

**Analyzing of Raising Capital in China and Turkey  
Shipping Sector , Comparison and Some  
Recommendations**

By

**Bunyamin Kamal**

**Student Number 099099451**



**Newcastle University**

**School of Marine Science & Technology**

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**Supervisor: Mr. Paul Stott**

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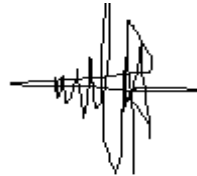
I declare that the work submitted in this dissertation is my own original work and has not been previously submitted.

**Name**

**Signature**

**Date**

**Bunyamin Kamal**

A handwritten signature in black ink, appearing to be 'Bunyamin Kamal', written over a horizontal line.

**09.08.2011**



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## ABSTRACT

Shipping is a highly capital intensive sector and due to that , resources of shipping finance comes, to a lesser extent, from shipowners' own funds and to a large extent from the borrowing funds .Therefore, it is vital to be able to raise capital for their business activities.

The term BRICs used to describe countries Brazil, Russia, India, China and among them China is the fastest growing economy with its bright economic performance indicators since it entered to World Trade Organization. Similarly, Turkey, with it' stable economic growth in the last decade, is a new applicant to BRIC countries. That is why these two countries deserve special study.

There are some financial instruments used in shipping finance such as Eximbank ,commercial banks , leasing .In support of China state, Eximbank, Sinosure , domestic banks and leasing play an important role in the financing of ships both in the form of pre-finance and post-finance. However, in Turkey, although there have been same financial instruments for ship financing as China, majority of finance has been done through domestic and foreign banks. Foreign banks were important players until 2008 financial crisis especially in the form of post-finance, whereas domestic banks were taking part in the form of pre-financing of ships. Soon after crisis, picture has changed and thanks to removing of funding cost drawback, Turkish domestic banks have started to finance the sector in both forms with complete packages.

Objective of this study has been to analyse and compare these financial instruments and make some recommendations for the betterment of ship financing environment for the two countries. For that reason, this comparison has been on the ground of the way how financial instruments work with their strengths and weaknesses rather than quantitative figures.

After comparison, it was seen that ship financing in China ,with the support of it' state owned financial tools such as Eximbank , Sinosure, leasing arms of domestic banks and ship fund , is working better than Turkey . However , outlook for Turkey is not so pessimistic and especially after financial crisis , with its increasing economic activities , shipping sector is becoming more important which in turn means increasing of ship financing activities as well

## GLOSSARY

|                 |                                                       |
|-----------------|-------------------------------------------------------|
| <b>IMO</b>      | International Monetary Fund                           |
| <b>BRIC</b>     | Brasil Russia India China                             |
| <b>LIBOR</b>    | London Interbank Offering Rate                        |
| <b>OECD</b>     | Organisation for Economic Cooperation and Development |
| <b>WTO</b>      | World Trade Organisation                              |
| <b>RMB</b>      | Renminbi                                              |
| <b>SPC</b>      | Special Purpose Vehicle                               |
| <b>COA</b>      | Contract of Affreightment                             |
| <b>NDA</b>      | Non-Disclosure Agreement                              |
| <b>ECA</b>      | Export Credit Agency                                  |
| <b>SINOSURE</b> | China Export & Credit Insurance Corporation           |
| <b>SPD Bank</b> | Shanghai Pudong Development Bank                      |
| <b>CBRC</b>     | China Banking Regulatory Commission                   |
| <b>ICBC</b>     | Industrial and Commercial Bank of China               |
| <b>MOFCOM</b>   | Ministry of Commerce of China                         |
| <b>SPV</b>      | Special Purpose Vehicles                              |
| <b>CSF</b>      | China Ship Fund                                       |
| <b>JBIC</b>     | Japan Bank for International Cooperation              |
| <b>BDDK</b>     | Banking Regulation and Supervision Agency of Turkey   |
| <b>SPK</b>      | Capital Markets Board of Turkey                       |

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# 1) INTRODUCTION

Shipping industry is very capital intensive industry. As Stopford indicated that according to 2007 figures capital can account for up to 80% of the costs of running a bulk shipping company with a fleet of modern ships, and decisions as to financial strategy are among the most important issue that shipping companies make (Ref , 1). Furthermore, as Akca pointed out that for this reason alone ship finance deserves a special place in the study of shipping economics (Ref, 2).

In general, the resources of shipping finance comes to a lesser extent from shipowners' own funds and to a large extent from the borrowing funds as with the requirement of building large scale of vessels, the shipowners almost cannot afford the higher amount of cost of building a ship by their own funds. Therefore, for almost all shipping companies, it is vital to be able to raise capital for their business activities and how to use borrowing funds to finance ships become more important.

In this study more specifically, there have been two countries chosen to analyse their ship financing activities. These countries are China and Turkey since economic growth figures of the two countries in the last decade accounts for why these countries have been selected .In order to make it more concrete, China is called as one of the BRIC countries since 2001 and Turkey is a new candidate to be a BRIC country thanks to its bright economic indicators.

The author therefore decided to analysing of raising capital in china and turkey shipping finance closely and subsequently there will be made some comparisons between the two countries in terms of each financial instruments used in ship financing . After analysing strength and weakness of two countries, some recommendations will be made for the betterment of shipping finance environment for two countries consecutively.

However, due to focusing on comparison issue as well as time and space restrictions, the scope of this study will remain limited with some financial instruments used in both countries.

## **2) LITERATURE REVIEW**

### **2.1 INTRODUCTION**

BRIC is a term widely used in economics and created by Jim O'Neill, who is the Chairman of Goldman Sachs Asset Management, and refers to countries of Brazil, Russia, India and China. These countries were considered to be emerging power of the global economy and to have potential to become a much larger force in the world economy over the next 50 years. (Ref 3)

The acronym was first used by Jim O'Neill in a 2001 paper entitled "Building Better Global Economic BRICs. (Ref 4)

China currently one of the BRIC countries and Turkey is a new applicant to BRIC countries with its fast economic growth rate. That is why these two countries deserve a special study.

#### **2.1.1 China as BRIC country**

Among the BRIC countries, China is undoubtedly the most successful one as it is the world's largest exporter followed by Germany and second largest importer followed by USA. Officially, China has overtaken Japan as the world's second largest economy during the second quarter of 2010. (Ref 5)

Importantly, China has emerged as an international maritime nation after it has been a member of World Trade Organization since 11 December 2001(Ref 6). Thanks to that China's economic integration to the world has accelerated along with its continuous rapid

development of economy and it is one of the most important and dynamic shipping markets in the world.(Ref 7)

As can be seen from the table 1 below that GDP growth rate of the China has been consistent in between 8-11% in the last 10 years. (Ref 8)

**Table 1 Annual GDP growth rates for the world and selected regions and countries,2002-2010**

|                                             | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 <sup>a</sup> | 2010 <sup>b</sup> |
|---------------------------------------------|------|------|------|------|------|------|------|-------------------|-------------------|
| <b>World</b>                                | 2.9  | 3.6  | 4.9  | 4.5  | 5.1  | 5.2  | 3.0  | -1.1              | 3.1               |
| <b>USA</b>                                  | 1.8  | 2.5  | 3.6  | 3.1  | 2.7  | 2.1  | 0.4  | -2.7              | 1.5               |
| <b>European Union</b>                       | 1.4  | 1.5  | 2.7  | 2.2  | 3.4  | 3.1  | 1.0  | -4.2              | 0.5               |
| <b>Japan</b>                                | 0.3  | 1.4  | 2.7  | 1.9  | 2.0  | 2.3  | -0.7 | -5.4              | 1.7               |
| <b>Newly Industrialized Asian Economies</b> | 5.6  | 3.1  | 5.9  | 4.7  | 5.6  | 5.7  | 1.5  | -2.4              | 3.6               |
| <b>Emerging and developing economies</b>    | 4.8  | 6.2  | 7.5  | 7.1  | 7.9  | 8.3  | 6.0  | 1.7               | 5.1               |
| <b>China</b>                                | 9.1  | 10.0 | 10.1 | 10.4 | 11.6 | 13.0 | 9.0  | 8.5               | 9.0               |
| <b>India</b>                                | 4.6  | 6.9  | 7.9  | 9.2  | 9.8  | 9.4  | 7.3  | 5.4               | 6.4               |

(Source ; United Nations Review of Developments in Transport in Asia and the Pacific Report ,2009 )

### 2.1.2 Turkey as BRIC country

Turkey may be too small to join the BRICs in terms of volume of the economic activities, however, its economic growth in last decade shows that it is one of the most strongest candidate to BRICs.



**Figure 11 Growth Rate of Turkey (based on GDP)**

(Source; - Association of Treasury Controllers of Turkey , 2010)

It is seen from the figure-1 above that economic growth of Turkey has been % 5.7 on average in last 9 years and especially 8.9% in 2010 (ref 10) .Moreover , its economy ranked 16<sup>th</sup> in the world in 2010 by the International Monetary Fund and one of the success stories of Europe (Ref 11) .

The solidity of the Turkey's banking sector is another factor in the country's economic success since after financial crisis of the country's banking system earlier in the last decade urged state to take tough measures to regulate the banking system . The advantage for Turkey has been financial institutions with sound balance sheets. (Ref,12)

## 2.2 China Shipping Sector

Developments in China are particularly noteworthy with regard to the supply and demand for shipping services and in order to emphasize the importance of China' shipping activities some figures will be given. According to Clarksons' 2011 China Report, The Chinese-owned fleet increased by 1.6% in GT terms in the first month of 2011 and now stands at 3,074 vessels of 75.9 m GT. (Ref 13) .Moreover, the number of ships in China have increased to 3,127 ships of 78.9m GT in service as of the start of June 2011, making up 8.9% of the world fleet in terms of GT and breakdown of the fleet could be seen below figure-2.

Domestic shipyards have built the largest proportion of the Chinese fleet on an individual country basis, having delivered 48.6% of the fleet in GT terms (Ref 13).

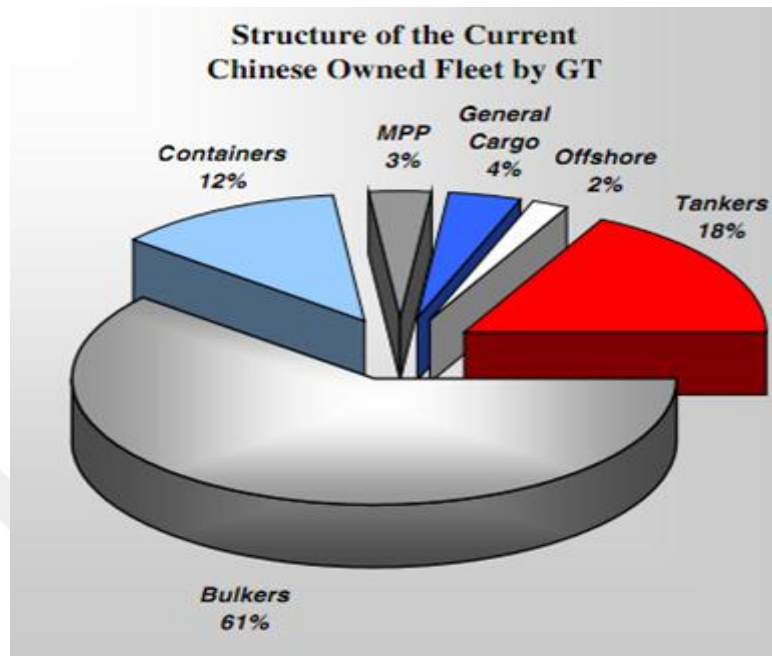


Figure 2 Chinese Owned Fleet Breakdown ( Source; Clarksons Report,2011)

As it is indicated in the review of maritime transport 2010 report of United Nations that , Chinese shipping companies are among the fastest-growing companies in the world and between 2008 and 2009, China overtook Germany as the third-largest shipowning country , surpassed Japan as the second-biggest shipbuilding country, and replaced India as the busiest ship-recycling country (Ref ,15).Moreover, in terms of nationally flagged and beneficially owned tonnage, China follows the Greek fleet, which is the largest with 58.5 million dwt , the Chinese-owned and flagged fleet with 41 million dwt . Similarly, as it noted in the same report , China comes second in terms of shipbuilding capacity with 28.6 % , after South Korean with 37.3 % (Ref ,15).

What reason lays behind the success of China' shipping activities is, to a significant extent , its ship financing power as China has emerged as an important provider of ship finance,

supporting owners and shipyards in avoiding the cancellation of ship orders. More importantly, it is interesting to note that Chinese banks have lent to foreign shipowners since the banking crisis started in September 2008, replacing the traditional sources of financing from Germany and the United Kingdom and helping owners to take delivery of previously ordered ships (Ref,15) .It is highly possible that balance of lending power might shift from Europe to Far-East.

## **2.3 Turkey Shipping Sector**

According to Turkey chamber of shipping 2010 sector report that Turkish merchant fleet consists of 655 ships and distribution of 655 ships by their types are 40.2 % dry cargo ships, 14.2 % bulk carrier, 12.2 % chemical tankers, 6.56 % containers and 5.19 % oil tankers, 21.65 % other types of ships. Furthermore, the general average age of these ships is 23,69 as of 31.12.2009. (.Ref, 16)

Distribution of the fleet by Dwt (7.5 Million) ; 46.55 % bulk carriers, 16.52 % dry cargo ships, 14.81 % oil tankers and 22.12 % other type of ships.(.Ref , 16)

When it comes to registration , by Dwt, 6.1 % of Turkish fleet is registered in National Ship Registry while 93.9 % of fleet is registered in International Ship Registry and by Grt, 7.9 % of Turkish fleet is registered in National Ship Registry while 92.1 % of fleet is registered in International Ship Registry(.Ref , 16)

More importantly, Turkey Republic , for the sake of its 100 th anniversary year of establishment , is targeting 500 billion dollar export volume .In order to prepare the infrastructure of this target ,some initiatives have been taken. Some investments will be given to show how great attention the state pays to the maritime sector in the turkey for the sake of achieving 500 billion dollar export volume aim. Some of these projects are;

**Kuzey Ege Candarli Port Project;** it is designated to rank among World's top 10 largest terminals and this investment has started in May 2011 and expected to cost approximately 200 million dollar ..(Ref 17)

**Canal Istanbul Project ;** Turkey will build a new waterway to bypass the heavily congested Bosphorus Strait and also to accelerate the tanker traffic as in the Bosphorus Strait sometimes tankers are waiting one week to pass through , thanks to this it is considered that approximately 150 ships will use this canal daily .(Ref 18).This project is expected to start in 2014 and also the cost of this project is estimated to be more than 10 billion dollar.

**Coastal Fleet Renewal Project;** This project will further be detailed in the Turkey section.

All taken together , it could be said that the volume of shipping activities is going to increase which in turn means increasing of shipping finance volume.

## **2.4 Sources for ship financing background**

There are some resources have been used before starting this study in order to better understand how the ship financing system is working. it is difficult to access data about China . Due to that author has subscribed to Marine Money website which costs 1490 dollar per year and as for Turkey, there has not been any study conducted in this field

For these reasons, these sources did not go beyond after providing background.

Some of them are as follows;

### **Maritime Economics**

This book was written by Prof Martin Stopford .He is one of the most knowledgeable person in the shipping sector and at present the head of the Clarksons Research which is the world's leading provider of integrated shipping services. In third edition of book , whole aspects of the shipping finance could be obtained in the part 3, chapter 7 and although this book

contains every aspects of ship financing , it does not go as technical as Grammenos' book especially in terms of credit analysis , initial public offerings and high yield bonds. However, this book is excellent source for someone who has not enough background on the issue.

