throughout.

Though SOEs have contributed to the development of the shipping industry in mainland China in the past decades, they have recorded a significant amount of loss due to their inefficient administration and business structure (Yang and Chan, 2014). The State Council announced a set of guidelines on the development of the maritime and



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Maritime Business Review Vol. 1 No. 1, 2016 pp. 40-54 Emerald Group Publishing Limited 2397-3757 DOI 10.1108/MABR-03-2016-0003 shipping industry as a landmark change leading to substantial reforms in the oversupplied and loss-making sector. The guidelines call for optimization of the structure of mainland-owned fleets and urge increased competitiveness of SOEs, which only carry a quarter of total imports and exports. The State Council presumes that this reform will bring positive changes.

In improving the efficiency of shipping business and promoting foreign investment, the Chinese Central Government further announced the approval of China (Shanghai) pilot free-trade zone (CSPFTZ) in September 2013, which aims to establish Shanghai as an international finance centre (IFC) by 2020 (Cainey, 2010). CSPFTZ released regulations to foreign investment, finance and tax. Foreign banks will be allowed to directly establish their branch, wholly-owned subsidiary or majority-controlled subsidiary with mainland Chinese business partners in the region within a shorter period. Customs supervision framework will be upgraded and also tax policies and incentives will not only provide reduced tax rates and incentives but also support innovative business models in the CSPFTZ.

China has surpassed the USA and Germany in 2009, and became the largest exporter. The total value of imports and exports of China in 2013 was US\$4.6 trillion according to reports by the Chinese Government. (The Financial Times, 2014) On the cargo side, raw materials including iron ore, coal, grain, etc., dominate seaborne trade, and China alone contributed to about two-thirds of global iron ore import volumes in 2011. Meanwhile, nearly 39 per cent of gross tonnage delivered in 2011 was built by Chinese shipyards, followed by shipyards from the Republic of Korea (35 per cent) and Japan (19 per cent). In 2012, half of the world gross tonnage (49.7 per cent) was owned by shipping companies from four countries, notably Greece, Japan, Germany and China (UNCTAD, 2013). As demonstrated in above, China has shown its rapid growth and substantial strength in shipping from cargo to ship building and tonnage.

Shanghai has the potential to be developed as an international ship finance centre (ISFC), which could encourage mainland Chinese private shipowners to approach dynamic sources of finance for their investments and attract foreign shipping companies to raise ship finance in mainland China. Historically, maritime cities, such as London, Hamburg, Oslo, Hong Kong, Singapore, etc., have been developed as ISFCs under this pathway. These cities have strived to maintain their position as ISFCs because they facilitate their shipping industry as well. Compared to these cities, there are many limitations for Shanghai to become an ISCF, such as restrictive regulations, expensive taxes, etc. Thus, Shanghai needs to identify areas of improvement to develop itself as an ISFC.

As shipping is a capital-intensive industry, it is of paramount importance to raise ship finance. In a very volatile and cyclical shipping market, shipping companies strive to search for optimal sources of finance and enhance their financing methods. SOEs in mainland China have been out of this issue, as the mainland Chinese Government strongly supports them financially and politically. However, SOEs have been hugely expanded in terms of their size and fleet number, but they are continuously making loss due to their inefficient operations and administration. Being aware of these drawbacks, the State Council has decided to reform the shipping industry by encouraging private shipowners and restructuring SOEs. Therefore, it is expected that private shipowners will likely be investing in their fleet more actively, whereby demand for ship finance will also be increasing.

With the establishment of CSPFTZ and its goal as an IFC, Shanghai could develop as a platform where shipowners can raise ship funds and international financial institutions can provide diverse products for shipping. However, not all maritime cities can successfully be developed into an ISFC. In addition, few researches have attempted to study critical success factors of ISFC, not to say in the case of Shanghai.

