# Research on Shanghai Shipping Fund Based on International Comparative Study

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**Abstract**

This paper is aimed to put forward concrete recommandations for the design and developement of Shanghai shipping fund. On the comparision of three major international shipping funds – KG funds, Singapore Maritime Trust Fund and Islamic Shipping Funds – and Chinese highway industry funds, it can be concluded that Shanghai shipping funds can draw on KG funds and improve the exit mechanism.

**Key words:** KG Funds; Singapore Maritime Trust Fund; Islamic Shipping Funds; Chinese Highway Financing Fund; Shanghai Shipping Fund

## 1. Introduction

Shipping fund is a significant financing method for shipping companies. It has already become the financing hotspot in shipping industry and has attracted many scholars to do researches in this field. For instance, Jin Xin [1] made a thorough analysis to the well-known German KG fund, which stands for the major financing method in the recent decade. Kang Rui [2] demonstrated relevant law limitations to hinder the development of China shipping fund and also put forward some advice regarding system innovation of shipping industry. However, they did not refer to concrete opinions about the growth of Shanghai shipping fund.

Comparative study is often used by scholars to show the advantage and disadvantages of certain topics. For example, Dai Yong [3] analyzed several major shipping funds in the world to introduce some useful suggestions to the establishment and improvement of China shipping fund. Wang Baodong [4] researched industry funds theory involved in many different industries and rated the practical performance of those industry funds to assist the analysis of Shanghai shipping fund. But their analysis did not point out the detailed advice of the design and operation of Shanghai shipping fund.

Therefore, this paper compares major shipping funds across the globe and China different industry funds and correspondingly put forward concrete suggestions for the design and development of Shanghai shipping fund.

## 2. Comparison to international shipping fund

### 2.1 KG Funds

KG funds, deriving from Germany, are the limited liability partnership, aiming to complete some kinds of commercial operations. This structure first appeared in the shipping industry, in which funds raised by KG are invested (including or-

 

dering new ships) and then became shipping KG funds. Under KG framework, partners acquire new vessels through their own inputs and bank debt financing. Deducted by operating cost and interest expense, revenues of new vessels from operation can be distributed to shareholders as income.

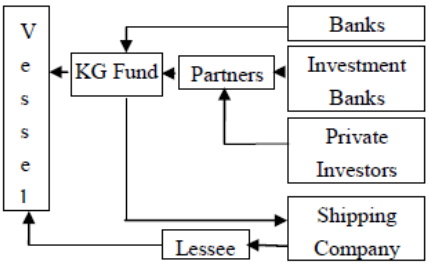


Fig.1: KG Fund Diagram

A KG fund, for example, in which 35% from investors, 65% from bank loans, usually takes vessels as collateral to apply for loans, and users will lease the vessel from KG fund [3]. German KG fund has become a typical shipping fund, and a major international financing platform. Recently, German local banks are the majority to participate in the KG ship finance business, but an increasing number of international ship financing banks also began to get involved in this business.

## 2.2 Singapore Maritime Trust Fund

Singapore Maritime Trust Fund is established by a Sponsor who is the main investor of the fund. The Trust Fund uses funds raised to purchase shipping assets and to achieve long-term stable cash flows by renting these assets. Specifically, the Trust Company sell the shares of the fund in the stock market, and the trust fund manager usually apply for loans from banks by mortgage these raising funds and buy vessels. The manager will rent these vessels to lessee in the long term to achieve stable return, and the possessors of the trust can receive dividends from the lease.