### **The Hand Book of Maritime Economics and Business**

This book was written by Prof Costas Gramennos who is currently working in Cass Business School. Chapter 27 and 28 give information as to ship financing and in these chapters, he classifies ship financing tools into 3 categories which are equity finance, mezzanine finance and debt finance. However, this book focuses much on mezzanine finance which includes highly technical content. Because of that this book has not been as useful as Stopford's book.

### **Professor Dr Ian buxton' lecture notes**

These resources have been compiled from Prof. Ian Buxton's lecture notes regarding ship financing. Although it does not cover ship finance as detailed as Stopford, it is well prepared summary of ship financing methods .However , he classifies these methods under two headings which are equity capital and loan capital , while Professor Stopford classifies under four main chapters which are private funds , bank finance, capital markets, special purpose vehicles and one disadvantage of these papers is that it does not cover updated figures.

### **Phd Thesis by Alex Orfanidis**

This is a phd dissertation titled Shipping Finance - Approach to the Hellenic Market. It contains highly technical information. Interestingly it suggests Islamic finance as an alternative financial instrument for shipping finance and tell how it is applied in ship financing.

### **Master Thesis in Istanbul University Nautical Science and Management Institute**

There are three master thesis regarding ship financing in this institute. However, they are not specifically frame the ship financing of Turkey and generally covers shipping finance system in the world and instruments used.

## 2.5 What is Ship Investment

As Stopford pointed out that ship investment is a capital intensive industry and capital can account for up to 80% of the costs of running a bulk shipping company with a modern ship. Due to that shipowners solely might not afford such a big investment apart from some capital rich companies such as Maersk.

For that reason financing of ships is very important .However, shipping finance is quite unique when compared to other types of finance due to some reasons. Lenders generally want to provide loan to the sector where there is predictable earning, well-defined corporate structures and transparency . Conversely, it is known that markets, as can be seen from the figure 3 , are highly cyclical and notoriously volatile.

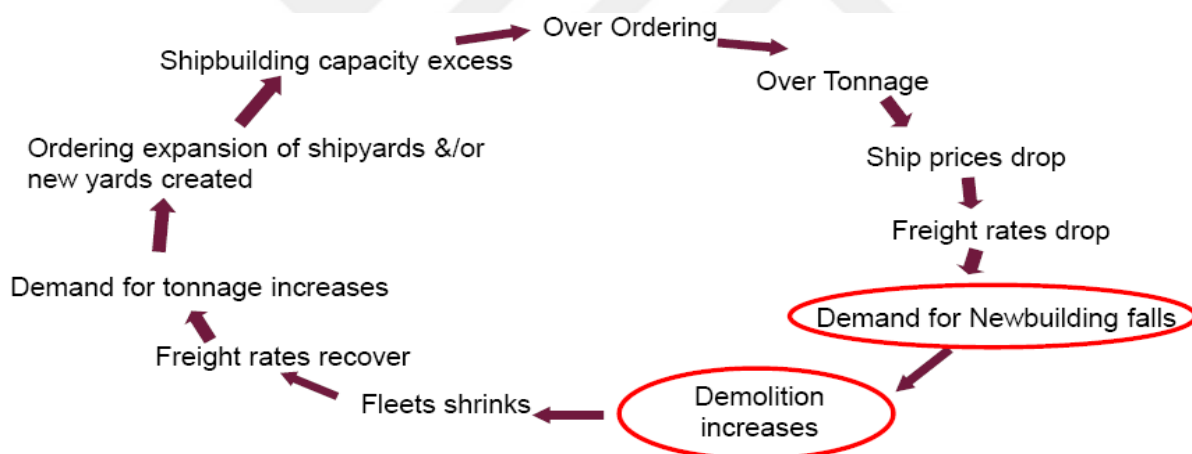


**Figure 3 Shipping Market Cycles (Source; Dr Yan Yun-ICBC Leasing , 2009 )**

In order to overcome the difficulties of the shipping sector, decisions about the financial strategy in terms of which financial method will be used, as will be defined below section, is of paramount importance that is made by shipping companies.

## 2.6 Ship Financing Methods

Basically, the money to finance ships comes from two sources which are shipowner's own equity or outside source. Outside sources are lenders and investors such as in the form of loan, leasing and investment as can be seen from the figure-4 below.

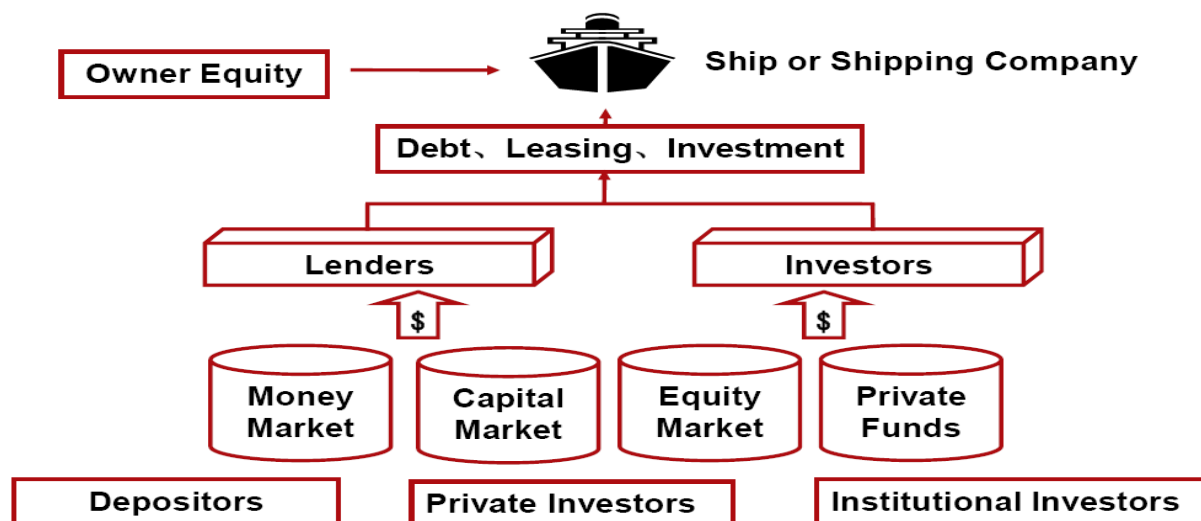


**Figure 4 Shipping Finance Instruments** (Source; Dr Yan Yun-ICBC Leasing , 2009 )

Moreover, it is further detailed by Stopford and classified into 4 different methods of raising funds in accordance with world financial system. These are private funds, bank finance, financing through capital markets and financing of special purpose vehicles. Each of them has different structure of finance which will be explained below.

### 2.6.1 Private Funds;

Private funds take the form of own equity of shipowner and private investment. Firstly, each shipowner finance their ship investments to some extent from his own equity. The ratio of

own equity and outside source depends on many factors such as reliability of the shipowning company and market situation.

Secondly, some companies may place equity privately through group of investors who take a significant share in the business. Actually, private equity investment was not common till 2002 and it has largely been carried out along with sector booming between 2003 and 2008. Private equity firms especially have showed more in the specialized business such as ferry sector especially in Europe in order to avoid from cash flow volatility.

### **2.6.2 Bank Finance;**

There is no doubt that bank loans are the most important source of ship finance as they provide shipowners with quick and flexible access to capital and at the same time ownership of the ship remains with the shipowner.

Banks offer three main types of loans to shipowners. These are mortgage –backed loans, corporate loan and loans made under shipyard credit schemes and occasionally bank can arrange mezzanine finance. In order to provide that service, banks generally have a dedicated shipping finance department which is a separate department and needs expertise as shipping sector is notoriously volatile .This dedicated shipping department can also offer ancillary services to the customers, such as foreign exchanges as DnB NOR Bank do to his clients in China branch..

Generally, in most businesses, loans are made to a company, however in shipping, banks generally make the loan the one ship company which is under a country's flag with well-established law. The bank makes loan to this one ship company and take a mortgage on the ship. Moreover, freight and insurances are assigned to the bank and this functions as dividend stopper so that funds remains within the company and the banks takes a pledge of shares from shipowner to make sure it's money.

One important point is loan proposal. Through bank, shipowners can obtain term loans as indicated in the loan proposal. There are some key issues pointed out in this loan proposal. These are amount of the loan, term (tenor), repayment, interest rates, fees, security and financial covenants.

Amount of loan depends on many factors such as reliability of shipowner and banks generally advance 50% or 60% of market value of the ship. However, if the customer is reliable and financially sound, this amount could be up to 90%. The tenor (term) refers to the repayment period and it used to be typically for 7-10 years, however as Stopford indicated that it is between 5 and 7 years depending on negotiation.

Repayment refers to the way loan will be repaid and this is usually done by equal payments in every six months and could be in the form of balloon payment as well as bullet payment depending on agreement. The interest rate is one of the biggest revenue sources of banks and loans are generally made at a spread over the bank's funding cost. For instance, while LIBOR 0.2 or 0.3 means that shipowner is financially sound, LIBOR 2 means that shipowner is financially weak and this will be more risky transaction. In the loan proposal, which asset will be collateral for security and financial covenants are also mentioned in detail.

Another important point is that in large volume credits, in order to spread capital exposure risks, banks are likely to be syndicated with other financial institutions. Syndication is done by the lead bank who organizes other banks to participate in the deal.

Overall, bank loans could be advantageous for both shipowner and lender. However, it could be disadvantageous as well due to strict banking regulations and limitation of shipowner's flexibility.

#### **2.6.2.1. Mortgage Backed Loan**

Banks, in the mortgage-backed loan, relies on the ship as a security which in turn allow banks to lend to one ship company. In order to raise loan, shipowner goes to the bank and negotiate every points with bank which is very important. Through this negotiation, bank

obtains a valuation of the ship offered as collateral and decides what proportion of its current value can be safely advanced . There are some factors affect this such as ship age and market situation.

### **2.6.2.2 Corporate Bank Loans**

Borrowing against individual ships is not suitable especially for large shipping companies as for example when there is any change in the fleet could be time-consuming for loan transaction. Because of that, financially sound large companies prefer to borrow as a company through using their balance-sheet as collateral rather than borrowing again individual ships. Few shipping companies are able to obtain this kind of finance such as General Maritime, A.P. Moller.

### **2.6.2.3 Shipyard Credit**

In order to sell more goods, a shipowner may advance credit to his buyers and could take the form of pre-delivery finance and post-delivery finance.

Pre-delivery finance has different structure and shipyards generally require their customers to make stage payments so that shipyards can pay for the costs exposed such as labour , material cost. In the stage payment, pre-delivery credit is arranged after making some basic expenses done by purchaser. After purchaser' first payment , banks provide credit for the rest of amount , although there is a risk for banks such as not completion of ship .However , in this case, either shipyard's bank could issue a refund guarantee or government could issue a guarantee in order to protect bank as lender against uncertainties.

In the post-delivery finance, credit is provided on delivery of the vessel. It may be obtained from either shipyard credit scheme, commercial bank credit or by leasing.

Shipyard credit scheme can be traced back to the 1960s to Japan' supporting of its shipyards against the European shipyards. And the terms of such credit for ships were been limited by OECD. For example, a maximum 80 % of ship price may be borrowed and also to be repaid over 8.5 years from delivery at about 8% interest. If such rates more attractive than current commercial rates, the purpose of this is going to be stimulate owners to place their orders in

particular shipbuilding countries . It is likely to be subsidized by a government agency such as Eximbanks or by the lenders themselves. These credits could also be provided to foreign shipowners as well as domestic owners and the mentality behind of this for each country is to protect their shipyards as it is, in some countries, seen as strategically important.

#### **2.6.2.4 Mezzanine Finance**

Mezzanine finance involves a further level of borrowing at a higher interest rate but the loan not repaid until the end of the period. Here, there is a possibility of equity participation for lender

#### **2.6.2.5 Private Placement**

From the financial institutions such as pension funds or insurance companies it may be possible to arrange private placement of debt or equity. In order to do that, an investment company such as Morgan Stanley could be given task to arrange the presentation for potential investors. Advantage of private placement is that it is quick and not expensive and also importantly there is no need to be registered a country, such as America to place private placement.

### **2.6.3 Capital Markets;**

Generally many large companies use capital markets to raise finance either in the form of initial public offering or bond. Through capital market, a significant amount of money is raised up in a quick and inexpensive way.

#### **2.6.3.1 Initial Public Offering**

In order to raise equity, shipping companies can arrange public offering of stock which is traded in the stock exchanges such as New York, Oslo and Hong Kong. As Stopford indicated that in 2007 there were 181 public shipping companies with the market capitalization of \$ 315 billion dollar and if a company want to raise equity in the public markets, it must make an initial public offering.

### **2.6.3.2 Bonds**

Bond is a special type of loan where there is no repayment of principal made during its period and just interest is paid with higher rates.

Basic structure of bond is that shipping company (issuer) sells bonds to financial institutions (the bondholders) and pay them interest which is known as coupon.

All principal is repaid as a lump sum at the end of the period which could be as much as 10 years. As was said above shipping is highly volatile and borrower might default in the end so in order to cover such a risk, interest rates is held quite high such as 15 %.

### **2.6.4 Special Purpose Vehicles**

Special Purpose companies have different financial structure to get ships. In order to simplify the special purpose companies, the SPC buys the ships and either leases them or time charters them and a manager is appointed to operate the ships and also the funding comes from equity investors. There two advantageous of using this system. Firstly it enables private investors to invest into shipping as return on investment could quickly be obtained after establishing the structure. Secondly, SPCs can be used as off-balance-sheet financing

#### **2.6.4.1 Partnerships**

The tax laws in some European countries have encouraged high tax rate individuals to have shares in the ships as partners .The most famous ones are German KG systems and Norwegian KS systems. This structure is achieved through a manager who invests in typically a container ship for some time or bareboat charter to large operator. At present , although tax benefits is not much favourable to shipowners as it used to be , this system has remained popular in Europe especially due to last shipping boom.

#### 2.6.4.2 Leasing

There is possibility of leasing ships under bareboat charter, instead of borrowing money to buy ships and repay it over many years. In leasing, legal owner could be a bank or a financial institution such as pension fund.