This study seeks to identify and ascertain the critical success factors of an ISFC and apply the findings to Shanghai. The first objective is to analyse the current status of the shipping industry in mainland China, and then examine the potential of Shanghai to be developed as an ISFC. Second, this study identifies what are the success factors that can critically and successfully lead a shipping hub to become an ISFC. Finally, recommendations regarding further areas of improvement and competition of Shanghai as an ISFC will be discussed.

In this paper, ISFC has the following characteristics. ISFC is a place that features a heavy concentration of demand and supply of ship finance. ISFC is a platform situated in international maritime centre (IMC) where a number of shipowners and investors can raise funds for ship finance and financial institutions provide diverse products available to shipping companies. It also functions as a hub for cross-border financing around the world and thereby international transactions for ship finance can be conducted easily and efficiently with high levels of expertise in a range of financial products and services. Its collective liquidity can allow them to handle the largest transaction and to provide long-term loans.

Shipping requires huge amount of funds for operation and long-term projects, and therefore, a well-developed financial sector can provide such funds and services to the shipping industry (Sheng, 1998). For instance, such international or regional maritime centres as London, New York, Hong Kong, Tokyo, Singapore, Dubai, etc., are finance centres. Regional maritime centre can stimulate a maritime city to become an ISFC and in the process, the national ship finance centre gradually evolves to the international level, which sustains further development of shipping business in the region (Yan, 2014). To conclude, a regional maritime centre can evolve into an IMC with dual functions as an ISFC, which is a synthesis with the maritime sector of IFC.

The following section provides a theoretical background on ISFC and current situation of ISFC in mainland China. It then describes and justifies the research methodology. The fourth section presents the results and findings of the survey. Conclusions are drawn from the analysis and prospects and challenges of Shanghai as an ISFC are discussed in the final section.

2. Theoretical background

2.1 Definition of international ship finance centre

There have been studies to determine IFC and a general view exists now, whereas few studies have attempted to define ISFC. By understanding the definitions of IFC and the features of ISFC, we can draw a concept and meaning of ISFC.

Jao (1997) claimed that the formation of a financial centre is fundamentally determined by market forces of demand and supply. Lai (2006) stated that IFC is typically developed as a national centre that subsequently assumes regional status from a rise in demand to service international capital transactions with increased international trade. For the purpose of this study, it can be understood that ISFC is a place where demand for and supply of ship finance concentrates. In addition, the

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emergence and development of ISFC are closely connected with the development of the maritime industry in the area. Many global financial centres, such as London, New York, Hong Kong, Tokyo, Singapore, Dubai, etc., are international or regional maritime centres at the same time. This is because shipping requires huge amount of operating and investing funds, and a well-developed financial sector provides important nourishments to the shipping industry (Sheng, 1998). Hence, a regional maritime centre could stimulate and enhance a maritime centre to become an ISFC. The national ship finance centre gradually evolves to international level, which sustains further development of shipping business in the region (Yan, 2014). To conclude, ISFC is a platform that is situated in a shipping hub where shipowners and investors can raise funds and financial institutions can provide diverse financial products to shipping companies.

Table I summarizes the definitions and meanings of IFC and ISFC. IFC features the concentration of banks and financial institutions, particularly foreign ones, and advanced system with deep and liquid market and adequate legal frameworks. Meanwhile, ISFC is a place where shipowners raise ship finance and financial institutions provide financial products to shipowners. IFC and ISFC share the same element, such as concentration of a wide variety of financial institutions despite demand side and available products are somehow different.

2.2 Ship financing in mainland China

Definitions and meanings

Terms

2.2.1 Imbalance between global cargo and tonnage coverage. Although the shipping industry in mainland China has developed substantially to accommodate its growing demand, there is still a gap between world's cargo coverage and tonnage coverage. On the cargo side, mainland China takes up the largest proportion of world's bulk trades, followed by Australia, the USA and Japan, which dominate the world's seaborne trade. According to Maritime Trade Intelligence (2014), mainland China's share of the world's bulk trade is the largest, with a big gap between others. On the tonnage front, about 54 per cent of the world's tonnage (measured by carrying capacity or dwt) is controlled by

