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# **THE UTILIZATION OF ISLAMIC FINANCE IN SHIPPING INDUSTRY**

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**A thesis Submitted in partial fulfillment of the requirements for  
the degree of Master of Business Administration**

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## Approval Sheet

This dissertation, which is an original work undertaken by Khachiaa Oumaima in partial fulfillment of the requirement for the degree of Master of Business Administration, is in accordance with the regulations governing the preparation and presentation of dissertations at the Graduate School in Korea Maritime & Ocean University, Republic of Korea.

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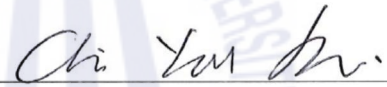
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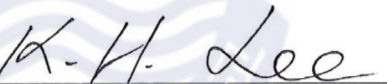
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## 초록

최근 서구에서 발전되어 온 전통적인 금융에 대한 대안이 세계에서 활발히 논의되고 있다. 고유한 특성을 갖고 있는 이슬람 금융 시스템에 대한 것이 그 중의 하나이다. 러시아에서는 이슬람 금융에 대한 논의가 지역적 수준에서 국제 전문가 실무 그룹의 참여로 과학적 및 비즈니스 환경에 의해 전개되고 있기도 하다. 이 논문에서 이슬람 금융의 주요 조항과 특성에 대한 분석은 Musharaka, Mudaraba, Murabaha, Ijara, Salaam, Istisna 등과 같은 금융 상품을 포함하고 있다. Musharaka의 경우, 거래 참여자들은 자산을 결합하고 그들 사이에서 위험을 공유한다. 신탁 관리 계약인 Mudaraba를 통해 관리자의 기업가적 재능과 자본 소유자의 자금을 결합 할 수 있다. 또한 재판매 계약인 Murabaha는 고객에게 할부로 상품을 구매할 수 있는 기회를 제공한다. Ijara는 임대 운영을 대체하고 보다 광범위하게 임대로 사용된다. 사전 금융 계약인 Salam은 주로 표준 자산과의 거래에 사용된다. 계약 업체가 서비스 외에도 장기 프로젝트를 위한 투자 도구인 자체 자재 및 원자재를 사용하는 Istisna의 계약이 있다. 이슬람 금융 계약 조건을 통합하기 위해 이슬람 금융기관의 회계 및 감사 조직(AAOIFI)에서 국제 표준을 개발하고 있다. 샤리아 과학의 한 부분인 Fiqh 재산 관계는 이슬람 금융에 대한 방법론적이고 이론적인 기초가 되고 있다.

이슬람 금융의 특징에는 자산을 기반으로 하고 있으며, 그리고 자금 활용에 대한 제한 및 자본과 기업가 간의 위험 공유 원칙이 포함되고 있다. 이슬람 경제 교리에 따른 현금 흐름의 이동은 반드시 실제 상품과 서비스의 이동에 의해 뒷받침 되어야 한다. 이슬람은 사회에 해로운 금융 활동을 금지하고 있다. 이슬람 금융에서 이익을 얻을 권리는 위험을 수용함으로써 발생한다. 러시아 이슬람 금융 기관의 발전을 위한 제약 요인은 국가 법률의 규제로 인해 남아있는 것으로 나타나고 있다. 러시아에서 이슬람 금융의 발전은 사업과 이슬람 원리를 적극적으로 실천하는 인구가 많은 지역에서

수요가 존재하는 것에 의존하고 있다는 점을 주목할 필요가 있다. 러시아의 이슬람 금융 서비스 시장을 모니터링 한 결과 현재 러시아에는 이슬람 금융 서비스를 제공하는 약 10 개 회사가 운영되고 있는 것으로 보고되고 있다.

이슬람 금융은 지난 5 년간 전례 없는 성장을 보였지만 많은 도전과 기회가 있는 것으로 평가되고 있다. 신앙의 근본적인 문제와 다른 많은 이유들로 인해 이슬람 금융이 비회교 국가에서 완전히 이행되는 것이 제한을 받고 있다. 그러나 걸프 지역의 일관된 유가 공급으로 이슬람 금융은 비회교국가에도 매력적인 측면이 크기도 한 것으로 알려져 있다.

해운은 전 세계 무역량의 약 84 %를 수송하고 있는 강력한 성장 산업이다. 문제는 IFI 와 투자자가 거의 또는 전혀 노출되지 않아 국제 운송에 대한 이해를 하기 어렵다는 것이다. 그러나 해운은 자본이 많이 소요되는 산업이며 현재 선박 대출의 75 %가 유럽 은행이 수행하고 있어 주로 은행대출방식으로 자금을 조달하고 있다. 2008 년 글로벌 금융위기 이후, 선주, 선박 대주 및 조선소는 모두 레버리지 및 대차 대조표에 미치는 요인에 노출되어 있다. 이 논문의 연구 목적은 국제해운업계에 Shariah 기반 대출의 기본 개념 (예 : Riba, Gharar, Maysir 등)과 각 자금 조달방법과 관련된 위험에 대한 간략한 분석, 현재 다양한 금융 시스템에 의해 사용되는 이슬람 금융의 인기있는 상품을 소개하는 것이다. 선박 소유자 및 선박 금융 기관 (예: Ijara, Murabaha, Sukuk 등), 이슬람 금융 상품의 운송 위험 및 반품 평가, 기존 금융 시스템 내 문제 분석 및 기업의 가능성에 대한 성공적인 사례를 제공하는 것이다. 이를 통해 서유럽의 해운계가 기존의 유럽은행으로부터 대출에 의존해 오던 것에 대한 대체 선박금융으로 이슬람 금융 상품을 활용하는 것에 대한 가능성을 제시하고 있기도 하다.

핵심어: 이슬람금융, 이슬람금융상품, 자산기반, 위험공유, 해운산업, 은행대출

## Abstract

Currently, an alternative to traditional finance is actively forming in the world—the Islamic financial system with its inherent financial products. In the Russian Federation, the topic of Islamic finance is being developed by the scientific and business environment at the regional level, precisely, with the involvement of working groups of international experts. In the course of the study, an analysis was made of the main provisions and characteristics of Islamic finance includes financial products such as Musharaka, Mudaraba, Murabaha, Ijara, Salaam, Istisna' and others. According to Musharaka, participants in the transaction combine assets and share risks among themselves. Mudaraba, a trust management agreement, allows you to combine the entrepreneurial talent of the manager and the funds of the owner of capital. Murabaha, a resale agreement, provides an opportunity to purchase goods by installments to customers. Ijara serves as a replacement for operating leasing and is used more broadly as a lease. Salam, an advance financing contract, is mainly used for transactions with standard property. Istisna' contract, where the contractor, in addition to its services, uses its own material and raw materials, an investment tool for long-term projects. In order to unify the terms of Islamic financial contracts, international standards have been developed by the Organization of Accounting and Auditing of Islamic Financial Institutions (AAOIFI, Bahrain headquarters). Fiqh property relations, a section of Shariaa science, is a methodological and theoretical basis for Islamic finance. The features of Islamic finance include asset-based, restrictions on funded activities and the principle of sharing risks between capital and the entrepreneur. The movement of cash flows according to Islamic economic doctrine must necessarily be supported by the movement of real goods and services. Islam prohibits financing activities harmful to society. The right to profit in Islam arises from the acceptance of risk. It was found that the constraining factors for the development of Russian Islamic financial institutions remain due to its regulation in national

legislation. It is noted that Islamic finance has developed in Russia due to the presence of demand at the local and regional levels from business and the population who are actively practicing Islam. Monitoring of the Russian Islamic financial services market has shown that about ten companies offering Islamic financial services currently operate in Russia.

Islamic finance has observed unprecedented growth in the last five years, but it also offers many challenges and opportunities. The fundamental issue of faith and many other reasons restrict Islamic finance from being fully implemented in non-Muslim countries. But the consistent oil-money supply from the Gulf region makes Islamic finance attractive even to non-Muslim countries.

Shipping is a strong growth industry with about 84% of global trade carried by the international shipping industry. The problem is that IFIs and investors have little or no exposure and thus understanding of international shipping. However, shipping is a highly capital intensive industry and currently 75% of ship lending has been conducted by European banks and financed on a conventional basis. Post financial crisis, ship owners, ship lenders and shipyards have all been exposed to the impact of over levered balance sheets and debt finance. The objectives are to introduce to the reader the basic concepts of Shariah based lending (e.g. Riba, Gharar, Maysir etc.) and a brief analysis of the risks associated with each method of financing thereof, the popular methods of Islamic finance utilized currently by various ship owners and ship finance institutions (e.g. Ijara, Murabaha, Sukuk etc.), evaluate the risks and returns of shipping under the Islamic finance products, to analyze the problems within the conventional financial system and giving some successful examples for the possibility of companies with Western origin to utilize Islamic financial products as an alternative ship finance.

Keywords: Islamic finance, Financial products, Conventional financial system, Financial crisis, Shipping industry, Ship owners, Ship lenders, Shipyards.





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# Chapter 1. Introduction

## 1.1. Background

Islamic finance is seen to be rapidly expanding across the global financial system with as many as 600 financial institutions across 75 countries offering Islamic law compliant products and services. As like any other industry or sector wherein Islamic finance has permeated, the global shipping industry too has reaped the benefits of an ever increasing interest in Shariah compliant finance products and services.

Shipping industry is an industry few understand, but many rely on. Yet, why should it be of interest to investors and financiers, indeed specifically, Islamic financial institutions and institutional investors? In essence, globalization and sustainable growth could not occur without the development of shipping industry. Seaborne trade is fundamental to globalization: 84% of global trade, representing 11,128 million tones, is carried by international shipping totaling 1.75 Bn DWT, 87% of which, is carried by the primary shipping segments involving bulk-carriers (43%), tankers (31%) and containerships (13%). With population, trade and financing data culled from Clarksons Research Studies, the global population has increased to 7.3 Bn and over 50% of the global population is now urbanized. Asia and developed economies' infrastructure is experiencing significant investments, especially within ASEAN. To underpin industrial growth, economies require electricity, steel and energy, which at the very least, stimulates the demand for coal, iron ore and oil, as well as industrial output in the form of finished products. This in turn impacts the derived demand for seaborne trade. Global GDP is also increasing by on average at least 3.0% p.a., such that shipping is clearly a growth industry. The problem is that shipping has been, and will remain, a capital-intensive business and 75% of ship lending has been conducted on a conventional basis by European banks (Clarksons, 2016), which post financial crisis, are struggling to reform and recapitalize towards Basel III reserve requirements. Indeed, post crisis, ship owners, ship lenders and ship yards have all been exposed to the impact of over-levered balance sheets and risk free debt finance lent at interest. As conventional bank lending has contracted, the shipping industry must source

alternative capital. High asset cost makes shipping a natural destination for institutional and asset-backed capital investment and financing.

## **1.2. Objective of the Study**

The objectives of this paper are as follows:

- To introduce the Islamic financial system: theories and practice, opportunities and challenges.
- To evaluate the risks and returns of shipping industry under the Islamic financial system.

## **1.3. Structure of the Study**

The aim of this chapter is to introduce to the reader the basic concepts of Shariah based lending (e.g. Riba, Gharar, Maysir etc.), the popular methods of Islamic finance utilized currently by various ship owners and ship finance institutions (e.g. Ijara, Murabaha, sukuk etc.) and a brief analysis of the risks associated with each method of financing thereof. The chapter ends with a listing of certain considerations, which are unique to Islamic finance that must be borne in mind by anyone who chooses to be involved in an Islamic finance transaction by giving some examples for the possibility of companies with Western origin to utilize Islamic financial products as an alternative ship finance.

## Chapter 2. Principles and methods of Islamic finance

### 2.1 Study Background

Shariah, or the body of Islamic law. Shariah is filled with moral purpose and lessons on the truth, and is hence more than just a set of legal rules (Abdullah and Chee 2010, 4). Islamic religious law springs from various sources (Visser 2013, 12). The primary sources are the Holy Quran and Sunnah of the Holy Prophet Muhammad. The Quran is “[...the last revealed book from the Almighty, free from any tampering until the Hereafter...]” (Ayub 2007). The Sunnah consists of the sayings and the actions done and/or approved by the Holy Prophet, it is an equally important source of information in Islamic law (Ayub 2007, 21-22). Furthermore, one can also refer to the Hadith and Fiqh (Nijoe 2014, 3).

As present-day Muslims live some 15 centuries after the time of Muhammad, there are problems upon which the Quran and the Sunnah are silent. Furthermore, the Quran and the Sunnah leave room for different interpretations. Muslims therefore often have to resort to secondary sources of law (Visser 2013, 13). Such secondary sources of Shariah tenets are based on Ijtihad. Ijtihad occurs in a variety of forms such as Qiyas, Istihsan, Istishab and even Ijmaa (Kamali 2010, 19). As Shariah is no statutory law that has been mutually agreed upon and written down, different opinions on certain matters can be the result (Simander 2013, 99). Shariah distinguishes between things and actions that are strictly prohibited or haram and those that are permitted or halal. But decisions whether something is permissible or not are not simple yes or no questions. The concept of halal in turn can be subdivided into four categories: Fard, Mandub, Jaiz and Makruh (Visser 2013, 17). In situations, where it is not clear what Shariah law requires from a Muslim, individuals or a court of law can seek a fatwa in the context of litigation or a public issue (Kamali 2010, 162). A fatwa is given by a mufti and is not binding in Sunni Islam, but it is in Shia Islam. However, a fatwa issued by a highly respected mufti is the closest equivalent in the Muslim world to a case law precedent in the Anglo-American legal system (Visser 2013, 17). For just the same reason of ambiguous situations (and contracts), Islamic financial institutions usually have a Shariah Supervisory Board (or religious board), which has supervisory and consultative



functions. Such boards are required to ensure that no business activities or investments are haram (Shah 2014a).

## **2.2. Principles of Islamic finance**

Not ambiguous are the key five principles of Islamic finance, which all have to be followed in order to ensure Shariah compliance. As stated by Daud Abdullah and Keon Chee, all of the following five principles have been mutually agreed upon and are respected by the different branches of the Islam (2010, 6-7):

- Belief in divine guidance: Man needs divine guidance because he does not have the power to reach the truth on his own. Not only is man imperfect, but also his “reasons” are often confused with “desires”
- No interest: One cannot earn interest on a loan, or be required to pay interest on a loan
- No prohibited investments: Money is to be invested in worthy causes, while companies that manufacture prohibit products like alcohol, tobacco, arms or pornography are to be avoided
- Risk sharing is encouraged: The idea of risk sharing is conscientiously promoted and regularly practiced between business partners
- Financing is based on real assets: Financing extended through Islamic products can only expand in step with the rise of the real economy, thereby helping to curb excessive speculation and credit expansion. In commerce and business transactions Islamic law does not recognize transactions that have a proven illegitimate factor and/or object. In this regard, special attention needs to be paid to Riba, Gharar and Maysir (Ayub 2007, 43-71).

Any increase over the principal amount of a loan/debt against nothing but time is considered to be Riba and therefore prohibited. In the Islamic jurisdiction one does differentiate between two different types of Riba, Riba-Al-Nasiah and Riba-Alfadl (Ecke 2012, 35-36) (Braham 2012, 13-14). Gharar is the excessive uncertainty in any business or contract about a subject of a contract or its price and therefore prohibited. Uncertainty that

is slight or minor, which exists in most transactions, is permitted. Also prohibited is Maysir, the game of chance (gambling) or borrowing money to speculate on currency movements (Abdullah and Chee 2010, 45). The reasoning behind the ban is to prevent people taking asymmetric information (Visser 2013, 54). When it comes to business transactions and contracts, the most basic principle of Islamic law is the pursuit of justice within the community. This does however not mean that Muslims should not seek wealth, on the contrary, trade is not only permitted but it is rather encouraged by the Holy Prophet, as long as it does not involve usury (Smolo and Hassan 2011, 237). According to the Holy Prophet, a man's labor and every legitimate sale are the best forms of income generation, as long as trading is by mutual consent (ElGamal 2000).