Simply, working structure of leasing is that the lessor (legal owner) hands the ship over the lessee who is able to use it in return for regular lease payments to the lessor and Lessor have some advantages as can be seen from the figure 5 below

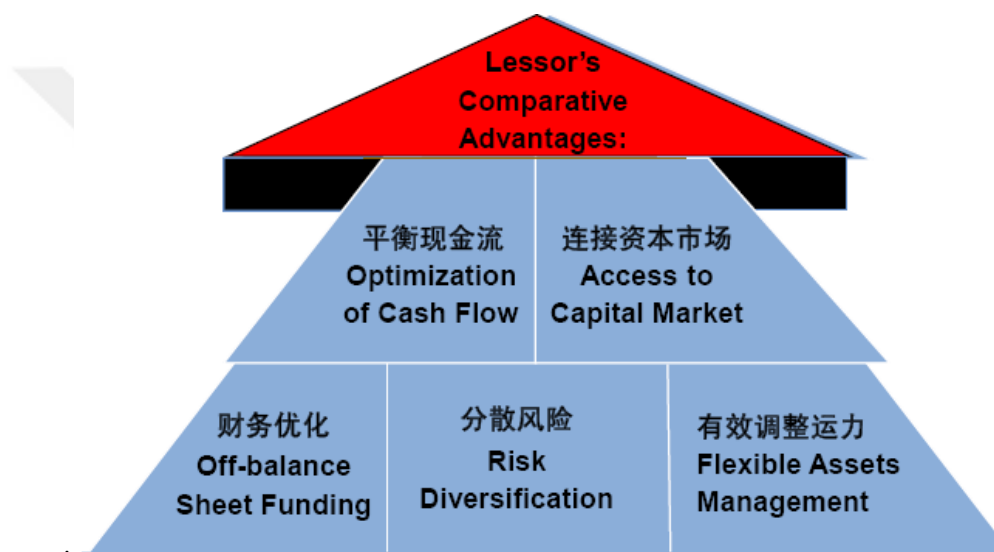


**Figure 5 Advantage of Lessor (Source; Dr Yan Yun-ICBC Leasing , 2009 )**

There are two common types of leasing structures, operating lease and finance lease. In an operating lease, the lessor pays for maintenance and other operational expenses of the vessel in exchange for a higher rate of hire. This is a generally short-term agreement where lease could be ended at the lessee's discretion and after leasing term, ship is returned to the lessor. Operating leases do not generally appear on the balance sheet and have been used especially for container ships. Another one is finance lease which is longer as much as 25 years compared to operating lease and cover the much time of the ship life. Lessor here has little involvement apart from owning ship as all operating responsibilities are on the lessee's

shoulder. Financial lease is generally used for cruise ships and LNG tankers and also appears on the lessee's balance-sheet.

There are some advantages of the financial lease .For example, shipping company gets a tax benefit and also long period fund is obtained .However , there is also disadvantage of the finance leasing which is that shipping company is tied into a long-term contract which prevents flexibility. For example, if the market is very good and second hand ship prices is quite high in that case ship company cannot sell the ship due to contract.

#### **2.6.5 Second-hand Ship Financing**

Another important aspect of the ship finance is the financing of second-hand ships. Second hand ship finance has obtained the same options but not as many as newbuilding finance. For example, second hand ships could be leased, however it lacks of government subsidiaries and there is no shipyard credit for that and also banks are very sensitive regarding second-hand ship finance due to some reasons

The most important reason is the age concern when second hand ship is taken into account since financial institutions do not tend to finance older ships due to some operational reasons such as maintenance and ship's performance is also important factor to be considered before investing a substantial amount of money.

As a result , as can be seen above that there are many ways of ship financing schemes .Some of them are used in China and some in Turkey , while some of them are not used . In this study, which funding sources are used in China and Turkey will be attempted to analyse and after that there will be made comparison and then some recommendations for both countries. Therefore, reader can have an understanding of how the ship financing methods are working in both countries.

## **3 ) METHODOLOGY**

### **3.1 INTRODUCTION**

In the methodology, author will explain how this study was conducted and what kind of resources has been used. And also how these resources have been obtained will be explained successively.

It will be analyzed based on primary data and secondary data.

The primary data have been acquired by evaluating interviews from four different representatives of the shipping sector. In order to analyse these interviews, the technique of the qualitative content analyses will be applied as it allows the author to evaluate the interviews.

When it comes to secondary data, it was obtained, to some extent, by a subscription required website and many other maritime journal papers as well as universally accepted international organizations' websites. These sources will be introduced briefly and described how they have been useful in this study.

#### **3.1.1 Problems Encountered**

In the China context, naturally, while the dissertation has been progressing, some sources have been encountered in Chinese language especially there were no English version of official reports of bodies of government such as Ministry of Commerce.

Moreover , in the Turkey context ,initially , lack of having background of shipping finance terminology in Turkish language has caused some problems in terms of translation from Turkish to English , however during the dissertation author has become familiar with the terminology and managed to overcome that problem.

#### **3.1.2 Organization of Study**

In order to carry out this dissertation, primary data and secondary data have been used and what sources for primary and secondary data used will be analysed below.

### **3.2 Primary Data**

In this study, as primary data, interview method and communication tools (email , telephone and facebook ) have been used .

Firstly , the interview method has been carried out to analyse the shipping finance of Turkey as there is no any study conducted in the academic level as to shipping finance of Turkey . This was understood after taking some actions. These actions are as follow;

-Author has scanned internet in-depth and then only some dissertation of Turkish master students were found as to ship financing. However, none of them attempted at specifically framing shipping finance of Turkey and simply covers shipping finance techniques used in the world.

-Sibel Bayar Caglak, who is lecturer in Istanbul University department of Marine Transportation Management and past supervisor of the author, was asked about the availability of any study in that topic and she, after reviewing the literature, could not find any study, either.

-Lastly, Osman Kaya Turan, who was a lecturer in Istanbul Technical University in the department of Naval Architecture and representative of shipyard at present, was asked and he noted that there is no any study carried out and there are some reasons for that. Firstly, there is no specialized banking system for shipping in Turkey .Secondly, there is no any legal infrastructure of ship financing in Turkey.

Upon that, interview method has been chosen as it seems to be the most reasonable way to draw the picture of ship financing of Turkey and for that reason the author has travelled to Turkey and spent 10 days totally.

### **3.2.1 Interview as Qualitative Research**

There are some ways of obtaining data in qualitative research such as texts (documents) and visual tools (video, photographs).(Ref 19). However , in this study interview method has been chosen

As McNamara noted that interviews as qualitative research are especially useful for obtaining the story behind a participant's experiences. The interviewer can pursue in-depth information around the topic. (Ref 20)

Furthermore, in interview as qualitative research technique, smaller but focused samples are much more important, rather than using a significant number of samples

For this reason, interviewees, who are very few in number and highly elite in quality in terms of expertise, have been chosen rather than developing questionnaires and spreading them to many people.

Moreover , through interview , the author has been able to evaluate ,interpret and also translate the recorded verbal data , whereas in quantitative research author is supposed to interpret a significant number of numerical data.

As a primary data, along with interview, there have also some communication tools been used through email whenever problems have been encountered while progressing and these contacts will be detailed in the relevant section below.

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All participants belong to different segments of the sector and it makes the study more realistic as well as enabling to cover the different point of views. Importantly, contribution of each interviewee will be highlighted .

Most importantly , apart from some little discrepancies , there were no any conflict as to comments and data provided by different representatives of the sector which in turn facilitate the work of the author in compiling the data and comments and also it shows how accurate this study is for the section of shipping finance of Turkey. Moreover, it could be said that at least alone Turkey part of this dissertation is going to be the first study in this field.

### **3.2.1.1 Interview as Primary Data**

In order to cover whole aspect of the ship financing of Turkey, some representatives of the sector , through the author's personal network, have been contacted. How the interviews were designed and interviewees will be detailed below.

### **3.2.1.2 Design of interview**

As explained above there was no any study conducted as to ship financing environment of Turkey and for that reason the interview has aimed at framing of shipping finance of Turkey. In order to do that all interviewees have been asked questions, which were planned before , according to their background knowledge of shipping finance so that the interview could be more efficient and also some of their articles were read through internet before meeting. Additionally , type of these questions were not yes or no questions , rather it was , to some extent ,open ended questions to obtain the interviewee's comments and also while the interview has been progressing some questions have been asked spontaneously so as to make the author's mind purified as to each point . These will be roughly summarized in the interviewees section.

One important point to mention is that all interviews took approximately one hour and a recorder machine was bought for interviews which costed 70 pound and two interviews were recorded. However, branch manager of Yapi Kredi bank and representative of the shipping finance consultancy company has not accepted to be recorded due to confidentiality issues and for them , notes were taken . Furthermore, although the author has experienced some difficulties regarding translation from Turkish to English , he has managed it successfully. As an important reminder, unfortunately , all answers and comments will not take part in this study due to space limitation.

### **3.2.1.3 Interviewees**

It is considered that the interviews have been conducted with the most suitable people for the ship financing field. These interviewees are representatives of ;

#### **A21-Shipowner and Shipyard**

In order to have an idea from shipyard and shipowner's perspective , the author firstly has made an interview with Mustafa Erdogan who is finance and marketing manager of Tersan Shipyard and Shipowner company. He has obtained background from different segments of the sector ranging from brokership to shipbuilding as well as having experience as master mariner many years . He is highly knowledgeable and has answered the questions in a quite academic way. Questions, asked to him, were about pre-financing of ships (bridging financing or shipyard credits), analysing of history of shipping finance of Turkey, approach of domestic banks to the sector. His contributions could be seen more in the section of domestic banks and periods of shipping finance in Turkey.

#### **A22-Consultancy Agency**

Ilhan Yirmibesoglu is an old shipowner and currently head of Medfin Turkey Shipping finance consultancy firm which is Turkey branch of Eurofin international shipping finance consultancy company. He can be described best as the authority in Turkey in terms of shipping finance expertise. It can easily be understood from the coverage of the media and even the people, whom I interviewed, approved him to be the best in the field.

He and Erdogan are the regular participator of the shipping finance conferences organized by Marine Money

Questions to him were much about ways of raising capital in Turkey and China, particularly approach of domestic banks to sector in both countries. Furthermore, his opinions were obtained as to comparison of domestic banks through questions.

#### **A23-Consultancy Company of Turk Eximbank**

In order to obtain knowledge as to Turkish Eximbank , credit guarantee fund and fleet renewal project of Turkey , interview with Engin Kocak has been considered to be the best as he was representative of the Finship shipping finance consultancy company which is providing service to Turk Eximbank and Kocak was responsible for disbursing of World Bank EFIL IV credits . Kocak also got involved in the fleet renewal project officially and currently manager of the Istanbul Freight Index.

Questions to Kocak were generally about his expertise explained above and also in the China contex. Although it was difficult to obtain data from Turkish Eximbank , thanks to him the author accessed to required data. However , although he ,officially, got involved in the coastal fleet renewal project , did not provided any data regarding that since a confidentiality agreement was signed between Dutch and Turkish government representatives.

#### **A24-Commercial Bank**

Lastly, interview with bank side was also considered to be important so as to have a holistic approach to the shipping finance. For that aim, Tarkan Cinar was interviewed. He was shipping branch manager of Yapi Kredi Bank a short time ago and that branch mainly deals with ship financing credits. Although he has obtained a broad knowledge of ship financing, currently he is working in different branch which is irrelevant to shipping and this obviously shows the problem of dedicated shipping finance department team.

He was contacted through Kocak and questions to him were as to the approach of domestic banks to the sector and problems faced in the bridging finance in the last decade from the bank's point of view.

Finally, content of the interviews could be viewed in the coming sections where it is relevant and of course some confidential comments have not been included in this study upon the interviewees' request.

### 3.2.2 Communication Tools as Primary Data

Secondly , as primary data , communication tools such as email , facebook and mobile telephone have also been used , particularly whenever the author has encountered problems while the dissertation has been progressing . People who have been contacted are as follows;

**-Rodricks Wong;** He is Senior Research Analyst in Singapore Office of Marine Money and responsible for preparing reports to Marine Money as to shipping finance in Asia, particularly about China. His articles regarding Chinese shipping finance, which obtained from Marine Money, have been used extensively and he has been contacted through facebook whenever the author has come across difficulties.

**-Hakan Gulelce ;** He is general secretary of FIDER , Leasing Association of Turkey , and was contacted through email regarding weaknesses of leasing

**-Engin Kocak ;** When encountered problems about credit guarantee fund of Turkey , he was contacted for some times.

**-Osman Kaya Turan;** He was described above who he is and was contacted via email to ask him about financial problems of shipping in Turkey.

**-Elif Ozil ;** She currently works in Eximbank and responsible for Shipbuilding Credit Department as chief. In order to obtain data about the eximbank's financial contribution to the sector, she was contacted via mobile telephone and also in the context of right to information act , the author was provided a document including activities of Eximbank for shipbuilding credits

**Julian Macqueen ;** who is currently working as correspondent in L'loyd List and is responsible for collecting news from countries as to ship financing including Turkey .He was contacted for some times through email.

### 3.3 Secondary Data

In order to support the results of the primary data and fill the gaps existed while the dissertation has been progressing , secondary data becomes very important and success of the secondary data lies in the answer of to what extent it includes diversified sources with high quality in terms of reliability. Therefore, the author has become highly selective and

utmost care was given in order to make this study as reliable and realistic as it can. Some of these sources are as follow;

#### **Marine Money - ;**

Marine Money has been operating for 25 years and bridges the gap between shipowners and representatives of the funding sources.

It organizes international shipping finance conferences every year with large number of participants in the famous financially capital cities such London, Shanghai , Istanbul.

More importantly in the context of the dissertation, to access the publications of the Marine Money, it should be subscribed which costs 1.490 dollar per year. However, the author has obtained free membership just for the dissertation within the specified period. This website includes all aspects of the shipping finance and issue some publications regularly.. For example, some of them are Freshly Minted (weekly), Marine Money Magazine, Marine Money Asia (biweekly). Moreover, after conferences it adds the presentations of well-known participants of the sector to the website under the forums page and it should not be considered as friendship forums.

Availability of Marine Money was of paramount importance to author especially where a study conducted about China by non-native Chinese author since Marine Money articles are prepared in English language.

The publications of the Marine Money are considered to be highly reliable and also it has been benefitting from a special interbank network which in turn facilitates their work in data gathering.

**Papers of International Organizations;** Data obtained from these international organizations are highly acceptable in the academia. Some of these sources used are OECD, World Bank, World Trade Organization, United Nations Conference on Trade and Development.

**Governments' websites;** Data comes from the website of governmental bodies are also recognized as quite reliable in academia .For that reason, some of these websites were applied

. These are the websites of China and Turkey Eximbanks, Sinosure, Official Gazzeta of Turkey, Japan Bank for International Cooperation

### **Lloyd's List ;**

It is highly respectable journal in the maritime sector and covers updated articles from all segments of the sector including shipping finance. It provides articles regarding china and turkey shipping finance and the financial respondent of the website, Julian Macqueen, through email, was contacted. However, it remains superficial when compared to Marine Money. Furthermore, L'loyd List has been accessed free through Newcastle Public Library.

### **Fair Play ;**

This website is also ,to a large extent, accepted as reliable source in the sector Although this website is useful as it covers some articles addressing financing issue , however it does not include as many articles as Lloyd List as to shipping finance. Lastly, through Newcastle University membership, the articles of this website have been accessed free.

### **Shipping Development Report of People's Republic of China's Transportation Ministry**

This report was bought for 20 pound through internet and it is issued every year which covers every aspect of the Chinese maritime activities, however there are very limited information as to shipping finance activities of China.

## **4) Anatomy of Shipping Finance in China**

As was mentioned in the introduction that China owns one of the world's largest merchant fleet worldwide as well as becoming one of the largest shipbuilding nation. Banks in China are becoming more popular in the global ship financing landscape particularly after 2008 financial crisis. The current economic environment provides significant opportunities, although there are some difficulties. Chinese banks are relatively new to ship finance with

many areas to grow. Small and middle sized shipowners especially who are operating both in coastal and inland water ways are still considered to be unbankable by the domestic lenders.

#### **4.1. Ownership In China in terms of accessing ship finance**

Before analyzing the sources of liquidity in China, it is better to analyse the structure of ownership in China as it will help to understand how the ship financing is working among the shipowning partners. In order to do that shipowners will be divided into three categories: large state-owned shipping enterprises, small and medium domestic shipowners, and foreign shipowners who is operating in China.