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IFC	A place where there is a high concentration of banks and other financial institutions, and in which a comprehensive set of financial markets are allowed to exist and develop (Jao, 1997)	
	A conglomeration of financial and service enterprises and corporate headquarters,	
	particularly foreign ones (Lai, 2006)	
	An intense concentration of a wide variety of international financial businesses	
	and transactions in one location. It is a large, international, full-service centre with	
	advanced settlement and payments systems, supporting large domestic	
	economies, with deep and liquid markets where both the sources and uses of	
	funds are diverse, and where legal and regulatory frameworks are adequate to	
	safeguard the integrity of principal–agent relationships and supervisory functions	
	(Yeandle <i>et al.</i> , 2005)	
ISFC (for the	ISFC is a place where demand and supply of ship finance concentrates. It is a	Table I.
purpose of	platform situated in an international maritime centre where a number of	Definitions and
this study)	shipowners and investors can raise funds for ship finance and financial	meanings of IFC and
uno otaay)	institutions provide diverse products available to shipping companies	ISFC
	institutions provide diverse products available to simpling companies	151 C

owners (shipping companies) in Japan (16.0 per cent), Greece (15.3 per cent), Germany (9.5 per cent), China (8.4 per cent) and Norway (4.5 per cent) (World Ocean Review, 2014). It is notable that Japan has the greatest control in global tonnage, while it shares the fourth largest proportion of global trade. In contrast, mainland China ranks the fourth, while it is the biggest trader in international trade. It implies that mainland China could improve its carrying capacity by taking advantage of its biggest pie in international trade, through which it will balance its cargo coverage and tonnage control. In other words, shipping companies in mainland China have yet to sufficiently accommodate demand and to utilize existing opportunities. Thus, there is potential for further investment into capacity.

2.2.2 Demand of ships in mainland China. In October 2010, the Communist Party of China's Central Committee approved the China's 12th Five-Year Plan for National Economic and Social Development (FYP) (2011-2015), which is the blueprint to the social and economic growth and industrial planning providing overall objectives and goals in each sector (APCO, 2010). The plan for energy consumption has a great influence on imports of cargoes used for energy sources. According to the 12th FYP, mainland China will pledge to have 15 per cent of its energy from non-fossil fuels by 2020 (from 8.3 per cent in 2009 to approximately 11 per cent by 2015). The plan aims to reduce coal production, with concerns about environment and pollution, and to increase natural gas consumption, which is predicted to be doubled over the 12th FYP (APCO, 2010). In response to this trend, mainland China is expected to have more liquified natural gas (LNG) import in the near future. The build-up of its LNG processing capabilities in the transportation and receiving areas is extremely important. The projects are capital-intensive, with 170,000 cubic-meter (CM) vessels now costing in the region of US\$200 million each, which requires a large pool of finance. At the global picture, order book for LNG newbuildings stands at 7.3 million CM, which needs approximately US\$18 billion in financing requirements over the next eight years, against current supply of 11.3 million CM (Wu, 2014).

2.3 Potential of Shanghai as an international ship finance centre

The Chinese Central Government plans to transform Shanghai into an IFC by 2020 as part of the overall plan to internationalize RMB, whereby RMB is targeted to play an enhanced role in the world's monetary market (Leung and Yim, 2009). Shanghai is already a national financial centre in mainland China by most measures, but it is still some way behind the world's leading financial centres in terms of market openness, market size and variety, sophistication of products available, etc. However, Shanghai has clear advantages over regional competitors, such as Hong Kong and Singapore, to become an IFC, including the backup of one of the huge domestic market and huge substantial growth potential. How far it can close the gap with the world's leading IFCs will depend on how fast Shanghai can remove or reduce the constraints that presently restrict the city from becoming a world's leading financial centre, including but not limited to capital control and the inconvertibility of RMB. That, in turn, will depend on how mainland Chinese authorities weigh the benefits and risks associated with the internationalization of RMB and how far the country can build up the necessary infrastructures for defending against any such risks.

