

CRITICAL ANALYSIS ON SHIPPING FINANCE INSTRUMENTS IN GREECE

A dissertation submitted to the Indian Maritime University in partial fulfilment of the requirement for the award of the degree of Master of Business Administration in Port and Shipping Management

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DECLARATION

I, **SALMANUL FARIS M (2005304022)** student of School of Maritime Management, Indian Maritime University, Cochin Campus hereby declare that the project report titled “**Critical analysis on shipping finance instruments in Greece**” submitted in partial fulfilment of the requirement for the degree of **Master of Business Administration in Port and Shipping Management** is my original work carried under the guidance of my project guide. It has not formed the basis for the award of any degree/diploma or associate-ship of any University/Institution. The information submitted is true and original to the best of my knowledge.

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Date:

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EXECUTIVE SUMMARY

Shipping is the backbone of world trade, as a capital intensive business it need a large amount of fund. To raise these funds there are multiple tools offer various institutes like banks, stock markets, firms and families.

In a highly dynamic and volatile business environment, ship finance becomes highly sophisticated, innovative and complex. Emphasis is placed particularly on financial innovations employed by Greek shipping companies that rank on top of international shipping. Greek Shipping is traditionally in leading position globally. Greek ship owners finance purchases of vessels themselves, but in such a capital intensive industry, such as shipping, finance from third parties, like bank loans, leasing, finance from funds or stock exchange is inevitable.

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CHAPTER 1

INTRODUCTION

INTRODUCTION

Finance is at the heart of world industries, to provide excel support to growth of their business. The various methods of financing that will make fence the disastrous condition of markets. Adequate knowledge on both aspect of funding and allocation of funds to different mini objectives needs to achieve profit maximization. Process of rising of funds or capital for the purpose of running business and profit generation called financing. The lenders and borrower both expected to create a business on either lending or borrowing money.

Shipping finance doing same kind of approach with financial institutions, without access to appropriate finance, the maritime industry would cease to exist. Whether it is purchase of a ship, invest in a shipping start up or outlay into research and development, finance is the engine of the progress in the shipping world. Shipping finance takes the guesswork out of fiscal planning, delivering professionally reviewed guidance from both sides of financing fence. Taking the lender's perspective, shipping finance considers the basic principles of good lending and sources of security for loans. From the borrower's angle, shipping finance examines different equity sources, from debt financing and bond markets, to various loans, securitization and tax efficient financing schemes.

Ship finance is a broad term that involves corporate financial management of shipping companies and shipyards as well as new-building finance. As the customers of shipyards, shipping companies need funds in order to refinance their debts, to sustain their working capital and to acquire new or second-hand vessels. Shipyards also need to finance their working capital before delivering orders and receiving full payments. Hence, it is inevitable to review the shipping and shipbuilding industries in tandem when dealing with ship finance.

As its very nature is both capital intensive and international, which makes the finance decision much important and potentially crucial one. Moreover, due to the coexistence of volatile revenues and high fixed expenses, the minimization of a firm's financing cost is of paramount importance for achieving survival, profitability and sustainability during all the phases of a shipping cycle. The choice of finance will shape the outcome of any investment by changing the balance of risk and reward between the owner and the provider of finance. Any ship owning company can choose the level of finance sought, the security provided, the timing of repayment and the cost of servicing the debt. But these choices will have significant impact on its return over the life of the project and their degree of vulnerability at certain point in the cycle. Ships are useful assets to offer as security for borrowing, and gearing up an asset can significantly increase the return to the owners at the right point in the shipping cycle. But at the wrong time they can threaten an owner's very existence.

The international nature of this industry means that choices of finance are wide which adds to the complexity of choices. Tax treatment and rates are inevitably a key factor which makes a certain

countries more attractive places to seek finance. The growth of Islamic finance is the important movement that happens as a part of cultural considerations.

Investment decisions in the shipping industry bear a notable element of business uncertainty, since varying and persistent volatile nature is apparent between different shipping market segments. This is due to a number of major factors, mainly the derived nature of demand for shipping services that is sensitive to economic growth, the cyclicity in freight rates and vessel prices in different market conditions, and the distinctive sectoral characteristics of the shipping industry. Intensive capital resources tied-up in the underlying real assets (vessels) can induce tremendous financial risk that, at times, may lead to adverse outcomes. As a consequence, the issue of optimal capital structure and the financing tools shipping companies employ are in the core of shipping business.

As shipping companies adjust to a dynamic and rapidly changing environment, so do the financial methods and instruments available to rise funding and materialize vital investment budgets. The core business strategy of shipping companies is gradually shifting from simple profit maximization to an increase in firm market value. To attain this, shipping firms should consistently focus on promoting investment plans that bear growth potential and have positive returns that outperform more than required costs undertaken.

OBJECTIVES

- To find various method of financing that backbone of world's largest ship owner's industry
- Find weather this approaches of financing is feasible to various stakeholders in industry
- Measure the overall area of industry that covers the financing
- To find how much profitable if a financial institution come forward to this business.
- What are the regulatory requirements in Greece that fledge the industry

Scope of study

As a ship owner's market the Greek shipping has always need cash to invest or run the business. To generate profit out of this industry many traditional and innovative way of investment that can see. World profit generate through financial investment of loans, stocks and plenty of ways. So a large sum of money needed industry will generate much huge money. So studying about this makes aware how financial structure of world market going.

Significance of study

Seek to capture the views of shipping-finance professionals regarding questions such as

- a) Whether bank debt will remain the primary ship-funding method,
- b) Whether alternative funding sources can effectively cover the bank-lending gap,
- c) Whether access to capital for the Greek shipping companies will be restricted,
- d) Whether the global lead of Greek shipping will be affected.

Furthermore, most of the shipping-finance literature focuses on statistical measures to provide empirical evidence. In that sense, we seek to differentiate ourselves by conducting a survey. Lastly, the study would like to deliver knowledge that ship owners and financiers can use in their financing decisions.

Research methodology

This study uses the secondary data to analyze and to understand the impact of shipping finance that support shipping and diverse industries in Greece. The diverse data are collected and analyzed with the help of information from the research papers, reports, journals, website, reference books written by industry experts, interview with the industrial players for the trends and suggestions.

Limitations

This study is based on secondary data, which is descriptive in nature.

As a global and confidential matter data can't available much.

CHAPTER 2

LITERATURE REVIEW

LITERATURE REVIEW

According to Theodore Syriopoulos (2007) Greek shipping industry has various ways for getting financed. These are forward freight agreements, bank lending, syndication, securitization, high-yield bonds, and leasing and international equity initial public offerings. In this research more focus will be given to bank lending and syndication and there will be just a brief reference to the other means of financing. According to Mr. Petropoulos, Head of Petrofin Research, there were some changes in the Greek ship finance market the last years. First of all, some foreign banks that were not having a Greek share entered the Greek market. Something else is that some of the Greek banks merged or were acquired by foreign banks. We can also see that from 2001 to 2008 bank ship finance portfolios were increasing, while from 2008 until today portfolios are shrinking. This can be explained by the fact that shipping business is not having profits at this time, so not only it is not a lucrative business for banks, but it is also producing loss sometimes, in case some shipowner is unable to pay back a loan and securities are not enough.

According to Petropoulos and Lloyds List (2012) new banks are getting into ship finance more and more recently. There is space for newcomers due to the shrinking of the portfolios of some traditional players in the market of ship finance. Moreover, Greek banks' share of the market is shrinking. Something else I should refer to is that banks are not willing to lend money to small or medium Greek shipowners according to Lloyds List. According to Lloyds Shipping Economist (2011), shipping companies, especially the medium and small ones are squeezed from all sides due to the scarcity of financing. This will clear the shipping market and cure the problem of the overcapacity, as only the strong ones will be left at the end. Eventually shipping will return to profits and banks will start seeing it again as a lucrative business worth investing in.

According to Lloyds Shipping Economist (2011), accessibility to ship finance has fallen and financing is difficult recently due to the poor performance of the shipping markets. However, according to Trevor Law (2012) in the current shipping market, where values and freights are very low, there are some opportunities for counter-cyclical lending. The reason for this is that there is an expected upside of the market. Market is at its bottom right now, meaning that risk is lower for the lending institutions and expected returns are higher. So we see that some banks have already started or are planning to get active in the ship finance market again after the last two years pandemic, ship finance shrinking situation. This can also be supported from Lloyd's List article based on Petrofin's bank research where it is shown that lending to Greek ship owners has increased in 2011 from both Greek and foreign banks active in Greek ship finance.

One of the main problems conducting this research is the fact that there is not a lot of academic research that has been done before on Ship Finance Loans and Securities taken for the loans to be provided. There are some papers about Greek shipping industry, like the Greek Paradigm (2007) that also refers to Greek ship finance, but they are far from enough.

There is plenty of material having to do with finance in general, but not so much for the specialized field of ship finance. There are also some papers like the ones of Kavussanos, talking about FFAs and derivatives in the shipping industry, but there are only very few on bank loans. Shipping journals like Lloyds List is the main source of news for the ship finance field and market trends in banking for shipping, but still it is not from a totally academic point of view, but mostly from the market's and the journalist's point of view

Another problem is the fact that optimization models for finding the optimum level of securities that should be taken do not take into account the extreme volatility of the shipping market. Shipping market can be affected by many variables and situation can change rapidly from one moment to another, like in 2008 with the market collapse. There will be an effort for calculation of the optimum percentage of equity and bank money in a loan applying models, something that banks are doing empirically until now and according to their many years of experience. However some constraints will have to be set, so there is a case that this model will not be suitable for all kinds of situations.

What we should focus on is that research on bank lending for ship finance has still a lot of way to go. There is not abundant information yet on the topic and there is plenty of exploration that still needs to be done. Banks mainly rely on their previous experience to carry on ship finance lending and syndication operations. Although it will be difficult, as it is a path that not many researchers have walked yet, it is a very challenging and interesting topic. If it will be done successfully it will produce results that will worth the effort dedicated.

CHAPTER 3

GREECE

GREECE

The true shipping superpower of the world is actually the small Mediterranean nation of Greece. Greece has a population of just only 10 million people, despite this Greece have been the worlds shipping superpower for much of the past 50 years. Here the real question arises that how Greece become dominant player in one of the world's largest industry.

When we look into map of Greece finds many reasons why the country has a super power in shipping industry over the last 2000 years. Greece's eighty percent of land covered with mountains that have an advantage of downside that tough to grow large quantities of food in mountainous region. So throughout history Greek turned into sea to get fish and maritime trade. And also the Greece has 5000 islands and hundreds of population that will connect through shipping because of the vital activities that connects people through marine activities only. When it comes to geographical peculiarities, firstly that closes to the Suez Canal and has a short land connection to richest nations of Europe. These are reasons why ship owners heavily interested in buying fleet and getting more business.

"Shipping is a pillar of the Greek economy," said, the Union of Greek Ship owners, the ocean-going industry's main association.

Greece's statistics office says shipping contributes around \$9 billion - or 4 percent - of the country's Gross Domestic Product (GDP). When you include related business, the industry says, the figure jumps to 7.5 percent of GDP, or about \$17 billion a year. Deep-sea shipping and related trades employ more than 192,000 people, it says. That's 4 percent of all Greek workers.