### **2.3. Islamic financing methods**

Abdullah and Chee identified eleven Islamic financing methods (2010). Additionally to those eleven, Mehmet Asutay also paid attention to Istijrar (2010, 27-29). Furthermore Simander also identified Sukuk as another credit transaction (2013, 125). In the following passages the important methods shall be introduced and explained. Once the characteristics of all methods are clear, their feasibility and use for the financing of ships shall be analyzed.

#### **2.3.1. Bai Bithaman Ajil**

One of the most popular Islamic financing products to meet long-term financing needs is Bai Bithaman Ajil (BBA). It involves a sale where the payment is deferred to a future date. It also includes a profit for the bank which does not need to be revealed. This is not to be interchanged with Riba or Gharar, as the mark-up is independent of the payback time of the loan.

#### **2.3.2. Bai Salam**

As an exception (of some) to the prohibition of Gharar, there is the Bai Salam contract or sale with the price paid in advance and delivery deferred to a future date. This transaction is usually utilized in the agricultural industry, where the future existence of the object of sale, such as a harvest, is uncertain. As the agricultural industry would suffer greatly if this form of buyer's credit were not allowed it is permissible under Ijtihad (Visser 2013, 55).

### **2.3.3. Ijarah**

In an Ijarah mode of financing a bank purchases non-consumable assets and leases them out, hence getting risk and reward of the ownership of said asset. If the bank keeps the asset in its ownership it is considered to be an “accumulator” and if the ownership and risk is transferred through securitization, the bank would be considered a “distributor”. Ijarah is usually conducted on a medium- to long-term scale (Ayub 2007, 361).

### **2.3.4. Istijrar**

Under Istijrar a buyer purchases different quantities of a given commodity from a single seller over a period of time with payment in instalments. There is some divergence of views regarding timing of fixation and payment or price. However, since Istijrar involves repeat purchases from a single seller, some scholars see room for flexibility in the matter of fixation and payment of price. Hence deferred payments to a future date do not impose a problem. Istijrar is commonly used to finance working capital involving repeat purchases from suppliers (Obaidullah 2005, 101-111).

### **2.3.5. Istisna**

Another exception to the prohibition of Gharar is the Istisna financing. Istisna financing involves the cash sale contract made against the promised future delivery of goods, which yet have to be built or manufactured. It is usually applied in the funding of major construction projects, under which shipbuilding would also fall (Nijoe 2014, 6-7).

### **2.3.6. Mudharabah**

When applying a Mudharabah financing scheme, a financial institution provides capital for a venture and the entrepreneur provides know-how and/or Labour. The generated profits are split on a pre-agreed ratio between the two parties. Both parties have the right to suspend the contract at any time, which is especially important to the financial institution, as they are the sole carrier of the business risk. The entrepreneur can only be held liable for any losses if there is a proven wanton or gross negligence. In order to reduce the risk, the financial institution might negotiate certain securities or also limit the time frame of the undertaking.

At the end of the contract duration, the financial institution will receive the return of the original capital that had been provided. There are two different types of Mudharabah financing, the restricted and the unrestricted. In the restricted Mudharabah the financial institution provides the capital for a specific venture, whilst in the unrestricted Mudharabah the entrepreneur can choose which goods to buy or which project to invest in (Ecke 2012, 50-51).

### **2.3.7. Murabahah**

Murabahah is a transaction where a bank purchases goods and sells them on a profit margin. Therefore the bank takes ownership-related risks until the goods are sold to a buyer. Hence the asset risk is transferred to the buyer upon completion of the transaction. Normally Murabahah is only used for short-term financing. Despite the similar nature to BBA there are some differences, such as the bank having to openly reveal the cost and profit margins (Ayub 2007, 360).

### **2.3.8. Musharakah**

Many scholars consider Musharakah as the most authentic form of an Islamic contract, as it is based on a profit-and-loss sharing system. Two or more people combine either their capital or labor and then share the profits on basis of an agreed ratio. As a partner might only invest knowledge and labor rather than capital, the ratio needs to be defined prior to the undertaking (Rammal 2002). Losses of the venture are simply distributed according the capital input, as one cannot lose anything that has not been invested (Braham 2012, 29-31). The length of a Musharakah does not need to be but can be defined (Simander 2013, 115-116).

### **2.3.9. Musharakah Mutanaqisah**

Musharakah Mutanaqisah is considered to be a derivative of the original Musharakah and Ijarah modes of financing. The two modes are combined in order to facilitate the acquisition of an asset. Musharakah Mutanaqisah consists of three elements. The first is the Musharakah between the customer and bank, where the asset is bought. The second part is the Ijara, between the customer and the bank, where the customer rents the asset from the bank and pays rent, based on the proportional ownership of the asset. The final part of the Musharakah

Mutanaqisah is, where the customer gradually buys back shares of the asset from the bank and therefore gradually increases their own share, until full ownership of the asset is achieved (Smolo and Hassan 2011, 237).

### **2.3.10. Qard Hassan**

From the perspective of the Islamic scholar, Qard Hassan is the most desirable and noble way of providing a loan, as it does not include any margins or fees for the service. Originally Qard Hassan has been used in families and clans, whereby members in need were supported. The Quran and the Shariah state that providing a Qard Hassan loan is a noble gesture that is most desirable and therefore has positive effects on the afterlife. Today this form of financing is applied for charitable means, as well as causes that are supposed to improve the social life of the community, such as education and marriage (Braham 2012, 35-36).

### **2.3.11. Rahnu**

Rahnu works hand in hand with Qard Hassan. In Rahnu financing a valuable asset is used as collateral to obtain a loan. If the loan is not repaid the ownership of the asset will transfer to the lender of the money. In such a transaction the bank (or lending body) is required to provide Wadiah until the loan is paid back in full. Typically, Rahnu is used for small amounts of money, which are turned around on a short-term basis (Abdullah and Chee 2010, 199-200).

### **2.3.12. Sukuk**

Sukuk can be defined as Islamic bonds. In principle it is a certificate of indebtedness, without the claim of any interest towards the issuer. As all investments need to be asset backed a loan which security is provided. Since issuers of a traditional Western bond guarantee a certain interest to be paid at an agreed point in time such a contract would be considered haram. In a Sukuk the investors participate in the earnings or the loss of the undertaking (Simander 2013, 122).

## **2.4. Contractual rules specific to Islamic finance**

The purpose of Islamic finance contractual rules is (1) **to encourage development** and (2) **to ensure that transactions between parties are sound and fair**. Islamic finance

requires that the parties to a contract be of sound mind, and that the contract be formed on the basis of offer and acceptance. Furthermore, the terms of the acceptance by one party must mirror the terms of the offer proposed. The basic contractual rules of Islamic finance transactions therefore reflect the same contract law rules of common-law jurisdictions, thus making the Islamic finance contracts enforceable in many western jurisdictions.

Like many of the rules throughout various jurisdictions that aim to protect consumers, Islamic finance requires the seller to fully disclose all known flaws of goods that may not be evident to a buyer. Parties must also avoid any misrepresentations, and a seller may not take advantage of a buyer's ignorance.

Furthermore, the seller must disclose the profit made from the transaction by disclosing the actual cost incurred (i.e., the cost of acquiring, producing or manufacturing the good). A permissible exception to this requirement is a Musawama transaction, whereby a buyer agrees not to know the profit earned by the seller.

## **2.5. Prohibitions in Islamic finance transactions**

Islamic Finance transactions must be based on honesty and fair trade. Profiteering and cheating are therefore impermissible or haram. Furthermore, certain practices of the financial services industry of western jurisdictions are prohibited in Islamic finance. In addition to the prohibition on transactions concerning impermissible goods (i.e., investing in the production or sale of pork and alcohol), one of the absolute prohibitions in Islamic finance is the prohibition of **Riba**.

There are two categories of Riba; The first is the act of charging interest on a loan (Riba al Nassiyah), and the second is the compensation received by one party which is in excess of the value of the underlying transaction (Riba al Fadl). The act of charging interest in addition to the principal on a loan is therefore impermissible in Islam. Islamic finance therefore provides alternatives to conventional financial products that use Riba through various Islamic finance products.

Transactions must also avoid **Gharrar**, or uncertainty. All terms of the contract, such as date of delivery in a sales contract, must be defined in order to avoid uncertainty.

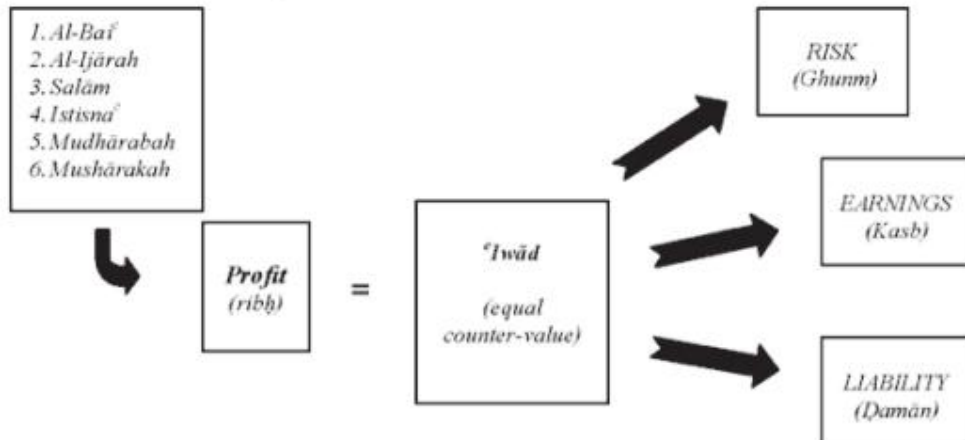
However, price need not be agreed upon in order for the contract to be valid if the price can be readily determined on the market. A seller must also own the property that is the object of the contract prior to the conclusion of the sale or transaction in order to avoid Gharrar. Ownership can be either constructive or actual.

Finally, **Maysir**, or speculation, is a major prohibition in Islamic finance. The interdiction therefore prohibits the use of derivatives in Islamic Finance transactions.

## **2.6. Islamic normative theory of profit**

### **2.6.1. Islamic theory of profit**

In terms of income earned from international shipping, market risk is a pre-requisite of lawful profit in Islam. In analyzing substance over form in determining a valid transaction in Islam, Ibn al- Arabi (d.1148) said, “Every increase which is without an equal counter-value (‘Iwad) is Riba”, and the components of ‘Iwad’ are; (1) risk (Ghunm), (2) liability (Daman), and (3) earnings (Kasb). As reflected in figure 1, the necessary components of ‘Iwad must be present for profit (Ribh) to be lawful (Halal), and if any of the components of ‘Iwad are not present in a transaction then the income is unlawful (Haram). In terms of risk (Ghunm) it refers to market risk; earnings (Kasb) implies to strive to earn or gain wealth, thus implying work and effort (Amal); whereas, liability (Daman) includes ownership (Milkiyyah). The Majallah reaffirms this with a number of important maxims: “reward begets risk” (Al-Ghurum Bi Al-Ghunm), “benefit begets liability” (Al-Kharaj Bi Al-Daman), and “burden is proportional to benefit, and benefit is proportional to burden”



Source: Abdullah (2016, Oct., p.545)

**Figure 2.1.** The Islamic theory of profit

### 2.6.2. Islamic senior and junior finance structure

Islamic Senior and Junior finance facilities have been structured increasingly successfully by GCC regional and international banks.

The Ijara double lease structure has become widely accepted and is appropriate for both Islamic and conventional financiers.

The structure diagram shows a standard double lease Islamic vessel finance structure with the additional feature of equity investment in respect of the vessel financed being provided by a PE investment vehicle through the provision of junior finance.

From the perspective of the shipowner, the key operational consideration – control of the vessel and its employment - is retained under the finance structure, finance obligations being met through the payment of a bareboat lease day rate.



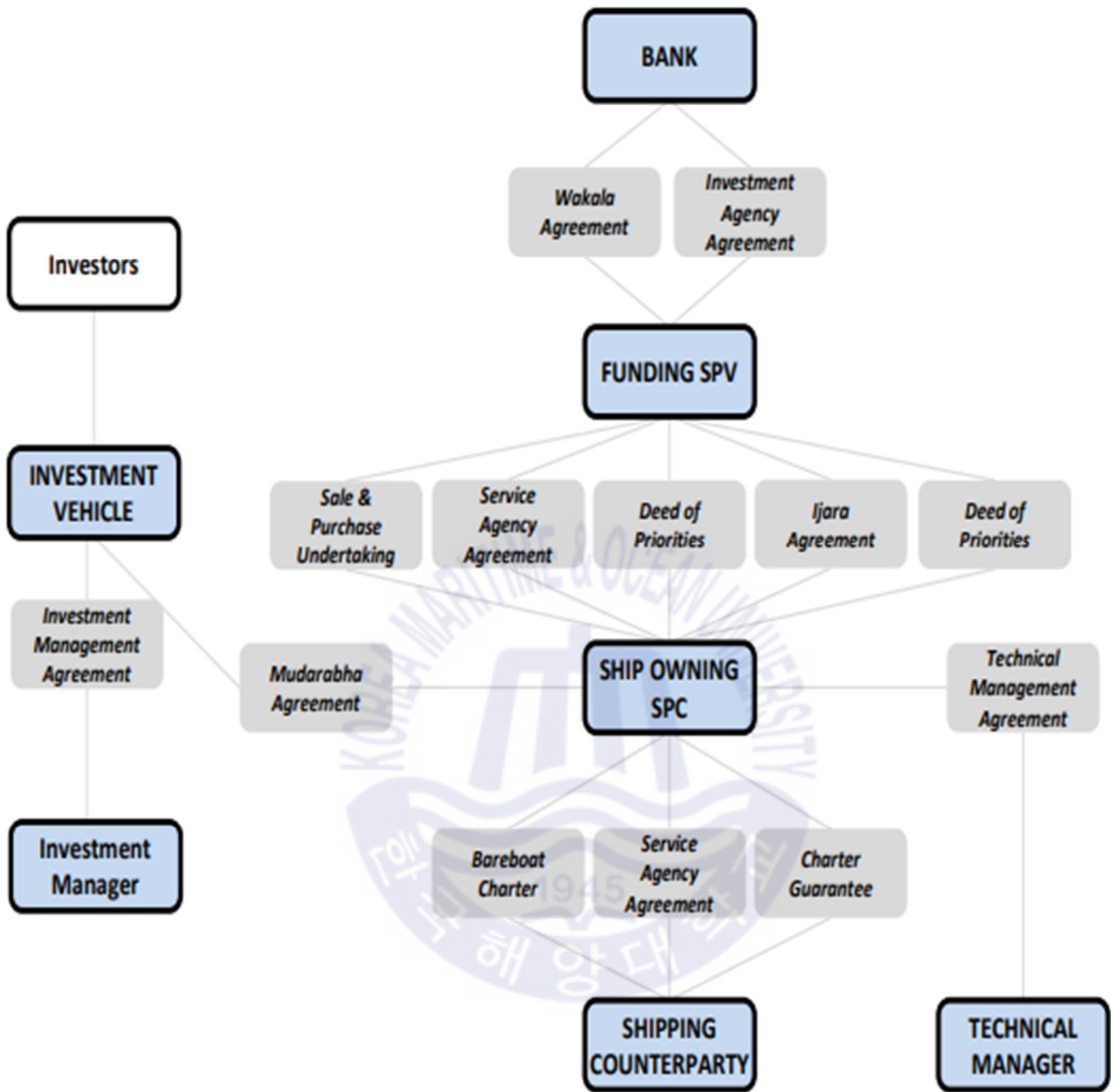


Figure 2.2. Islamic senior and junior finance structure

## **Chapter 3. Islamic finance in shipping industry**

### **3.1. Ship finance**

The situation with respect to ship finance globally and in the Middle East in particular remains challenging. The declined performance of shipping loans in the recent years have made the banks cautious in their lending strategy. From the ship owners' perspective, it means that obtaining the finances necessary for survival or expansion of the business can be very difficult. Against this background, Islamic finance has historically been seen as an attractive form of financing because it is generally backed by tangible assets. The selectiveness of the Islamic banks has meant that many of them have fared better in the financial crisis than their conventional counterparts.