Despite Shanghai's dominance in mainland's financial arena, the city still lags behind the world's major financial centres in terms of market size and the availability and sophistication of financial products and services. Foreign exchange trading in mainland China, for example, was less than 1 per cent of that in London. While the Shanghai Stock Exchange is ahead of that of London in terms of market capitalization, it was less than one-fourth of the latter in terms of the amount of capital raised and less than one-tenth of New York in terms of turnover. Conversely, mainland China has its constraints and weaknesses (Table II). Most obvious is capital control, which inevitably limits the business volume of mainland China's financial market. The inconvertibility of RMB further restricts the business volume in certain financial activities, such as foreign exchange trading and initial public offering on stock exchange. Other constraints include the control on information and foreign participation. How far mainland China can or is willing to remove or reduce those constraints will be the key to Shanghai's development as an IFC by 2020.

Some of the weaknesses, such as the lack of skilled personnel, are easier to be overcome by giving the right incentives. The inadequate legal and regulatory environment would not be a hindrance to foreign participants, as witnessed by the phenomenal inflow of foreign direct investment to mainland China in the 1990s. Other constraints, however, will need more time to remove. Capital control, for example, is imposed to limit the impact of any external shocks on the domestic economy. The Chinese Central Government is unlikely to relax any such controls hurriedly after the current global financial crisis. The presence of an international financial centre will provide mainland China with much greater capacity to increase the efficiency of capital utilization, and hence will potentially lead to sustainable growth of the local economy. It will provide better investment opportunities for the ever-growing wealth of the country, and it will be better able to serve the needs of domestic and foreign companies.

2.4 China (Shanghai) pilot free-trade zone

In September 2013, the Chinese Central Government announced the set up of CSPFTZ in Shanghai. The underpinning idea of this reform is to strengthen areas that can improve businesses in mainland China and throughout Asia, as multinational corporations and local mainland Chinese companies are able to be benefited from more relaxed financial and investment controls (PwC, 2013). The establishment of CSPFTZ has been recognized as a crucial economic reform initiated by mainland China's new leadership. The pilot experiment in Shanghai will include certain major reforms, as mentioned in the following text, in connection with the financial sectors.

2.4.1 Financial reform. Foreign banks will be allowed to directly establish branch, wholly-owned subsidiary or majority-controlled subsidiary with mainland Chinese

Constraints	Weaknesses
Capital control	Availability of skilled personnel
RMB convertibility	Risk management
Information control	Corporate governance
Limited foreign participation	International competitiveness
Control on interest rates and loans	Financial infrastructure
Source: Hang Seng Bank (2009)	

Table II. Mainland China's constraints and weaknesses business partners in the region within a shorter period. This new policy will shorten the lengthy approval processes and significantly ease restrictive foreign entries. It is noteworthy that domestic private investors are also allowed to participate in CSPFTZ in the form of financing services, including but not limited to setting up private banks, financial leasing and consumer financing (sole investment or joint investment with foreign capital). Financial institutions in CSPFTZ are expected to be gradually granted licences for new cross-border financial products, such as commodity trade financing, whole supply chain trade financing and financial support to service industries. A successful reform of granting financial services licences will pave the way for financial institutions to diversify their businesses and lending activities in CSPFTZ.

CSPFTZ also encourages the development of finance and derivative products for shipping as a way to promote Shanghai as an international maritime and financial centre. Currently, regional headquarters in mainland China are subject to strict administrative controls in the areas of fund management and capital project funding for their mainland Chinese subsidiaries. Overseas companies' cross-border treasury management will be further enhanced if policies promoting both RMB convertibility and easing administrative controls are applied. The results could push mainland China a step closer to its goal of attracting more multinational corporations to set up regional or global headquarters in the country.

2.4.2 Creation of a competitive regulatory and tax environment for business. Key features of tax policies and incentives are meant to support innovative business models in CSPFTZ, rather than just provide generally reduced tax rates or universal incentives to all sectors, which may not be adopted by other regions in mainland China anytime soon. For instance, under the overall plan, leasing companies in CSPFTZ are granted with exports value-added tax refund, a policy that is only applicable to the domestic companies in the Tianjin Binhai New District. Investors injecting capital in the form of non-monetary assets into their companies in CSPFTZ may average their asset appreciation premium over a period of five years for corporate income tax and individual income tax (IIT) purposes.