##### **4.1.1. State owned Companies**

When the People's Republic of China (P.R.C.) was established in 1949, a new political and economic model, copied from Soviets, were installed based on communism mentality.(Ref 21) Because of that all business entities in China were created and owned by the government.(Ref 21 ).Following that the Chinese government began to reform those state-owned enterprises (SOEs), and during the 1990s and 2000s, many mid-sized and small sized state-owned enterprises were privatized and went public.(Ref 22). However, in shipping sector, those state-owned-enterprises remain largely and are still occupy the significant part of shipping activities . There are five major government-owned shipping companies in China; Cosco, China Shipping, Sinotrans, China Changjiang National Shipping Group (CSC) and China Merchants Energy Shipping which is a subsidiary of China Merchants Group.(Ref 23 )

For example, COSCO Group has the largest fleet out of all Chinese shipowning groups, with 687 vessels of a cumulative 38.2m dwt in service as of the end of March 2011. Another one, China Shipping Group has the second-largest fleet with 388 ships of a total 18.5m dwt, whilst Sinotrans & CSC are in third place with 145 ships of a combined 8.2m dwt (.Ref-24)

According to Wong, liquidity has never been an issue for those mighty state-owned shipping companies such as COSCO Group, China Shipping Group and SINOTRANS and their subsidiaries.(Ref 25) Furthermore, according to him and many others , banks compete heavily to provide these companies credit facilities at extremely favourable margins in exchange for minimal default risks.

For example, COSCON, the container branch of COSCO, secured credit facilities of a total RMB 51 billion (USD 7.5 billion) in 31 March 2010 and out of which RMB 21.1 billion (USD 3.1 billion) has been drawn (Ref 26). As can be seen from the table 2 below that Bank of China, Agricultural Bank of China and China Merchant Bank are its main lenders for that deal which includes financing of 28 container vessels.

**Table 2 Banks Provide Credit to Cosco**

| China COSCO Holdings' Existing Credit Facilities as at 31 March 2010 |                                            |                               |                          |
|----------------------------------------------------------------------|--------------------------------------------|-------------------------------|--------------------------|
| Lender                                                               | Committed Credit Facility<br>(RMB billion) | Amount Drawn<br>(RMB billion) | Balance<br>(RMB billion) |
| China Merchant Bank                                                  | 6.6                                        | 2.8                           | 3.8                      |
| Agricultural Bank of China                                           | 8.7                                        | 3.5                           | 5.2                      |
| Bank of China                                                        | 11.0                                       | 6.1                           | 4.9                      |
| Bank of Communications                                               | 6.5                                        | 0.8                           | 5.7                      |
| China Everbright Bank                                                | 0.5                                        | 0                             | 0.5                      |
| China CITIC Bank                                                     | 3.3                                        | 0.6                           | 2.6                      |
| Bank of Construction                                                 | 3.0                                        | 0.6                           | 2.3                      |
| Shenzhen Development Bank                                            | 1.2                                        | 1.2                           | 0                        |
| Industrial and Commercial Bank of China                              | 1.4                                        | 0.7                           | 0.7                      |
| Other lenders                                                        | 8.8                                        | 4.6                           | 4.2                      |
| <b>Total</b>                                                         | <b>51.0</b>                                | <b>21.1</b>                   | <b>29.8</b>              |

Source: Company, Marine Money

(Source;Marine Money , 2010)

Furthermore, China Shipping Group (CSG) received RMB 90 billion (13.2 billion USD) from China Development Bank (CDB) in March 2011. The bank signed a strategic cooperation financing agreement with China Shipping Group in the amount of RMB90 billions. During the China 12th Five-Year Plan period (2011-2015), CDB will actively aid China Shipping in purchasing and leasing ships, investing in domestic and overseas ports and also constructing shipbuilding and logistics facilities. (Ref 27)

These examples clearly illustrates that the liquidity level Chinese banks have for their top shipping clients who are generally financially-strong state-supported shipping companies.

#### 4.1.2. Small and Medium Private Owners

As Wong indicated that according to rough estimates, there are over 2,000 domestic shipowners in China when considered 2010 figures, out of which more than 80% are small and privately owned.(Ref 25 ). Although those small and medium companies make up the majority in terms of number, their market share is smaller when compared to some big particularly state-owned companies. These owners are characteristically engaged in the domestic coastal trade, which is protected by cabotage laws. Vessels are required to fly the Chinese flag, and this is a major obstacle for the foreign lenders.

Currently, there are only one or two foreign banks, such as DnB NOR Bank and Standard Chartered Bank, accepting Chinese flagged vessels due to legislative issues especially in terms of mortgages and ship arrests. Furthermore, these shipowners, if they are eligible, generally borrow in RMB and not many foreign banks have the license to lend in the local currency.

As former World Bank official Pieter Bottelier, now a professor at Johns Hopkins, noted that “The irony is that 10 years ago, China’s banks were among the weakest in the world and today they are among the strongest, however primitive their system.(Ref 28)Although Chinese banks financially sound strong , many of those small and medium shipowners are not receiving the required support enough from both domestic and foreign banks due to some reasons.

Benjamin Bao, deputy general manager of Export Credit Department of China Eximbank, calls these small companies as second tier owners and for these reasons he says that these second tier owners are;

- Largely uncharted territory for international banks
- Lack corporate structure territory for international banks
- Under radar screen of capital markets

- Lack of transparency in management and financial reporting (Ref 29)

There is an increasing tendency in the number of Chinese shipowners who are registering their vessels outside China, to other flag states such as Hong Kong and Singapore.(Ref 25).For example , according to UNCTAD 2008, 2009 and 2010 reports successively , while there were 1403 Chinese vessels operating under foreign flag and 1555 vessels in 2009 , this figure reached to 1609 vessels in 2010.(Ref 30-31 ) .

Moreover , small and middle sized shipowners are ,to a large extent, operating in both coastal and inland water ways and largely driven by coal shipping.(Ref 32).Freight rates within China may not be as volatile as in the international shipping arena where competition are severely ruthless.

Taken together, without the strong support of the Chinese and foreign banks, it will be very difficult for those shipowners to grow in the international shipping market as it was mentioned above they are not larger and transparent enough to obtain finance especially from foreign banks .For that reason, these shipowners should adapt themselves to the increasing global financial rules and regulations.

#### **4.1.3. Foreign Shipowners who want to obtain Chinese Liquidity**

it is not easy for foreign shipowners to access Chinese money because as Yirmibesoglu pointed out that chinese banks are highly selective in providing credits not only to domestic shipowners but foreign shipowners as well. The deal done between foreign shipowners and Chinese financial institutions is supposed to include a significant amount of Chinese element. For example, they prefer to look at deals that involve Chinese newbuildings with Contracts of Affreightment (COA) to a great extent from the state-owned shipping companies such as COSCO, China Shipping and Sinotrans and the borrowers must be well-established companies with good track records so that they are repaid without problem.

As Yirmibesoglu highlighted that Chinese banks take the volume of the balance sheet of the foreign shipowner companies into account significantly. They tend to provide loans to

companies generally with over 1 billion dollar balance sheet. For example, Geden Lines, a Turkish company operating a fleet of 38 vessels totalling to 3,645,664 dwt, managed to obtain loan as it has over 1 billion dollar in its balance sheet. (Ref 33) and some foreign companies obtained Chinese finance could be seen in Table 3 below.

**Table 3 Foreign Shipowners Obtained Chinese Money**

| Selected Chinese Deals in 2009 – Foreign Shipowners |                                                      |                |                                                                                                        |
|-----------------------------------------------------|------------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------|
| Borrower                                            | Arrangers / Buyers                                   | Amount (USD M) | Pricing / Purpose / Remarks                                                                            |
| STX Pan Ocean                                       | Bank of China                                        | 180            | Buyer's credit for the acquisition of three 17,600 DWT bulkers ordered at Jiangsu New Century Shipyard |
| Torm                                                | Bank of China, SocGen, Sinosure                      | 167            | Export credit financing for 6 MRs to be delivered between 2010/12                                      |
| Schulte Group                                       | Bank of China                                        | 149            | Credit line for 9 chemical tankers built at Jiangzhou Union Shipbuilding                               |
| United Arab Shipping Co                             | Industrial and Commercial Bank of China, BNP Paribas | 340            | 12 year credit facility for 3x13,100 TEUs containership newbuildings                                   |

(Source ; Marine Money, 2010)

#### 4.1.3.1. Financing of Greek Shipowners

Deal signed between Greece and China in 2010 about the setting up of a \$5 billion shipping fund is the most important deal done by China to show how great importance it gives to be the leader in the world shipping finance arena and (Ref 34) That deal is an offer to support the purchase of Chinese ships by Greek shipping companies. Again, to a large extent, it must include Chinese element. However, when George Xiradakis, who is head of business consultants XRTC and has an active role in the matter, was asked whether this deal will be an additional incentive for Greek shipowners, he replied that it does not since the more important issue is the improvement of the quality of vessels produced, which is already a reality and is undeniable when it comes to vessels of Chinese technology. On the other hand, it does not mean that no one will get benefit as in a period like after financial crisis when there is a significant lack of financing, there will be some and it will be seen over the course of time.

Although , the question of which banks will get involved in this deal remains unclear , it is expected that mainly state-owned banks will take part in such as China Development Bank, Exim Bank of China, Construction Bank of China since the deal was intergovernmental and initial deals started between China Eximbank , Angelikoussis Group and Diana Shipping in 2010.(ref 34)

Mr Xiradakis further argues that the general strategy as is now evident, leads to an irrefutable competition between Chinese banks and the few European and US banks, which are still active in shipping financing.

#### **4.2. Effect of Monetary Policy**

Another very important point is monetary policy. Although monetary policies in most developed countries are dominated by interest rate adjustments which aims at controlling inflation , China's key monetary policy instruments include not only interest rate but also targets the exchange rate between renminbi and a basket of other foreign currencies which means to incentivise banks to lend in RMB rather than dollar.(Ref 35). Especially , 2008 financial crisis forced the Chinese government to act decisively and to shift its monetary policy from being appropriately loose to being prudent .(Ref 35).This means properly tightening and central bank Governor Zhou Xiaochuan expressed in April 2011 that the trend will continue for some time. (Ref 36) .

Normally, foreign shipowners expect Chinese lending in USD, however, due to tightening up policy there is not enough USD within the banking system as more USD means appreciation of RMB . This shortage of USD and banks' lending activities are affected by the central government's tightening monetary policy as well as efforts for internationalization of RMB (Ref 37). According to Wong, management is following USD lending closely, since financial statements are eventually consolidated in RMB and any appreciation of RMB against the USD will undoubtedly have a negative effect on the year end economic performance. More importantly, for the sector, appreciation of RMB against the dollar makes Chinese-built vessels pricier in dollar terms .Wong further noted that this cautious stance in

USD lending is applicable across all industries in the bank's portfolio which includes shipping sector as well.

Moreover, increasing number of corporate and highly wealthy clients of the banks are reluctant to hold on to USD deposits, and this has, to some extent, affected the bank's USD liquidity since if the customer does not want to hold on to USD deposits, then there is no point in keeping much USD liquidity. Another important reason accounts for why there is a USD shortage is the sudden surge in USD denominated loans granted by the Chinese banks in 2009. This was largely driven by the anticipation of RMB appreciation against the USD dollar. At the end of the day, the central government in China is the director of the lending policy rather than bank itself.

### **4.3. Liquidity Providers in China Shipping Finance**

There are some liquidity providers in China shipping finance who will be explained in details below.

#### **4.3.1. Domestic Banks**

In China, domestic banks play a significant role in shipping finance as there are many financially strong state-owned and private banks who take part in the ship financing. These banks are mainly Bank of China, China Construction Bank, Bank of Communications, Industrial and Commercial Bank of China (ICBC), Shanghai Pudong Development Bank, China Development Bank. For example, the total shipping assets of ICBC, who is China's biggest shipping finance bank, has exceeded \$7 billion with 350 vessels and 50 million tonnage in total in 2010 (ref 38). And also there are some obstacles, which will be explained below, for foreign banks to perform in China which eventually facilitates the operation of domestic banks in the market to take more active role.

As was indicated by Wong that there is a lot of bank lending to the Chinese shipowners at the moment and Bank of China, Industrial and Commercial Bank of China and Bank of Communications are major providers of shipping debt in this market domestically, although primarily in the form of corporate based lending (name lending). However, syndications among the Chinese banks have been few.

On the other hand, as was covered previously that Chinese banks take the volume of the balance sheet of the shipowner companies into account significantly. For example, they tend to provide loans to foreign shipping companies with over 1 billion dollar balance sheet. This is an obstacle for foreign shipowners who are not big enough in terms of balance-sheet. Moreover, the deal done between foreign shipowners and Chinese financial institutions is supposed to include a high degree of Chinese element. Another important point account for why domestic banks are dominant in the sector is that foreign shipowners expect Chinese lending in USD, however, due to tightening up policy there is no enough USD within the banking system as more USD means appreciation of RMB. This requires foreign banks to operate in RMB .However, it is difficult for foreign banks to be awarded for RMB licence due to restrictions. (Ref 39)

When it comes to deal details done by banks ,according to Yirmibesoglu ,in China , after 2008 economic crisis , 70% of amount of project is provided by domestic banks and 30 % of the amount is provided by the own equity of the shipowner, however, this could vary typically between 50 – 70% depending on the sipowner and also tenor for the projects fluctuates between 7 and 8 years. Repayment schedule is arranged as 3 months or 6 months on a regular basis. He further explained that the domestic banks are highly sensitive regarding shipyard selection and they do not accept every shipyard to work with .It is simply due to trust issue .They are more tend to work with state-owned shipyards

At the moment , Chinese Banks are receiving a payment of between %3 and % 5 spread over LIBOR , for once only 3-4 % export credit agency premium(ECAP) is received , 1% commitment fee and 1% arrangement fee. Some transactions of Chinese domestic banks could be seen in Table 4 below.

Table 4 Some Chinese Domestic Bank Transactions

| Shipping Company     | Lender                 | Amount                                                       | Date          | Comments        |
|----------------------|------------------------|--------------------------------------------------------------|---------------|-----------------|
| China Shipping Group | Bank of China          | RMB 80 billion (USD 11.7 billion)                            | October 2009  | Credit Facility |
| China Shipping Group | China Merchant Bank    | RMB 20 billion (USD 2.9 billion)                             | June 2009     | Credit Facility |
| China Shipping Group | Bank of Communications | RMB 30 billion and USD 1 billion<br>(USD 5.4 billion in all) | May 2009      | Credit Facility |
| COSCO Group          | Bank of China          | RMB 74.5 billion (USD 10.9 billion)                          | December 2008 | Credit Facility |

(Source ; Marine Money Research ,2010)

### 4.3.2. Export Credit Agencies (ECAs) : China Eximbank and Sinosure

#### 4.3.2.1. China Exim Bank

After separating from Bank of China, the Export-Import Bank of China (China Exim Bank) founded in 1994, is a state bank solely owned by the Chinese government(ref 40). The Export-Import Bank of China is one of the few Chinese banks that has extensive experience in shipping and it is supporting domestic shipyards either by offering direct loans to the yards or their clients (Ref 25.)