Prior to 2016, various shipping Sukuk (a certificate of ownership similar to bonds) issuances have prompted more local banks to set up dedicated ship financing teams. This has been a positive move for the UAE ship financing sector and fortunately for ship owners this provides more options to raise funds.

The global growth of Sukuks as a form of finance has been steadily increasing year on year. However, Islamic finance has its own uncertainties, which if misunderstood, can be off putting to the potential investors.

### **3.2. Review of the existing Islamic financial instruments in the shipping industry**

Islamic finance, due to its asset-based nature, has been repeatedly mentioned to be a viable funding option for capital-intensive industries in the transportation sector, The shipping sector keeps struggling with access to finance as banks have become reluctant to lend to a highly capital-intensive industry which has been weathering rough seas for decades, even more so after the global financial crisis in 2008. The industry is directly exposed to changes in global trade politics which are, particularly in recent times, fairly unpredictable.

As of 2017, the world's top 40 banks were lending more \$350bn – predominantly in conventional debt – to the shipping industry, while the momentum for the industry

remained not too optimistic. This is increasing credit risk and prompting more and more banks to leave shipping finance entirely and divest their shipping loan portfolios.

But the international shipping finance market still remains a substantial one. As other forms of finance remain scarce for shipping companies and port operators, Islamic finance could come to the rescue given the global growth of Sukuk as a form of asset-backed finance in long-term structures. These are fitting well in the shipping industry starting with straightforward financing vehicles such as Murahaba or Ijara, and also other contracts including Istisna for the pre-delivery financing of ships under construction, as well as equity partnerships such as Musharakah.

The key advantage of Islamic finance for the shipping industry are higher liquidity, encouraged by asset-backed transactions that provide banks with better risk management options than non-asset backed conventional finance transactions, and risk-sharing between parties which leverages the loan exposure for them.

When it comes to risks, the securitization of borrowing is important and encouraged in Islamic finance, and therefore all types of guarantees can be built into Shariah-compliant financing contracts. Islamic finance can also be provided as sole source of funding, for example for a single vessel, or as multi-sourced financing, for example for a larger fleet or to provide working capital for shipping companies.

However, there are challenges too. One is the lack of standardization of Islamic finance in different jurisdictions. Due to the high-capital nature of shipping finance, most contracts involve a larger number of financiers and banks from different countries, and not all have the same regulations on Shariah compliance of Islamic financing contracts. It is also not certain that financing contracts get enforced in the same way in different jurisdictions, which is – nonetheless – a fundamental requirement for global trade and makes it necessary that certain types of Islamic ship financing get backed by state export credit guarantees. Thus, the higher number of financiers and jurisdictions involved in Shariah-compliant shipping financing makes it rather complex to create a contract that

takes all those eventualities into account. This is exacerbated by the fact that Islamic shipping finance is still in its infancies and both the maritime industry and Islamic banks and financial institutions on the other end are just beginning to understand the needs, opportunities and challenges the sector brings with it, placing them still at the lower end of the learning curve.

### **3.3. Challenges and opportunities of Islamic finance**

#### **3.3.1. Challenges of Islamic finance**

As Islamic banks operate within a global financial system, they have not been completely insulated from the recent economic and financial shocks. For instance, on the one hand, the Islamic financial industry is considered by many to be less risky because financial transactions are backed by physical assets. On the other hand, however, Islamic banks may be more vulnerable to fluctuations in the mortgage market, given their high activity in the real estate sector compared to conventional banks. The recent slowdown in real estate activity in the Gulf economies raises concerns about some Islamic banks' financial positions. The main challenges to be addressed by Islamic financial institutions are the following:

- The fundamental issue of Faith: Islamic finance comes with certain limitations which come from Islamic religious beliefs. Islamic finance, with features, like bans on Riba, Gharar and the investment in industries that are prohibited by the Qur'an, such as alcohol, pornography, gambling, and pork based products; make it less attractive to non-Muslim countries. The above restrictions may not be according to the belief systems of non-Muslim societies. Hence, implementing a full-fledged Islamic finance looks practically impossible.
- Awareness: Though Islamic finance has been in existence for many decades, the awareness about its features, products or services and benefits are largely unknown by most of the population. Even a majority of the Muslim population is unaware of Islamic finance.

- Taxation and legal issues: Various products under Shariah Murabaha, Ijara, Tawarruq, etc. attract government taxes at multiple levels. This is because, in a single transaction the property/commodity is bought and sold more than once. The issue has been addressed in many countries like the UK and Bahrain, but still poses problems in most Western countries
- Risk management: Since Islamic financial institutions (IFIs) are prohibited from investing in debt markets, ‘impure’ sectors and hedging instruments like derivatives, etc. the element of risk is higher, as compared to other conventional banks. Also, an inability to charge default interest for late payments and the imposition of preconditions on levying penalties result in higher business risks for IFIs.
- Excess liquidity: Due to prohibitions on investing in debt markets, ‘impure’ sectors and hedging instruments, the secondary and inter-bank market is very thin and underdeveloped. This causes a major threat to excess funds with banks remaining unutilized and failing to earn adequate returns.
- Fragmentation: The industry is fragmented with small players who are unable to compete with international players for large-scale project finance deals.

### **3.3.2. Opportunities of Islamic finance**

Islamic finance, or financial services that conform to the tenets of Islam, offers a potential market of 1.5 billion Muslims that should continue to offer opportunities for foreign and domestic banks. In the last five years, Islamic finance has grown by 15 to 20 percent annually, with an estimated \$270 billion in assets, controlled by approximately 300 Islamic banks in more than 25 countries. Considering both a country’s Muslim population and per capital income, the largest markets for Islamic finance include Turkey, Indonesia, Saudi Arabia, the United States, and France. The fastest growing markets are Malaysia, Bahrain, the United Arab Emirates, Indonesia and Pakistan.

The potential for continuous growth in the Islamic financial sector is significant, with some estimates suggesting that 1.5 billion Muslims will be in Islamic banks. This could represent \$905 billion in total assets in Middle Eastern countries alone. Muslims living outside the Middle East, represent an even larger population, including countries such as India, Indonesia, and Malaysia, but also within developed countries including the United Kingdom, France, Germany, the Netherlands, and the United States. The market for Shariaa compliant financial services will continue to grow, driven by both demand and supply factors. On the demand side, the desire to conduct all financial transactions in accordance with Shariaa law is expected to further increase not only among retail customers, but also increasingly among corporations. There is evidence of pressure on corporations and sovereigns by the public and shareholders in the Middle East and South East Asia on to apply Shariaa compliant solutions. This includes, for example, the adoption of Islamic bonds (Sukuk) or Shariaa compliant syndicated lending based on Murabahah or Ijarah contracts. Interestingly, non-Muslim sovereigns such as in the UK, Japan and China have recognized this shift and are preparing Shariaa' compliant debt issues to target the liquidity-rich Middle East. The changing demographics of Muslim countries will also drive the demand for Shariaa' compliant financial services. Many Muslim countries have population growth rates of more than 3% per annum. In addition, many of these countries are characterized by young populations, with more than 50% of the population yet to reach adulthood. At the same time, there is evidence of an increasing sophistication among youthful consumers regarding their financial services and purchases. These twin effects of population growth and increasing sophistication are likely to result in a large number of savvy retail consumers in the near future.

Finally, from the demand side, the overall macroeconomic growth within Muslim countries will drive the growth of Shariaa compliant financial services. This is particularly relevant in the oil-rich countries of the Gulf, where state-owned enterprises which tend to strictly adhere to Shariaa law are the immediate beneficiaries of the booming hydrocarbon prices. Though the sudden fall in the price of oil has slowed down growth in the region, in the long run it is expected to contribute to the GDP growth. On the supply side, the main

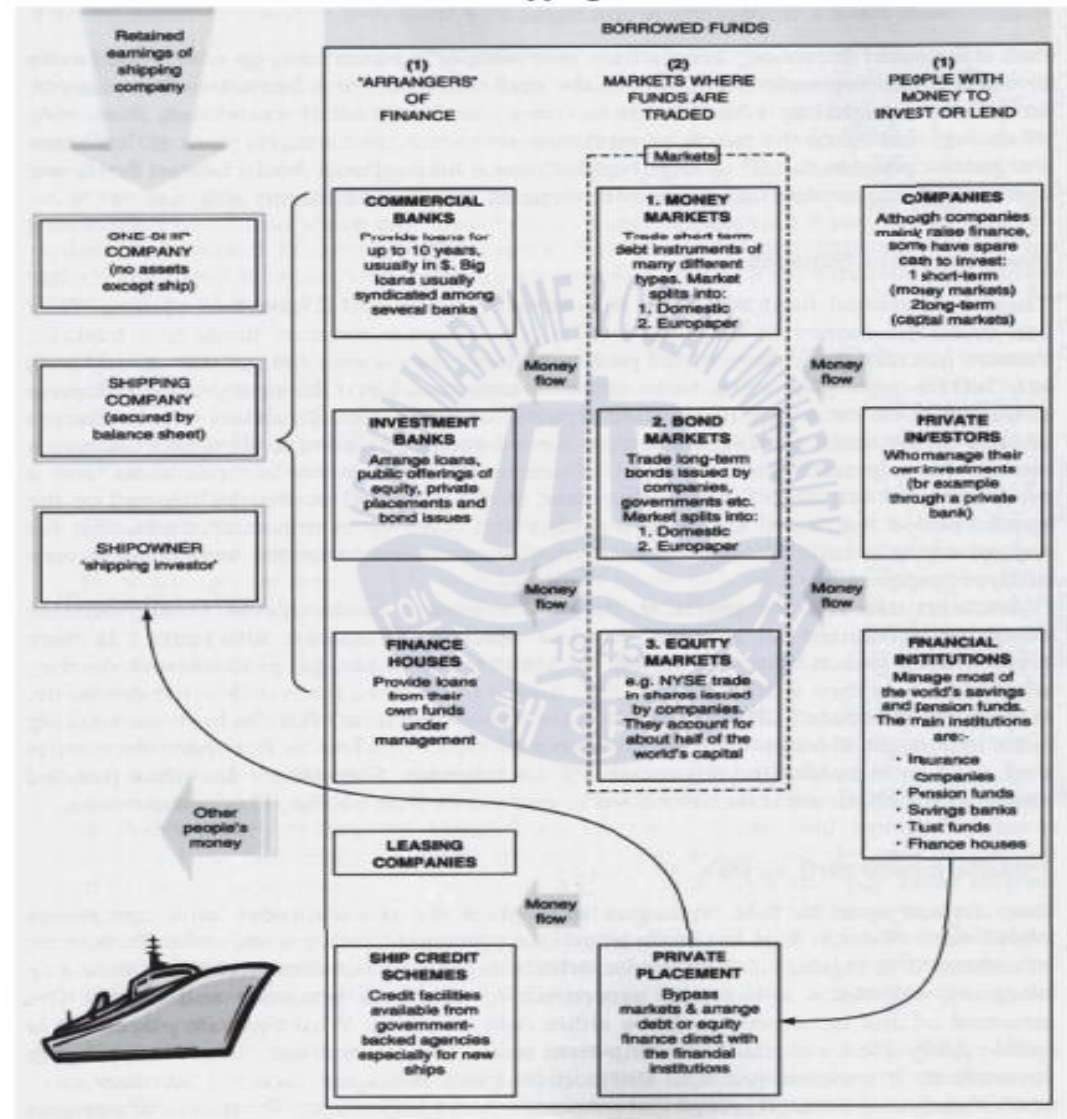
driver is the increasing number of financial service institutions offering Shariaa compliant solutions. In addition to the new Islamic banks being formed, there is an emerging trend of existing conventional banks converting their operations to be Shariaa compliant. For example, National Bank of Sharjah recently converted its entire operations and National Commercial Bank-Saudi Arabia's largest bank-converted its retail operations to be Shariaa compliant. The increase in supply has two effects. Firstly, with a greater number of players in the market, the level of awareness of Shariaa compliant products and services is heightened. This is important, since in many countries, including Muslim countries, the level of awareness and understanding of Shariaa compliant products is remarkably low. Secondly, a larger number of providers lead to increased competition in the marketplace with improved product innovation and pricing. This in turn is increasing the attractiveness of Shariaa compliant solutions to both Muslims and non-Muslims as like.



# Chapter 4. Utilizing Islamic financial products for financing vessels as an alternative to the Western financial tools

## 4.1. Sources and problems of Western ship financial system

### 4.1.1 Sources of Western ship financial system



Source: Stopford (2009, p.277)

Figure 4.1. The global finance system and types of finance for international shipping

Table 4.1. Financing options for international shipping



Method of Raising Funds	Structure of Finance	Features of Structure	Malaysian Ship Finance Market
Private Funds	Own Funds	Equity finance provided by owner or private investors for shares in a privately held company	Limited funds for international shipping as compared to Greece, Norway, Hong Kong with maritime background.
	Private Investment	Equity or loan arranged privately with retail or HNWI's	
Commercial, Investment Bank Finance	Mortgage Backed Loan	Term loan provided by bank, secured against mortgage of ship(s). Large loans may be syndicated between several banks.	Tenure 5-7 yrs for second-hand vessels, max 10 yrs for newbuildings. Margin: 50%-70%. i-Financing available, but as with conventional financing, scarce and expensive.
	Corporate Loan	Loan secured against the company's balance sheet	Available both from conventional and IFIs.
	Shipyard Credit	Loan provided or guaranteed by government or agency to assist domestic shipyards in obtaining orders.	Finance from Development Bank and Exim Bank. Construction subsidies. Tax & depreciation allowances.
	Mezzanine Finance	Financing containing elements of both equity and debt, e.g. debt with an equity warrant	Conventional high-yielding debt (preference shares & equity warrants).
	Private Placement	Sale of equity or corporate debt to one or several investment institutions. Avoids lengthy public offering process.	Government VC and smaller PE & VC available but funds finite. Increasing interest from IFIs and Pension & Investment institutions in shipping funds.