Professionals in high demand may enjoy preferential IIT treatment in respect of their gains derived from the share-based payment granted by companies in CSPFTZ. In addition, industries expect more tax incentives in certain areas, including offshore business and overseas equity investments from the Chinese Central Government in subsequent announcements. Local incentives in the form of financial subsidies are also anticipated.

3. Methodology

3.1 Research steps

The purpose of this study is to identify the critical success factors to ISFC and to understand the reasons behind ship financing decision by shipowners and their views on the potential of Shanghai to become an ISFC in the near future. To meet the purposes, survey questionnaire and follow-up interviews were conducted. Research interviews are normally adopted to explore the views, experiences and motivations on specific matters because they can provide a deeper understanding than will be obtained from purely quantitative methods (Gill *et al.*, 2008). Therefore, interviews are regarded as the most appropriate, where little is already known about the study area or where detailed insights are required from the individual participant (Gill *et al.*, 2008). The survey of this study was conducted by firstly sending an online questionnaire with interview questions via email and then carrying out an interview

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either on telephone or in-person with the interview questions to collect factual data and views from individual interviewees.

3.2 Sampling

The targeted interviewees are foreign ship-owning companies in mainland China, as they could be the potential customers who might raise ship finance in Shanghai. The bases of organization vary from Hong Kong to Germany to obtain views on the success factors and measurement indicators. However, majority of the targeted interviewees are based in Hong Kong and they are more likely to raise finance within Asia. According to the survey by Norton Rose Fulbright Transport Survey (2013), respondents have the tendency to favour their local financial centre. The number of members of the Hong Kong Shipowners Association is 55. Among them, 30 shipping companies mainly operate ships. Thus, 30 shipowners in Hong Kong were selected as the main target of this study. Invitations to interviews were sent to 30 shipowners via email with the survey questionnaire and interview questions. We received 18 completed questionnaires and their responses are discussed in next sections.

3.3 Questionnaire design and measures

The measurement items for the respondents' evaluation of the critical success factors pertinent to ISFC were mainly adopted from prior research (Table III), while those previous studies are related to, but not for, IFSC. To maintain the accuracy and content validity of the questionnaire, an extensive review of the literature was conducted.

To ensure the content validity of the measurement items, interviews were conducted with two independent experts, an experienced shipping executive and an academic with research expertise in shipping finance, to judge how well the survey questionnaire meets the common questionnaire design standards (Malhotra and Grover, 1998) and the expected requirements in terms of its coverage and the degree to which its statements are unambiguously worded. The final measure items used to measure the critical success factors are presented in Table IV.

A five-point Likert-type scale was used for this questionnaire survey. Respondents were asked to indicate the perceive importance with each item of the critical success factors, where 1 represented "very low importance" and 5 represented "very high importance". The respondents' level of importance with the measurement items is shown in Table IV.

4. Findings

4.1 Respondent profiles

Table V shows that more than 70 per cent of the 18 respondents had worked in the firm for more than six years, suggesting that they have sufficient knowledge and experience to answer the questionnaire accurately and reliably. Moreover, over 77 per cent of the questionnaires were completed by treasurer (33.3 per cent), financial controller (33.3 per cent), chief operational officer (5.6 per cent) and chief financial officer (5.6 per cent), which further reinforced the reliability of the survey's findings. Over 16 per cent of the respondents' revenue per annum were between US\$26-50 million, 5.6 per cent between US\$51-100 million and nearly 67 per cent had revenue of over US\$100 million.