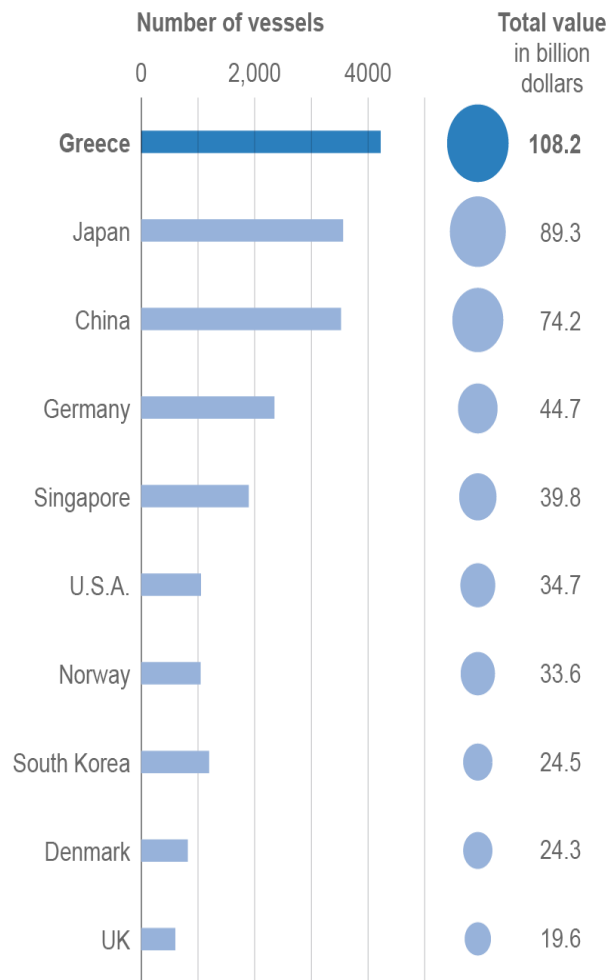
In 1933, Emmanouil Tsouderos, then the Bank of Greece's governor and later a prime minister, published a report which found that shipping was the country's biggest source of foreign exchange. The industry brought in 5.9 million pounds sterling equivalent (roughly \$450 million in today's money), around 20 percent more than tourism, he said.

Greece remains the world's largest ship owning nation, with a fleet of 4,901 vessels, Greek ship owner's control 19.42% of global deadweight tonnage (dwt). In 2020, the Greek-owned fleet grew by over 4% to approximately 364 million dwt.

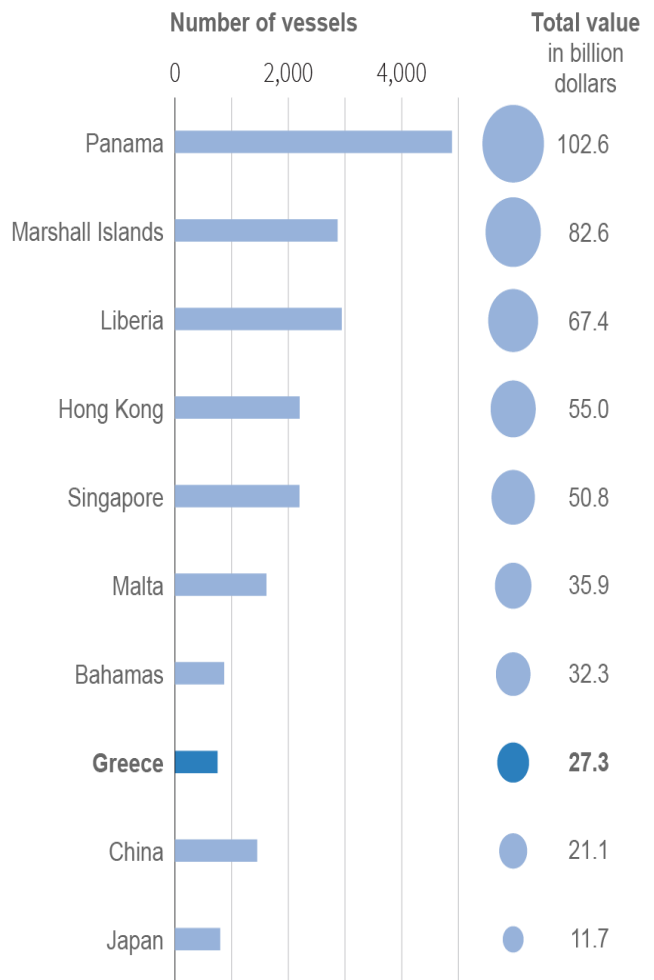
When we look in to top ten shipping nations Greek shipping has the domination over Japan, China, Germany, etc. when it comes to flag state there also a significant position that capsized by Greek.

Top ten shipping nations

TOP TEN COUNTRIES BY MANAGEMENT



TOP TEN COUNTRIES BY SHIP FLAG



Source: Vessels Value

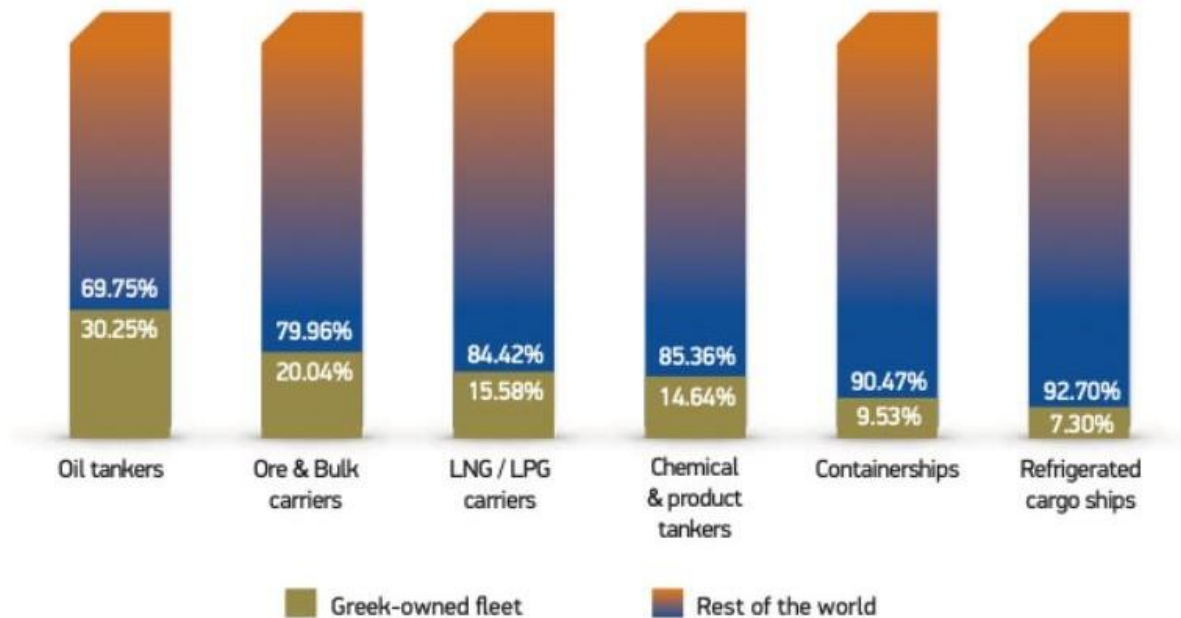
Greece continues to increase its share of the European Union (EU)-controlled fleet. The Greek-owned fleet represents 58% of the EU-controlled fleet, more than a third of the Greek-owned fleet or 1,706 vessels.

Greek shipping is a cornerstone of global seaborne trade: Greek ship owners' control

- 30.25% of the world tanker fleet.
- 14.64% of the world chemical and product tankers,
- 15.58% of the global LNG / LPG carriers,
- 20.04% of the world bulk carriers,
- 9.53% of the world containerships.

Share of Greek-Owned Fleet in World Fleet by Main Ship Type

(in dwt, ships >1,000 gt)



Source: IHS Global Limited, January 2021

From these data we can see how important shipping for Greek and how they spend and earn from business. Oil is the one of the leading market product that carry mostly in Greek owned ships when compared to rest of the individual countries. Ore and other bulk cargoes also catch a leading position in market, about 20% of the bulk that carried by Greek owned fleet in 2021. The alternative fuels like LNG/LPG and also chemicals that carried by 15% of the Greek owned fleet. When it comes to containers and refrigerated items the index go down, but not deep, it also have a profitable level of fleet capacity.

History of Shipping and Ship Finance in Greece

Like most industries, Greek shipping has relied on both traditional and less traditional methods of financing. Greece's history and culture has been intertwined with the sea since the Battle of Salamis against the Persians in 480 BC, when the Greeks trapped the invading fleet in a narrow strait. Historically, ship financing came from the private funds of emerging strong maritime families, mainly from the islands of the Aegean. The modern industry grew up in the 19th century. Trading families bought vessels to transport goods between the Black Sea and northern Europe. The use of these "savings," coupled with the ability of the Greeks to share their expertise with respect to international markets for trade, insurance and financing, as well as by pooling resources whenever needed, led to the impressive expansion of the Greek merchant fleet.

Following the Greek revolution, when Greek independence was achieved in 1832, the Greek merchant navy had around 700 ships. This number doubled to 1,450 within 20 years due to the increased shipbuilding activity at major yards within Greece. Around 1870, the Greeks became aware of the fact that they, too, had to purchase steam-driven vessels to maintain their standing as a maritime nation even though steamships had been introduced more than 50 years earlier. However, these new vessels did not come cheap. Although the government ordered several vessels, private shipping companies used traditional financing methods, like grouping the resources of owners, captains, seamen and their relatives, so that they would be able to expand.

More often than not, they also had to look for older vessels, because funding was scarce, and older vessels were less expensive. Greek seamanship was of a very high quality and the Greeks were able to run their ships more efficiently and with smaller crew, with the owners themselves often sailing with the vessels. The result was that by 1901, Greece had over 1,150 sailing ships and 150 steamships.

Following World War I, when nearly 60% of the Greek merchant fleet was destroyed, and then the Great Depression of 1929, Greek shipping again faced very challenging times. At the end of World War II, the Greek government provided funding for Greek ship-owners in the form of guarantees, and over 100 Liberties and seven T2 tankers were bought by various owners. Liberty-type ships had been built during WWII in the US and were lying idle as surplus war equipment. This, in essence, was the beginning of Modern Greek shipping, and over the next 40 years, Greece came to control the largest merchant fleet in the world.

Additionally, the adaptability of the Greeks to changing markets and political and legislative requirements, and even their readiness to relocate, depending on where the business for shipping was primarily located, has proved to be exceptionally effective over time. Today, the Greek shipping industry is the global leader in terms of both tonnage controlled and the nation's contribution to global transportation, logistics, and world trade. In 2011, there were a total of 762 shipping companies based in Greece. The number of Greek vessels was 4,714 and the 30 largest owners held 52% of the Greek fleet. The cyclical nature of shipping, both in terms of freight rates, vessel values, shareholder returns and financing, constantly presents new challenges in an increasingly complex and competitive setting.

Overview of shipping market

Intensified competition in the shipping markets has led shipping companies to constantly pursue operational flexibility, managerial efficiency and robust financial liquidity. A shipping company can attain business growth following either an internal or external growth path. Subject to freight market conditions, shipping companies can expand their fleet by building new vessels or purchasing second-hand vessels. On the other hand, mergers, acquisitions and strategic alliances (pools) can be an alternative path to internal growth. Nevertheless, these growth strategies, in addition to the need for replacement of older vessels, require substantial capital support and careful financial planning.

Two broad approaches can be distinguished in shipping capital financing: (i) self-sustained (internal) financing and (ii) external financing. The first financing approach is based on robust corporate profitability and implies that retained earnings are sufficient to finance investment decisions. Instead of withdrawing and distributing profits as cash dividends, the management prefers to reinvest these funds and finance new projects. In the second financing approach, the company turns to the international capital markets to raise the required investment funds. Debt financing may come from financial intermediaries' lending or debt markets by issuing corporate bonds or commercial paper. Equity markets, alternatively, can enhance own funding. Fund raising then can be realized through a combination of traditional bank lending, private placements, public issues of equity and bonds, commercial paper and, more recently, securitization.