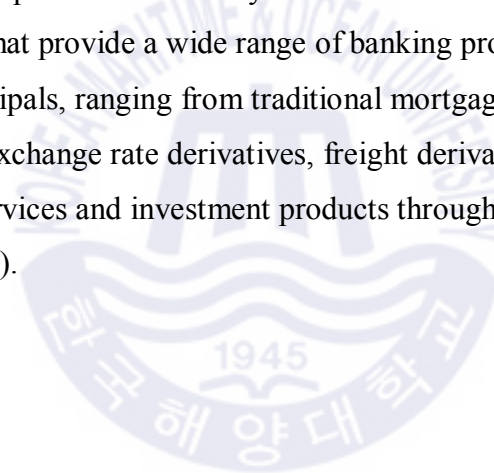
Method of Raising Funds	Structure of Finance	Features of Structure	Malaysian Ship Finance Market
Capital Markets	Public Offering	Offering of shares and sold by subscription on a stock exchange: subsequently traded on a secondary market.	Larger shipping companies are listed (MISC, MBC, Halim Mazmin, Alam Maritim etc.)
	Bond Issue	Long term securities issued in the capita market, usually with interest payments every 6 months and principal paid on maturity.	Conventional bonds & <i>Sukuk</i> . Coupon rates higher than interest rates, more hybrid bonds (zero coupon, equity-linked)
Special Purpose Vehicles (SPVs)	Special Purpose Company (SPC)	Shares in a special purpose company sold privately by individuals or may be listed on a stock exchange.	Available on-shore and off-shore in Labuan
	Limited Partnership	Limited liability partnerships set up as a vehicle for financing ships. Equity provided by private investors and debt by bank, e.g. Norwegian K/S and German K/G.	Malaysian S/B limited liability co.s on-shore. LLPs for 100% foreign ownership off-shore in Labuan.
	Finance Lease	Long-term tax efficient finance based on sale of ship to company which benefits from tax allowances and leases ship back to user.	Corporate finance structures. Structured <i>al-Ijarah</i> leasing from IFIs.
	Operating Lease	Short-term lease, generally less than 7 years, which does not have to be shown on the lessee's balance sheet	Off-balance sheet & capital cost reduction. Malaysian registered ships are tax-exempt.
	Securitization	Financing structure designed to separate assets from company management	Available with conventional and Islamic asset backed securitization.

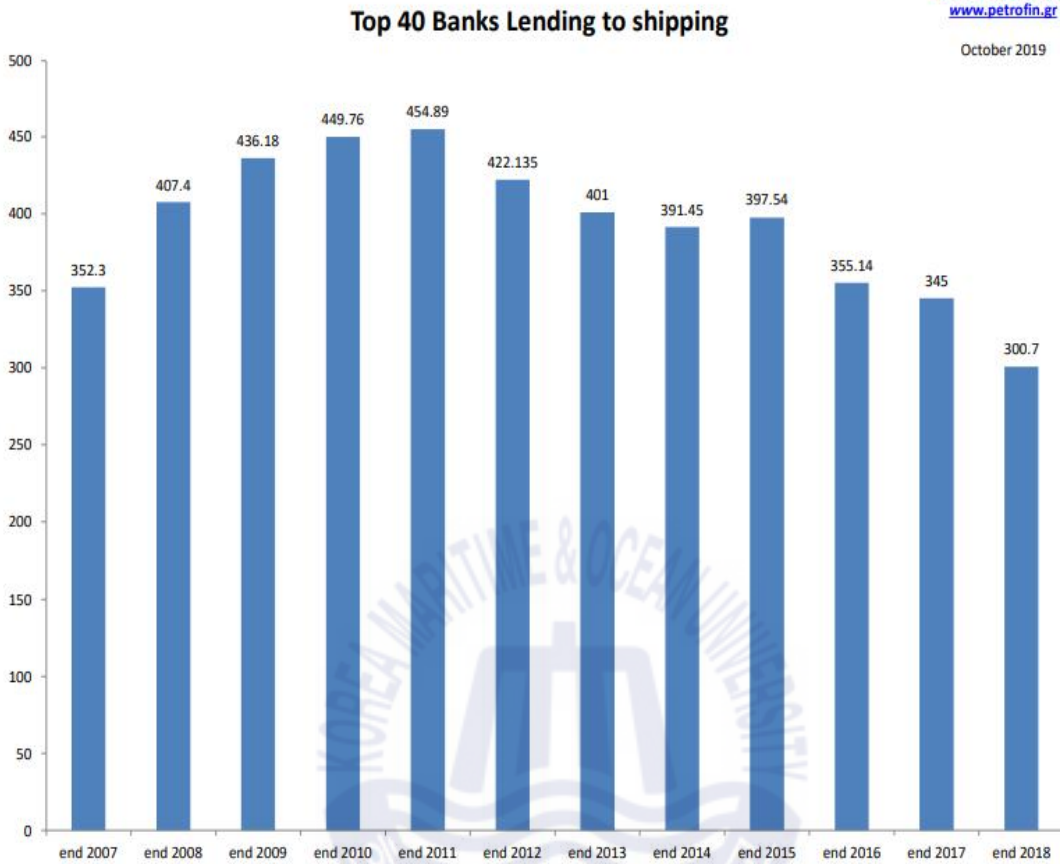
Sources: Stopford (2009, p.283); Khalid (2005, 2008, 2009)

#### 4.1.1.1 Financing from banks

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, accounting for the greatest majority of the shipping capital every year. According to 2018 estimates of Petrofin

Research, the global shipping loan portfolio is around USD300.7 billion. For the shipping companies, bank debt is considered the most attractive form of financing at an interest cost of 200–300 basis points (bp) above LIBOR. Even after the 2008 financial crisis and the decision of a number of banks to reduce their shipping exposure, the cost of bank financing remains highly competitive for ship-owners as compared with any other source of capital. 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 financing's 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, exchange rate derivatives, freight derivatives, liquidity management, advisory services and investment products through their private wealth divisions (Figures 4 and 5).





Source: Petrofin October 2019

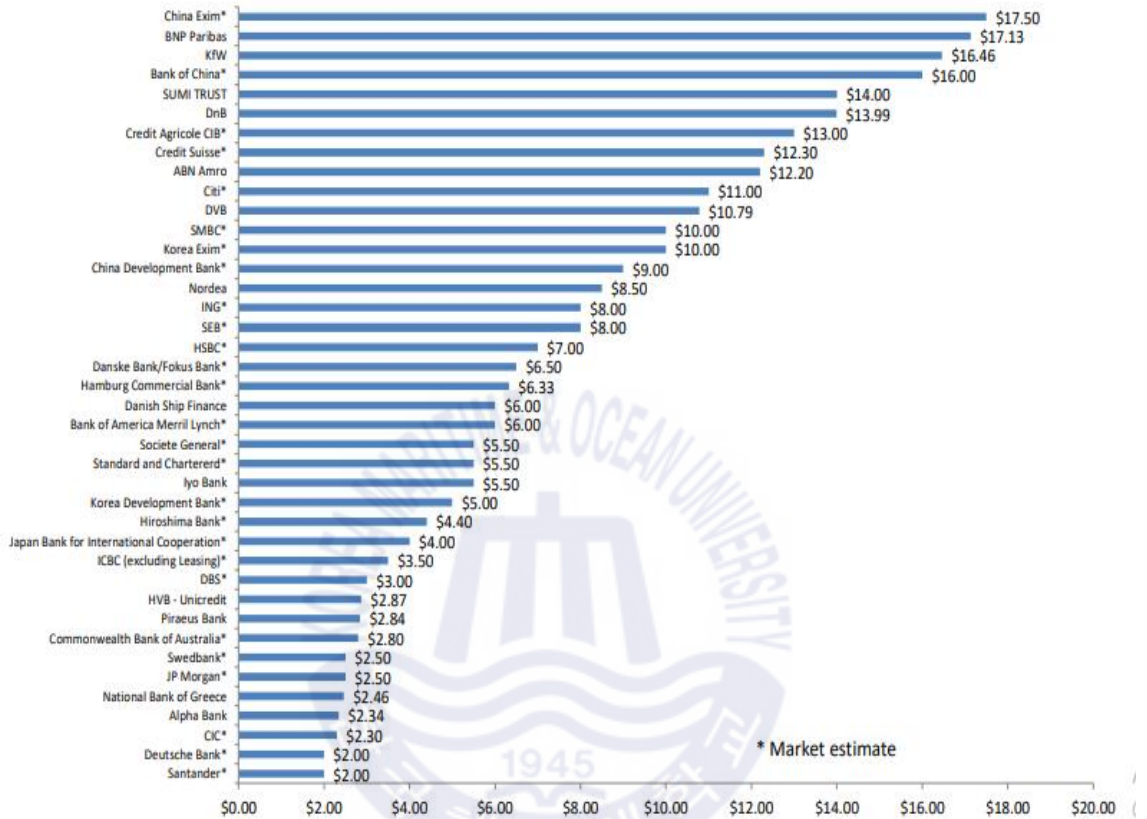
**Figure 4.2.** Top 40 banks lending to shipping from end 2007 till end 2018

# Bank Lending to Shipping

Global Bank Shipping portfolios - as of end 2018 - in \$bn  
Total loans of leading 40 ship finance banks: **\$300.7bn**

October 2019

(end 2017: \$345, end 2016: 355.25bn)



Source: Petrofin October 2019

**Figure 4.3.** The top 40 banks have a total of \$300.7bn exposure to shipping

### 4.1.1.1.1 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 shipowner, 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 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.

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.

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

**a. 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. Lenders require the equity from the owner to be paid first before the loan is available to be drawn, although these two transactions in reality happen simultaneously.

**b. 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.

**c. 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. However, the repayment profile may vary significantly depending on the leverage and the collateral vessel. The older the vessel is, the shorter is the repayment profile, in order to assure that the loan can be safely repaid during its useful life.

**d. 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 shipowner, the quality and liquidity of the collateral and the competition in the ship financing market. During the frothy 2006–08 market peak, the margins for high-quality owners had shrunk in some cases below 100bp, but in the current market top-tier borrowers have to pay between 250 and 300bp.

**e. 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. There is also a commitment fee that usually covers the lenders costs of tying up capital that has not been drawn down, and is usually around 40% of the margin.

**f. 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.

**g. 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. Other financial covenants may include a minimum liquidity of the borrower or a cap on the total indebtedness of the guarantor.

**h. Non-financial covenants:** Mortgaged-backed shipping loans usually have a number of non-financial covenants that administer the flag and jurisdiction of the borrower, the required insurance coverage, the manager of the vessel, the regular provision of financial accounts to the lender and the completion of satisfactory technical surveys.

#### **4.1.2.1 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. 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.

**Table 4.2.** Current newbuilding orderbook in 2018



## Current Newbuild Orderbook

Ship Type	No Vessels	Total Size	Total Value \$M
BULKER	972	99,586,840	32,148
TANKER	786	68,048,880	30,590
CONTAINER	381	2,781,810	22,819
LNG	118	17,415,760	21,043
LPG	78	3,772,945	3,790
SMALL DRY	273	1,733,200	2,022
REEFER	4	1,157,304	69
<b>Grand Total</b>	<b>2,612</b>		<b>112,481</b>

**Leverage Levels and the newbuild orderbook**

50% - \$56.2 billion

60% - \$67.5 billion

70% - \$78.7 billion

80% - \$90 billion

Source: Marine Money January 2019

### 4.1.2.1.1 The risks

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.

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. 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 shipowner 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%.

**Table 4.3.** Cargo second hand transactions between 2007 and 2018

### Cargo Second Hand Transactions

Year	No Sales	Sale Price Achieved	Av Sale Price *
		USD M*	Achieved USD M
2007	1,083	34,258.4	31.7
2008	745	23,379.9	31.5
2009	1,067	15,585.4	14.6
2010	1,197	23,466.2	19.7
2011	1,045	19,704.8	18.9
2012	1,365	16,676.0	12.3
2013	1,700	23,721.2	14.0
2014	1,809	38,270.3	21.2
2015	1,300	27,683.2	21.3
2016	1,404	20,730.9	14.8
2017	1,582	27,485.5	17.4
2018	1,345	23,395.6	17.4
<b>Grand Total</b>	<b>15,642</b>	<b>294,357.3</b>	<b>18.8</b>

**Leverage levels for the total Sale Price Achieved in second hand transactions**

50% = \$13.7 billion

60% = \$16.5 billion

70% = \$19.2 billion

80% = \$22 billion

Source: Marine Money January 2019

We used the 80% leverage level as being reflective of what most would wish to be able to achieve.

Vessel Values provided us the number of cargo vessels whose age has them scheduled for either their third or fourth special surveys in 2019. Cargo 886 15-year-old vessels with special survey due in 2019 463 20-year-old vessels with special survey due in 2019.

As the traditional banks withdrew, the industry was not ideally suited for the alternatives. It is fragmented. It has no ratings to speak of, and it has been historically a poor credit. Yet, among energetic CFO's, ambitious CEO's, and a plethora of smart, hungry and capable capital sources, the industry has been able to renew its tonnage and operate safely — just not always profitably.

#### **4.1.3.1 Mezzanine financing**

In the situation where a company is trying to maximize its returns without investing more equity and has exhausted its ability to add traditional secured debt, mezzanine is often a favorable middle-ground solution. Mezzanine financing can be structured either as debt or equity, and represents a claim on the vessel that is senior only to the common equity. As a result, the cost of the mezzanine is higher than that of traditional secured debt, but less expensive than the cost of equity. Traditional shipping banks are the main providers of mezzanine financing, although during the last few years private equity firms or hedge funds have also proved willing to enter into this type of transaction, covering the void caused by the gradual exit of a number of traditional lenders. One of the most common structures of mezzanine financing is a subordinated debt with an equity kicker. In this case, the lender provides a subordinated debt that has a second or third mortgage on the vessel, coupled with a higher interest rate and lighter (or often no) repayments than the traditional mortgaged-backed loan(s). At its maturity, the mezzanine lender receives a certain percentage of the equity in the vessel, which increases its return as the market rises and the vessel's value appreciates. The equity upside of the mezzanine investors can be linked to either the value of the vessel or the cash flows, and can kick in after certain negotiable thresholds.

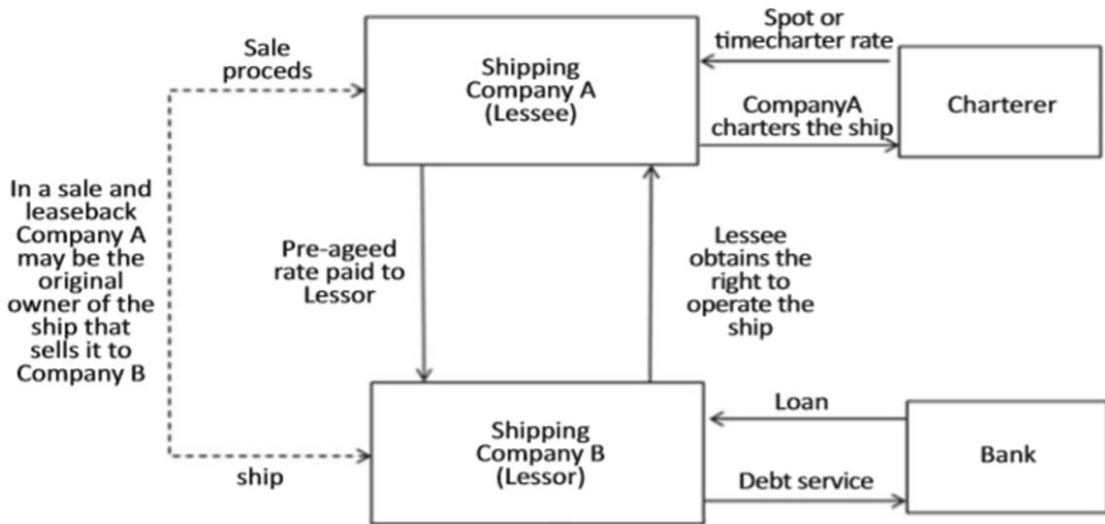
#### **4.1.4.1 Corporate loans**

In addition to the loans that finance specific vessels, either existing vessels or vessels under construction, banks may also provide loans to large established companies, based on their balance sheet. These loans can be unsecured and are typically available to publicly listed companies with access to the capital markets. Corporate loans provide financial flexibility to the shipping companies and allow them to manage their liquidity. Some of these loans are revolving credit lines that offer the company the flexibility to draw the loan when the funds are needed. The loans may vary in terms of duration, covenants or repayment terms, as they depend on the balance sheet of the lender, the stability of the company's cash flow and its ability to serve the other liabilities on its assets. From the lender's perspective, the main consideration is the balance sheet of the company, and

therefore the most typical covenants are the corporate leverage ratio and the interest coverage ratio.