At present, China Eximbank has received credit ratings from Standard & Poor's, Moody's Investors Service, and Fitch, which respectively are AA-, Aa3, and A+. All of the ratings are compatible to China's sovereign ratings. It is seen that China Eximbank has one of the highest credit ratings among Chinese banks and this means the cheapest funding cost (ref 41)

Since its establishment ,China Exim Bank has played an important role in supporting China's maritime industry, and provided shipping related fields loans of over RMB 116.8 billion (USD 17.1 billion) in the domestic currency and USD 8.5 billion as dollar at the end of 2009.(Ref 42). Moreover, the bank has also supported the financing of over 3,700 Chinese built vessels of an aggregate tonnage of 120 million dwt.

The practice of subsidizing credit was regulated by the OECD Understanding on Export Credit in 1969 .(Ref 38 ) .Since 1994, the main shipbuilding nations have been trying to reach an agreement in the framework of the OECD on conditions for fair competition in the

shipbuilding sector  and unfortunately, these negotiations have met with little success.(Ref 43 ). Although China is not a OECD member, it wants to join that frame .OECD may re-start negotiation with China on shipbuilding agreement halted in September 2005.(ref 44)

As mentioned above, even though China is not an OECD signatory, China Exim Bank started to undertake finance on a buyers' credit basis in 2001 and the policy bank voluntarily followed OECD guidelines.(Ref 45-25 )

China Exim Bank assists shipyards in the form of the provisions of seller's credit and buyer's credit, payment guarantees and advance payment refund guarantees. (Ref 46).Moreover, it worked and are still working with numerous foreign shipowners . For example, it worked with Pacific International Lines, IMC Group, Ocean Tankers, A.P. Moller Maersk, OSG and Teekay and American company Overseas Shipholding

In order to illustrate the buyer's credit of Eximbank , two examples will be detailed . Firstly, ,China Exim bank, as can be seen from the table-5 below, together with other domestic lenders, has provided National Iran Tanker Company (NITC) over USD 1 billion debt financing for its 12 VLCCs ordered at Dalian Shipbuilding Industry and Shanghai Wai Gao Qiao Shipyard. The loan was offered at very favourable terms, which require only a 10% down payment. Furthermore, NITC pointed out why it chose China Eximbank that the attractive terms were the reason for ordering the vessels in China, even though the interest rates from the Chinese banks were higher than their Korean counterparts. Second important example worthwhile mentioning is that Bourbon, French offshore marine services provider, made a deal with China Exim in 2010. The bank extended a USD 400 million 12-year credit facility to Bourbon for its vessels under construction at Sino-Pacific Shipbuilding.(Ref 26 )

As well as buyer's credit, China Exim Bank provides finance to shipbuilders in the form of seller's credit to increase their competitiveness in attracting new shipbuilding orders . As it is known that, a seller's credit is where the seller provides credit to the shipowner with regard to the purchase price of a ship. As Wong indicated that seller's credit became a very popular tool offered by the shipyards to assist shipowners in raising funds to obtain vessels especially when commercial banks are typically offering leverage at only 50 to 60% of the ship prices.(Ref 47).

In terms of private shipyard support, the Exim bank for example signed a huge RMB 50 billion (USD 7.35 billion) long-term strategic agreement with Jiangsu Rongsheng Heavy Industries in 2010. The cooperation includes the provision of the different types of bank guarantees required in Jiangsu Rongsheng's business which include refund guarantees, tender bonds, performance bonds, payment guarantees and seller's credit. Moreover, over RMB 10 billion (USD 1.47 billion) will be set aside for seller's credit and there is no doubt that this deal enhances Jiangsu Rongsheng's competitiveness in attracting new shipbuilding orders. (ref 47). Below, there can be seen some deals done by Chinese Exim Bank in 2010

Table 5 China Exim Bank Transactions in 2010

| China Exim Transactions in 2010 |                |                                                                                                                                                                                                                                                                          |
|---------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shipping Company                | Amount (USD M) | Comments                                                                                                                                                                                                                                                                 |
| <b>Europe</b>                   |                |                                                                                                                                                                                                                                                                          |
| Danaos                          | 203            | Greek owner secured approval for a USD 203.4 million Sinosure backed credit facility from Citi and China Exim Bank. The funds will be utilised for the financing of three 8,530 teu boxships, currently under construction at Shanghai Jiangnan Changxing Heavy Industry |
| Diana Shipping                  | 83             | 70% financing for the acquisition of two 206,000 dwt dry bulk carriers, to be built at China Shipbuilding Trading Company and Shanghai Jiangnan-Changxing                                                                                                                |
| Angelicooussis Group            | 111            | Financing of Chinese built dry bulk carriers                                                                                                                                                                                                                             |
| InterOrient Navigation          | 65             | USD 64.7 million buyer's credit for the construction of two 115,000 dwt bulk carriers at Jiangsu New Century Shipbuilding. Sinosure provided the export credit                                                                                                           |
| Bourbon                         | 400            | 12 year credit facility for the construction of vessels ordered at Sino-Pacific Shipbuilding                                                                                                                                                                             |
| <b>Africa and Middle East</b>   |                |                                                                                                                                                                                                                                                                          |
| Ethiopian Shipping Lines        | 235            | 80% financing for 7x multipurpose vessels and 2x product tankers at China's Taizhou Kouan Shipbuilding with Sinosure                                                                                                                                                     |
| Oman Shipping                   | Undisclosed    | Financing of 4x 400,000 dwt VLOCs to be built at Jiangsu Rongsheng Heavy Industries. The ships reported cost USD 483 million                                                                                                                                             |
| National Iranian Tanker Company | 1,112          | 90% financing with other Chinese banks for the financing of 12 Chinese built VLCCs                                                                                                                                                                                       |
| <b>South America</b>            |                |                                                                                                                                                                                                                                                                          |
| Vale                            | 1,230          | 13 year term loan together with Bank of China to provide 80% financing of the construction of twelve VLOCs ordered at Jiangsu Rongsheng Heavy Industries                                                                                                                 |

(Source; Marine Money 2010)

#### 4.3.2.2. Sinosure (China Export and Credit Insurance Corporation)

China Export & Credit Insurance Corporation (SINOSURE) is China's only official policy-oriented insurance company specializing in export credit insurance and it began operations on December 18 of 2001, after splitting from China Exim Bank, with capital coming from the Export Credit Insurance Risk Fund as arranged by the State fiscal budget.(Ref 48)

Before the financial crisis, there was little demand for their products in shipping, and upon that the ship finance team was dissolved due to lack of business.(Ref 49).However , situation has changed after the 2008 financial crisis and as it can obviously be seen from the deals and strategic cooperation agreements indicated in its website that the export credit agency came back into the market and want to increase its shipping business activities.(Ref 50).

One important point is that Sinosure became a member of the Berne Union, which is the leading association for export credit and investment insurance worldwide (ref 51). Members use OECD guidelines for guarantees such as 80% leverage, no balloon payment, 1st priority ship mortgage and right of transfer of long-term charter agreement.(Ref 25 ).However , ECA (Export Credit Agency) Watch indicates for Sinosure that ; When compared with the Berne Union Sinosure's terms and conditions for its product are generally:

- Similar with regard to total repayment term and form of repayment
- Similar with regard to down payments (15% minimum)
- Unclear with regard to minimum exposure fees as required by the OECD(Ref 52)

Like China Exim Bank, Sinosure has no any limitations which are imposed by OECD guidelines and because of that it can act flexible.

Sinosure provides export credit insurance, assuming the risks of the foreign buyer on behalf of private lenders who are willing to extend their actual funding.(Ref 52). Tao notes that 75% of Sinosure's business is focused on short-term credit insurance and the rest is medium term.(ref 53) Moreover, Sinosure provides leasing scheme insurance policies to cover payment risk for charterhire earnings. The leasing insurance covers bare boat charter (also called as demise charter) agreement for a post-delivery finance transaction, and the risk assessment standard is similar to that of buyer credit insurance.(Ref 25).As reported by

Marine Money that , Sinosure has been working actively with Bank of China in many transactions, which are generally over USD 500 million, and supports foreign shipowners such as Pacific International Lines, FH Bertling, STX Pan Ocean, TORM and Schulte Group( Ref 54).For example , in terms of volume Sinosure closed around USD 3 billion in shipping deals in 2009 . In terms of customers, Sinosure wants them to have a demonstrated long-term commitment to the shipping industry such as not to have speculative order , low debt ratio at between 65 and 70% and at least USD 500 million in total assets (USD 300-400 million for dry bulk shipping companies could be acceptable).

Lastly, Wong noted that Sinosure is also able to finance ships for the Chinese owners if they set up foreign entities and trade in international waters.

#### **4.3.3. Foreign Banks Operating in China**

As mentioned in the previous section that it is difficult to operate in the Chinese market for foreign banks as the top shipping companies especially state-owned companies are very well serviced by the state-supported domestic banks. However, there are some foreign banks resist the difficulties of operating within China. These are Norwegian shipping bank DnB NOR and Standard Chartering. What allows them to operate in China is the gaining of a Renminbi (RMB) currency license, for instance DnB NOR has obtained RMB Licence in December, 2009( ref 56) . The RMB license enables these banks to provide finance to customers in China in RMB across the country as the important point here is that around 95% of all China's domestic ship finance is carried out in RMB.(Ref 56)

Generally, many international banks operate and keep their expertise in Hong Kong and Singapore. DnB NOR's Shanghai branch also is lending in RMB to Nordic companies based in China such as Elkem , Goltens who require a local currency bank in order to run their businesses smoothly. However, DnB NOR is moving closer to the Chinese ship owners. The bank has been operating in China since 1982 and has a representative office in Beijing which focused on export credits and trade finance. After that it moved to Shanghai in 2003 to better serve the Norwegian and Nordic trade and industry clients, as well as Chinese and international shipping customers on the Chinese mainland . Bank offers deposit facilities in

RMB to international companies as well as a range of payment transfer facilities and foreign exchange transactions.( ref 55)

DnB NOR's country manager in China and head of the Shanghai branch, Espen Lund, noted that DnB NOR has been able to finance Chinese flagged vessels and accept Chinese ship mortgages. And the ability to lend in RMB to the growing number of Chinese owners is , as he highlighted , an important step forward in its China strategy.

Some of its transactions are as follows;

- \* In 2006, DnB NOR's Shanghai Branch played its first agency role in a USD 245.6 million syndicated loan facility to China Shipping Development.

- \* In the same year, the bank provided Shanghai Time Shipping a USD 38.4 million bilateral term loan secured by Chinese flag.( ref 55)

Another bank who is operating within China ship financing system is Standard Chartered Bank. In June 2010 the bank closed a RMB 150 million (USD 22 million) facility for Shanghai Greenland Energy (Group) Co Ltd to provide it with post delivery financing for the acquisition of two handysize newbuildings as part of the company's overall expansion into the energy sector .The importance of this deal is that it was the first RMB denominated, Chinese flagged, Chinese-documented shipping finance transaction undertaken by a foreign bank in the People's Republic of China since the 2008 global financial crisis (ref 57)

#### **4.3.4. SPD Bank –New Player**

Why SPD bank, local government owned bank, was mentioned here is that it is estimated that this bank will play bigger role in the financing of shipping related fields .As head of business development Shanghai Pudong Development Bank's (SPD), Chen Qi, pointed out that the bank is very determined to take advantage of growing funding needs from shipowners ,both Chinese and foreign .(Ref 58).And for that aim, a dedicated ship finance department was

established in 2009 which is very important point as many Chinese banks operating in the sector have no dedicated team and the bank applied for leasing licence to operate in ship leasing

Furthermore, Pudong's dedicated team is currently working closely with Sinosure on deals that involve foreign shipowners as well and have close relationships with top 22 shipbuilders in China ref (ref 59)

#### 4.3.5. Ship Leasing In China

One of the most important actions in the field of ship finance in China is that Chinese authority (China Banking Regulatory Commission-CBRC) permitted banks to set up financial leasing companies in March 2007 (Ref 65). After that permission, China Banking Regulatory Commission initially granted licence to 5 financial institutions to enter into leasing , such as Industrial and Commercial Bank of China (ICBC), Bank of Construction, Bank of Communications, Minsheng Bank, China Development Bank and China Merchants Bank.(Ref 66) .After that permission the leasing market in China has grown substantially .Although it does not classify each sector in the figure 6 given below ,It can obviously be seen that leasing volume is increasing and the profits done through leasing is also going up apart from the term soon after 2008 financial crisis .

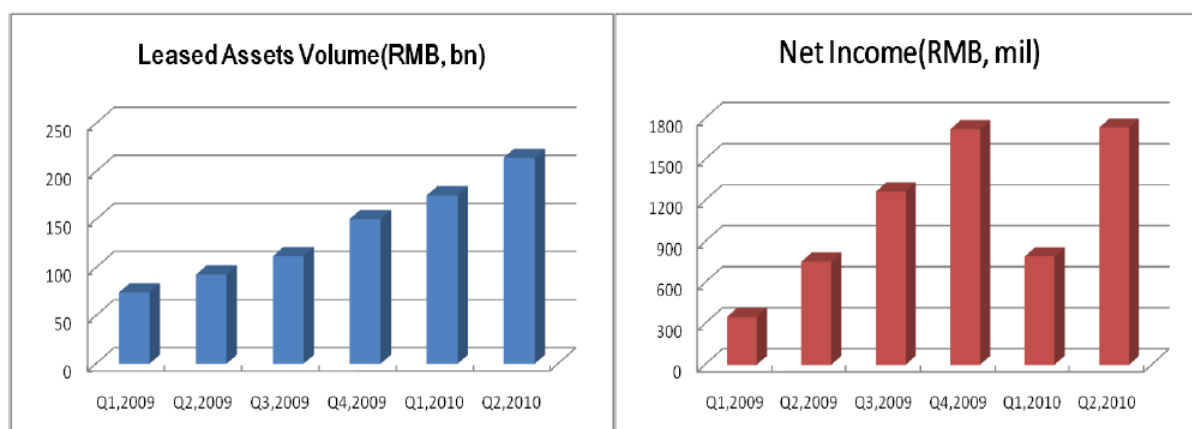


**Figure 6 China Leasing Asset Volume and Net Income 2010 (Source ; CBA Financial Leasing Committee , 2011)**

To make it clearer that Wong, according to reports he obtained, noted that at the end of the first quarter of 2010, Chinese leasing companies reported a combined net profit of RMB 2.5 billion (USD 367 million), an increase of 12.76 times when it is compared to the same corresponding period in 2007 and accumulated assets of over RMB186.3 billion (USD 27.4 billion). He further expressed that competition among the leasing companies is escalating as more leasing companies are entering into the sector, through obtaining regulatory approval from CBRC, such as Agricultural Bank of China, China Everbright Bank and as mentioned previously Shanghai Pudong Development Bank.

Through their leasing branches, many banks, as given some names above, are becoming shipowners and thanks to that, these banks become one of the most important source of funding in the form of leasing.

As mentioned in the literature review that leases are classified into finance lease and other leases often called as operating lease. In China there is also foreign-invested finance leasing companies which are not classified as financial institutions and so fall under the separate supervision of the Ministry of Commerce (MOFCOM) while finance leasing companies are supervised by CBRC.

As Chinese law includes different definitions of contract law, tax and accounting purposes, leasing contracts have to be drafted very carefully in order to achieve the intended result, especially in terms of accounting and taxation. For example, in China finance lease is not subject to business tax whereas in operating lease, lessee is subject to 5% business tax (ref 60)

In order to establish foreign-invested finance leasing company in China, a number of requirements have to be met. For instance, the minimum establishment capital should be at least 10 million dollar. Moreover, certain requirements apply with regard to experience and qualification of the investor, including minimum total assets of USD 5 million dollars.