Capital markets play a key role in the promotion of shipping business growth and value creation by performing the following fundamental functions. As primary markets, capital markets act as intermediaries to provide the funds required to financing new investment projects and sustain business growth. Fresh funds are channeled to firms in need through the issuance of securities. Furthermore, as secondary markets, capital markets provide an efficient mechanism for trading outstanding securities. They contribute, thus, to potential value creation that is reflected on corporate security prices.

CHAPTER 4

SOURCES OF FINANCE

SOURCES OF FINANCE

Companies raise capital in two principle ways; either by issuing equity or debts. Issuing equity involves issuing common or preferred stocks but the debt securities offer a wider and greater diversities. Financing is also a greater industry that integrates with shipping industry to provide adequate fund that needs in different stages of market conditions. The products of the financing industry intend to money in and eliminate competition, so they need market trends in up to date and flexible. This is why new method of financing and raising capital finds by them.

Beyond a private fund shipping industry need much more bigger capital to new building program and second hand acquisition. Bank is the important player in the field of raising funds both traditional, innovative and hybrid ways. Insurance companies also come forward to invest in shipping because of large return of possibilities and earnings. Loans, subsidies or credits, equities and stock markets are the traditional financial instruments. Leasing, mezzanine finance, offshore companies, securitization, venture capital, maritime joint ventures are some of the newer and innovative or alternative instruments to raise the capital for industry.

The capability of a shipping company to navigate the ebbs and flows of the market condition is primarily dependent on the timing of capital investments and its chartering policy, the selection among all these funding alternatives can be of equal importance. Together with the market conditions, these factors also dictate the availability of the financing alternatives that each company has in its arsenal at any given time.

The commercial banks involved different types of funding methods that involves Senior Category, Mezzanine Finance and Lease. Senior Category have subs like 1) bond issue; security issued in the capital market, 2) commercial bank loans; loans provided by bank also large loans may be syndicated between several banks 3) shipyard credit; loan provided by government or agencies that to assist domestic shipyards, 4) Private Placement; debt financed privately arranged with pension funds, insurance company, etc. Mezzanine Finance also comes in a form of private placement that debt with high interest rate and possibly equity rates. Finance lease and operating lease comes under lease category and this involves long term tax effective finance based on sales of ship to company which uses depreciation benefits, may be leveraged.

The public and private equity markets constitute viable sources of ship financing alongside bank debt and other debt alternatives. Although a less traditional source of ship finance, the equity capital markets and private investors offer a plethora of opportunities. A company divides its capitals in to shares with equal or par values. These shares are distributed among shareholders and investors. According to the number of shares in their possession the retained earning can be distributed stockholders in the profitable financial end. It is up to the decision of company heads that the earning or dividend that distributed among owners or retained. Companies are usually retained this dividend to expand their financial stability, so the condition among the investors and firm may or may not be changed. Shares are usually comes from private or public placements, so those are different in all respect.

Public equity is an asset class of which institutional and/or individual investors can purchase ownership in shares of a company through unregulated and regulated public markets. Within the public equity asset class there are different types of equity, depending on the type of company that issued the equity as well as the seniority of the equity. In Greece Athens (ATHEX) Stock Market is the public equity market that can invest and purchase stock from various sources. Since the financial crisis of 2008 and the economic downturn, the shipping industry has experienced an unprecedented level of interest coming from financial sponsors; that is, hedge funds and private equity funds. Hedge funds are private investment funds that invest pools of capital in securities and other financial instruments. These funds typically engage in activities such as creative investment strategies based on active trading and combinations of long and short term investments as well as borrowing money in an effort to increase investment gains.

Shipping companies may start considering the alternative sources to finance because of cost of traditional methods expected to be more and more while gaining large sum of money. Here the users go behind the lease financing especially leasing companies are not subsidiary of bank, private placements and high yield bonds. The lease separates the use and ownership of the vessel. The lessor hand the property over to lessee who, in return for regular lease payment is entitled to use it as tough it was his own for an agreed period. The two most common types of leasing is operating and financing lease. Operating lease is used for hiring equipment and is usually in the form of a short or midterm bare-boat or time charter after which lease can be usually terminated at the lessee's direction, the lease payments do not involve an amortization of the leased property and most of the risk is left with the lessor. When it comes to finance lease is longer, typically used for long term finance of ship, cover a substantial part of the ship's economic and is usually fully amortized. As a financier, lessor has little involvement with the asset beyond owning it, and all operating responsibilities fall in on lessee who in the event of early termination must fully compensate the lessor.

BANK LENDING

The most widely accepted form of company financing is through loans, particularly the ones that use a combination of funding projects and assets. Bank financing is the main source of capital to the shipping industry, providing a flexible and low cost of capital to the shipping companies. Banks are the most reliable and long-term oriented capital providers to the industry, the basic elements in any ship loan arrangement are relatively simple and straightforward. These can be summarized into three fundamental types of borrowing.

- The standard ship mortgage loan with or without assignment of charter party.
- The fixed interest credit for new buildings advanced on behalf of the shipbuilder by a bank with the backing of a state guarantee.
- Financing up to 100% through a lease or bareboat/hire-purchase arrangement.

From the banks' perspective, the shipping industry remains a favorable sector to do business with, despite the volatility and the relatively low margins. Banks manage to increase their returns on low margin financings as vessels change hands on a regular basis causing loans to be refinanced before their maturity. Furthermore, the liquidity and homogeneous nature of the shipping assets allow banks to deploy large amounts of capital with relatively low overheads. Many banks have specialized departments that provide a wide range of banking products to the shipping companies and their principals, ranging from traditional mortgaged-backed loans to interest rate derivatives (i.e. swaps), exchange rate derivatives, freight derivatives, liquidity management, advisory services and investment products through their private wealth divisions.

According to 2014 estimates of Marine Money International, the global shipping loan portfolio is around USD380 billion. European merchant banks have been traditionally the most reliable and consistent lenders to the shipping industry, accounting for over 65% of the global lending portfolio. Germany's HSH Nord bank and Commerzbank, and Norway's DnB, are the largest lenders to the shipping industry.

Despite a recent shift towards alternative financing instruments, such as equity funding and high-yield bonds, bank lending continues to dominate ship finance. Low interest rates and exceptionally strong freight markets over the previous three years have led to extensive vessel new buildings and have kept bank lending steadily robust. Despite a recent slowdown in freight rates, vessel values remain high, at multiple levels compared to previous years. The unprecedented liquidity experienced particularly by Greek ship owners is channeled partially into new buildings or young tonnage. Banks remain positive in lending clients with robust liquidity, conveniently arranging front-loaded repayment schedules by case.

Since Greek shipping ranks on top of world shipping business in terms of tonnage and volume, it is of interest to have a closer look at Greek shipping finance. The trends prevailing in this market segment reflect indeed the structural shifts and prospects for the overall shipping market. In 2006-2007 empirical evidence indicates that the Greek shipping loan portfolio has increased sharply by both Greek and foreign banks. Moreover, this trend seems to prevail, despite robust cash reserves available to many shipping companies. Major reasons for that include loan refinancing at more favorable terms and extensive investments in new tonnage. As shipping markets exhibit some slowdown, rational ship owners proceed to prepayment or refinance of their loans.

Passing to different lending structures to shipping companies, we should say here that traditionally there are three lending structures, the bilateral lending, the syndicated lending and the “club lending”. Bilateral lending is when one single borrower and one single lender are involved in the transaction

One very important aspect of bank lending into shipping is syndicated lending. Syndicated loans are provided by a group of banks, while there is one or more of them, commercial or investment bank, which is called the arranger. Usually the arranger is the bank that provided the largest share of the loan. The arranger or agent will fix the interest rates, provide the accounting services and receive the repayments. Usually we see syndicated lending structure because first of all as already mentioned before shipping is a capital intensive industry. So some banks do not have the required capital adequacy or they prefer to share the risk, especially for some big deals.

Finally, there is also the club lending, where usually the deals are smaller than the syndicated ones, between \$25 m. and \$150 m, while usually the deal is between similarly risk-oriented banks and the arranger is first among equals.

Characteristics of Bank Loans

The bank loan is the most important source of ship finance. Usually the term of the loan is between 1 and 12 years, but recently it is much lower. Typically the repayment profile is up to 17 years and the bank loans are fully repaid when the ship is 20-23 years. However in general these periods have become shorter. Interest of the bank loans is typically based on LIBOR and it is floating, while the currency the transactions are made most of the times is US dollars.

Something that we see very often in the shipping bank loans is the “Balloon” Installment. There is Balloon Installment in a loan when there is a significant amount of the loan paid in the last installment; usually it is between 20% and 40% of the total amount lent. There are some advantages that balloon installment has. First of all, when a loan contains this type of repayment, it immediately helps improve the cash flow of the company. Shipping company is adding one more ship to its fleet increasing the operating profit and in the same time paying a very reasonable amount of money for each of the repayment installments, which usually are quarterly or semi-annual. Another reason is the fact that when the final maturity date of the loan is close, the company can agree for a new loan facility with a financial institution and refinance the current one, improve its liquidity and repay the above mentioned balloon installment. Balloon installment helps improving the financial situation of the company and the image the shareholders have. So a company can survive in the harsh times of the shipping industry if there is capability and success in the search for financing sources.

Another important fact concerning the bank loans is that the number of advances or tranches can vary. Usually a loan is paid to the borrower in one or two advances, and not so often in three or even four. When we are talking about newbuilding finance, then we can talk about pre-delivery and post-delivery finance by the bank. Pre-delivery finance is when one advance of the loan is withdrawn by the borrower before the delivery of the vessel, while post-delivery finance happens after the delivery of the vessel. Banks in general prefer post-delivery finance, letting the ship owner pay the first 30% or 40% of the market value, depending on the terms of the loan. For example in a newbuilding contract there would be five installments payable to the shipyard. One upon receipt of refund guarantee (10%), one upon steel-cutting (10%), one upon keel laying (10%), one upon launching (10%). Finally one upon delivery (60%) would complete the payment. Numbers and percentages are indicative. However what should be mentioned is that it

is preferable for the financial institution to finance after delivery due to the reason of reduction of exposure. After delivery, even if the shipyard goes bankrupt there will not be need for refund guarantee. Moreover, after delivery ship has already legal entity, it can be mortgaged, traded or even sold in case of ship owner's inability to repay the loan.

As shipping business and volatility are two things that go together, the lenders require securities, not only to be secure that the loan agreement will be honored, but also for the owners to be more careful. Usually the most important security is the first mortgage. Before the shipping crisis of 70s, a banker would usually get securities of around 60%. However after the crisis occurred in the 70s, the policy of the banks changed, as a lot of financial institutions collapsed and others kept on carrying the ship owners' liabilities when the ownership of the mortgaged vessels passed to these banks. After the crisis of the 70s the financial system changed and in most of the cases there is extensive caution showed when a loan is agreed. Usually in every loan agreement there is a set of securities.

Some of the common securities contained are the following; Employment of the vessel, First Mortgage, Second Mortgage, Cross Collateralization, Assignment of Income, Retention Account, Pledge of shares in the borrower party, Assignment of the Insurance, Personal Guarantee and Security Maintenance Clauses.

Objectives of lender and borrower

The principle objectives of established lenders into shipping business are to;

- Support their shipping company clients in the development and growth of their business.
- Generate sufficient profits from the loan itself and any ancillary business to meet the return requirements of their shareholders.
- Minimize the risk of making a loss through failing to obtain repayment funds lent.
- Ensure adherence to the increasing level of regulation, capital adequacy and legal requirements to which the lender is subject.

The main objectives of shipping company borrowers vary depending on the ownership and strategy of the company is concerned but generally fall into the following categories;

- Obtain high leverage in order to maximize return on equity. This may be tempered by the borrower's desire or requirement to maintain a conservative financial structure.
- Secure more competitive terms to maximize return and reduce the likelihood of default. This objective may be of less importance should the borrower view the maintenance of their relationship with key lenders as a vital requirement for the future.