#### **4.1.5.1 Leasing financing**

One of the tools that companies have to finance their operations is to enter into leasing agreements of some of the assets they operate. Such agreements allow the company to operate assets without having ownership of them, thus without investing any capital. In other words the company (“lessee”) leases the vessel from its owner (“lessor”) for a period that might extend to multiple years. Companies often enter into sale and leaseback agreements, selling a vessel to the lessor and leasing it back usually at a fixed daily bareboat rate where they remain responsible for the vessel’s operation. The lease agreement may come with an option or an obligation to buy back the vessel at the end or during the leasing period, at a pre-agreed price. When the company has a purchase option or purchase obligation, or when the vessel is leased for a period that extends beyond 75% of its useful life or when the present value of the lease payments are over 90% of the vessel’s market value, the transaction is accounted as a capital lease and the company has to include the vessel on its balance sheet. In this case, a portion of the lease is expensed as interest and the remainder flows through the company’s cash flow statement against the repayment of the capital lease obligation. Otherwise, the lease is considered as operating and the payments are expensed in the company’s income statement. Companies may also time charter in a vessel from another shipping company, paying a fixed time-charter rate to the vessel’s owner, who remains responsible for its operation. In this case, the company usually charters in the vessel for a period at a discounted rate to the spot market, and tries to achieve a spread on the higher spot rates. On the other side, the owner has secured a fixed employment for the vessel, which allows him or her to lever it and repay the debt obligations without having to deal with the volatility of the spot market. Charter-in agreements provide companies with additional leverage, without the use of traditional debt. However, in the event of a falling freight market, lease agreements may add a disproportional burden to the company’s balance sheet as spot rates may drop below the level that is required to cover the lease payments and the cost of operating the vessel.



Source: Abdullah (2017)

**Figure 4.4.** Example of a leasing transaction

#### 4.1.6.1 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 shipowners 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, Honk 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.

#### **4.1.7.1 Corporate bonds**

Corporate bonds offer larger and more established shipping companies an alternative to the bank loan market. While they are almost always more expensive compared to bank debt, they can enhance the company's liquidity, providing greater financial flexibility as bonds tend to be non-amortized with the entire amount paid upon maturity. Given the volatility of the shipping industry and the relatively small size of the companies, all shipping bonds are characterized as high yield rather than investment grade, and the coupon they have to pay is usually in the high single digits. Typically, bonds are issued with a fixed coupon, although some have floating interest terms (i.e. a spread over LIBOR). Shipping bonds may be secured or unsecured by a company's vessels, and can be issued as either senior or subordinated debentures depending on their hierarchy in the company's capital structure. The low interest rate environment has increased the attractiveness of the bond market as an alternative source of financing and can be taken on in addition to the traditional bank debt with its strict covenants and heavy repayment schedules. Many of these bond issuances are unsecured with light covenants and no repayments, allowing the companies to enhance their equity returns and buy assets, without issuing equity, thus avoiding shareholder ownership dilution. Corporate bonds may also be convertible into equity, offering the issuer the advantage of a lower coupon in exchange for providing the holders with the option to convert them into the company's shares at a certain price. Despite the advantages, bonds can add significant risk to a shipping company in a weak market, as bond terms are very difficult to alter in the event of a default. Altering bank debt in the event of default is much simpler as the lender can waive certain covenants or change the repayment profile. Furthermore, as vessels depreciate and the company's fleet ages, the non-amortizing nature of the bonds may increase the leverage above sustainable levels. While bonds might work as a medium-term boost to a company's liquidity and purchasing power, they do not provide a permanent substitute for equity.

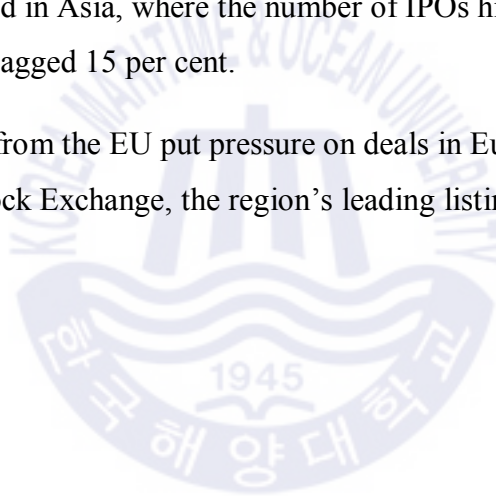
#### 4.1.8.1 Public equity offerings

Despite surging global equity markets last year, the number of new listings fell by a fifth to 1,237, the lowest level in three years, according to Dealogic data. These companies raised a combined \$188.8bn, a 10 per cent drop from 2018 and also a three-year low.

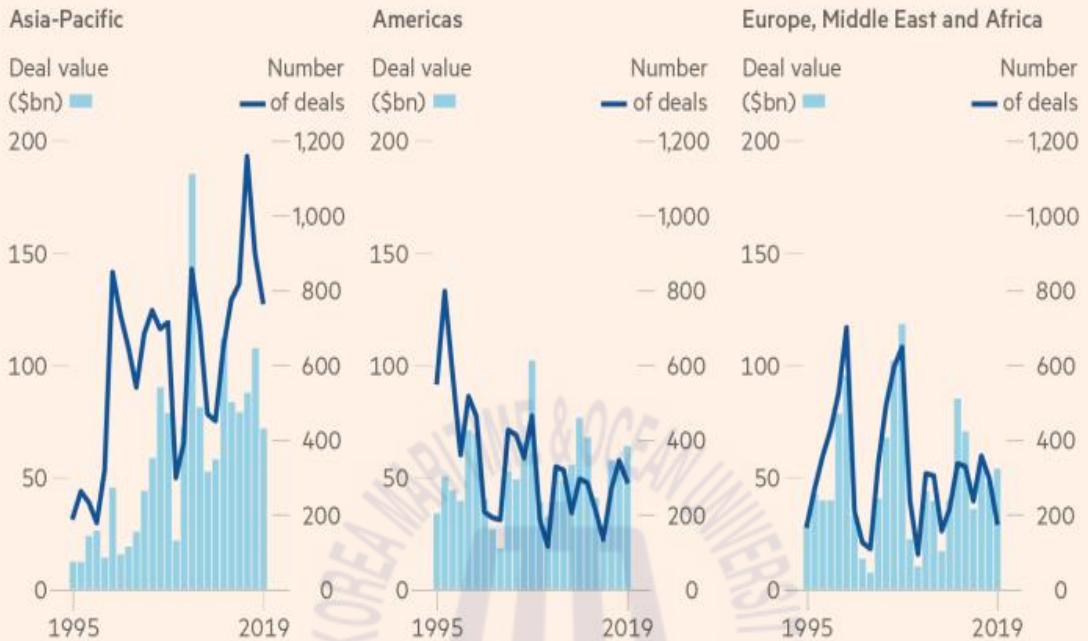
The drop in IPOs comes at a critical juncture for public markets, which have shrunk over the past two decades, while private markets — such as private equity and venture capital — have expanded.

Listings across Europe, the Middle East and Africa suffered the sharpest fall this year. The 179 IPOs marked a 40 per cent drop from 2018 and the lowest total in seven years. The poor showing was mirrored in Asia, where the number of IPOs hit a five-year low, and the Americas, where listings sagged 15 per cent.

The UK's protracted exit from the EU put pressure on deals in Europe, with the number of listings on the London Stock Exchange, the region's leading listing venue, dropping 62 per cent.



## Global IPO volumes by region



Source: Dealogic  
© FT

Source: Dealogic FT

**Figure 4.5.** Global IPO by region between 1995 and 2019.

Saudi Aramco’s \$25.6bn listing on the local Tadawul stock exchange in November marked the largest one of the year, and the greatest sum raised in an IPO. This listing alone doubled the total raised across the Emea region.

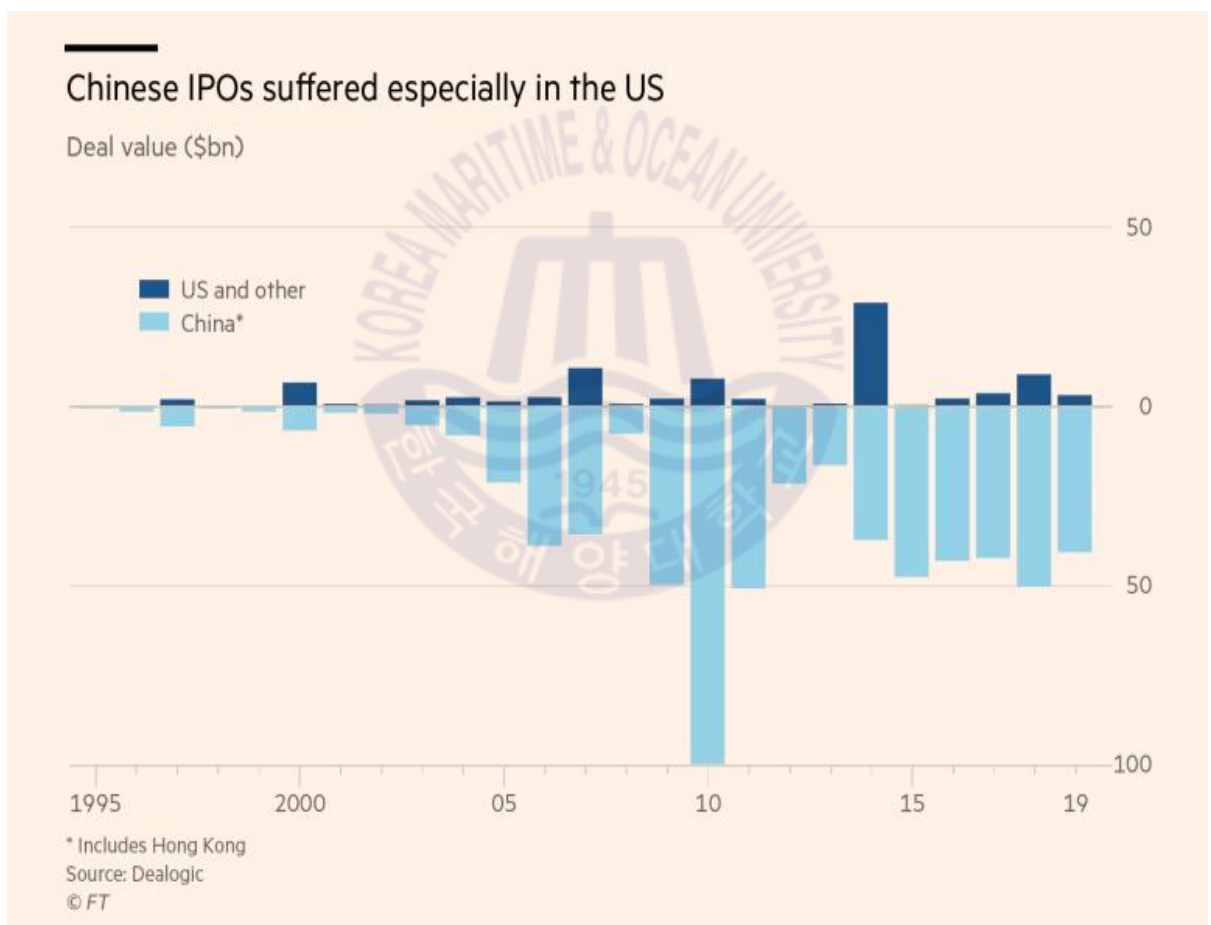
Uber’s \$8.1bn listing was the second-largest, followed by the \$5.7bn Hong Kong IPO for Budweiser APAC, the Asia-Pacific unit of Anheuser-Busch InBev, the beer group.

A government shutdown in the US stalled the required approvals from the US securities regulator in the very early part of the year, before a burst of activity that included a



number of “unicorns” — private venture-backed companies valued at more than \$1bn. The initial excitement for these hotly anticipated listings gave way to disappointment as the share prices for many slipped throughout the year.

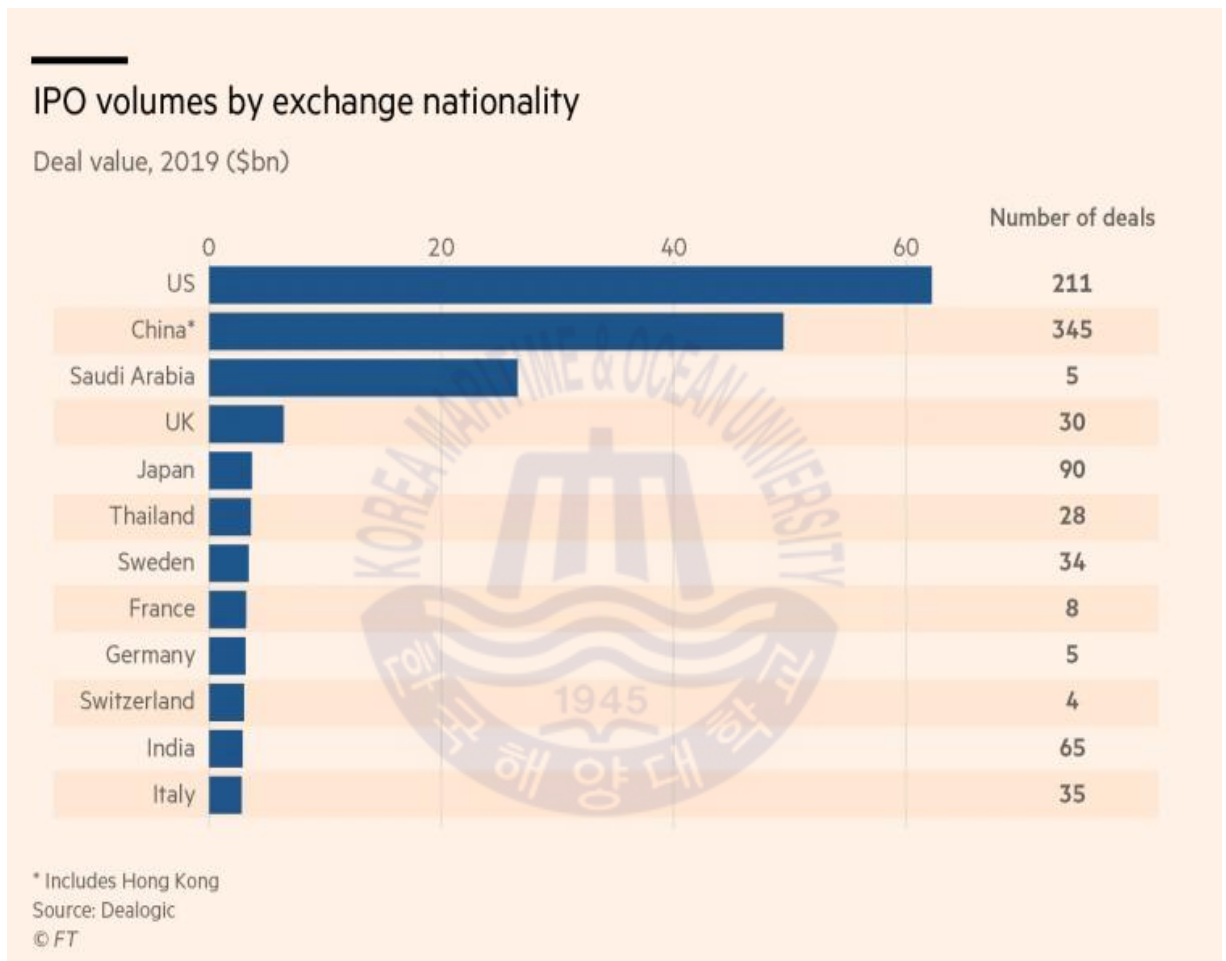
In addition to Uber, shares in Lyft, the third-largest deal in the US, have fallen more than 30 per cent, while stock in SmileDirectClub, the fifth-largest US listing, has fallen more than 60 per cent.