Foreign-invested finance leasing companies require ultimate approval by MOFCOM in Beijing. However, applications must first be filed and pre-approved by the provincial branch of MOFCOM at the location where the company will be established (ref 45). This application process both in MOFCOM and its provincial branch takes more than 6 months

which discourages foreign investors to enter into Chinese market and this is disadvantage for Chinese shipowners.

In China leasing houses are still facing numerous restrictions from the government in terms of taxation, foreign currency control, the setting up of special purpose vehicles (SPV) abroad and setting up Foreign-invested finance leasing. However, Wong indicates that the situation is improving through changes on existing regulatory framework. For instance, leasing houses are now permitted to set up one-ship SPVs within the special economic zones in China and this will allow them to source for financing outside China and take advantage of the tax incentives. To give an example, In June 2010, Bank of Communications and China Merchants Bank established 6 SPV s in Shanghai Comprehensive Free Trade Zone for a container vessel and became the first leasing company to benefit from the regulation.(Ref 61)

#### **4.3.6. China Ship Fund**

China Ship Fund is the first investment fund for the Chinese shipping industry by government and it began operations in Tianjin in 2010.( ref 62) The fund initially collected RMB 2.95 billion (USD 450 million) successfully from five investors such as Tianjin Urban Infrastructure Construction Investment Group, Tianjin Jinneng Investment Shareholding, Tianjin New Finance Investment Company and it is expected to be valued at 20 billion yuan and will be used to purchase ships and rent them to domestic carriers.(ref 63)

The fund was structured as a limited liability partnership, the fund strives to enhance the competitiveness of China's maritime sector .CSF adopts highly flexible fund-raising approach. For example, investors can choose to invest in the ship fund, its sub funds, or holding companies/single purpose companies established by CSF.

After being established , within short time CSF signed shipbuilding contracts for 45 vessels with total investment amounting to over RMB 15 billion (USD 2.3 billion) .(Ref 63)

Moreover, as it is indicated in the China Transportation Ministry shipping development report that another two new industrial fund is on track . One is shipbuilding industry fund led by government and another one is shipbuilding industry fund lead by China Shipping Group(.Ref 64)

## **5) Anatomy of Shipping Finance in Turkey**

As explained by Erdogan that finance in shipping is divided into 2 parts as newbuilding (pre-finance) and post-finance. New building finance starts from the planning stage of ship until completion of the ship in the shipyard and it covers short period generally between 13 months and 25 months. On the other hand, after completion of the ship, if the ship is financed it is called as post-finance such as German K/G, Norwegian K/S systems and bank loan. Newbuilding finance in Turkey had no importance until 2000 in terms of volume. There has been growth from 2000 to 2008 economic recession along with the rise in the maritime sector as freight rates saw the highest rates in this period. In this period, for the first time Turkish shipyards have started to compete with foreign companies internationally by undertaking high volume shipbuilding projects.

Although there is no accurate figures as Kocak pointed out that banks tend to keep their data confidential , Yapi Kredi and Garanti Bank ,which are the largest contributor to the sector , has approximately 2 billion dollar fund for ship financing totally and overall volume of the ship financing in Turkey is approximately 4 billion dollar which includes bridge loans , post-finance and leasing. This totally coincides with roughly 400 projects. However, as Kocak noted that only Marine Money could provide comprehensive figures of the ship financing in Turkey as they are benefitting from a special interbank network.

## 5.1. Analyzing of Shipping Finance Periods in Turkey

According to Erdogan , ship financing in Turkey could be divided into 3 periods in order to analyse more realistically as followed ; Pre-2001 economic crisis in Turkey , period from 2001 to until 2008 world financial crisis and lastly after 2008 period.

For the period of pre-2001 , there is no enough point to talk about and only thing could be worthwhile to mention is that there were some foreign banks operating in Turkey such as HSH Nordbank AG.

In 2001, Turkey underwent a financial crisis and after that banks restructured themselves and started to provide loan to the maritime sector along with booming of the sector and their sources of finance increased after 2001 not only for shipping but also all economic fields.

Until 2008 economic crisis, foreign banks were dominant in Turkey and domestic banks financed some small companies which were not taken into account by foreign banks.

After 2008 crisis , it has been almost impossible to find credit with LIBOR +1 from foreign banks as the funding cost of domestic banks removed and those aggressive foreign banks at present have been coping with their sunk credits and stopped their enlargement policy in the sector due to liquidity shortage especially for post-finance. There were no any finance from 2008 crisis until 2010 and almost no deal was made during this period. However, after 2010 some deals have been done with LIBOR +2 , LIBOR +3 and LIBOR + 4 by foreign banks. Domestic banks ,as was said , have eliminated price disadvantage from foreign banks after 2008 and thanks to that it could be said that domestic banks have started to operate in post-financing of ships .In this period, as Cinar pointed out that some projects of highly reliable customers, such as Sabanci family and Ciner family, were financed with shipowners' own equity rate as low as 15% or 10% . However , there are some problems should be overcome such as highly increasing equity requirement for the project financing and infeasibility of the projects.

Until the period of 2007- 2008 crisis, ship financing system in Turkey was working as ;

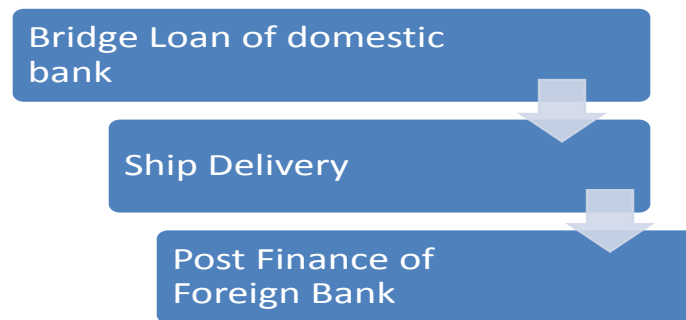


**Figure 7 Ship Financing Structure Before Crisis in Turkey**

After 2007-2008 period , ship financing has started to work as ;



**Figure 12 Ship Financing Structure After Crisis in Turkey**

It is due to the fact that Turkish banks did not want to leave all pie to foreign banks and started to prepare complete packages pioneered by Garanti and Yapi Kredi Bank.

## 5.2.Banks

### 5.2.1. Domestic Banks

Newbuilding finance, as Erdogan indicated, was done almost 100 % by the Turkish banks such as Yapi Kredi, Garanti Bank, Finansbank and Denizbank as they did not want to get involved in the post-delivery due to some reasons such as funding cost, low profit margin and long funding period. Among these, Garanti Bank has solely handled almost 60 % of these newbuilding projects. During the period till crisis, as Cinar indicated that As Yapi Kredi was lending with 70%-30% ratio in normal customer and 80%-20% in good customers. And also domestic banks were offering approximately LIBOR 2,25 – 2,50, while foreign banks were offering LIBOR 0.80 – 0.70. However, these LIBOR figures have changed after crisis as funding costs of domestic banks removed. After 2008 crisis, Isbank and Halk Bank have started to operate in ship financing. Although the number of the banks have increased in the sector, the volume of the ship financing has reduced substantially and as Cinar said that while banks were accepting ship itself as collateral after crisis they have demanded other real estates as well.

In order to give an example about Turkish banks who entered the sector after the crisis is that Yildirim Holding, a Turkish container port operator, bought 20% of the French container shipping giant of CMA CGM in 2010 by help of Turkish banks. It costed approximately 500 million dollar and whole amount is financed by Turkish banks.(ref 67). Moreover, in the first half of 2011 Yildirim Holding bought 50 % of Malta Freeport Terminals from CMA CGM for 200 million euros (\$286 million) and about % 80 percent of the purchase will be financed by borrowing from Turkish banks' consortium consisting of Akbank, Vakifbank, Isbank and Ziraat Bank. Through consortium, as Stopford indicated that, banks spread their risks. Again, this case shows how reliability issue is important in obtaining fund.

On the other hand, as Erdogan noted that there are some weaknesses in domestic banks. An important point is that the characteristic of the ship financing has not been formed in Turkey yet same as China since Turkish banks had no professional approach to ship financing. They started to operate along with increasing opportunities in the sector. There was a finance structure which was not based on the mentality where risk analysis is seriously taken into

account. These domestic banks have taken the risks in the highest levels just by looking at customer profile and ignoring notoriously volatility of the sector as everything was going very good until financial crisis. It is basically due to the fact that domestic banks had lack of experts in ship financing and as Erdogan said they had no enough expertise in analyzing of risk. Moreover, for the first time they have been experiencing financial crisis and banks did not know how to cope with crisis. After crisis, risk analysis has become more important and some banks have started to act professionally .Some banks might not want to stay in the sector permanently, their period of stay might change in line with the fluctuation of the sector. These years will be threshold for the domestic banks to make a decision whether to stay in the sector or not. Because of that it is early to talk about the characteristics of the sector as mentioned same as China.

Furthermore, they are changing their staff, who is dealing with ship financing, constantly within few years such as 2 years which in turn prevents the accumulation of the expertise within the organization. If the bank want to sustain it's experience, the same team should be held in the related branch rather than assigning to other branches which are irrelevant to ship financing.

Another import problem stems from the regulation of the BDDK (Banking Regulation and Supervision Agency) .After crisis, as Cinar explained that banks had to restructure repayments of shipowners due to cash flow problem and difficulty of shipowners in repayment. Sometimes the banks have restructured loans many times, however BDDK has banned restructuring of repayment more than 2 times due to strict regulations.

Cinar further explained that in making deal between the bank and customer, official expert is appointed by SPK (Capital markets board of turkey ) and for example in Yapi Kredi Bank expert is paid by Yapi Kredi Bank , however in Garanti Bank , he/she is paid by customer and in this situation expert might work for the interest of customer against bank. This unfortunately leads trust issue again.

### 5.2.2. Foreign Banks

As has been covered above that foreign banks, especially from 2000 to 2008 economic crisis, have become important player in the market in the form of post finance.

Post finance is different from newbuilding finance. Competition takes place globally as ships are operated globally and banks can follow international commercial law easily. There are some banks that acts globally and developed their portfolio such as HSH Nordbank. When compared to those international banks, Turkish banks remain behind of these banks. The main reason in that is the funding cost. To put it simply , while foreign banks was providing credit to the Turkish shipowner with LIBOR +1 , Turkish banks were able to obtain syndication credits from foreign banks with LIBOR +1 until 2008 financial crisis .That is to say , in order to make profits , these domestic banks were supposed to provide credits to Turkish shipowners with much higher interest rate which in turn disqualify them in the market .Gunay also express that the biggest problem in the sector is the finance problem as the interest rate that banks are demanding is much higher than international markets.(Ref 68). Therefore, it becomes impossible to build ships in the Turkish shipyards for international markets if the funding is met by domestic banks.

Moreover, foreign banks were very aggressive in the sector as they were lending up to 80 % and demanding 20 % shipowner's own equity in the same period. So, in this situation it is obvious that Turkish banks were not able to compete with those foreign banks until 2009.

One of the most important deal in the Turkey maritime history was done by foreign banks is the loan provided to Kiran Holding in 2008 when the market was at peak. This was syndicated loan, secured a 440 million dollar with the syndication of banks including mainly HSBC, Lloyds TSB, Emirates Bank, Royal Bank of Scotland and some other banks( ref 69)

One another important player in Turkish shipping finance field as a foreign player is Japan Bank for International Cooperation (JBIC). JBIC, the merged entity of Export-Import Bank of Japan, is a policy-based financial institution of Japan and wholly owned by Japanese government.(ref 70) .JBIC ,same as China Eximbank , provides credits to foreign shipowners so that they order their ships to Japanese Shipyards . The main aim here is to to increase Japan's export volume. For that reason in 2010 ,JBIC ,through Turkish Isbank , has provided

export credit line of JPY 10 billion (USD 111 million) to some Turkish shipowners as well such as Yasa Holding and Mardas as can be seen details of the transactions in the table 6

**Table 6 JBIC deals done with Turkish Shipowners**

| JBIC and NEXI Ship Finance Transactions |                                 |                      |                                                                                                    |
|-----------------------------------------|---------------------------------|----------------------|----------------------------------------------------------------------------------------------------|
| Shipping Company                        | Lender(s)                       | Amount (USD million) | Comments                                                                                           |
| Mardas                                  | JBIC and BTMU                   | 60.9                 | JPY 5.5. billion loan dispersed via Isbank in Turkey to purchase two Japan built dry bulk carriers |
| J. Lauritzen A/S                        | Société Générale, BTMU and NEXI | 166.2                | 12 year senior secured facility for 6 Japan built bulk carriers                                    |
| P&M Drilling                            | JBIC and BTMU                   | 497.0                | Loan to finance the first drilling rig owned by Petrobras and a Japanese firm                      |
| Tata-NYK Shipping                       | JBIC and Mizuho Corporate Bank  | 45.0                 | Buyer's credit to finance a Japan built dry bulk carrier                                           |
| SK Shipping                             | JBIC and SMBC                   | 57.0                 | Loan dispersed via KDB for the financing of 2 Japan built dry bulk carriers                        |
| YASA Shipping                           | JBIC and BTMU                   | -                    | Loan dispersed via Isbank in Turkey to purchase a Japan built dry bulk carrier                     |

(Source; Marine Money 2010)

Moreover , in March 2011 JBIC, second times , signed a general agreement for arranging an export credit line for ships in the amount of up to 22 billion yen through Is bank which is the largest private bank of Turkey. (Ref 71) And graph below simply shows how the JBIC export credit transaction is progressing .

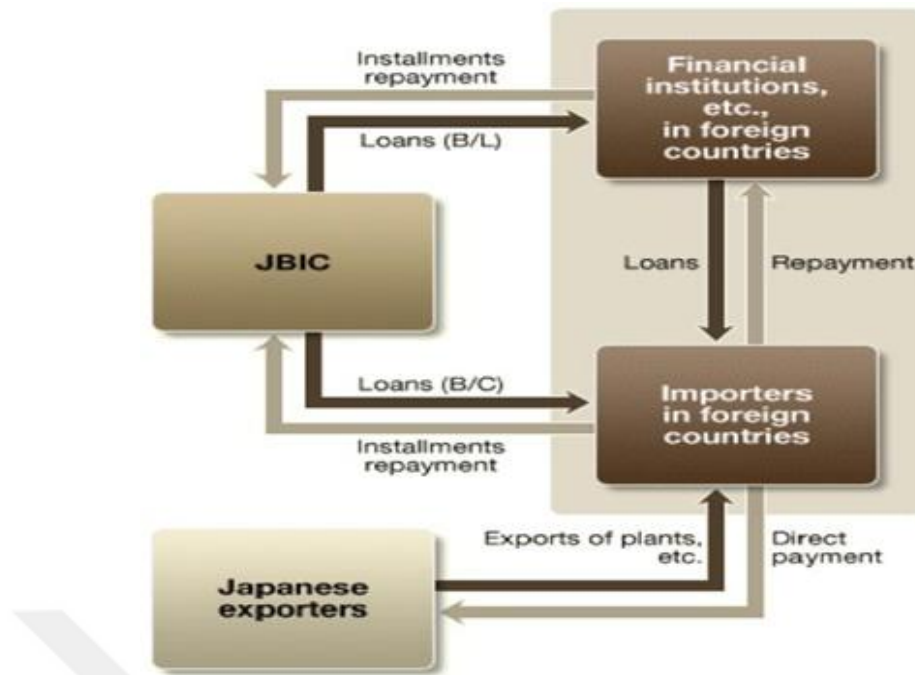


Figure 9 JBIC Export Credit Transaction Flow (Source ; JBIC, 2010)

### 5.3. Impact of Law on the Ship Financing

New building and post-finance have different law status in the Turkish Commercial Law. For newbuilding finance, as Erdogan pointed out that , Turkish commercial law is favourable to Turkish banks rather than foreign banks and as said that Turkish banks are important player in newbuilding finance not in post-finance . On the other hand, Yirmibesoglu expressed that foreign banks are in a better position as to post-finance since related part of the Turkish commercial law code was copied from German law system which in turn, facilitates foreign banks to operate smoothly. Taken together, wording of law does not prevent competition in terms of financing as foreign banks and domestic banks are working in different fields.