How typical loans are assessed, structured and documented; the process

In vast majority of banks the process from initial contact to drawing funds an agreed facility is similar to the following;

- Initial discussion takes place between borrower and lender
- Lenders carry out credit assessment and structure a transaction which complies with the banks requirements and provides the owner with an acceptable facility. A number of indicative terms sheet may go back and forth between lender and borrower until agreement is reached.
- Once agreement on indicative terms is reached the lender will prepare his internal credit paper seeking approval from the relevant credit authority within the bank for the transaction agreed with the borrower. Credit papers vary from institution but are intended to identify the specific risks and mitigants of a transaction, illustrate the credit assessment that has been undertaken and detail the reasoning behind the structure agreed.

- Usually an amount of discussion takes place between the lender and their credit team or credit committee following which a credit approval is obtained. The relevant credit authority may require certain amendments to the transaction which the lender will need to discuss and agree with the borrower.
- A committed offer letter is then issued to the borrower detailing the main terms of the facility that the bank is willing to provide them. The difference between the committed offer letter and the earlier indicative term sheet is that the bank is now committed to provide the facility subject to acceptable documentation and other items, and is now effectively 'on risk'.
- The borrower is usually has a period of time which accept the committed offer by signing and returning a copy.
- After acceptance of the committed offer the letter the bank will appoint maritime lawyer to draft the facility and security documentation, based on the agreed terms of the committed offer letter.
- Once documentation is agreed and signed, the facility is available for drawing subject to various conditions precedent being met.

Core issues:

A number of core issues are important for shipping loans. External finance (debt) should come up to a level and term-horizon (length of repayment period) that prospective investment cash flows can sufficiently meet financing expenses. This point is interrelated to newbuilding price trends, second-hand vessel price prospects and freight rates trends. The cost of funding, as reflected in ship lending interest rates, is a key issue of major concern. Despite declining interest rates in recent years, shipping is a highly volatile and cyclical industry and risk premiums on shipping loans have remained relatively tight. Currency risk is another important issue, associated particularly with potential credit facilities originating from shipyards. To this end, modern hedging instruments, including currency derivatives and currency swaps of varying durations, can contribute to foreign exchange risk control.

Flexibility between lender and borrower is frequently required as transaction cannot possibly meet all requirements of all parties.

One area where conflict arises is pricing. A strong relationship will often only be maintained if the incumbent lender is able to match the lowest pricing the borrower is able to secure. In some cases lenders have had to accept pricing below the level that meets their own return requirements in order to maintain a relationship with a particular borrower.

Another key area of potential conflict surrounds leverage. While some shipping companies wish to maintain a conservative financial profile, others to wish to maximize leverage to reduce the amount of equity they need to commit to a transaction while maximizing their return from the investment. The downside for the lender is that depending upon the shipping cycle, the provision of loan at a high leverage can dramatically increase the risk of a default should a market correction takes place, there by nullifying the key objective- to minimize risk of making a loss.

Mortgaged-Backed Bank Loans

Mortgaged-backed bank financing has been the single most important source of capital for the international shipping industry. With the exception of equity invested by the ship owner, mortgage-backed loans are often the only type of capital in the capital structure of shipping companies. Mortgaged-backed bank debt has been historically around 70–75% of the total capital invested. The weak shipping markets after 2008 and the difficulty in obtaining bank debt financing, coupled with the greater availability of capital from private equity firms and the capital market, has reduced the availability of bank debt to around 50–60%. A mortgage-backed loan uses the ship as collateral to secure the lender's exposure. This means that the vessel has to be delivered from the shipyard in order for the borrower to be in a position to write a mortgage to a lender, a process that takes place simultaneously with the issuance of the loan.

The borrower is typically a single-purpose company that owns the collateral vessel and is registered in a legally acceptable jurisdiction, most likely in Liberia, the Marshall Islands or Panama. This offers the lender direct access to the collateral and isolates the vessel from any claims or liabilities unrelated to the financed asset. In many cases, the holding company that owns the shares of the single-purpose company acts as a guarantor of the obligations of the borrower. A mortgage-backed loan may finance multiple vessels that are cross-collateralized and, when this happens, the loan is usually split in different tranches, which facilitates the repayment in the event of the sale of any of the vessels. This usually happens when the shipping company is acquiring a fleet of multiple vessels that are financed by the same bank or when the lender is asked to enhance the collateral package adding debt-free vessels in order to reduce the leverage of a credit facility.

In Greece, to make a mortgage more attractive to financiers, L.D. 2687/1953 (legislative Decree, Investment and protection of foreign capital) provided for enhanced rights for the mortgagee. It allowed the mortgagee to take over the management of the ship in case of default. L.D. 3899/1958 introduced the concept of preferred mortgage, which further enhanced the rights of mortgagees. There are two types of ship mortgage: (a) the mortgage pursuant to Articles 195–204 of the Code of Private Maritime Law (Law 3816/1958), and (b) the preferred mortgage, which is granted pursuant to Law 3899/1958 on vessels over 500 tons.

In both cases, the mortgage is granted for a specific amount by notarial deed and is registered with the ships register; it constitutes a title giving the mortgagee a right in rem running in priority over any unsecured claims and constitutes an enforceable title.

A mortgagee may liquidate the mortgaged asset (i.e. the vessel) in a private sale or public auction and, in case of a preferred mortgage; the mortgagee has the right to assume management of the vessel. The standard Greek mortgage resembles mortgage on immovable property. However, such mortgages are not flexible.

The amount and terms of the financing determines the cost of capital for the ship owner, and also the ability of the borrower to meet its obligations and navigate through the volatility of the market. As shipping rates and vessel values fluctuate widely throughout the cycle, the terms of the debt must be structured in such a way that the earnings of the vessel can serve the debt covering the cash break-even and the vessels provide enough collateral against the loan outstanding. Therefore, negotiating the financing terms is a key part of the lending process.

The main terms of an asset-backed loan can be summarized as follows:

1. **Financing amount.** Usually ranges between 50 and 80% of the collateral vessel depending on the age of the vessel, the freight outlook of the respective subsector and the available securities, including any existing time charter contracts and other corporate guarantees. In certain situations where there is a long-term contract with a very high creditworthy counterparty, the financing amount can be even higher as the lender's exposure is secured by the charter party.
2. **Tenor.** The duration during which the loan has to be repaid usually ranges between five and ten years and depends on the bank's ability to secure funding as well as the age of the vessel.
3. **Repayment.** The loans are usually repaid in semi-annual or quarterly installments, usually of equal amount, with a balloon at the maturity of the loan. The repayment profile of the loan depends mainly on the age of the vessel. The loan amortization is usually faster than the depreciation of the vessel to assure reduced exposure for the lender. A typical financing for a newly built vessel with a 25-years useful life has a repayment profile of around 15 years, suggesting that the loan is repaid at a pace of 1/15 every year during the loan tenor, with the outstanding amount payable in one balloon payment at maturity.
4. **Interest rate.** Asset-backed debt loans are usually priced as a spread (margin) over LIBOR, which ranges between 100 and 400bp depending on the creditworthiness of the ship owner, the quality and liquidity of the collateral and the competition in the ship financing market.
5. **Fees.** In addition to the interest rate, the arranger of the loan is entitled to fees for arranging and administering the loan. A 1% arranging fee is typical for mortgage-backed loans, while additional annual fees are paid to the agent of the loan.
6. **Securities.** A mortgage on the vessel is the main security that the lender has in the event of a default. However, other securities are also common, such as corporate guarantees from the holding company that owns the collateral vessel, charges on the earnings accounts of the vessel, assignments on any charter contracts associated with the collateral vessel, assignments of the borrower's insurance proceeds and pledges over the shares of the borrower.
7. **Financial covenants.** The most typical covenant on mortgage-backed loans is the value maintenance clause that requires the market value of the collateral vessel to exceed the outstanding loan amount usually by at least 140%. In the event that the market value of the vessel falls below this threshold, the borrower must either provide additional security by way of cash or additional security acceptable to the lender, or prepay the loan to restore the covenant.
8. **Non-financial covenants.** Mortgage-backed shipping loans usually have a number of non-financial covenants that administer the flag and jurisdiction of the borrower, the required insurance coverage, and the manager of the vessel, the regular provision of financial accounts to the lender and the completion of satisfactory technical surveys.

Similar to the financing of real estate assets, vessels can be financed with more than one mortgaged-backed loan provided by separate groups of lenders. The loan that has the seniority is called the "senior" loan and its lenders enjoy a first mortgage, while the second loan is called the "junior" or "subordinated" loan, with the lenders receiving a second mortgage which provides security access to the collateral after the first mortgagees have been served. That allows the company to increase the leverage on the vessel and improve its equity return. When there is more than one mortgage on a vessel, the lenders of both facilities enter into a subordination agreement, which determines the order in which the liens will be paid if the vessel is sold.

The majority of these mortgaged-backed loans are "bilateral", loans between one single lender and the borrowing entity, or "club deal" syndicates, loans between a small group of lenders and the borrower, where one bank acts as an agent of the lending consortium and all lenders share equal, or nearly equal, parts of the fees earned from the loan facility

Newbuilding Financing

Financing of newbuilding vessels follows the same principles as mortgaged backed loans. However, while the financing of a newbuilding vessel that has been delivered is a straightforward mortgage loan, the pre-delivery financing of a vessel under construction is more complicated. In the case of the financing of an existing vessel, the bank has a mortgage on a collateral asset that earns revenue and offers security against its loan exposure. In the case of a pre-delivery loan, the vessel is not available to be mortgaged and there are no earnings that can be used to repay the loan. That means that the loan can be repaid only after the vessel has been delivered from the shipyard, which can be two to three years after the loan is initially arranged. Instead of a mortgage, the borrower assigns the newbuilding contract to the shipyard, which, in the event of default, is transferred to the lender. However, as the contract payments are staggered during the construction period, if the lender defaults, the bank becomes responsible to the shipyard for the completion of the construction. As a result, the risk for the lender is significantly higher than the original loan amount of the pre-delivery financing. Therefore, the pre-delivery financing is structured as a separate loan that will be repaid upon vessel delivery, typically from the proceeds of the post-delivery loan. Most often, the lender that provides the pre-delivery loan is also willing to finance the vessel following its delivery from the shipyard.

Another risk that the bank has to deal with is the event that the shipyard does not complete the construction of the vessel, for example due to a bankruptcy or the vessel having technical problems. Therefore, when the construction takes place in an unproven shipyard or in countries with political uncertainty, the lender may require additional guarantees, which may be provided by the ship owner in the form of additional collateral or corporate guarantees, or from the shipyard, which could involve bank or government guarantees. The shipyard's payments of a newbuilding vessel usually take place in stages with the largest portion paid upon vessel delivery. The timing of these payments, as well as the drawdown of the pre-delivery financing, are negotiable and often coincide with specific milestones of the vessel's construction process (e.g. 10% upon signing of the newbuilding contract, 10% at steel cutting, 10% on keel laying, 10% on launching and the rest upon delivery). Almost always, the shipyard is required to provide the ship owner with refund guarantees from a respectable bank that secures the installment paid throughout the construction process and which is assigned to the lender that provides the pre-delivery financing.

Similar to post-delivery loans, pre-delivery financings fund only a portion of the shipbuilding installments, usually around 50–60%. The drawdown of the pre-delivery loan could take place on a *pari passu* basis with the equity financing, although the lenders may require the full, or at least a large part, of the equity to be paid up front.

FINANCING FROM CAPITAL MARKETS

The capital markets have become an essential source of financing for the shipping industry. The expansion of the global fleet and the increasing need for funding has led shipping companies to seek funds from the capital markets.