Source: Dealogic FT

**Figure 4.6.** Chinese IPOs suffered especially in the US between 1995 and 2019.

China offered a bright spot for the Asia-Pacific region. IPO volume jumped two-thirds to 289, including Hong Kong listings, helped by the July launch of the Shanghai Star market. The new market offers companies an easier path to listing in an effort to lure groups that may otherwise list abroad.



Source: Dealogic FT

**Figure 4.7.** IPO volumes by exchange nationality in 2019 (Number of deals).

The fall in the global listings total comes despite record highs for stocks. The FTSE All-World index of blue-chips is trading at its highest level and is on course for its best year of performance in a decade.

The 100 largest IPOs around the world have returned investors on average 20.4 per cent since listing this year, according to Dealogic data. The best performer was Beijing Kingsoft Office Software, which has rocketed 240 per cent since listing on the Shanghai Stock Exchange in November, while the worst performer was SmileDirectClub.

#### **4.1.9.1 High payout structures and master limited partnerships**

The structures of the shipping companies that access the public markets have varied significantly according to market valuations and investors' appetites. The decline in interest rates during the last ten years and the increasing appetite for yield, particularly in the USA, has created a demand for companies that pay dividends. A large number of companies adopted a high or full- payout dividend strategy due to the market's willingness to pay significant valuation premiums relative to the market value of the fleet for companies with high dividends. More than half of the equity raised in the USA during 2004–14 was by companies that had a high or full-payout strategy, including companies structured as master limited partnerships (MLPs). MLPs are publicly listed entities that combine stable revenue and tax benefits under US federal law when the majority of their income is generated from qualifying resources, mostly related to energy or other natural resources, such as petroleum and natural gas extraction and transportation. Most MLPs are limited partnerships, but they can also be limited liability companies or business trusts that are managed and operated by a general partner who is owned by the sponsor. Because MLPs are classified as partnerships, they are treated as "pass through" for tax purposes and avoid corporate income tax at both state and federal levels, reducing therefore their cost of funding which allows them to pay higher distributions. MLPs typically distribute all their available cash flow after taking into consideration the necessary retained reserves for maintenance, operating and growth expenditures.

#### **4.1.2. Problems of Western financial system**

Financial crisis has made such an impact, which phrases such as 'turbulent times,' 'sub-prime crises,' 'extremely volatile' and so on have been used to describe today's financial

markets. In order to understand the problems of the Conventional Global Financial System, it is necessary to understand the causes of the crisis and to contribute to solutions to globally avoid a similar situation. There are numerous causes of financial crises. The generally recognized, most important cause is excessive and imprudent lending by banks, which leads to an unsustainable boom in asset prices, followed by an artificial rise in consumption and speculative investment. The higher the leverage, the more difficult it is to unwind it in a downturn. Unwinding gives rise to a vicious cycle of selling that feeds on itself and leads to a steep decline in asset prices followed by a serious financial crisis. The main reasons for the current global financial crisis include the US sub-prime mortgage crisis arising from the securitization of financing through Collateralized Debt Obligations (CDOs), inadequate market discipline within the financial system, and the excessive growth of various financial derivatives, including credit default swaps. The question that now arises is, whether or not market discipline is adequate within the financial system? The market can impose discipline primarily through incentives and deterrents. If incentives and deterrents do not exist or become weak, market discipline will also become weak. The incentives and deterrents come through the prospects of making profits or sustaining losses. The major source of profit in the Western system is interest that banks earn through their lending operations. The losses come through the inability to recover these loans with interest. There would be a check over excessive lending, if bank were afraid of suffering losses that would reduce their net profit. This does not happen in a system where “profit and loss sharing” (PLS) does not exist, and the repayment of loans with interest is generally guaranteed. There are two factors that enable banks to assume that they will not suffer losses. The first of these is collateral, which is indispensable and unavoidable in any financial system for managing the risk of default. The collateral can, of course, do this only if it is of good quality. Collateral is, however, exposed to a valuation risk. Its value can be impaired by the same factors that diminish the borrower’s ability to repay. The collateral cannot, therefore, be a substitute for a more careful evaluation of the project financed. However, if there is no risk-sharing, banks may not always undertake a careful evaluation of the collateral, and may extend financing for any purpose, including

pure speculation. This may be compounded, if it is possible for banks to transfer the risk of default by selling the debt to someone else. The second factor that provides protection to the banks is the “too big to fail” concept, which assures them that the central bank will bail them out.

Banks which are provided with such a safety net have incentives to take greater risks than what they otherwise would. Given that banks lend excessively to maximize their profit, why is it that the depositors do not impose a discipline on the banks? They can actually do so in several different ways: by demanding better management, greater transparency, and more efficient risk management. If this does not work, they can always punish the banks by withdrawing their deposits. They do not, however, do so in the conventional financial system, because they are assured the repayment of their deposits with interest. This makes them complacent and they do not take as much interest in the affairs of their financial institutions as they would if they expected to suffer losses. The false sense of immunity from losses provided to bankers as well as depositors impairs the ability of the market to impose the required discipline. This leads to an unhealthy expansion in the overall volume of credit, to excessive leverage, to even subprime debt, and to living beyond one’s means. This tendency of the system gets further reinforced by the bias of the tax system in favor of debt financing—dividends are subject to taxation while interest payments are allowed to be treated as a tax-deductible expense. This shows that the absence of risk/reward sharing reduces market discipline and, thereby, introduces a fault line in the financial system. It is this fault line that makes it possible for the financier to lend excessively and also to move funds rapidly from place to place at the slightest change in the economic environment. A high degree of volatility thus gets injected into interest rates and asset prices. This generates uncertainty in the investment market, which in turn discourages capital formation, and leads to the misallocation of resources. It also drives the borrowers and lenders alike away from the long end of the debt market toward the shorter end. Consequently, there is a steep rise in highly leveraged short-term debt, which has accentuated economic and financial instability. The IMF acknowledged this fact in its May 1998 World Economic Outlook by stating that countries with high levels of

short-term debt are “likely to be particularly vulnerable to internal and external shocks, and thus susceptible to financial crises.

#### **4.2.Utilizing Islamic financial products for financing vessels**

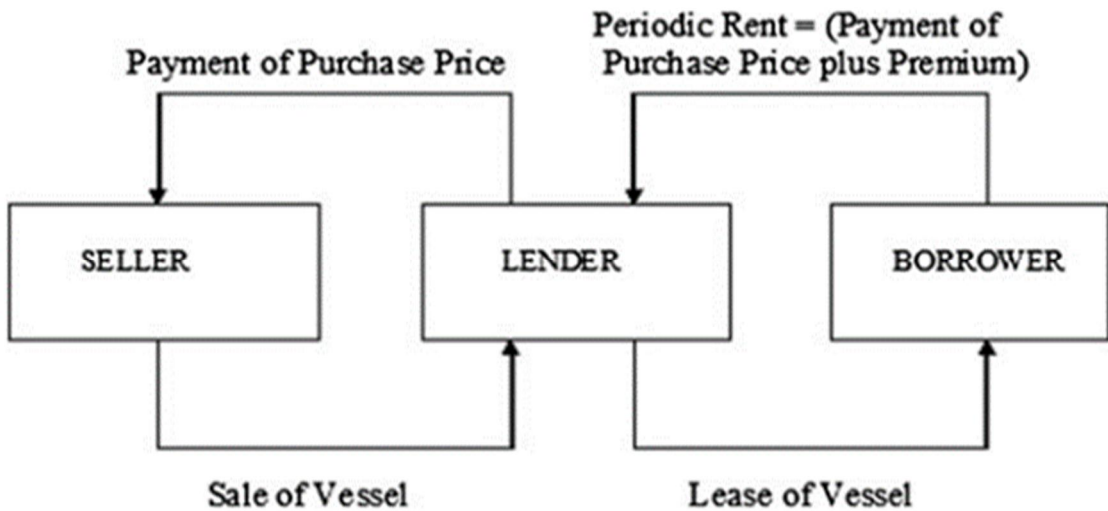
Amongst the various Islamic finance products available, certain products are well-suited to the needs of the shipping industry. The following are the most popular Islamic finance products used in ship finance:

##### **4.2.1. Ijara- Operating and finance leases**

Ijara is the Arabic word for “rent.” It is defined as a bilateral usufruct contract, or contract which grants one party the right to use the property of another party for a specific duration. In order to avoid Gharrar, a lessor must therefore own the asset before entering into a lease contract with a lessee.

The Ijara contract can be structured as either an operating lease or a finance lease known as Ijara and Iqtina.

Ijara Wa Iqtina allows a lessee to pay periodic rental payments to the owner of the property with the promise to purchase the property at the end of the lease term. In the shipping industry, Ijara Wa Iqtina is therefore used to finance the purchase of ships and other marine assets. Islamic finance also allows transactions to be structured with a security or mortgage in order to protect the lessor from the lease’s default.



Source: (Muhammad 2009)

**Figure 4.8.** Ijara transaction.

#### 4.2.1.1. Risk management tools in Ijara

- Risk 1: Refusal by the borrower to take the vessel on lease:

The danger of the borrower not taking the vessel on lease after the lender has acquired it can be countered to a great extent by having the borrower enter into a written and binding promise to lease that should be obtained at the time of purchasing or reserving the vessel by the lender along with the requirement of an adequate earnest deposit, to be provided by the borrower.

- Risk 2: Borrower may default in payment of due rental:

An undertaking should be obtained from the customer to pay certain amount to charity or for charitable purposes and the usual satisfactory securities/collateral should also be realized from the borrower.

- Risk 3: The risk of major destruction or of repairs being needed for the asset/vessel:

Once again, such risks can sought to be mitigated by ensuring that adequate insurance or Takaful (Islamic insurance schemes) are subscribed to and maintained in full force by the borrower during the tenor of the Ijara.

- Risk 4: Early lease termination risk:

In such a case, the bank may both take the vessel back and sell the same in the open market (in accordance with the laws thereof) or, in risky cases, have the customer give an undertaking to purchase the asset at a pre-agreed price schedule.

- Risk 5: Careless use of the vessel by the lessee:

A documentary counter to the above risk is to have the lessee issue a trust receipt wherein it is stated that the lessee shall be bound to use the vessel as a binding trust, with the lenders as the beneficiary.

- Risk 6: Customer may decline to buy asset at maturity:

Protection from this risk could be taken care of by a separate promise to purchase undertaking from the borrower.

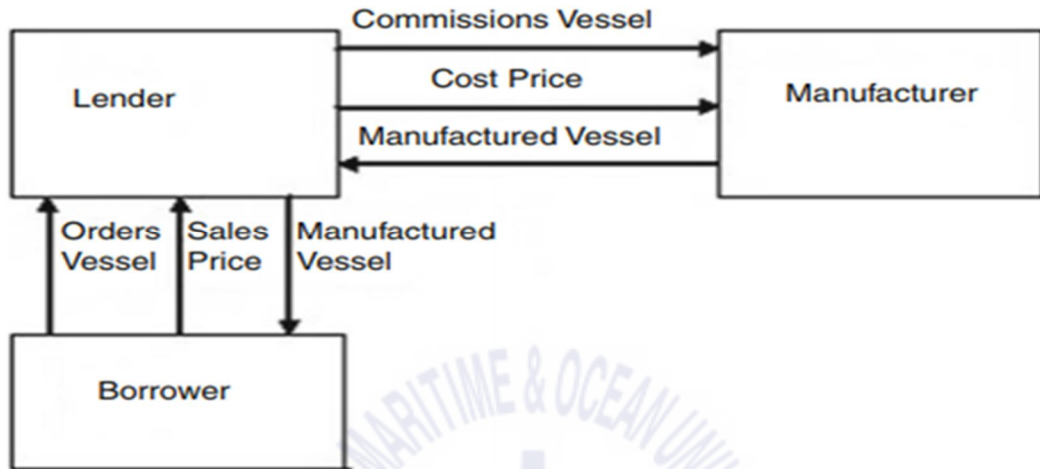
#### **4.2.2. Istisna'a – Project finance**

Istisna'a is a commonly used Islamic finance product which enables a bank to act as an intermediary between a customer and a manufacturer hired to produce or construct an asset. It is mainly used for project finance or working capital as an alternative to a loan.

In practice, a customer approaches a bank in order to construct property or manufacture goods. The bank pays for the construction of the project, and ownership of the finished product is transferred to the bank upon completion. In the maritime industry, Istisna'a is predominately used in ship building. It enables a bank to exercise pre-delivery financing of ships under construction.



Upon completion of construction, ownership may be transferred from the bank to the customer. The customer has the right to pay for the property either (1) in installments, or (2) in whole at the end of the construction.



Source: (Muhammad 2009)

**Figure 4.9.** Istisna transaction.

#### 4.2.3. Murabaha – Cost-plus financing

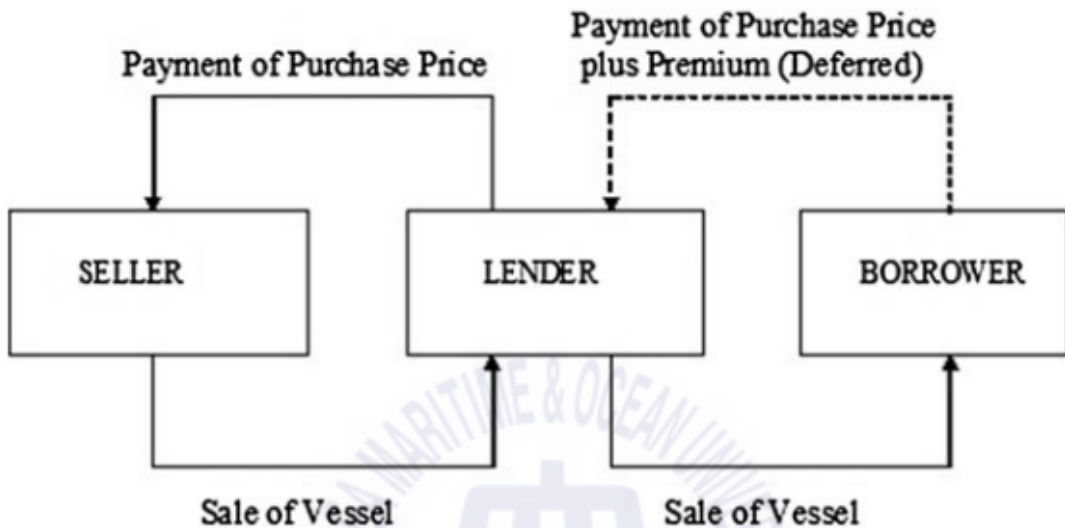
Another commonly used Islamic finance product is Murabaha, which is the Islamic finance equivalent of cost-plus financing in conventional banking. Murabaha is often used for acquiring assets and working capital. In the maritime industry, Murabaha would therefore be used to acquire ships and other marine assets.

In a Murabaha transaction, the bank enters into a contract to acquire an asset on behalf of a customer. The bank acquires ownership of the asset in order to avoid Gharrar. The rules of Islamic finance allow a bank to acquire the property in its name, or to appoint an agent to act on the bank’s behalf to acquire the asset. The bank may even appoint the customer as an agent.

After the bank acquires the asset, the asset is immediately transferred to the customer. The customer then pays for the asset by a deferred payment on a date that is pre-agreed

upon between the two parties.

Like other Islamic finance transactions, banks may protect themselves from loss through mortgages, collateral (Rahn), and/or guarantees (Kafala).



Source: (Muhammad 2009)

**Figure 4.10.** Murabaha transaction.

#### 4.2.3.1. Risk management tools in murabaha

- Risk 1: Borrower refuses to purchase the asset from the lender:

This can be managed to a great extent by utilizing a promise to purchase instrument as well as an earnest deposit, to be obtained from the borrower right at the beginning, so that it can cover the lender's risk in taking the title to the assets under the Murabaha.