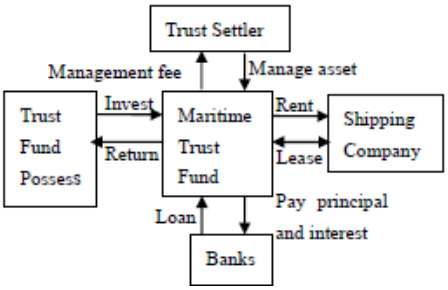


Fig.2: Singapore Maritime Trust Fund Diagram

Singapore Maritime Trust Fund is closed-end fund and finance lease is the main means of investment. Since the funds invest in vessels rented in a long-term lease, the funds is required to be stable in a long time [5]. Further, Singapore Maritime Trust Fund has a large degree of freedom in the operation and finance. The Trust Fund raises funds in public which can enlarge funding sources, and the forms of ship leases without specific requirements are various. However, shipping companies avoid the finance risk of interests, and the Trust Fund avoids the risk of freight price fluctuation through the promissory leases.

## 2.3 Islamic shipping fund

Islamic shipping fund, like the leasing Islamic bonds, is a new type of financial product which is in line with Islamic teachings and principles of modern finance. The typical pattern is that special institutions (SPV) issued Islamic bonds in order to purchase ships. Then SPV as trustee and agent for the bondholders, leasing entrusted holding assets to shipping companies in proportion to the Islamic leasing investment fund contract [6]. Shipping companies need to pay rent based on the London Interbank Offered Rate plus margin. Meanwhile, SPV collect and assign leasing revenues to bondholders. Lessees repurchase the ship at an agreed price at the expiration or early termination of leases.

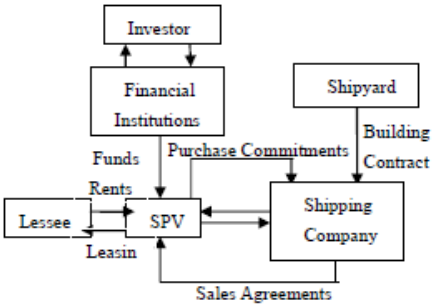


Fig.3: Islamic Shipping Fund Diagram

Islamic shipping funds are flouring because of their unique survival advantage. Firstly, the Islamic shipping fund is combined with Islam, which requires low risk and stable revenue. Secondly, due to the sanctity of the contract formulated by religious doctrine the incidence of debt crisis, speculation and contract disputes is low.

Table 1: Comparison of main shipping industry funds

| Major funds / Category | KG Fund | Singapore Trust Fund | Islamic Shipping Fund |
|---|---|---|---|
| Issue Instrument | Fund | Trust | Bond |
| Organizational Form | Partnership | Indenture System | Indenture System |
| Issuer | Fund Company | Shipping Company | Islamic Bank; Shipping Company |
| Typical Product | MPC Maritime Fund | Pacific Ocean Trust Plan | Arab Islamic Maritime Fund |
| Exit Mechanism | Settlement at Maturity | IPO | IPO or Asset Securitization |
| Feature | Tax Preference | Focus on Cash Flow | Abundant capital; high return rate |
| Finance Form | Private Equity | Public Fund | Combination of Private Equity and Public Fund |
| Investment Area | Shipping Financing Lease | Shipping Financing Lease or Merger | Shipping Financing Lease |

## 3. Comparison to the highway industry: Highway financing in China

Chinese highway construction financing has a lot of similarities with the shipping financing: they are both capital-intensive industries; they both have the enter capital barriers; they both reject the majority of small investors. However, in recent years, Chinese highway construction experienced a rapid development since the government financing and private financing combined together [7]. The construction of shipping fund can learn lessons from highway development.

### 3.1 Government financing

The central government and local government play a leading role in financing process of entire highway construction process. Under the planned economy system, the original financing way was single and restricted by the national financial system. Thus, most highway funds came from the government investment until the economic reform and opening up in China.

### 3.2 Bank loans

After the reform, the market economy developed quickly and the bound of national financial system gradually disappeared. Chinese highway construction changed greatly due to the change of fund source. The proportion of national investment dropped largely while the proportion of bank loans is rising year by year. Huge bank loans alleviate the serious insufficiency of highway construction funds.

### 3.3 Equity financing

Shareholding financing has advantages, such as fast speed, wide range and no interest cost. From the late 1980s, in order to alleviate fund shortage problem, Chinese government encouraged highway listed companies to raise money by the

equity financing. By 2005, highway industry in China has 14 listed companies and raised about 18.8 billion Yuan. The raised funds from listed company helped many highway construction projects.