At the same time, the growth of global trade, especially after China's entry into the WTO in 2002, and the anticipation of high returns associated with this growth, increased the visibility of the shipping industry to a wider universe of participants beyond the traditional market participants such as ship owners and European banks. Today, hedge funds, pension funds and every type of institutional and individual investor have the opportunity to invest in the shipping industry through debt or equity securities. New York, Oslo, Hong

Kong and Singapore are today the most important financial centers for shipping companies that seek to raise capital outside traditional bank debt financing. Corporate bonds, convertibles, preferred equity, common equity, private placements, master limited partnerships and private equity are some of the products that are available to shipping companies. In the aftermath of the 2008 financial collapse, capital markets have managed to close the funding gap created by the withdrawal of many European banks from the shipping market and the gradual shrinkage of their portfolios.

Equity Financing

An alternative source of ship finance is equity financing. Either the ship owner invests his or her own money or sells equity shares in the company. In other words, the owner gives up some portion of ownership in the company. Equity financing is another way of raising funds for the building of a new ship or ships, especially if the company is "all borrowed up" or is involved in a risky shipping venture. Equity here is in the sense of ownership in or shares in the profits or future value of the shipping company. The sources of equity funds may come from the shipping company's retained earnings, or out of cash. It may involve the sale of assets. It may also involve the sale of stocks (shares) in the company (common or preferred stock). Finally, it may involve forming limited partnerships.

The sale of shares may involve (1) common stock, (2) preferred stock or (3) convertible preferred stock. Common stock carries voting rights that can impact on the managing of the shipping company. Preferred stock does not have the privilege of voting, but has the advantage of being paid dividends before they are paid to other shareholders. Convertible preferred stock is preferred stock that can be converted to a defined number of shares of common stock, which is another option of the shareholder. The many shareholders in large publicly traded companies exercise their voting rights by electing members to the board of directors. The company managers and board members have a fiduciary obligation to the shareholders.

The size of Greek shipping has attracted a large number of Private Equity Funds, looking for high investment returns. A number of them are deal driven selectively lending or investing in specific projects with short horizons. Increasingly, though, funds such as Entrust and others are looking to invest in shipping Groups private or public, seeking capital appreciation over the short to medium term. In addition, a number of investment /chartering/financing schemes have developed offering the opportunity of limiting owners' participation to 20% but with a relatively low breakeven and some sharing between owners and financiers of the profits. Such investment/

financial schemes and other tailor made financial products have assisted a number of Greek owners to grow their fleet, ahead of the recent market improvement.

Private equity funds are typically limited partnerships with a fixed term of 10 years (often with annual extensions). Usually a prospectus is made and released when a shipowner is starting cooperation with a fund. At this prospectus information is contained concerning how many and what types of ships will be purchased, strategy, return to the investors and exit scenario in case things not work as expected. At inception, institutional investors make an unfunded commitment to the limited partnership, which is then drawn over the term of the fund. From investors point of view funds can be traditional where all the investors invest with equal terms or asymmetric where different investors have different terms. Usually equity funds are based in tax friendly environments, like Cayman Islands or Bahamas.

A private equity fund is raised and managed by investment professionals of a specific private equity firm (the general partner and investment advisor). The ship owner who will be the technical and commercial manager usually enjoys a degree of limited liability. He will receive fees for the management of the vessel. Usually banks or rich tycoons will underwrite portion of the equity capital. Then it will be promoted through market specialists and sold in international capital markets. That is one of the reason funds that are listed in the stock exchange are generally preferred both by ship owners and by individual investors. Typically, a single private equity firm will manage a series of distinct private equity funds and will attempt to raise a new fund every 3 to 5 years as the previous fund is fully invested.

There are several benefits to bring able to purchase a vessel with cash resources. One of the principle advantages is the ability to act quickly and with certainty. As with many other asset classes, sellers of ships often have a preference for dealing with buyers who are able to pay for the subject vessel mostly in cash. Another key benefit is that the flexibility. This can be especially important in situation such as vessel auctions where a cash buyer can easily increase their bid if desired without needing to seek the approval of their lender if an initial price level exceeded. Further benefits include the ability to continue operations unrestricted by covenants and conditions often included in financing arrangements, particularly in bank loans.

Some well-known private equity funds are the German KG, the Norwegian KS, UK tax leases, US pension funds and US finance organizations. Private equity funding is relatively flexible and in general independent. Private equity funding activating in shipping finance happens especially in occasions like now. The shipping market is low; bank lending is not available for anyone, it is only available to the well-known shipping companies with the strong balance sheets. According to gallops and pole voting, shipping industry people are expecting the market to recover in the next one or two years. This gives the opportunity to independent investors like the private equity funds to invest in shipping companies with high expected returns, higher than if the investment was in any other industry, when the market recovers. However, like in every kind of investment, in private equity fund timing of placement is very important. Investing when the market is at the highest levels, like 2008, most probably is not favorable, as profit margin is limited; market is already high

Despite the fact that bank lending continues dominating shipping finance, a gradual shift in shipping firms' funding attitudes has been apparent more recently in favour of international equity markets. This shift has been associated with the interactive impact of critical factors, including internationalization and integration of global capital markets; deficiencies and

consolidation of major banking players; emphasis on capital adequacy and ‘solvency ratios’ by banks, shipping firms and investors; liquidity constraints and erosion of firm capital reserves; substantial funding requirements to replace ageing fleets; structural and cultural adjustment of shipping firms, partly induced by capital market requirements and investors’ expectations; extrovert market approach and promotion of wider multi-share holder ship; market visibility and prestige towards institutional and private investors; emphasis on the concepts of corporate governance, social responsibility and business ethics.

Expanding on these issues, major advantages for shipping firms going public include: (i) access to capital markets that are not readily available to private companies; (ii) liquidity, at potentially higher valuations, if the company’s fundamental are compelling enough to attract new investors; (iii) stock options as a means to attract and retain key personnel; (iv) opportunities for companies to utilize their stock to acquire other companies. However, the long-term attractiveness of international equity markets for shipping companies will only be sustained in case freight and equity market performance remains robust and corporate profitability is less volatile.

Until 2004, equity markets had played only a marginal role in shipping finance, despite their prime role as an investment funding mechanism. From an investor’s point of view, historically, shipping stocks were not a particularly attractive choice for fund allocation but had a rather ‘negative’ reputation. This adverse attitude can partly be related to a series of shipping defaults in the 1990s, including, bank loans, high yield bonds and corporate bankruptcies. Other reasons include close family ownership ties, reluctance of ship owners to dilute company control, non-disclosure of sensitive company information and the unattractiveness of shipping stocks due to volatile earnings (Syriopoulos, 2007). Shipping companies only recently have discovered the virtues of public listing on international stock exchanges. The shipping IPO wave, during 2000–2007, has tackled investors’ appetite, as the latter also discover the attractiveness of exchange traded shipping firms. This trend has been supported by booming freight rates and strong balance sheets in an environment of bullish stock markets. Steady growth rates in the US economy and high growth rates in the Chinese economy, particularly during 2003–2007, led the shipping sector into a unique growth super-cycle during 2002–2008, generating strong earnings and cash flows.

Shipping IPOs are distinct from those of ordinary industrial or service companies. The market value of a shipping company is often closely associated with the underlying value of the physical assets (vessels). In this respect, shipping IPOs bear similarities with the respective IPOs of closed-end funds and property firms. Furthermore, due to extensive information flows in international vessel sales and purchase markets, shipping IPOs tend to exhibit lower information asymmetry. Due to the cyclical nature of shipping business, shipping firms tend to prefer listing on the equity markets whenever shipping market prospects appear to be robust.

Private equity

Unquestionable, it is the most direct type of capital. Although large profit is made with better leverage- that is small equity participation in a project- the role of equity should not be disregarded. As in each case of finance scheme, is potential opportunity here too.

It must be clear that along with the volatility of the values in asset opportunity for profit is inherent. The American Marine Advisor point out that a disciplined private equity placement should be able to earn a decent 20% annual return. The advantage in exploiting equity capital should be kept in mind whenever a finance scheme is being conducted. Among them are that is much easier to achieve goal alignment when depending on direct equity. Moreover, it is definitely more liquid than most public stocks or bonds.

However, the property of an enterprise should be cautiously manipulated leaving no room for misplacement. Investing private equity must be a decision taken an opportunistic market condition and based onto solidly managed, detailed business plan. Care must also be paid into the development of a potential exit strategy and the ability to use leverage.

Private placement

Still, the concept behind private equity funding is to raise money by issuing shares, to be traded in a private market. Here too, common as well as preferred stocks may be issued. It is useful to see the advantages and disadvantages of private placement against the public distribution of shares.

Advantages

- Private equity funding provides the ease of partnering with people who know about the industry- not bankers or investors/ stockholders.
- The regulatory framework is less than in the case of public placement, where the company must fulfill certain criteria.
- Company's inner information is not spread at large.
- The brokerage commission and underwriting fees necessary the registering and selling of the stocks, are considerably less.

Disadvantages

- It is more difficult to obtain high amounts of money privately, as it is publicly.
- Large investors may monitor the company's performance more than the public and achieve voting control.
- Investors cannot easily resell their securities.

International capital markets assist industry to raise equity capital to finance expansion. Nevertheless shipping, being traditional and old fashioned, has not so far exploited the dynamics provided by the stock markets up to the extent that it is possible. Oslo, Tokyo, and London hold major capital markets where shipping issues are traded. Until recently, listing in the Athens Stock Exchange of shipping companies other than the few Greek passenger- transporting was forbidden. Now however, a new form of legal entity has been introduced that enables such a listing, indirectly. Shipping companies stock may be traded through a special type of holding company developed for this reason.

Inevitably, the role of stock Exchange will become more substantial as banks regroup changing the scenery. Mergers or exits out of the shipping industry, weaken the aggressive competition among the remaining banks.

Due to conservatism the shipping company of today is hardly distinguishable from its predecessor of 100 years ago in culture, business practice and technology. However, the landscape around shipping has changed dramatically in the last 100 years with an accelerating pace towards the end of the millennium and shipping has failed to adapt. In the process, most shipping companies have become weak if not obsolete competitors placing themselves below investment grade by most institutional investors.

Capital markets have historically not featured in business as they do today; for masses, investment has tended to be unsophisticated. But even though shipping company public offerings are addressed to and powered by, institutional investors as shipping is too small to attract the public.

Public equity

As opposed to investment made directly in private companies, public equity can be defined as shares that are quoted on a stock exchange and tradeable between third parties.

Apart from a collection of large shipping companies that have been historically been listed on stock exchanges, the shipping industry and the public equity markets were not seen as very compatible until recent years.

There are many reasons are there but major ones can be considered as:-

- Levels of transparency required as pre-requisite for a public listing
- Corporate governance requirements and perceived ceding of control
- Lack of analyst coverage of the sector leading to poorer share performance.

Over the recent years the shipping industry has accessed the public equity market on more occasions than ever and many ship owners have become familiar and more accepting of the transparency and corporate governance requirements of the financial regulators concerned.

As more companies have become listed and critical mass has begun to form, centered on certain exchange, analyst coverage has to begin to improve. This enables potential investors to garner an independent view of risk and reward of investing in a particular share and to form rational expectations on the likely future performance of their investment.

Unlike private equity where there are funds of all sizes available to consider small as well as large investments, public equity normally requires that a company seeks to list a very sizeable number of shares.

The primary reasons for this is significant cost involved in arranging an IPO- the first sale of stock by private company to the public.

Compliances with the multitude of rules, regulations and laws surrounding to the public issuance of shares, compared with the under regulated private equity industry, requires input of the team of specialists to ensure all pre-conditions are met.

Advantages and Disadvantages of Being a Public Company Being a public company offers a range of advantages and disadvantages that shape the key decisions surrounding the corporate structure and various financing options.