4.2 Perceived importance of critical success factors

To evaluate their perceptions of the importance of the critical success factors, respondents were asked to rate 19 items. The results in Table IV indicate that six items

MABR 1,1	Critical success factors and measurement items	Previous studies
48	A. Government support and stable policy A1: Favourable tax regime A2: Political and social stability A3: Good and responsive government	Huat <i>et al.</i> (2004), Jackowicz <i>et al.</i> (2013), Jao (1997), Wijnolst <i>et al.</i> (2003)
	 B. Sound and favourable legal system B1: Good rule of law B2: A pool of legal professional B3: Ship registration (flag of convenience) 	Centre for Transport, Trade and Financial Studies and One Country Two Systems Research Institute (2013), Jao (1997), MPA (2013)
	 C. Advanced maritime cluster C1: Wide range of maritime services and strong links in maritime cluster C2: Advanced structure of maritime cluster C3: Educated workforce in maritime industry C4: Numerous headquarters of shipping companies 	Benito et al. (2003), C.Y. Tung International Centre for Maritime Studies (2014), Jao (1997), MPA (2013), Wijnolst et al. (2003), Zhang and Lam (2013), Zhao et al. (2004)
	 D. Dynamic source of finance D1: A pool of internationally competitive financial institutions D2: A pool of financial professionals D3: A multi-functional and highly internationalized financial market system 	Huat <i>et al.</i> (2004), Jao (1997), MPA (2013), Singapore Solutions (2014)
Table III. Previous studies on critical success factors	E. External environment E1: Good location and time zone advantage E2: Robust economic growth in the nation E3: Healthy competition between rivals E4: Globalization of banking and finance	Chang (2011), Jao (1997), Wijnolst <i>et al.</i> (2003), Zhao <i>et al.</i> (2004)

which respondents perceived as important (those having a mean score of greater than 1.67) were as follows: "political and social stability", "good rule of law", "pool of internationally competitive financial institutions", "government's financial support for national shipyard (ECA)", "favourable tax regime" and "educated work force in maritime industry". The success factor with which respondents most agreed, i.e. political and social stability, is crucial and consistent with Jackowicz *et al.* (2013), who found that the long-lasting stable political environment enabled London to develop and secure its place as the world's leading and premier maritime financial centre. A good rule of law implying a sound legal system has enabled Hong Kong to become an international platform for finance and shipping-related services (Jao, 1997). A pool of international competitive financial institutions indicates the significance of the location as part of the banks' strategic intents (Huat *et al.*, 2004).

The main findings deriving from the survey can be summarized in four points. To begin with, the governmental support and stable political environment can attract

Dimension	Factors	Mean	SD	Rank	Critical success
A. Government support	A1: Favourable tax regime	4.33	0.65	5	factors
and stable policy	A2: Political and social stability	4.75	0.45	1	ractors
. ,	A3: Good and responsive government	3.75	0.45	12	
B. Sound and favourable	B1: Good rule of law	4.42	0.51	2	
legal system	B2: A pool of legal professional	3.58	1.08	15	49
0 ,	B3: Ship registration (flag of convenience)	3.67	0.89	13	49
	B4: Transparency in business regulation	3.83	0.83	10	
C. Advanced maritime cluster	C1: Wide range of maritime services and strong links in maritime cluster	4.00	0.00	9	
	C2: Advanced structure of maritime cluster	3.67	0.49	14	
	C3: Educated workforce in maritime industry	4.33	0.49	6	
	C4: Numerous headquarters of shipping companies	3.58	0.67	16	
D. Dynamic source of finance	D1: A pool of internationally competitive financial institutions	4.42	0.51	3	
	D2: A pool of financial professionals	4.08	0.79	8	
	D3: A multi-functional and highly internationalized finance market system	3.83	0.72	11	
	D4: Government's financial support and export credit for national shipyard	4.42	0.51	4	
	D5: Globalized and developed bank, equity market and ship leasing	4.17	0.72	7	
E. Circumstances	E1: Good location and time zone advantage	2.83	0.58	19	
	E2: Robust economic growth of the country/city	3.33	0.49	17	
	E3: Healthy competition between rivals	3.17	0.39	18	
Average	· · · · ·	3.91	0.59		
Number of responses		18			Table IV.
					Mean scores of