- Risk 2: Overdue and/or late payment(s) by the borrower:

As late payment "penalties" to the lender are prohibited in Islamic finance, an undertaking from the borrower is usually obtained that he/she will give a certain amount of money to charity in

case of any late payments. Though none of the parties' benefits from such charity payouts, the payment is intended to act as a deterrent for breach of the contract.

- Risk 3: Default risk:

This risk, which accompanies any financial transaction, can be negated to a great extent by the realization of the securities/collateral taken from the borrower to recover the losses. Takaful (Islamic insurance policy) schemes may be taken up for ownership-related risks in Islamic Murabaha transactions as well.

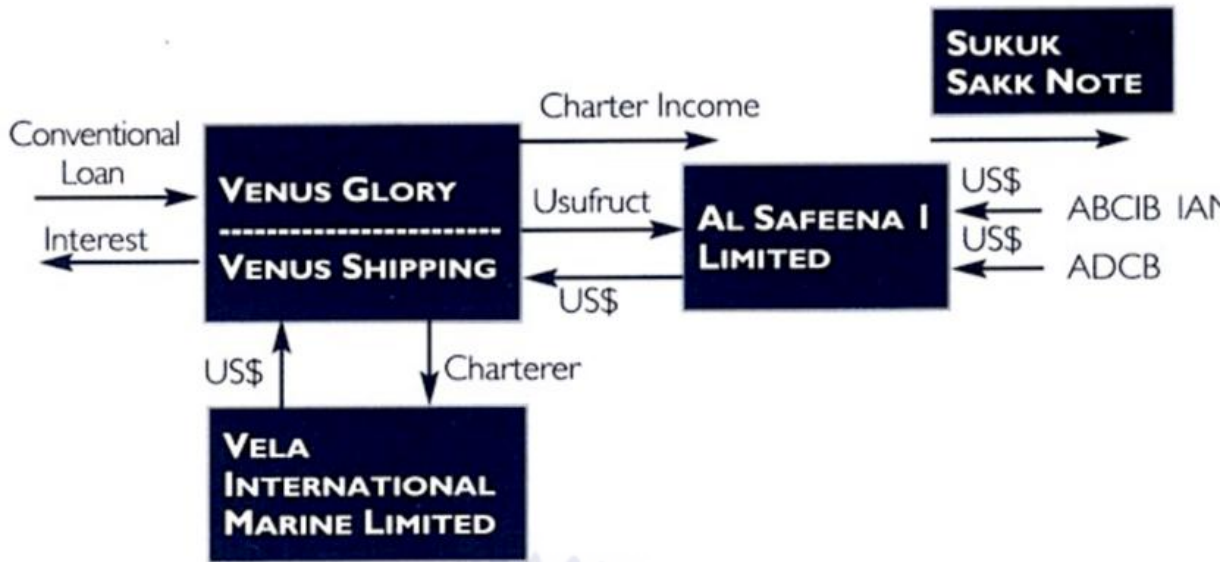
#### **4.2.4. Sukuk – Bond**

Sukuk is considered the fastest growing and most popular Islamic finance product on the market. The growing popularity can be accredited to the fact that, like bonds and shares, Sukuk certificates are securities that can be publically-traded on a secondary market (exchanges). The popularity is also due to a Sukuk's capability of raising large amounts of capital.

Sukuk can be defined as a beneficial interest or proof of ownership in an underlying asset whereby a Sukuk holder receives periodic payments based on the performance of the underlying asset. Sukuk is often equated to bonds in conventional banking. However, many characteristics clearly distinguish Sukuk from conventional bonds.

In the context of shipping industry, Islamic finance has experienced some success, but all of the deals to date are essentially structured finance debt transactions, via funds or Sukuk, that ultimately avoid market risk, even though the Islamic legal maxim states, "reward begets risk" (Al-Ghunm bi al-Ghunm) (Majallah, no.87). The first structured finance deals were reported by the Islamic Banker (2005). The first one was in the form of a USD 150 Mn fund, Al-Islami Oceanic Shipping Company Limited ("AOSC"), owned by Dubai Islamic Bank PJSC ("DIB"). AOSC was launched in 2004 and promoted by DIB and Tufton Oceanic Finance Group Ltd, who were the investment managers, and structured as a Musharakah with investors. The first acquisition conducted by AOSC was a VLCC from Pacific Star (PacStar) International Holding Corp., which is owned by Saudi

Aramco. The vessel was then leased back to Vela International Marine Ltd, also a wholly owned subsidiary of Saudi Aramco. AOSC has now invested in three vessels, which have been leased out to shipping companies for periods up to 6 ½ years at predetermined bareboat charter rates. The prices the vessels are purchased by each lessee, at the end of the lease, are pre-agreed, which provides certainty of income and redemption. The bare-boat lease involves a fixed income investment comprising quarterly rental payments providing a yield of 8.5% p.a. (AOSC, 2017). The second deal reported by the Islamic Banker (2005) was the USD 26 Mn Al Safeena Ijarah Sukuk structured finance transaction, which was concluded in 2005. It combines Islamic structured finance within a senior conventional debt transaction for the same asset, the VLCC called the Venus Glory (figure 11). The Sukuk was arranged, structured and jointly underwritten by London-based ABC International Bank (ABCIB) subsidiary, Islamic Asset Management Ltd (IAM) and Abu Dhabi Commercial Bank (ADCB). The Sukuk involves a lease financing of the Venus Glory, which is also owned by PacStar and chartered under a bare-boat charter back to Vela Marine (both companies are subsidiaries of Saudi Aramco). The tenor was for 5 years with a yield of 6%, payable on a quarterly basis, with the repayment of principal to be realized from the sale of the issuer's interest in the bare-boat charter. The repayment is either through exercising put-options by the issuer (Al-Safeena 1 Ltd, a SPC registered in New Jersey) in the event of non-renewal of the charter by Vela, or at maturity of the facility, such that the USD 26 Mn does not amortize, but balloons at the end of the 5-year period. Upon maturity of the Sukuk, the ownership of the vessel was transferred back to Saudi Aramco.



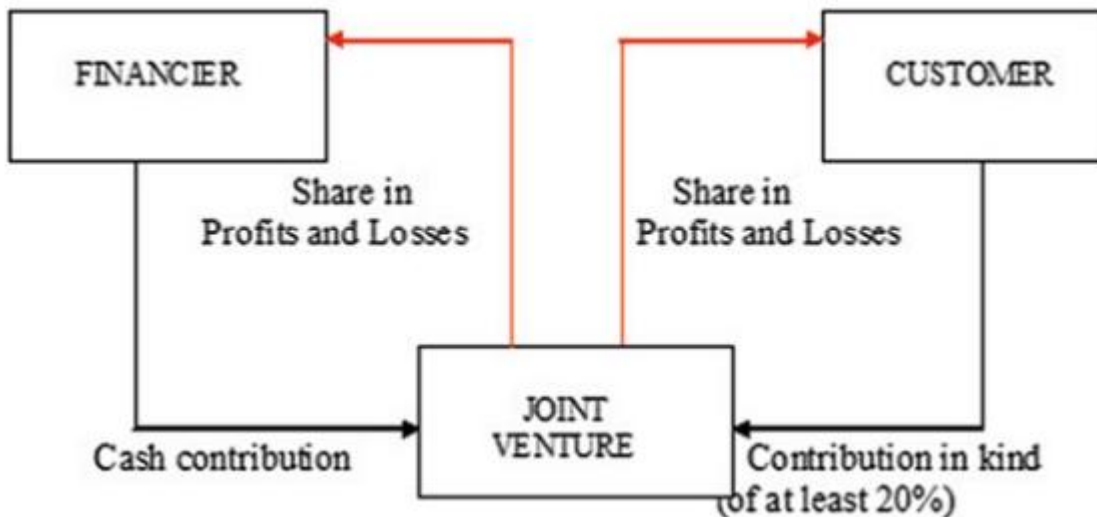
Sources: ABCIB, IAM, ADCB

**Figure 4.11.** Al-Safeena 1(ship) Ltd Ijarah Sukuk Structure

#### 4.2.5. Musharaka (Partnership financing or profit and loss sharing)

Though the Musharaka has not been widely used in ship finance, it is a useful and flexible structure that can be adapted for assets, such as finance for sea-going vessels, as well as for assets that are of a certain type or age for which other forms of finance would be expensive and/or complex. In a Musharaka transaction, all parties have a share in the capital and according to this capital ratio, the profits as well as losses (if any) of the transaction/venture/project are divided between the parties. Each partner is considered an agent of the other. However, the management of the entire project may be conducted by just one party, as may be agreed in the Musharaka agreement. The Musharaka is increasingly gaining popularity as a method for financing purchases of second-hand vessels. A Musharaka transaction (see Figure 14) may be described as follows (Muhammad 2009):

1. The borrower and the lender first enter into a Musharaka or partnership agreement, wherein they agree to contribute certain predetermined amounts respectively toward the construction or the purchase and delivery of a vessel.
2. The Musharaka agreement prescribes that once the vessel has been delivered, it will be legally owned under the name of the borrower. This is, more importantly, for the benefit of the partnership (i.e. the Musharaka).
3. The Musharaka agreement will set out the respective profit and loss rates for the partners and these will correspond to their equity contributions to the Musharaka.
4. The borrower, as it would be most knowledgeable about the subject matter of the Musharaka, is also appointed the technical partner and acts as the trustee of the partners in the Musharaka.
5. Significantly, the Musharaka agreement will, in most cases, also reference a bareboat charter agreement between the borrower and a third party charterer or other similar agreement of employing the asset/vessel, which is the subject matter of the Musharaka.
6. In accordance with a pre-agreed schedule of payments as per the construction or purchase agreement of the vessel, both the lender and the borrower make payments to the seller/manufacturer of the vessel in accordance with their predetermined ratios.
7. Upon delivery, the vessel is then engaged into the bareboat charter with the third party charterer as referenced in the Musharaka agreement. The charter payments received by the borrower from the charterer are applied (whether partially or fully) to purchase an increasingly greater share in the Musharaka in favor of the borrower until the lenders portion of the equity is eventually bought out by the borrower.



Source: (Muhammad 2009)

**Figure 4.12.** Musharaka transaction.

#### 4.2.5.1. Risk management tools in Musharaka finance

- Risk 1: Misconduct, breach of contract, negligence by a partner in taking care of the Musharaka assets, and so on.

To counter such risks, adequate security or guarantees from the partners have to be obtained by the lender(s) at the time of entering into the Musharaka agreement itself. Clauses may be inserted into the Musharaka agreement, wherein a partner in default of his/her minimum care obligations is required to pay certain fixed amounts for charitable purposes. This can act as a deterrent as well (Lewis and Algaoud [2001](#)).

- Risk 2: Loss of capital or assets, etc.

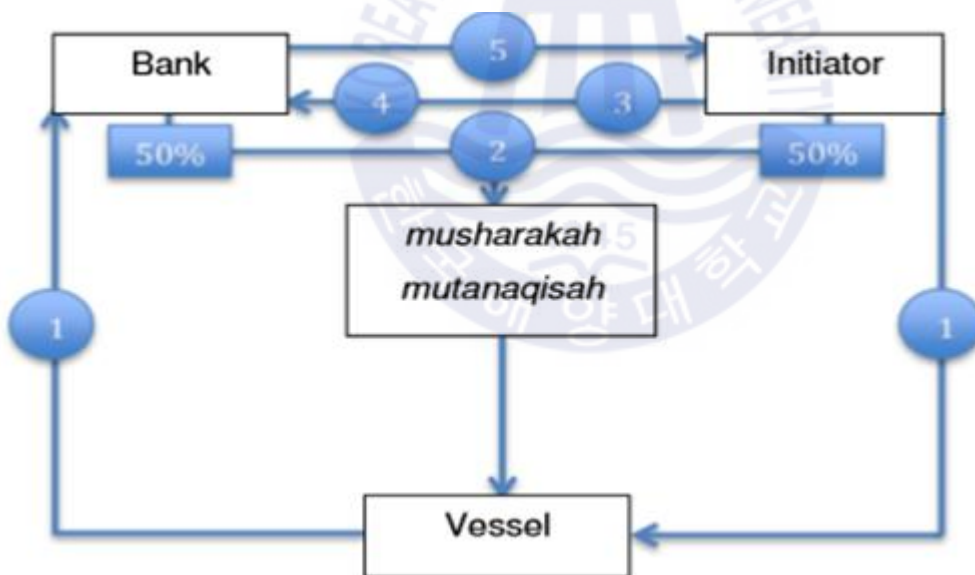
Adequate Takaful or insurance coverage for all ownership-related risks must be taken and there must be active participation either by the lender(s) themselves or by competent managers or experts in the management of the Musharaka business. Alternatively, a third

party (e.g. the parent entity) guarantee for capital loss, subject to Sharia'a conditions and qualifications, could also be extremely useful.

#### 4.2.6. Musharakah Mutanaqisah

Once the aim is to gain ownership of an asset – in this case a vessel – Musharakah Mutanaqisah provides itself as a suitable and Shariah-compliant financing method. Due to the nature of this study and the similarities to the prevailing KG model in Germany, the main focus shall subsequently be put on Musharakah Mutanaqisah and not a plain Musharakah.

Figure 15 below illustrates the relationships and connections in a Musharakah Mutanaqisah, where the bank and initiator each bring in half of the capital required:



**Figure 4.13.** Musharakah Mutanaqisah structure.

1. A vessel suitable for investment is identified and proposed to a bank.



2. Once the bank approves the project, both parties combine their equity for the Musharakah Mutanaqisah partnership.
3. The initiator shares the generated profits or losses with the bank either according to the equity ratio (losses) or to a pre-determined ratio (profits).
4. The initiator uses generated income to purchase shares from the bank and thus increases its own stake in the vessel. This must, however, take place through offer and acceptance between the bank and the initiator.
5. Once all shares are transferred from the bank to the initiator, the project and thus the Musharakah Mutanaqisah will be over.



## **Chapter 5. The possibility for companies with Western origin to utilize Islamic financial products as an alternative ship finance**

### **5.1. Background**

Since the demand for new vessels is still very present due to various reasons, such as old existing tonnage, continuous trade, as well as environmental regulations, the question arises as to how capital can be raised for financing vessels in the years to come?

Meanwhile, Islamic finance has registered double digit growth in the past and is likely to grow further. Yet, Islamic finance rejects interest payments and promotes ethical principles that bring banks and clients closer together. Considering this point in mind, this chapter raises the question, whether the demand for financing new vessels can be linked with the principles and funds from the Muslim world. It also attempts to identify ways to bring the two together and consequently addresses points that are of special interest when engaging in such partnerships and finally gives an answer to the question whether it is feasible and possible for companies with Western origin to utilize Islamic financial methods as an alternative when it comes to financing new tonnage.

### **5.2. The possibility of companies with Western origin to utilize Islamic financial products as an alternative ship finance**

Islamic finance, due to its asset-based nature, has been repeatedly mentioned to be a viable funding option for capital-intensive industries in the transportation sector, namely aviation and shipping. While the aviation sector, at least in Muslim countries, is already widely open to Islamic funding, the shipping sector keeps struggling with access to finance as banks have become reluctant to lend to a highly capital-intensive industry which has been weathering rough seas for decades, even more so after the global financial crisis in 2008. The industry is directly exposed to changes in global trade politics which are, particularly in recent times, fairly unpredictable.