Advantages	Disadvantages
Higher company valuation	Extensive listing requirements
Ability to fund growth	Business transparency
Increased liquidity, improved access to capital and reduced need for alternative financing options	Pressure from market to focus on short-term results and hit earnings estimates
Better economics for raising capital	Costly process
Ability to use stock as currency for acquisitions and assets	Increased scrutiny of management
Human resources	Risk of takeover and loss of control by

	founders and management
Exit and requirement strategy for founders, investors, and shareholders	
Public credibility	

Public equity played a minimal role in the shipping industry up until the early 2000s with IPOs few and far between. The booming freight rates and robust global trade fundamentals, especially the industrialization of the Chinese economy that drove strong demand for raw materials, supported high charter rates and boosted shipping asset values higher, which in turn drove favorable company valuations. The strong fundamentals provided shipping companies with the ability to promise investor’s high dividend yields and potential for capital appreciation. As the shipping industry’s relationship with the public equity market has developed, the composition and characteristics of public shipping companies has evolved alongside it. In the early 2000s, shipping companies with small fleets, often with a vessel count below ten, found enough traction to go public. In the past couple of years, the shipping equity landscape has altered and mainstream shipping companies operating in dry-bulk, crude oil tankers or the container shipping segments find that the potential for extensive scale economics is viewed as essential. Therefore, a larger fleet of on the-water vessels and/or contracted new buildings is often critical to launch successfully in the public equity markets.

BOND ISSUANCE

Bonds are written down debt obligations. A bond holder is entitled to receive annual or semi-annual interest payments – also known as coupon payment- until maturity date, when they receive the face value of the bond. An issuer of bonds seeks of cheaper debt finance, compared to traditional bank loan therefore one is addressed to bond investors which may be individuals or institutional investors.

There are corporate bonds of every conceivable maturity. Almost all issued debt obligations are unsecured. Long-term unsecured issues are called debentures, whereas shorter term issues are called notes. Should a bond be secured, trustee or lender may take possession of relevant assets of the firm. Utility company bonds are usually secured. The most famous secured type of bond is a mortgage bond.

There are several bonds that in usual practice;

Asset backed securities: - They are bonds that are based on underlying pools of assets. A special purpose trust is set up which takes title to the assets and the cash flows are delivered to the investors in the form of an asset backed security. Residential mortgages to credit card receivables up to music recordings royalties are some of the asset types that can be securitized.

Convertible bonds: - Such a bond gives the holder the right to exchange the par amount of the bond for common shares of the issuer at some fixed ratio during a particular period. Their conversion feature, gives them characteristics of equity securities this way extending the fixed income security feature.

Corporate Bonds: - the creditworthiness of corporate bond is tied to the business prospects and financial capacity of the issuer. Companies issuing bonds, receive credit rating which is either ‘investment grade’ or ‘below investment grade’.

Eurobonds:- bonds dominated in a currency that is not the currency of the country where the bonds are issued and therefore traded internationally. Such a tactic may be adopted when the issuer speculates that the foreign currency’s performance will offer an advantage within the maturity period.

Government bonds: - Bond issued by the governments. They withhold minimum credit risk as the issuer will meet its debt obligations even if it involves printing more money. Of course this action causes inflation.

High yield bonds: - As mentioned earlier, corporate bonds usually receive a credit rating. High yield bonds are corporate bonds, rated below the investment grade benchmark, that offer a higher coupon to mitigate the risk inherent and consequently attract investors. They are called junk bonds.

Inflation linked bonds: - It is bond that gives protection against inflation. In most countries the customer price index is used as an inflation proxy. As the principal amount increases with inflation, the interest rate is applied to this increased amount. At maturity, the principal is repaid at the inflated amount.

Mortgaged-backed securities:- It is a security that is based on a pool of underlying mortgages. They are usually based on mortgages that are guaranteed by a government agency for payment of principal.

Islamic Finance

Another form of banking and finance is Islamic finance or Islamic banking. Islamic finance is mostly activating trying to help private or semi-private organizations within the Muslim community to develop their business activities. What is very important here is that Islamic finance institutions are operating under the regime of certain Muslim rules, also known as “Shariah”. The basic principle of Islamic banking is based on risk-sharing which is a component of trade rather than risk-transfer which is seen in conventional banking. Islamic rules do not allow making profit out of interest rate (“Riba”), so in Islamic finance, financial institutions operate obeying rules that have been created to prevent profit making through interest rate (“Fiqh al-Muamalat”). For example instead of leasing and making profit out of interest, in Islamic finance the finance institution is buying the asset and charters it out to the interested party at a little higher price than bought.

Although Islamic finance techniques were initially designed to support mainly Muslim business, recently it is becoming widely acceptable and there is some international cooperation, while in the same time the idea of a European shipowner getting financed from an Islamic bank is not something impossible. It is really attractive for foreign shipowners considering the liquidity of Islamic financial institutions and the fact that Islamic finance is developing around 10% year to year. What is really important is that Islamic finance price-wise is highly competitive compared to western traditional lenders like shipping banks. There was already cooperation between western banks as advisors and Islamic banks together with Japanese banks as agents. In the same time there was help provided by western law firms in order for Islamic finance institutions to get know-how and legal advice in operating as ship financiers.

Mezzanine Financing

Mezzanine finance represents a combination of the characteristics of debt and equity (in many cases it is viewed as representing “quasi-equity”). Financial institutions providing this type of financing agree with the borrower, its shareholders and its senior lenders that the financing provided by the latter will take priority in terms of repayment and security. Mezzanine lenders will enter into a junior or subordinated financing agreement which regulates the lender’s ability to be repaid, usually only from the surplus income which may be generated by the borrower after the senior loan has been serviced and operating expenses have been paid. In the absence of such a surplus, there will be no payment to the mezzanine lenders under the subordinated financing agreement. Mezzanine lenders, who rank between the senior lenders and the shareholders, are rewarded for assuming a significantly greater level of risk—as compared to the senior lenders—with a higher return in the form of a higher interest margin, a fee or “promote” (an agreed percentage of the profits or income of the borrower, usually above a certain threshold) or even the right to convert their debt into shares of the borrower. Any such fee or promote will be payable on the condition that certain targets (set by reference to the internal rate of return, net positions, income, etc.) are achieved and will allow the mezzanine lender to share in the profits of the borrower or to receive shares in the borrower (or a right to buy shares at a pre-agreed price within a specified period, in the form of a warrant).

As explained above, the position of a mezzanine lender is similar to that of an equity holder, as the lender has the right to participate in the profits of the borrower even though, strictly speaking, the lender is a creditor who expects its debt to be repaid in full, subject to the usual risks of insolvency of the borrower. While the senior lenders are also exposed to the risk of insolvency of

their borrower, their exposure is less because they will always rank ahead (both in terms of rights to the borrower's cash flow and security) of the mezzanine lenders. The safer position assumed by the senior lenders (who will almost always provide the large majority of the debt) is reflected in the amount of their return (usually significantly lower than that of the mezzanine lenders) and also by the fact they will not usually have a right to participate in any of the borrower's profits. While there are some specialist providers of mezzanine debt to shipping companies, in many cases the same syndicate of lenders will provide both the senior debt and the mezzanine debt, whilst the extent of the participation of each bank in the senior or the mezzanine debt will vary and depend on its risk appetite.

LEASING

Leasing and bareboat chartering is an alternative way of ship finance. It can be either operating lease or financial lease. Economists consider leasing as the third most important source of finance. It is a 100% financing method, which is strong relief to a ship owner, especially on high ship price time. Traditional finance, scarcely does it cover 80% of the project, requires mortgage over more than one ship and a neat long term charter as an indicator of a secure cash flow. This scheme does not require additional guarantees.

Tax allowances are significant and for many, the most important aspect in a lease scheme. A ship owner repaying a loan is taxed on the premium and allowed for in the interest charged by the bank. Conversely, the lease payments are normally allowable in full, for tax purpose. Even more, asset does not appear in the balance sheet of the ship owner. The lessor likewise enjoys tax allowance merits from depreciating expensive asset such as ships.

In occasion where proprietorship is demanded such as confiscation based on the first preferred mortgage, intensive care of law and a lot of time delay shall be needed. In a leasing scheme, ship is always the bank's asset, which makes the repossession smoother than mortgage enforcement.

There are three matters to consider though, the revenue risk, operating risk and the residual value risk. To make these matters more clear, two types of leasing scheme have been developed; financial and operational. They are based on much on the same concept except for slight differences.

Financial leasing

In financial leasing, the transaction covers the asset's economic life. The lessee then, purchases the asset at the end of the agreement at nominal price fully depreciated and consequently acquires the residual value risk. Specific type of financial leasing is the sale and leaseback transaction. It is when the owner of asset sales is to a leasing company only to rent it back under the rules of a lease agreement. In shipping financial leasing is known as bareboat charter.

Usually the lease companies agree with owners to buy their vessels. Then leasing companies' bareboat the vessels back to the owners for example for 10 or 15 years. This allows the lessor to make use of the vessel without tying up capital for it. During bareboat chartering the charterer bears all the costs of the vessel, like crew management, insurance and maintenance, but in the same time enjoys all the benefits and the profit making. Very often the contract says that the owner should buy back the vessel after certain period at a certain price. So the owner knows the cost of the deal in advance. The return for the lease company is also known in advance and it is usually above 15%. The cost of such a deal is usually higher for an owner than the cost of the traditional bank finance and debt. However a sale & leaseback deal like this offers an owner 100% or close to 100% financing of the vessel's value, something that is extremely rare in bank financing.

One of the main advantages that sale & leaseback deals have is the fact that it is a way of financing 100% off-balance sheet. This means that a ship owner has the opportunity of accomplishing a new project without further burdening the balance sheet with long term liabilities. This can make a shipping company have a better financial image and increase its credibility and creditworthiness. It can be easier for a company that has a less burdened balance sheet to secure a loan from the bank. The bank considers this company as being less risky in comparison with another that has a lot of liabilities. These liabilities can be reflected in Equity / Liabilities Ratio, which improves by acquiring more assets, like ships, and by having fewer liabilities, like loans etc. Speaking about the fact that sale & leaseback is an off-balance sheet

transaction, another advantage of it is the fact that the ship owner does not have to face the residual value risk when there is no repurchase option. When a market is low like today, the prices of a vessel decrease. In that case the ship owner will probably produce loss as the assets on the balance sheet of the company will have lower value. Another very important advantage of sale & leaseback deals is the fact that it gives the opportunity to ship owners to complete new projects. For example, when a ship owner agrees with a lease company to sell his vessel and lease it back, with the money he gets by selling his vessel he can buy a new one and in the same time lease back the old one. Cash is released and can be employed elsewhere. By this way sale & leaseback deals give the opportunity to shipping companies to increase further their fleet. Something else that is very important with the sale & leaseback deals is the fact that the liquidity of the owner improves very much. And in times like now, when a lot of companies go bankrupt, cash is king. Tax benefits provided with this type of leasing deals should also be mentioned, as well as attractive Net Present Values.

Another characteristic of the sale & leaseback deals is the repurchase clause of the deal. According to a sale & leaseback contract, a ship owner usually has the obligation to repurchase the vessel after certain period at certain price. However, there is also the case that a ship owner can have the option of repurchasing the vessel after certain time period.

We should say here that except all the advantages that a sale & leaseback deal has its drawback is the fact that it is more expensive than for example the traditional way of financing through a loan from a bank. As previously mentioned, the return for the leasing company is more than 15%. Return for the bank for a loan would be 5-7% including LIBOR. Another disadvantage is the fact that it is not easy to terminate a leasing deal prior to maturity. It can lead to large termination costs. But yet, if the benefits of an S&L deal outweigh the extra cost, then it is on the judgment of the owner to decide what to do. For example there are companies like Oldendorff Carriers, which do not have a lot of self-owned vessels, they mostly lease them. While operating a 400 ships fleet, Oldendorff owns only 30 of them.