Notes: Mean scores are based on a five-point Likert scale (1 = very low importance; 5 = very high critical success factor

dimensions

shipowners to set up their base in an IMC. The indicators are "favourable tax regime", "political and social stability" and "good and responsive government". Secondly, a sound and favourable legal system enables shipping companies to feel confident in conducting business and raising their funds, which is composed of "good rule of law", "ship registration" and "transparency in business regulation". Thirdly, advanced maritime cluster measure the degree of shipping activities also affects the development of the maritime city into an ISFC. The components are "wide range of maritime services", "advanced structure of maritime cluster" and "educated workforce in maritime industry". Finally, dynamic source of financing provides shipping firms with availability of products for ship finance. The four indicators are "pool of internationally competitive financial institutions", "pool of financial professionals", "multi-functional and highly internationalized finance market system", "government's financial support for national shipyard (ECA)" and "globalized and developed bank, equity market and ship leasing". In short, ISFC shall have the environment where shipping companies feel confident in their business and financing with favourable tax regime and initiatives regulated by the governments, and also shall be capable to provide a variety range of financial services.

importance)

MABR 1,1	Characteristics of respondents	Frequency	(%)
1,1	Job title		
	Chief Financial Officer	1	5.6
	Chief Operational Officer	1	5.6
	Financial Controller (Director)	6	33.3
50	Treasurer	6	33.3
	Others	4	22.2
	Length of service in company		
	Less than 5 years	5	27.8
	6 – 10 years	4	22,2
	11 – 15 years	4	22.2
	16-20 years	3	16.7
	Over 20 years	2	11.1
	Employees		
	Less than 50 people	1	5.6
	51 - 100 people	2 5	11.1
	101 - 150 people		27.8
	151 - 200 people	2	11.1
	More than 200 people	8	44.4
	Revenue per annum		
	US\$5 - 25m	2	11.1
	US\$26 – 50m	3	16.7
Table V.	US\$51 – 100m	1	5.6
Profile of	Over US\$100m	12	66.6
respondents	Number of respondents		18

4.3 Qualitative interviews

After the questionnaire survey, interviews were conducted either face-to-face or on telephone. Among the 12 interviewees, nine interviewees had a high degree of knowledge in ship finance, whose jobs were directly related to finance, such as chief finance officer, financial controller and treasurer, while three interviewees had medium level of knowledge, as they worked as chief operation officer, general management at sales and purchase and business analyst. The interviewees have worked for the organization for, on average, 8.8 years and in their current positions for, on average, 5.0 years. Thus, they have acquired enough experience to understand the corporate financial decisions and market conditions.

Two streams of thoughts emerged from the follow-up interviews. The pessimistic view claimed that Shanghai is still far away from being an ISFC because none of the foreign shipping companies will be willing to be based in Shanghai, as they are already well-established in the current base and there is nothing the companies can benefit from more due to many restrictions in China. Furthermore, Singapore and Hong Kong offer various tax incentives and there are a number of international financial institutions in these countries. As such, it is unlikely that Shanghai can compete with these two countries and develop into an ISFC. On the contrary, the optimistic view pointed out advantages that mainland China has over Hong Kong and Singapore or other ISFCs. Firstly, mainland China encourages shipowners to use Chinese banks through export

credit when ordering new buildings in Chinese shipyards. Secondly, the central government strongly supports the maritime industry through development of the port and maritime-related services sectors.

Interviewees pointed out several challenges that Shanghai needs to address to compete with other financial centres. Firstly, the tax regime in mainland China is stringent compared to Hong Kong and Singapore. One of the findings of this study, favourable tax regime, is considered one of the critical success factors to a successful ISFC. As mainland China is a large country, it is difficult to modify its tax regime. However, if favourable tax regime applies exclusively to Shanghai through the CSPFTZ, it could foster the establishment of Shanghai as an ISFC. In addition, small shipowners lack the necessary knowledge and capabilities in financing methods. On the other hand, banks are hesitant to lend to small shipping companies due to their uncertainty and capability in making repayments. Interviewees suggested that Shanghai can benchmark and consider financial products that were developed by other ISFCs, for example German Kommanditgesellschaft (KG) in Hamburg, and Norwegian Kommandittselskap (KS) and over-the-counter (OTC) market in Oslo, to provide shipowners, in particular local small shipowners, with diverse accessible sources of capital. Also, the Chinese Central Government could encourage local small shipowners to collaborate with and form a shipping pool to improve their financial status and borrowing capabilities to borrow from commercial banks with more favourable terms.