### 3.4 Foreign financing

At present, Chinese highway raises foreign capital through the issue of B shares and H shares or transfer highway management toll to foreign investors directly. These loans make up for the funds need of Chinese highway construction and speed up the highway construction.

### 3.5 Folk capital financing

Recently, Chinese private enterprises use various financing way to take part in the highway construction, including right transfer, joint venture, cooperation and BOT. Governments firstly built road in the relative developed area. Then, the private capital can take part through the "road - transfer – road" intervention and the fund snowball rolled bigger. Therefore, the problem of lacking funds was solved and government financial burden reduced largely.

## 4. Conclusion and Recommendations

### 4.1 Conclusion

The Chinese current shipping financing methods have great limitations and cannot meet the needs of shipping construction under market economy. Besides, the means of shipping finance are increasingly diversified and structural in the future, and more off balance sheet activities will be put into use, but bank credit will still be the main source of shipping finance. Therefore, Shanghai shipping fund can learn from KG Fund, Singapore Maritime Trust Fund and Chinese highway financing, thereby improving the shipping industry funds. The recommendations are listed below.

### 4.2 Recommendations from international shipping funds

Firstly, Shanghai can develop national finance products by raising funds from investors, authorizing expertise to manage funds, and using shipping rent as the form of return. This form of shipping finance can not only invest dormant capital into shipping market to meet its growth needs, but also enhance Chinese competitive power in international shipping industry to realize the wealth growth. Moreover, China can draw on Islamic shipping funds to open up a new pathway of allocating short or medium-term capital. Islamic finance has an eastward tendency in the development areas. Thus, Shanghai can attract capital from the Middle East by importing Islamic finance form.

Secondly, the limited partnership of KG Fund is the most suitable form for Shanghai shipping funds. Shanghai shipping funds can choose professional investment organizations as their predominant partner and shipping corporations as general partners, thereby integrating financial capital with industrial capital. As the amount of shipping funds usually reaches several billions, Private Equity rather than Public Fund is the optimal finance pattern. However, KG Fund depends on settlement at maturity as its exit mechanism, whereas IPO as an exit mechanism is increasing popular in international shipping industry worldwide [8]. Of crucially importance for Shanghai shipping fund is how to design and improve IPO system as exit mechanism.

Thirdly, Shanghai can use specific finance forms to develop Shanghai shipping finance. Shanghai can establish fund to avoid law barriers, to solve the problem of human scarcity, and to bring private capital into shipping market [9]. Further, Shanghai can create institutional innovation of mezzanine finance in the shipping bond market to attract private

capital by using interest rate spreads to establish mezzanine bond.

### 4.3 Recommendations from the highway financing

#### 4.3.1 Increase national financial capital and make full use of fiscal policy and tax policy

In future, both port construction and ship building can introduce government construction funds. The local government can set special funds and self-raised funds to support the development of shipping industry. On the other hand, the government can reuse tax increment from the ship and port operation to shipping fund. Combined with long-term preferential tax policies, the government can set special arrangement of taxes income to transfer payments of operation and ensure shipping fund not to loss. To the funds whose return rate is below bank loan interest rate, the local government can make up the difference to reduce pressure from the liabilities of Marine shipping project.

#### 4.3.2 Use bank loans effectively

Stock financing is still the most effective direct financing method. The key is to develop the management of shipping fund institution, strengthen the control in operation and enable shipping fund managers to make financing decisions according to their maximization goal. The methods are listed below. One is to vigorously develop institutional investors and expand the investment scale of institutional investors to effective absorb small-sized investors. The second is to put a hook between shipping fund raising limit and the company's credit ratings. The third is to rich shipping fund investment kinds and establish series with a varied diversity, a practical function and a flexible interest rate. The fourth is to gradually increase the proportion of long-term funds and change the situation that short-term investments is the majority in recent times.

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