Except the Sale & Leaseback deals there is also the Bareboat Charter, where the charterer and operator does not need to bare the capital costs for the acquisition of the vessel. For that reason he will pay a small but risk free premium to the owner. The charterer will be then responsible for the management (crew, stores, fuels, lubes, repairs & maintenance) and the insurance of the vessel. Some key points in bareboat chartering is the fact that the ship owner should charter out a seaworthy, well-constructed and maintained vessel without defects in order for the charterer to enjoy smooth operation of the vessel. Another key point when we are talking about bareboat chartering is the fact that the charterer, when bareboat chartering term is coming close to maturity, should not stop maintaining the vessel. He should also not stop paying the insurance; he should not avoid passing the vessel through the 5-year planned maintenance and other obligations a ship manager has because the vessel will shortly return to the original owner.

Operational leasing

A financial leasing is considered to be more flexible. The lessor is required to maintain the equipment leased, resuming the maintenance cost which may be negotiated in a separate contract. This type of lease may not contain full amortization of the asset cost because the lessee preserves the right to cancel the agreement and return the asset before the stipulated expiry date. The shorter term structure of operational leases, result in the lessor assuming the residual value risk.

Nevertheless ownership retention from the part of the lessor brings in potential dangers. Supposing there is a claim from a third party for damages or even worse- for environmental

pollutions; the financier is exposed to the statutory and common law liabilities arising from that claims. Moreover being the legal operator of the asset, the lessee may involve it in liabilities that rank in priority over the ownership claims of the lessor, such as maritime liens.

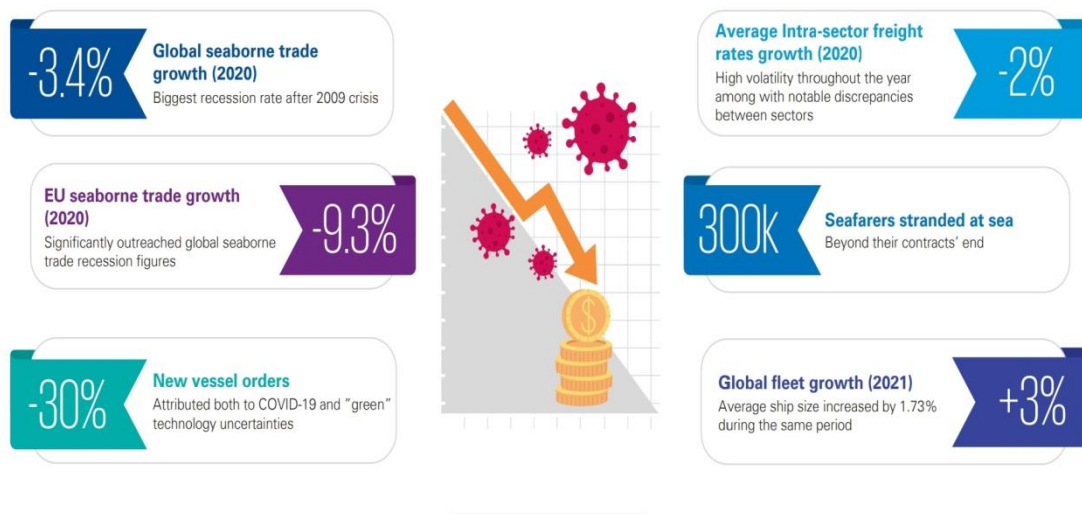
CHAPTER 5

DATA ANALYSIS

DATA ANALYSIS

Since 2020, the increased demand for manufactured products during the COVID-19 era, has led to a sharp rise in the container and dry cargo freight rates, breaking the BDI and FBGCI records of the last 10 and 13 years, respectively. On the contrary, Tanker freight rates were reduced by almost 50% just a few months after the first lockdowns. At the same time, the shipping industry presents new trends and challenges related to the development of technology.

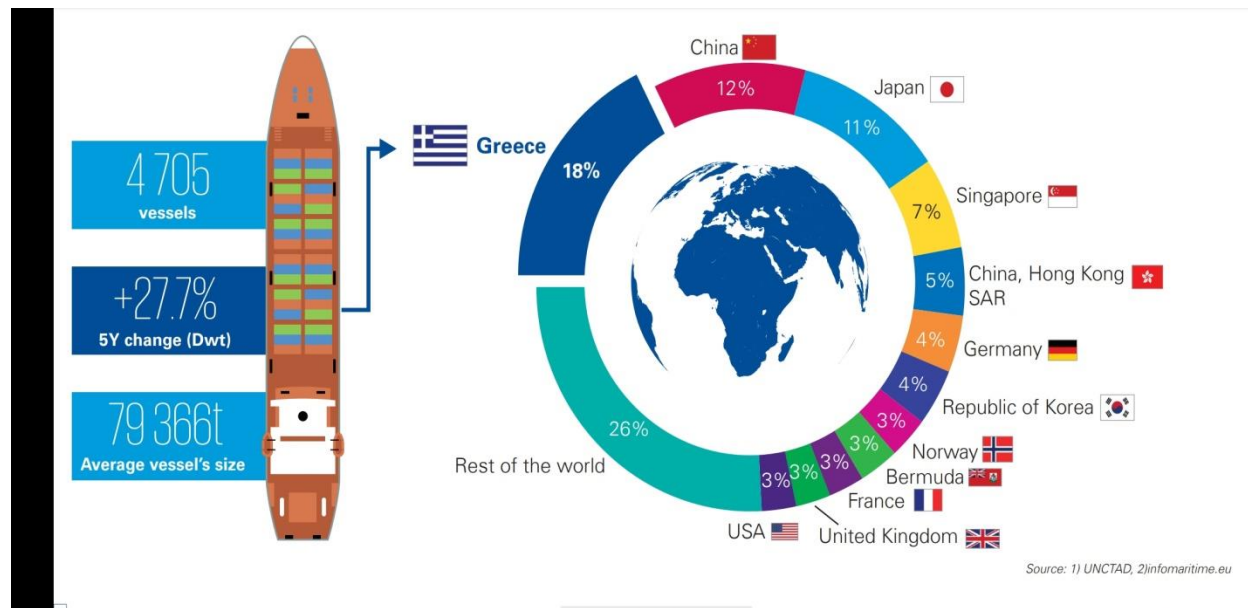
Impact of COVID-19 pandemic



Firstly, the importance and implications emerge of the relatively recent compliance regulatory framework aimed at minimizing Sulphur emissions emerge. In addition, the 400% increase in cyber-attacks due to COVID-19 brings to the fore the use of new technologies, aiming at improving cyber security. The performance of the shipping industry is due to multifactorial conditions that are influenced by external components, so the question arises of the search for alternative ways of financing as well as an immediate and efficient response to the risks that arise. Finally, a challenge for the industry is the forces of supply and demand, as the oversupply of ships implies a percentage reduction in the cargo and freight market.

At present, approximately the 90% of world commodities' trade (in terms of capacity) is seaborne, while the global fleet increased by 67% during the last decade. Specifically, Greece ranks 1st globally in ownership of merchandise vessels, presenting a 28% increase in owned capacity in the last five years, while the average vessel's size is almost double, which indicates that Greek ship-owners mostly operate in high volume markets. Also, recent data show that

Greek ship-owners are heavily investing in growing their fleets with new buildings, maintaining the average age of Greek-owned fleet's lower than the global average.



Sector's historical growth is strongly related to the changes of global world stage, affecting directly the demand for shipping services. Since 2020, the increased demand for manufactured products during the COVID-19 era, has led to a sharp rise in the container and dry cargo freight rates.. On the contrary, Tanker freight rates were reduced by almost 50% just a few months after the first lockdowns.

Freights remained volatile and relatively low, vessel prices were relatively low and bank lending was restricted to the top names. The Greek fleet is, nevertheless, still expanding, in terms of numbers, age and size. Confidence in shipping is still evident and strategic considerations are at work to render owners ready when the market recovers. The data obtained from our research is indicative of a very active market, a positive outlook for the future and continuous emphasis towards larger and younger vessels. It seems as if Greek shipping took a breather in 2019

Year	DWT	AVERAGE AGE	AVERAGE VESSEL DWT
2001	150,978,565	21.41	36,734
2002	166,931,748	20.58	40,302
2003	171,448,133	20.51	41,970
2004	184,288,917	20.12	44,046
2005	176,411,750	19.9	44,436
2006	194,486,455	19.14	46,707
2007	208,001,159	18.7	47,860

2008	222,368,331	18.4	48,926
2009	237,288,216	17.6	49,820
2010	242,802,092	16.4	52,160
2011	256,174,041	15.92	54,343
2012	263,635,420	14.7	57,600
2013	281,467,983	14.055	61,550
2014	303,579,176	13.252	64,495
2015	328,254,495	12.729	66,868
2016	361,934,047	12.186	69,203
2017	387,256,616	11.84	73,330
2018	412,310,405	12.08	74,857
2019	426,909,330	12.245	75,922

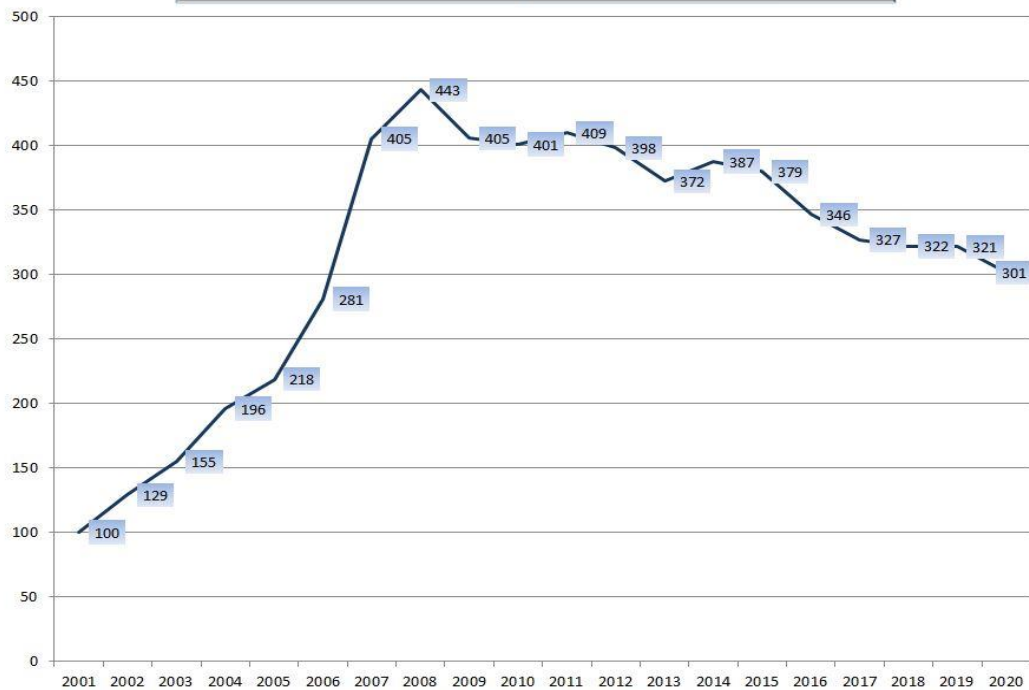
From 2001 to 2019 data are provided above, that shows the trend of Greek fleet continues to increase by the last two decades. The average age indicates how long a ship became part of fleet and seaworthy. The practice that using by the shipping companies, that repositioning of the old vessel by new one in a small time gap to improve efficiency of the fleet. The carrying capacity of the fleet increased over the years, by these they can earn more.