As mentioned above, the monetary restriction and prevailing regulation unfavourable to foreign companies are challenges to Shanghai to become an ISFC compared to Singapore and Hong Kong. However, it has comparative advantages including shipyards and growing shipping industry and maritime activities. In addition, development of innovative financial products for private shipping companies in mainland and also for overseas companies can be considered as a method to encourage ship financing at Shanghai.

5. Conclusions

IMC is closely associated with ISFC because the shipping industry demands a huge amount of capital and wide range of sources of fund. Nevertheless, not all maritime centres or finance centres are able to be developed as an ISFC. Firstly, governmental support and stable policy play an important role in attracting shipowners to set up their base in a maritime city. The indicators are "favourable tax regime", "political and social stability" and "good and responsive government". Secondly, sound and favourable legal system is also a candidate for ISFC, which comprises "good rule of law", "ship registration (flag of convenience)" and "transparency in business regulation". Taking into account the sound and favourable legal system, shipping companies are able to feel confident in conducting business and raising their funds in the concerned finance centre. Thirdly, advanced maritime cluster consists of "wide range of maritime services", "advanced structure of maritime cluster" and "educated workforce in maritime industry", which measure the degree of shipping activities also affecting the development of the maritime city into an ISFC. In terms of dynamic source of financing, there are five indicators - "pool of internationally competitive financial institutions", "a pool of financial professionals", "a multi-functional and highly internationalized finance market system", "government's financial support and export credit for national shipyard" and "globalized and developed bank, equity market and ship leasing". ISFC shall have the capabilities to provide a full, comprehensive and varied range of financial services.

By assessing Shanghai with the critical success factors to an ISFC, Shanghai has both advantages and disadvantages. The Chinese Central Government should further release restrictions in its tax regime and improve the legal system. Also, it should liberalize the financial market and develop a better banking system. On the other hand, there are many opportunities. It goes without saying that the shipping industry in Shanghai is expected to continuously growing in the foreseeable future. Moreover, private shipping companies may arise as an engine of the shipping industry in mainland China as a whole and the demand for ship finance will also arise. Finally, mainland Chinese shippards have a competitive advantage conferred to Shanghai, which Hong Kong and Singapore do not have. In short, by addressing the challenges and seizing the opportunities, it could be possible that Shanghai can be developed as an ISFC in the near future.

Although our findings may have broadened the understanding of the critical success factors of ISFC and its implications to Shanghai, our study is not immune from several limitations, which will be potential topics for future research. First, data and views are collected from respondents based in Hong Kong, as it is noted that shipowners raise ship finance at locations that are geographically close to financial institutions. As such, ship finance experts working as shipowners in Asia are the main target of this study. Hence, the use of a larger sample with a geographically wider range should possibly yield higher level of generalizability and reliability of the results, and also wider range of views from respondents. In addition, future research can also be conducted to collect data and views from mainland Chinese shipping participants and foreign shipping participants so as to evaluate and compare the results of sectoral differences, and how the sectoral differences would affect the mix of success factors and measurement indicators of ISFC and Shanghai as an ISFC. Second, this study only collected cross-sectional data and views which measure the respondents' perceptions and interviewees' views at a point of time, which do not capture the continuous transformation of respondents' perceptions and interviewees' views that might affect the results, in particular the volatility of the ever-changing ship finance market. As such, a longitudinal study is desirable for future research. Finally, additional research should be conducted to examine the possible links and mediations between the success factors and measurement indicators of ISFC uncovered in this study.

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