#### **5.4. Outlook of Shipowners Company in Turkey**

Although there is no any study conducted regarding the classification of shipowning companies in Turkey, however in this study, they will shortly be classified into 3 groups by the author through his market knowledge.

The first group is the traditional, family-owned shipowning companies who is operating in the sector at least 40 years such as Kalkavan, Kiran , Cerrahgil , Kaptanoglu families.

Some new industrialist entrants to the sector could be classified under the second group such as Yasa Holding, Ciner Group , Yildirim Holding .They have entered into sector in the last few years and acquired a significant volume of fleet .

This first two group has sizeable fleet volume, good company structure and generally well serviced by both domestic banks as well as foreign banks .However, companies in the first group have no Chief Financial Officer (CFO) as they are family companies which are not institutionalized and because of that they do not want to leave the control of the money to someone outside of the family due to reliability issue.

Third group consists of shipowners who have owned less fleet volume compared to first two group and some 600 ships in the coastal fleet are largely owned by these shipowning companies. Although they are the biggest in terms of number of ships, however, in terms of volume when compared to others , they are the smallest. This group has got many problems in terms of obtaining fund to finance their ships. For example, small companies' profit is low and also banks generally are not interested in lending loans to those companies.

Due to these reason , their fleet renewal project will be carried out through Undersecretariat of Maritime Affairs in cooperation with Dutch government .However , sorting out their fleet renewal project does not necessarily mean that they will solve fund obtaining problems.

Yirmibesoglu indicated that almost all companies in the third group have got the corporate rating problem as many of them lack the holding company structure and due to that they are not transparent. That means that if a company has no corporate rating then it becomes

impossible to obtain credit from the banks since the banks require corporate rating for their risk analysis.(ref 72). Similar to family-owned firms, third group companies do not employ CFO , either .

In the past , as Yirmibesoglu said that there were no requirements such as balance-sheets , audits or Basel 2 regulations . The important criterion was reliability issue. However, in today's financial world, companies are required to have an audit report and well-defined capital structure. If not, then banks will not put these companies in their lists.

### **5.5. Eximbank of Turkey**

Turk Eximbank makes its operations in the maritime sector under the Shipbuilding Finance and Guarantee Programme. What is targeted in this programme is to support the Turkish dockyards to increase their share of international markets and through this programme, Turkish companies involved in shipbuilding and/or exporting of ships will be provided direct loans and/or Letters of Guarantee so that they may obtain pre-financing either in advance or in installments from the buyer or they can buy supplies & materials with payments having a fixed term( ref 73).

In Eximbank' credit and Letter of Guarantee, there are some criteria which should be taken into account by firms in order to meet the Bank's requirements. For example, the amount of the Letter of Guarante's/direct loans are determined by Turk Eximbank by each project, but it should not be more than the % 85 of the total contract price. Moreover, The Turkish content of the ship concerned with the contract should be at least % 25 of the total contract price and the equity content of the firm should be % 15 or more

There are some collateral which are accepted by the Bank such as Letter of guarantee from a private Turkish bank, Treasury bills and government bonds, First-priority mortgage over the vessel under construction.

Moreover, Eximbank has been providing credit to the sector obtained from World Bank

under the Export Financing Intermediation Loan (EFIL- IV) programme. In this programme, what is aimed at is that through EFIL- IV, Loan is disbursed for financing operating capital and fixed capital requirement of Turkish companies operating as manufacturer –exporter or manufacturer producing products for exports purposes in ship/yacht building and machinery manufacturing.

This transaction is executed by and between Türkiye İhracat Kredi Bankası A.Ş. (Turkish Eximbank) and International Reconstruction and Development Bank (World Bank). (Ref 74). This Loan was provided in 2008 and will be ending by 2013 .

According to Kocak ,Eximbank credits are based on export in the form of bridge loan and 20 % amount of the newbuilding project comes from shipyard' s own equity and 80% of that amount from Eximbank. He further stressed that those sort of credits are provided to developing countries by World Bank and it is not considered as ship financing. At present, Eximbank is not providing any credits to the sector apart from World Bank EFIL IV credits and is dealing with restructuring of given credits.

As Elif highlighted that since 1990 Turkish Eximbank has provided 240 million dollar to the sector in the form of either credit or letter of guarantee which corresponds to 27 projects. 180 million dollar of this was provided in the form of ship building credit and the rest was in the form of Letter of Guarantee. Moreover, according to Kocak in last 5 years 145 million dollar credit was provided to the sector and the rest of the amount was approximately 100 million dollar which means on average 6 million dollar was provided to the sector every year till 2005 and after 2005, 29 million dollars was provided to the sector under the Shipbuilding Finance and Guarantee Programme and Export Financing Intermediation Loan (EFIL- IV)

However ,the problem with Eximbank is that according to Yirmibesoglu , Eximbank's the letter of guarantee is not recognized by foreign banks .This could mainly be due to the fact that Turkish firms using Eximbank credits are working with domestic banks rather than foreign bank. It can also be on account of the fact that foreign banks in Turkey do not get

involved in the newbuilding credits as domestic banks do and as was mentioned , Eximbank credits and letter of guarantee are provided for newbuilding rather than post-financing

Moreover , S&P Credit Rating Agency indicated the credit note of Turk Eximbank as BB in 2010 (Ref 75) which is medium grade .This means funding cost is not so cheap when compared to China.

## **5.6. Credit Guarantee Fund**

Credit Guarantee Fund first was established in 1991 , owned largely by The Union of Chambers and Commodity Exchanges of Turkey (TOBB) and KOSGEB (Small and Medium Industry Development Organization) and also with small shares by many banks ,which are operating in Turkey including foreign banks , in order to support small and middle sized businesses in Turkey to make them be able to obtain credits from the banks especially for long term credits where interest rates are lower .(Ref 76) Since, it is difficult for those small and middle sized businesses to obtain credit from banks . For that reason, Credit Guarantee Fund helps those businesses in the form of both issuing letter of guarantees and providing credits.

Soon after the 2008 economic crisis, Some 70 incomplete ships' contracts in the shipyards have been either cancelled or suspended due to financial reason (Ref 77). For that reason , Credit Guarantee Fund have started to subsidize the sector in May 2010 in the form of either business credits or investment credits provided that some requirements are met as pointed out in the Official Gazzetta .(ref 78)

Those Criterias;

- Capacity of ships will be minimum 1.500 dwt or 700 Grosston
- 15% of the ship physically must be completed
- Those credits must be repaid within 3 years after 1 year gap

Amount of guarantee fund per beneficiary will be maximum 7 million Turkish Liras (4.250.000 dollar) in business credits and 20 million Turkish Liras in investment credits

.Similarly , per beneficiary who belongs to a risk group will maximum be 10 million Turkish Liras(6.071.045 dollar) in business credits and 30 million Turkish Liras in investment credits .(Ref 79)

Until 2011 April , 5 firm's application have been accepted with 7 transactions which amounts to 70.337.390 Turkish Liras(42,499,697 dollar) for guarantees and 108.212.044 million Turkish Liras ( 65,384,894 dollar ) for credits totally .(Ref 80) And also as expressed by the Credit Guarantee Fund, some projects were rejected due to various reasons. For example, some projects were found negative by fund's intelligence department , some companies were found financially weak and also some applications did not meet requirements . (Ref 80)

## **5.7. Partnerships and Ship Fund**

Although there is no partnership system like German K/G or Norwegian K/S in Turkey , however , there are some companies such as Yardimci shipping , Furtrans shipping and Turkon Holding operate some of their ships under German K/G systems .(Ref 81) it is simply due to tax reason. On the other hand, after 2008 crisis these companies had difficulties because of not being able to pay for rent to K/G companies.

When asked regarding the likelihood of establishing ship financing model like K/S or K/G in Turkey ,Yirmibesoglu stressed that it is very difficult to establish. There are two reasons for this. Firstly, information flow is not transparent among companies as it directly affects reliability issue and secondly companies in Turkey generally are very small.

However, Captain Altun indicated that it is about negative experience of the companies established with the financial support of Turkish immigrants lives in Germany. The founder of these companies borrowed directly from Lenders(Turkish immigrants) without using any financial intermediaries and eventually some of these large voluntary-based companies, operated in many sectors such as supermarket and heavy-industry , collapsed due to lack of professional operation and financial management ability . Because of this case, Turkish

shipowners are not tend to join any large common partnership. More importantly Altun noted that Turkish nation, although surrounded by waters on three sides,is not maritime nation and has no tendency to be maritime nation like Greek.

## **5.8. Coastal Merchant Fleet Renewal Project**

Recently , There has been an initiative between Turkey and Dutch governments to renew Turkey's ageing coastal fleet (Ref 82).Although fleet renewal project has been considered by Turkey government more than 10 years ago , however due to financial reasons the initiative eventually has been taken in 2011.

In Turkey's coastal fleet, according to Kocak , who is working on the project team on the behalf of Turkey government, there are approximately some 600 ships in the coastal fleet of Turkey . More detailed, 350 of them flying Turkish Flag and the rest is flying foreign flag and more importantly many of them are 30 years old or even older. He did not provide definite figures as confidentiality agreement, called Non-Disclosure Agreement (NDA), has been signed between two government in march 2011.(Ref 83)

Through this move, Turkey essentially want to renew coastal fleet and help to its struggling shipbuilding industry , while Dutch side want to increase the export volume of Dutch marine equipment companies.

The first stage of the project would see 100 coastal ships begin construction in Turkey. The order would be made in 10 vessels batches and work is expected to start in the end of 2011 and the up limit for ships will be 10,000 dwt. According to agreement, new building orders will flow into Turkey shipyards which in turn will be financed by Dutch and in terms of ship equipments , there will be to a large extent Dutch element.

However, the issue of how to finance has not been set out yet. According to Maurice Wijmans, a director at Dutch Investment Bank NIBC, the project's financing could proceed in one of two ways. Either Turkish shipowners could be financed by Turkish banks which would in turn be supported by the Dutch financial institutions or an alternative route could be via project finance. Later on, for this deal a lessor company could be established, either in the Netherlands or Turkey and then the assets would then be chartered out to Turkish owners and carry a purchase option at the end of the leasing agreement. In return, the owner would put in equity into the deal.(Ref 82)

## **5.9. LEASING**

First leasing company in Turkey was established in 1986 soon after the enactment of the financial leasing legislation. Since then, the leasing option has not been a popular tool in Turkey and leasing of ships, either.

FIDER, Turkey Leasing Association, classifies shipping vehicles into five different groups which are dry bulk, tanker, passenger ship, yacht and others. According to FIDER data compiled from the FIDER reports below that total the volume of the leasing transactions carried out between 1998 and 2011 June amounts to 620,366,000 dollar and many of them were done for dry bulk with 71%. From this, it is clearly understood that leasing transactions are not carried out enough in Turkey

**Table 7 Leasing Volumes of Turkish Maritime Sector Vehicles**

| <b>Leasing Volumes of Turkey Maritime Sector Vehicles</b> | <b>Dry Bulk \$/Year</b> | <b>Tanker \$/Year</b> | <b>Passenger \$/Year</b> | <b>Yatch \$/Year</b> | <b>Others \$/Year</b> | <b>Total \$/Year</b> |
|-----------------------------------------------------------|-------------------------|-----------------------|--------------------------|----------------------|-----------------------|----------------------|
| Years                                                     |                         |                       |                          |                      |                       |                      |
| 1998                                                      | 7,730,000               | 348,000               | 0                        | 22,076,000           | 6,994,000             | 37,149,000           |
| 1999                                                      | 1,350,000               | 3,336,000             | 42,000                   | 500,000              | 1,060,000             | 6,289,000            |
| 2000                                                      | 8,066,000               | 173,000               | 0                        | 733,000              | 4,070,000             | 13,044,000           |
| 2001                                                      | 639,000                 | 122,000               | 0                        | 391,000              | 202,000               | 1,354,000            |
| 2002                                                      | 6,685,000               | 6,350,000             | 0                        | 1,390,000            | 2,585,000             | 17,011,000           |
| 2003                                                      | 1,344,000               | 853,000               | 867,000                  | 1,556,000            | 2,210,000             | 6,832,000            |
| 2004                                                      | 1,966,000               | 2,949,000             | 0                        | 367,000              | 328,000               | 5,611,000            |
| 2005                                                      | 2,597,000               | 3,125,000             | 0                        | 821,000              | 495,000               | 7,039,000            |
| 2006                                                      | 18,057,000              | 41,000                | 1,806,000                | 1,572,000            | 3,455,000             | 24,933,000           |
| 2007                                                      | 112,739,000             | 3,323,000             | 3,446,000                | 5,028,000            | 13,905,000            | 138,443,000          |
| 2008                                                      | 95,218,000              | 103,000               | 309,000                  | 11,640,000           | 6,563,000             | 113,835,000          |
| 2009                                                      | 51,798,000              | 3,856,000             | 0                        | 15,735,000           | 1,182,000             | 72,573,000           |
| 2010                                                      | 109,476,000             | 4,467,000             | 0                        | 15,541,000           | 6,119,000             | 135,605,000          |
| 2011                                                      | 24,586,000              | 5,272,000             | 0                        | 2,067,000            | 8,721,000             | 40,648,000           |
| <b>Total</b>                                              | <b>442,251,000</b>      | <b>34,318,000</b>     | <b>6,470,000</b>         | <b>79,417,000</b>    | <b>57,889,000</b>     | <b>620,366,000</b>   |

(Source; Compiled from FIDER' Statistics,2011)

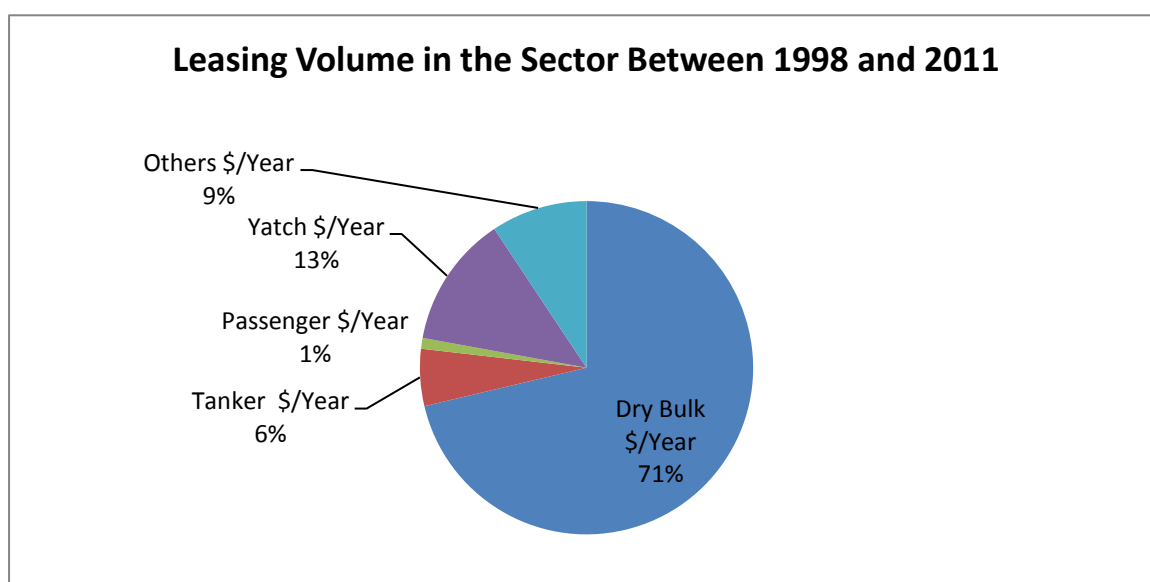


**Figure 10 Leasing Volume in the Sector between 1998 and 2011**

(Source;Compiled from FIDER Statistics,2011)

There are some reasons account for why leasing option is not favourable to shipowners . As Toksoz, Executive Vice President at Garanti Leasing, noted that operational leasing in Turkey ,which covers the 30% volume of the overall leasing transactions in the world , is not legally allowed in Turkey and Sale and lease bank version of the leasing is not allowed in Turkey , either .(ref 84) Another interesting point is that the customers whom are using leasing option is approximately 90 % KOBİ (small and middle-sized industrialists) for their machinery equipment requirement and shipowners are not considered as KOBİ in Turkey.