THE PETROFIN INDEX

- The Petrofin Index for Greek Ship finance, which commenced at 100 in 2001 and peaked at 443 in 2008, fell from 321 in 2019 to 301 in 2020.
- According to The Petrofin Index for Greek Ship finance Bank, ship finance for Greek shipping has declined further year over year by 6.24%. The overall Greek loans booked both in Greece and worldwide as of 2020 fell to \$49,794.51, compared to \$53,107.8m in 2019.
- Greek banks form the only group that shows continuing support and growth in Greek shipping. The upward trend that started in 2017 went on during 2020 and their portfolios are up by 19.76% YoY, the biggest growth of the last few years
- The number of banks involved in Greek ship finance has gone up to 56, compared to 55 in 2019 and 52 in 2018. New additions came from Japan (Tokyo Century Bank and Mizuho Marubeni Leasing Corporation).
- The decline of Greek ship finance bank lending reflects the difficult regulatory and operating environment by banks, primarily in Europe. Comparatively, Far East lenders and leasing companies operated under more supportive conditions. Greek banks are the exception, as they benefit greatly from Greece's hugely improved S&P and Moody's rating, a lower cost of funding and attractive loans and ancillary business returns, as well as robust loan portfolios.

Petrofin Index

The Index of Greek Ship Finance – as of end 2020

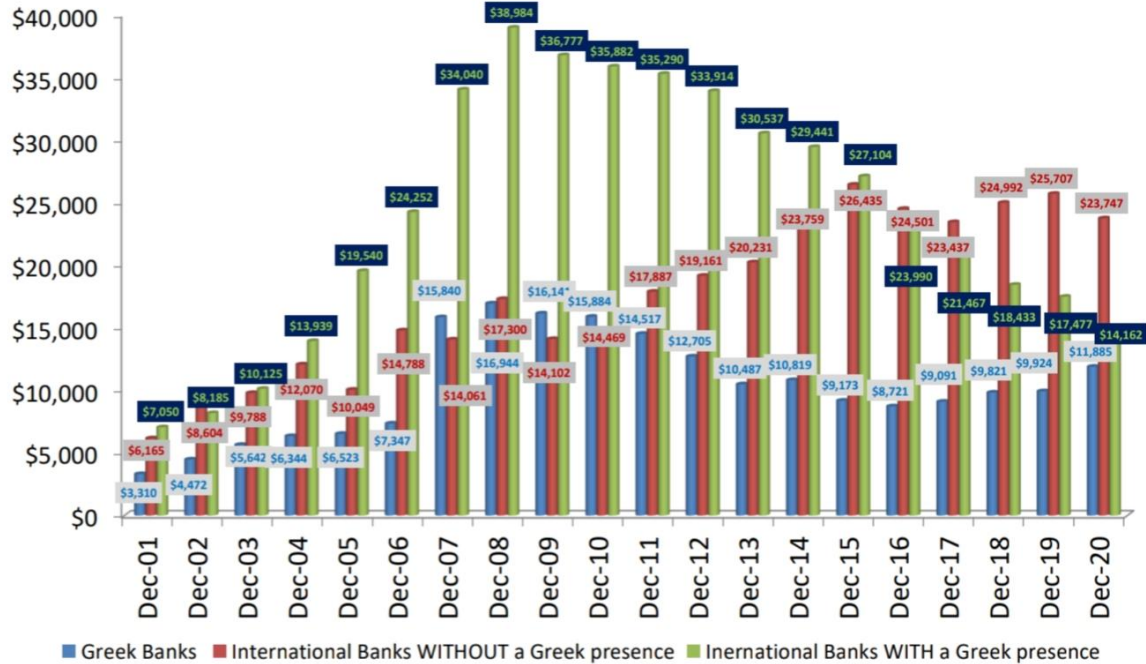


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Year 2020, despite the pandemic, was major growth and commitment for Greek banks, which are up by 15.22% in their drawn loans and a very impressive 127.21% in their forward commitments. The other bank groups show steep declines. On a closer look, we note that 2020 looks like a year interrupted. This is extrapolated from the rise of the commitments that ALL groups showed in the year 2019, compared to their performance in 2018 and then the fall in 2020 to 2018 levels. Only Greek banks went ahead despite the parameters governing 2020.



Greek shipping bank portfolios since 2001 – per bank group
 in US\$m



- All geographical areas have shown declines in the last 5 years, except for France & Belgium and Greece.
- European banks have lost a lot of ground, with the exception of Greek banks. Far Eastern Portfolios have increased market share and so have North America’s portfolios.
- A tale of decline for Europe but growth for North America, Far East and Australia.

International banks without a Greek presence have increased their involvement into Greek ship finance almost to levels last seen in 1997. The additions are primarily from the Far East and their portfolios are mainly reported as market estimates. In view of the ‘newness’ of these banks’ involvement we are citing them in the Other Banks category.

The number of banks engaged in Greek ship finance has seen an increase this year although the actual portfolio is down overall. It is self-evident that the new entrants cannot replace the departure of the major shipping banks.

Private equity funds (PEF) in keeping Greek shipping finance

Bank lending to Greeks is down to 46 from 51 in 2012. The top 10 Greek ship financing banks now hold 62.38% of the total Greek portfolio, a rise in their market share for the first time in five years. European banks continue to account for the vast majority of total loans, although they show a reduction from 92% to 90%. Restructuring RBS remains the market leader but with a reduction of 16.5%. The lead managers in syndicated loans have reversed last year's increase in their managed portfolios and have reduced such exposure by 14%, down to \$9.89bn. Forward commitments to new buildings have decreased as a percentage of committed loans. And all this as the Greek-owned fleet was growing and now stands, all told at 3,901 vessels of 291m dwt, and rising by the day.

Greek ship finance has been hard hit as the industry's biggest lenders exited the market at precisely the time when Greek newbuilding orders and second-hand purchases accelerated, but still, ways have been found to fund fleet growth says Petrofin's Petropoulos. "With the Greek banks unable to provide new ship finance and caught by the difficulties of European banks as a whole, Greek owners turned to the remaining few active lenders, to Far Eastern lenders, linked only to shipbuilding orders and, increasingly, to US private equity funds," says Petropoulos.

"As the finance gap widened, Private Equity Funds were for many Greek owners often the only way to take advantage of what promised to be a healthy shipping recovery," says Petropoulos. "Private Equity Funds were not only active but often scoured Greece for opportunities to co-invest and lend to Greek owners believing the anticipated shipping recovery will provide them with the high returns they have been seeking. The result was an explosion of joint ventures most of which investing in eco-friendly vessels of a new design that is hoped will be the vessels of the future." While Petrofin says there is no hard data on the Greek exposure, "we believe there are over 40 joint ventures in place today" with PEFs, saying "this explains the paradox of a 6.5% fall in Greek ship lending at a time when the Greek fleet grew to record levels".

However, the Athens-based researcher believes if the shipping recovery continues, it is expected PEF interest shall wane in 2014 / 2015 as the opportunity to invest at a low point in the cycle falls away. "In addition, over the last months, Chinese ship lending and, especially, lending to non-Far East owners has stumbled due to Chinese credit restrictions. These two developments will be counteracted by the increasing confidence and financial ability of western banks, both European and North American, which will be attracted by the high loan yields of Greek shipping based on modern eco-design vessels.

Leasing

Greek ship owners do not believe in forecasting shipping markets, and are well aware of their cyclical and volatility. We have showed elsewhere that shipping is a game with jokers, which appear suddenly and unexpectedly. After a long observation of the Greek owned shipping (GOS) strategy, we found-out that it builds and buys ships larger and newer, when a shipping cycle offers rock-bottom prices, and subsequently sells ships smaller and older. We showed this with data and with an adequate number of figures. We also found-out that technology has brought cycles faster in the markets! We have also showed the growth of GOS since 1856, and especially since 1945. Greek ship-owners, with whatever cleverness they possess, they could not beat wars, recessions and depressions, as showed, but they tried to get advantage of them. Their timing was not perfect, but very good, as the prices at which bought 1568 2nd hand ships were 86.5% cheaper (1983-1987) than in their peak price (1980). GOS pursues a cost leadership policy in all frontiers: economies of scale; economies of age; economies of low capital cost; low depreciation, and rock-bottom prices... Greeks proved that the 2009 crisis offered good opportunities, and they had the funds required.

CHAPTER 6

CRITICS AND CONCLUSION

CRITICAL ANALYSIS

When considering the biggest ship owner's market the Greece has certain peculiarities. An enormous amount of money necessitated industry, it going for different fund rising schemes that to run the business. All discussed in previous chapters. Somehow the industry getting fainted, because of large invasion of Chinese companies and capital in to Greek shipping market. Considering the bank loans, there also see the influence of foreign banks offered lump sum money in to the system. Because of shipping is an international business, it definitely need foreign investment. But this kind of investing, they also came to be a part of industry; eventually they would dominate over domestic.

Greek has a large number of fleet, but no one knows how to run the business and generate profit from their investment. Here the second problem. The lack of knowledge on ship management will carry the ship in to ship management firms. It followed from historic period itself. When ship owner need more money out of its profit, to repay the amount lend for the same vessel. Here the interest of management firm will lose and drop it.

Registration and other legal matters that gets worse in the country. So ship owners are turned out from the actual to other businesses of less legal constraints. A ship owner has to invest money into the system in right time. So they need to research about the current and past market. Even in the pandemic also the shipping business will get much demanded, these much volatile and unpredictable industry need proper knowledge about different time gaps.

CONCLUSION

This research paper has focused on the analysis of modern, innovative and efficient financing, instruments, tools and markets that shipping companies can employ in funding their investment plans. Emphasis was placed particularly on Greek shipping, as this industry segment ranks by far on top of world shipping business. Greek ship owners, furthermore, are well reputed for their aggressive entrepreneurial spirit and innovation skills, including the field of finance. As was discussed, Greek shipping companies can employ a combination of traditional and modern financing instruments and even proceed to innovative hybrid financing combinations. Major financing tools for Greek shipping companies include, new forms of bank lending, leasing and syndication, IPOs in international equity markets, private equity funding, high-yield bond issues, and securitization, whereas FFAs provide an efficient risk management mechanism.

The discussion of recent trends in shipping and capital markets has provided a solid background as to where we are heading. Shipping markets have experienced extraordinary growth rates over the last years. This has resulted to unprecedented corporate profits and robust liquidity reserves for shipping companies. On the other hand, most market participants have followed an intensive fleet expansion strategy, albeit at high-vessel values. This business growth has been funded predominantly by external sources of financing, result too many shipping companies ending highly leveraged.

For companies interested in expanding their fleets, international capital markets and financing instruments present interesting opportunities to fund-rising. Shipping companies realize that they should apply more outward looking business strategies and take advantage of international capital mobility. They gradually follow a more tailor-made use of equity markets and further growth is anticipated in this area, although the recent shipping IPO wave may not be repeated soon. At the same time, shipping finance appears to have reached a stage where innovative financing methods are combined with traditional approaches. These include asset-backed lending and securitization, leasing, syndicated bank loans, structured finance and high-yield bonds. Private equity companies and specialized hedge funds pay increasing attention to financing shipping investments. The growth in freight derivative instruments has served to spread risks associated with shipping and has made shipping a more attractive sector to investors, private equity and hedge funds. Recent experience has indicated that equity investors can be attracted to shipping stocks provided there is a good value story, sound fundamentals and an efficient management to rely on. Banks, on the other hand, follow careful steps in ship lending, as increased competition has kept loan margins tight but they are keen to increase the range of financial products available to shipping companies.

The contribution of shipping remains small in international capital markets but the recent intensive activity has resulted to new levels for the industry as a whole. As more shipping companies go public, new managerial issues are ranged high in priority. The implementation of efficient corporate governance systems and the critical role of the Board of Directors are on top

of the list. All in all, new and innovative frontiers in shipping finance will certainly not allow market participants to get bored over the coming years

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