In terms of taxation , leasing sector is in difficulty as leasing tax rate were 1% until the end of 2007 , however , government increased it to initially 8% and subsequently to 18 % to align leasing tax rate with other segments of economy' tax rate in 2008(ref 85)

Moreover, according Gulelce, who is general secretary of the FIDER, explained some reasons as to why ship leasing is not used much in Turkey. Firstly, lessor has some concerns regarding devastating outcomes of environmental issues and likelihood of retaining of ship if the ownership is on the lessor which in turn could be financially destructive for the lessor. These concerns simply stems from the characteristics of the market .These negative reasons should be minimized if not eliminated and some regulations regarding leasing tax rate and permission of operating leasing are expected to be come into force in a short time through new legislation.

## **6) Comparison and Recommendations**

China and Turkey has no long history in the shipping finance and considerably goes back to 2001 for Turkey and 2002 for China when is time of accessing WTO and for both countries ; the characteristics of ship financing has not been formed yet as noted by Kocak. For that reason, their ship financing activities will be compared on the ground of last decade wherever possible.

Because of the difference between China and Turkey in terms of the volume of economic activities as well as structural difference in terms of state approach to economy, in this section comparison will not be on the basis of quantitative figures, rather the way how financial instruments work will be compared with their strengths and weaknesses.

### **6.1. Approach of State**

Due to China Republic's approach to economy, some large companies are owned by the state which in turn means direct support to the sector by state and also there is a good cooperation among those state-owned enterprises such as the case between ICBC bank and Cosco. However, when asked Erdogan, he noted that in Turkey, state should not support the sector directly such as by pumping money into the pocket of the shipowners. The reason behind of it is that this action might prevent shipowner companies to compete globally. Rather, state should provide some facilities such as reduction in the energy prices, reduction in the tax burden especially on employment tax and also relaxing the wording of law for the shipyards who is outsourcing some of its works to sub-tier companies. State should increase firms' competitive advantage and allow them to be able to sustain its structure in the sector in the long run.

### **6.2. Large Shipowner-companies**

As explained in the previous sections, in China state-owned large shipping companies are very well serviced by domestic banks same as financially sound Turkish shipowning companies.. However, in Turkey, banks solely involved in the pre-delivery finance until 2008 economic crisis and within this period shipowner companies raised fund from foreign banks in the form of post-delivery finance. After 2010 they started to offer complete packages for shipowners.

#### **6.2.1. Recommendation**

In Turkey, domestic banks will continue funding large domestic shipowning companies as long as funding cost does not become disadvantage while they compete with foreign banks.

More importantly, Chinese government should expose large state-owned shipowning companies to ruthless competition so as to ensure that they remain competitive in the market in the long run.

### **6.3. Small-middle sized companies**

When it comes to small sized Chinese shipowners , they have been suffering from the same problem as Turkish small sized (coastal fleet ) shipowners which is to be unbankable . These companies in both countries have lack of corporate structures and transparency. Due to these reasons, banks do not tend to provide them credit.

#### **6.3.1. Recommendation**

These companies should merge to create larger shipowning companies or should be acquired by large companies so that they can resist the difficulties of the market and be better serviced by financial instruments as well as obtaining corporate rating.

### **6.4. Domestic Banks**

In Turkey, domestic banks do not provide credits to the foreign shipowners as it is simply due to funding costs since funding cost in Turkey is much higher than Western banks and Chinese banks. However, Chinese domestic banks have been lending to foreign shipowners as long as they have sound balance-sheets. On the other hand , foreign shipowners expect Chinese lending in USD and due to tightening up policy of the Chinese government there is no enough USD within the banking system as more USD means appreciation of RMB which in turn have an negative impact on year end economic performance of China.

Most importantly, domestic banks in Turkey were just providing pre-finance (bridging loan) till 2008 crisis, however after that they started to share the pie with foreign banks, while in China domestic banks are taking part in both pre- delivery finance and post-delivery finance substantially and foreign banks have tiny involvement compared to domestic banks.

When it comes to ship financing expertise, this is the weakness of two countries. However , Chinese domestic banks have started to establish dedicated ship financing team , while Turkish banks have not set up yet and are still doing the same mistake which is the changing the location of expert staff from the shipping branch to somewhere else where is irrelevant to shipping . This prevents the accumulation of shipping expertise within that bank and means extra cost to get the new staff used to know the sector . In order to prevent that, there must be a dedicated ship financing departments.

Another point worthwhile mentioning is that currently Chinese Banks are receiving a payment of between %3 and % 5 spread over LIBOR and peculiar to the transactions for once only 3% or 4 % export credit agency premium(ECAP) is charged , 1% commitment fee and 1% arrangement fee is also charged.

Similarly , in Turkey, domestic banks are receiving a payment which fluctuates between %3 and % 5 spread over LIBOR at present and right now the 60%-65 of the project is financed through bank loan . Yirmibesoglu noted that over 65% cash flow of the company does not work when taken freight rates after crisis into account. As mentioned above that in China the banks generally charge 1% arrangement fee and ECAs premium for 3% or 4%, in Turkey however, there is no arrangement fee or ECA premium fee for ship finance projects.

#### **6.4.1. Recommendation**

Chinese domestic banks should get themselves familiar with international lending by establishing more dedicated ship financing departments and through more collaboration with the traditional financiers so that they can better serve to foreign shipowners. Furthermore, they should focus more on the small and middle sized players domestically.

.Turkish domestic banks have almost removed the disadvantage of funding cost after 2008 financial crisis so they might provide loan to foreign shipowners as well as establishing dedicated ship financing department and keeping its team in the branch rather than changing.

This helps attracting shipowner to place their ship orders to Turkish shipyards and contributes to growth of economy which is based on export.

## **6.5. Foreign Banks**

In China, there are few foreign banks which play a little role in the ship financing field as financially-sound shipowning companies especially state-owned ones have already been served very well by domestic banks and also there is some restrictions for foreign banks to operate within Chinese financial system such as requirement of obtaining of RMB licence.

On the other hand, foreign banks play an important role in the shipping finance of Turkey especially in the post-delivery finance. From 2000 to until 2008 economic crisis, almost all post-delivery finance transactions were carried out by foreign banks. Although they left their positions to domestic banks after crisis, however they are still active in the market in the form of post-finance.

## **6.6. Eximbank**

China Eximbank is supporting the sector heavily as was showed in the Bourbon and National Iran Tanker company case, while the support of Turkish Eximbank remains symbolic when compared. For example, although China is not an OECD signatory country it is providing finance on a buyers' credit basis as well as on a seller's credit basis and although Turkey is an OECD signatory country, it not providing finance in the form of buyer's credit and it is functioning same as domestic banks by just providing in the form of bridging loan to domestic shipyards. In addition, Chinese Eximbank , through buyer's credit , is lending to foreign shipowners as well, while Turkish Eximbank is just lending to domestic shipyards .

Another important point is that the requirement of Chinese content by China Eximbank is higher than the requirement of Turkish Eximbank since the aim of Chinese Eximbank is to make the deal with Chinese element as much as it can by using different ways , while the requirement of Turkish content of Turkish Eximbank remains just % 25 and over.

And thanks to having one of the highest credit ratings , funding cost of China Eximbank is much cheaper compared to Turkish Eximbank which in turn makes it important player in the ship financing arena and makes Turkish Eximbank passive player.

#### **6.6.1. Recommendation**

Funding capacity of Turkish Eximbank should be increased and its coverage as finance provider should spread to foreign shipowners as well which in turn attract foreign shipowners to place their orders to Turkish shipyards as the Turkey's economic growth is based on export same as China

#### **6.7. Sinosure**

What makes Sinosure important is that it provides export credit insurance, assuming the risks of the foreign buyer on behalf of private lenders who are willing to extend their actual funding. This corporation was established due to growth policy of China based on export. However, there is no any structure in Turkey like Sinosure as Turkish Eximbank is not providing buyer's credit for foreign shipowners, although the growth policy of Turkey is also depending on export same as China.

##### **6.7.1. Recommendation**

Turkey's growth policy is also depend on export same as China and a structure like Sinosure might be established in Turkey to undertake the risk of of foreign shipowners on behalf of domestic lenders so that the volume of ship exports form Turkish shipyards can increase substantially.

#### **6.8. Monetary Policy**

There is a USD shortage problem in the Chinese banking system due to some reasons such as tightening up policy, concerns about the appreciation of RMB and reluctance of the domestic customers of the banks. RMB has not become internationalized yet. This could be, to some extent, to the benefit of domestic shipowners, however if China want to be the center of the shipping finance, it should take foreign shipowners into account as well so that they can access to Chinese money. In order to do that government should seek the ways of increasing USD in the system, although it is against the export policy of China as appreciation of RMB against dollar makes the Chinese-built vessels pricier in dollar terms. However, there is no shortage of USD problem in Turkey as much as China and importantly, currency is not much

problem for foreign shipowners as they are not raising capital from Turkish financial instruments and Turkish banks are not in a position to finance them yet.

### **6.8.1. Recommendation**

One important point which prevents foreign shipowners to raise fund in China is the tightening up policy. Because of that, there is a shortage of USD in the financial system and RMB has not become internationalized yet, so USD should be available to foreign shipowners although increasing in the amount of USD causes the appreciation of RMB which affects year end economic performance of China negatively. China should increase the amount of USD availability in the banking system for foreign shipowners so that they can access the Chinese money smoothly. In order to do that monetary policy should be normalised and tighter regulations should be relaxed

### **6.9. Leasing**

Although the history of Leasing in Turkey goes more back than China, however, leasing sector have become more popular in China than Turkey since CBRC permitted financial institutions to obtain leasing licence and the volume of leasing increased 12.7 times in the first quarter of 2010 when compared to corresponding period of leasing permission. Moreover, the number of leasing institutions is increasing in China. However, leasing volume does not increase regularly in Turkey and the tax advantage of leasing was removed by government by increasing tax rate from 1% to 18% which in turn lowered the overall leasing volume.

Interestingly, operating leasing is not allowed legally in Turkey and the tax rate on finance lease is 18%, whereas in China both of the leasing types have been conducted and in operating lease, lessee is subject to 5% business tax and also finance leasing is not subject to tax which in turn makes leasing in China favourable to shipowners. However, the problem China has got is that it takes more than 6 months for foreign-invested leasing companies to

obtain licence and this bureaucratic process becomes deterrent effect on their investment decisions .

#### **6.9.1. Recommendations**

Bureaucratic process for foreign-invested leasing companies in China should be eliminated to diversify financial institutions, thus foreign money could flow into Chinese financial system seamlessly and smoothly. This might lead to competition among existing leasing players in the market which in turn Chinese shipowners will benefit from this competition .Furthermore, government can remove 5% operating tax of shipping leasing companies.

As for Turkey , the tax rate on leasing should be decreased to 1% back to 2007 figures as soon as it can and operational leasing transactions should be permitted legally . Furthermore, awareness of ship leasing among shipowners should be increased by leasing sector representatives.

#### **6.9.2. Ship Fund**

In China, ship fund called China Ship Fund was established in 2010 and seems to have been working smoothly so far and another two new industrial funds are on track. One is shipbuilding industry fund led by government and another one is shipbuilding industry fund lead by China Shipping Group , while there is no any ship fund established in Turkey because of some reasons such as bad examples experienced in other sectors before and problems of transparency of companies . However, shipping sector is quite different that of failed sectors and some Turkish companies delegated the operation of some of their ships to German K/G companies by establishing branch in Germany. It shows that if there becomes a strong initiative then a ship fund could easily be established in Turkey.

### 6.9.3. Recommendation

Ship fund in Turkey should be established in order to create better ship financing structure by incorporating the representatives of the different segments of the sector to the fund. This could be done after merging of very small shipowner companies, since through that these companies might sort their transparency problems out by having strong corporate structure. It is suggested that initiative should be taken and pioneered either by Association of Shipowners or Undersecretariat of Maritime Affairs to organize this fund.

## 7 ) Conclusion

In conclusion, in this study, although there have been time and space limitation, financial instruments used in China and Turkey have been attempted to analyze. After having them on hand, this analysis has become on the ground of comparison for each financial instruments used in these two countries. Moreover, for each instrument there have been made some recommendations for the betterment of ship financing environment later on.

As has been previously covered that in China large state-owned shipowning companies are very well serviced by domestic banks especially state-owned domestic banks while small and middle sized shipowning companies have still been suffering of funding problem. Moreover, leasing sector is becoming more popular day by day since permission has been granted by management although there have still been some permission problems for foreign-invested leasing companies to operate in China. From the foreign shipowners' point of view, there are some obstacles to overcome in the Chinese market such as shortage of USD in the banking system as more USD has been causing appreciation of RMB which in turn has been severely affecting year end economic performance of Chinese economy.

As for Turkey, domestic banks have been monopoly in pre-financing of ships due to some reasons and it did not play any role in post-financing due to funding cost disadvantage. However, this drawback has been eliminated after 2008 financial crisis and they started to

offer complete packages to shipowners and they also have started to establish syndications as was seen in Yildirim Holding example.

In Eximbank case , it has been seen that Turkey state is not supporting the sector as much as China state ,however it's supports is appearing slowly as was showed in the case of credit guarantee fund and coastal fleet renewal programme.

Of course, in this study every aspects of raising capital in China and Turkey were not touched on due to space and time limitation. For example, Initial Public Offering is not an option to raise capital for Turkish shipowners due to some reasons as explained by Yirmibesoglu while it has been used by Chinese shipowning companies . Furthermore, bonds and especially high yield bonds are used by Chinese state-owned shipowning companies as a funding tool , whereas it is not an option for Turkish shipowning companies, either. It must also be noted that second hand ship financing has not been touched on in this study, either due to same reason.

For that reason, further comprehensive research should be conducted as to the raising capital in China and Turkey shipping finance to include areas mentioned above.

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