On the other hand, the shipping industry remains a global economic engine with an estimated annual economic impact exceeding \$430bn and providing for some 13.5mn

jobs. Roughly around 52,000 merchant ships and 11,000 bulk vessels are each year carrying \$4tn worth of goods across the oceans, and there are little alternatives to large ships doing that. Among the few options for rationalization are to make vessels bigger so that they can carry more load, which – in turn – makes them even more expensive.

As of 2018, the world's top 40 banks were lending more \$300bn – predominantly in conventional debt – to the shipping industry, while the momentum for the industry remained not too optimistic. This is increasing credit risk and prompting more and more banks to leave shipping finance entirely and divest their shipping loan portfolios.

But the international shipping finance market still remains a substantial one. As other forms of finance remain scarce for shipping companies and port operators, Islamic finance could come to the rescue given the global growth of Sukuk as a form of asset-backed finance in long-term structures. These are fitting well in the shipping industry starting with straightforward financing vehicles such as Murabaha or Ijara, and also other contracts including Istisna for the pre-delivery financing of ships under construction, as well as equity partnerships such as Musharakah.

The key advantage of Islamic finance for the shipping industry are higher liquidity, encouraged by asset-backed transactions that provide banks with better risk management options than non-asset backed conventional finance transactions, and risk-sharing between parties which leverages the loan exposure for them.

When it comes to risks, the securitization of borrowing is important and encouraged in Islamic finance, and therefore all types of guarantees can be built into Shariah-compliant financing contracts. Islamic finance can also be provided as sole source of funding, for example for a single vessel, or as multi-sourced financing, for example for a larger fleet or to provide working capital for shipping companies.

However, there are challenges too. One is the lack of standardization of Islamic finance in different jurisdictions. Due to the high-capital nature of shipping finance, most contracts involve a larger number of financiers and banks from different countries, and not all have

the same regulations on Shariah compliance of Islamic financing contracts. It is also not certain that financing contracts get enforced in the same way in different jurisdictions, which is – nonetheless – a fundamental requirement for global trade and makes it necessary that certain types of Islamic ship financing get backed by state export credit guarantees. Thus, the higher number of financiers and jurisdictions involved in Shariah-compliant shipping financing makes it rather complex to create a contract that takes all those eventualities into account.

### **5.3. Case Study: Companies with Western origin that utilized Islamic financial products as an alternative ship finance**

**Case study 1:** Woori Bank announced on Jan. 12, 2016 that it has become Korea's first bank to use Islamic financial techniques for making a financial transaction worth US\$10 million (12.13 billion won) with Qatar Islamic Bank on the 11th through its Bahrain branch by.

Financial transactions with banks in the Islamic region have been ignored by Korean banks due to complicated transaction terms using actual assets, according to Islamic Shariah law, which prohibits acceptance of specific interest or fees for loans of money, and ensuing tax issues. In this regard, Woori Bank made direct financing possible with the Islam bank through Murabahah, one of the most popular modes of financing by Islamic banks and financial institutions, by making use of its overseas branches in Islamic countries.

In this case, Qatar Islamic Bank will buy and sell actual assets at the same time after taking out a loan from Woori Bank's Bahrain branch for actual asset purchase purposes. Then, it will manage funds during the contract period and give the principal and earnings to Woori Bank's Bahrain branch on maturity. This mode is commonly used in financial transactions between global banks, which run business in the Middle East, and Islamic banks.

An official from Woori Bank said, “The bank has the largest network in the Islamic region among domestic banks. The financial deal with Qatar Islamic Bank is aimed at securing new income sources overseas and cushioning the impact of market volatility resulting from a series of U.S. rate hikes expected throughout this year on the domestic market. Based on its overseas branches in the Islamic region, the bank is planning to expand financial deals with Islamic banks, and continuously take part in the Islamic financial market in the future.”

Meanwhile, Woori Bank has become the nation’s first bank to open the 200th overseas branch on Nov. 26 last year, and currently runs the global network in the Islamic regions, such as Bahrain, Dubai, Dacca, Kuala Lumpur and Indonesia.

**Case study 2:** The Bank of London and The Middle East (BLME), the London based wholesale Shariah compliant bank, announced in June 2008 the completion of a USD 50 Mn syndicated Ijarah leasing facility for Al Ghadeer Marine Shipping LLC, the Dubai based shipping company, to fund the acquisition of the 53,000 DWT double-skinned bulk carrier, Sara V. BLME advised and arranged the financing, with Kuwait Finance House in Bahrain, Boubyan Bank in Kuwait and Capital Bank in Jordan who joined in syndication with Jordan International Bank acting as CoLead Arranger. BLME structured the transaction using a SPV established in the Cayman Islands, which acted as the Mudharib in the transaction and holds beneficial title to the vessel. The vessel was purchased by the lessors and leased back to the Al Ghadeer under an Ijarah transaction. Al Ghadeer paid periodic but fixed pre-agreed amounts as lease rentals (plus a premium) and finally purchased the vessel at the maturity date. According to BLME, “depending on the agreement, the asset may be transferred to the lessee on the expiry of the lease, either against payment of the residual value, the market value or, if the asset has been amortized completely, without any further payment. In this transaction, the asset will be transferred without any further payment. It is very similar to conventional ship financing, although in conventional financing, part of the rental is very often expressed as being the equivalent of the interest on the amount outstanding” (TFR, 2008).

**Case study 3:** Brunei Gas Carriers (BGC), a joint-venture between the Brunei government, Shell and Mitsubishi, secured financing through a syndicated Islamic ship financing transaction in July 2008 from Saadiq (Standard Charterer’s Islamic finance department). Under a pre-delivery construction facility and forward lease structure (Istisna’-Ijarah structure), USD 505 Mn was made available to BGC to fund the construction and procurement of its liquefied natural gas (LNG) vessels (Joseph, 2015, pp.329-330). In Nov. 2009, Qatar’s largest investment bank QInvest and Fortis Bank Nederland launched a USD 100 Mn Shariah-compliant mezzanine shipping fund although “it diversifies and increases sources of debt funding available for the global shipping market in an environment constrained by a general lack of available capital” (QInvest-Fortis, 2009). Also SFS Group, a Cyprus-based non-banking financial institution (NBFI) and KFH Asset Management a subsidiary of Kuwait Finance House, announced a partnership to establish a USD 150 Mn private equity Global Shariah Shipping Fund in Dec. 2009 (SFS, 2009). The target investors were institutional and HNWIs, however, due to the global financial crisis, investor appetite was clearly restricted and the fund agreement was terminated by mutual agreement in 2010. Subsequently, Oxford Business Group (2013) reported that Bank Islam Brunei Darussalam (BIBD) was involved in two Islamic financing facilities extended to Brunei Gas Carriers (BGC) the state-owned liquefied natural gas (LNG) shipping company. In July 2012 BGC signed an agreement with BIBD for an USD 83 Mn refinancing package for the Abadi, the firm’s first LNG carrier with a capacity of 135,000 CUBM. The deal was structured as an Ijarah facility, in a manner that was “similar to lease financing in conventional banking” (OBG, 2013). This refinancing package was used to fund the equity tranche for another Islamic financing deal signed a week later with BIBD, Bank of Tokyo-Mitsubishi UFJ (BTMU Malaysia), the Hong Kong and Shanghai Banking Corporation (HSBC Amanah Malaysia) and Sumitomo Mitsui Banking Corporation Europe, which raised USD 169.89 Mn in financing through another Ijarah facility for the construction and deployment of a new 154,800 CUBM capacity LNG vessel, which was BGC’s 4th newbuilding LNG carrier. In July 2011, the

National Shipping Company of Saudi Arabia (NSCSA) signed a USD 219 Mn Murabaha financing agreement with Saudi Arabia British Bank (SABB) and National Commercial Bank (NCB), whom together provided 80% of the funding, with NSCSA providing the balance 20%, for the construction of two 26,000 DWT general cargo ships. The deal had a tenor of 12 years, repaid in equal quarterly installments with a balloon repayment of about 30% of the contract value at the end of financing period (Joseph, 2105, p.327). More recently, the asset finance market in the Middle East has seen increasing use of Shariah-compliant finance to fund transactions in the oil and gas offshore support vessel (OSV) sector and in terms of international shipping. In 2016 Standard Chartered Bank (SCB) advanced a USD 350 Mn senior secured Murabaha facility to the National Shipping Company of Saudi Arabia (Bahri). The facility will be used by Bahri (the exclusive shipper of oil for Saudi Aramco) to finance the construction of five VLCCs to be delivered in 2018 (Adli, 2017).

From the above analysis, it seems that Islamic banks have replicated risk-free debt ship-finance in the same manner as their conventional counterparts. According to Al-Zuhayli, goods can be sold at a price either at a loss (wadi'a), at break-even (Tawliya), can be sold in full or in part (Ishrak), at a disclosed profit (Murabaha), or simply sold at a price without disclosure of the original cost (Musawama) and are known as trust sales (Al-Zuhayli, 2003, 1, pp.353-4).

## Chapter 6. Conclusion

It is undeniable that there is a sustained and increasing demand for Sharia'a compliant financial and investment products over the world. Although not yet fully developed, Islamic finance has become a widely used and flexible tool in international finance as an alternative funding resource for a large number of business houses and enterprises in helping grow their businesses in a depressive fiscal environment. Devout Muslim investors, who had been locked out of many individual financial vehicles, now have an opportunity to explore and find appropriate fiscal products that are in compliance with their faith and religious beliefs. It is understood that the Islamic banking sector in 2017 had 505 Islamic banks, including 207 Islamic Banking windows. The industry's total worth, according to key industry stakeholder organizations, across its three main sectors (banking, capital markets, and TAKFUL), was USD 2.05 trillion in 2017, marking an 8.3% growth in assets in USD terms, and reversing the preceding two years of assets' growth stagnation (2017: USD 1.89 trillion vs. 2016: USD 1.88 trillion). Islamic banking is commonly seen to have two advantages over conventional banking. The first is a perception that Islamic banks are bound to a higher moral standard. They will not take on irresponsible amounts of risk or pay outsize bonuses to their top bankers. The second is that earnings come from identifiable assets, not opaque combinations of derivatives and securities. Because Islamic banks cannot make money through interest, they rely on ties to tangible assets, such as real estate and equity, charging rent' instead of interest.

Islamic finance is also becoming increasingly popular in industry project and asset finance, with a growing number of high profile Sharia'a-compliant aviation and maritime financial transactions seen globally. The asset-backed nature of vessel financing makes the shipping industry naturally compliant with most Sharia'a principles as well. It provides a great opportunity for financial institutions, global corporations, sovereign funds and countries to develop untapped financial resources accorded to Islamic finance products in



non-Muslim countries as well, the interest in and success of Islamic finance are only bound to grow further.

Although Islamic finance assets still represent less than 1 percent of global financial assets, and growth slowed somewhat in 2017, the global Islamic asset base grew from approximately US\$200 billion in 2003 to an estimated US\$2 trillion at the end of 2016. It is projected by some industry experts to surpass the US\$3 trillion mark by end 2020.

Unsurprisingly, Islamic banking and finance assets have concentrated historically in the Middle East and Malaysia. These markets currently account for more than 80 percent of industry assets. In the past five years though, stakeholders from traditionally non-Islamic majority jurisdictions—including Europe and East Asia—have also entered the Islamic finance market or indicated their intention to participate in Islamic finance transactions.

Africa, in particular, is a region in which Islamic finance could and, indeed, should thrive. The continent has a Muslim population of approximately 636 million, representing almost 53 percent of Africans. The Muslim population in sub-Saharan Africa is projected to grow by nearly 60 percent from 242.5 million in 2010 to 385.9 million in 2030. Furthermore, a vast infrastructure development deficit creates financing needs, towards which Islamic finance could make a significant contribution.

Some African countries have already started taking steps to support the local uptake of this financing mechanism. Among others, South Africa, Nigeria, Kenya, Senegal, Djibouti, Uganda and Morocco have all introduced legal and regulatory frameworks to promote the development of Islamic finance products in their respective jurisdictions. Examples include recent changes to Kenya's stamp duty and VAT regulation to create a more level playing field between Shariah-compliant and conventional products. Nigeria, Tunisia and South Africa are now home to Islamic banks and Takaful (Islamic insurance) companies. Several traditional banks across the continent have also started to offer Shariah-compliant banking products through "Islamic windows."

Also, in the public sector, regional governments have either started issuing international or domestic sukuk or "Islamic bonds" (such as South Africa, Senegal, Nigeria, Côte d'Ivoire and Togo) or have at least commenced preparatory work for their debut sovereign sukuk issuances (such as Tunisia and Morocco). Consequently, how can Shariah-compliant financial products participate in expansion shipping industry in the future especially in Africa?



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## Glossary

- **Gharar:** Uncertainty. One of three fundamental prohibitions in Islamic finance (the other two being Riba and Maysir). Gharar is a sophisticated concept that covers certain types of uncertainty or contingency in a contract. The prohibition on Gharar is often used as the grounds for criticism of conventional financial practices such as short selling, speculation and derivatives.
- **Ijara:** An Islamic lease agreement. Instead of lending money and earning interest, Ijarah allows the bank to earn profits by charging rentals on the asset leased to the customer. Ijarah wa Iqtinah extends the concept of Ijarah to a hire and purchase agreement.
- **Maysir:** Gambling. One of three fundamental prohibitions in Islamic finance (the other two being Riba and Gharar). The prohibition on Maysir is often used as the grounds for criticism of conventional financial practices such as speculation, conventional insurance and derivatives.
- **Mudarabah:** A Mudarabah is an Investment partnership, whereby the investor (the Rabul Mal) provides capital to another party/entrepreneur (the Mudarib) in order to undertake a business/investment activity. While profits are shared on a pre-agreed ratio, loss of investment is born by the investor only. The Mudarib loses its share of the expected income.
- **Mudarib:** The Mudarib is the entrepreneur or investment manager in a mudarabah who invests the investor's funds in a project or portfolio in exchange for a share of the profits. For example, a Mudarabah is essentially similar to a diversified pool of assets held in a Discretionary Asset Management Portfolio.
- **Murabaha:** Purchase and resale. Instead of lending out money, the capital provider purchases the desired commodity (for which the loan would have been taken out) from a third party and resells it at a predetermined higher price to the capital user. By paying this higher price over instalments, the capital user has effectively obtained credit without paying interest.
- **Musharaka:** Profit and loss sharing. It is a partnership where profits are shared as per an agreed ratio whereas the losses are shared in proportion to the capital/investment of each partner. In a Musharakah, all partners to a business undertaking contribute funds and have the right, but not the obligation, to exercise executive powers in that project, which is similar to a conventional partnership structure and the holding of voting stock in a limited company. This equity financing arrangement is widely regarded as the purest form of Islamic financing.

- **Riba:** Interest. The legal notion extends beyond just interest, but in simple terms Riba covers any return of money on money-whether the interest is fixed or floating, simple or compounded, and at whatever the rate. Riba is strictly prohibited in the Islamic tradition.
- **Safeena:** ship.
- **Shariah:** Islamic law as revealed in the Quran and through the example of Prophet Muhammad (PBUH). A Shariah compliant product meets the requirements of Islamic law. A Shariah board is the committee of Islamic scholars available to an Islamic financial institution for guidance and supervision in the development of Shariah compliant products.
- **Shariah Advisor:** An independent professional, usually a classically trained Islamic legal scholar that advises an Islamic bank on the compliance of its products and services with the Shariah, or Islamic law. While some Islamic banks consult individual Shariah advisors, most establish a committee of Shariah advisors (often know as a Shariah board or Shariah committee).
- **Shariah Compliant:** An act or activity that complies with the requirements of the Shariah, or Islamic law. The term is often used in the Islamic banking industry as a synonym for “Islamic”-for example, Shariah compliant financing or Shariah compliant investment.
- **Sukuk:** Sukuk is the Arabic name for a financial certificate but can be seen as an Islamic equivalent of bond. However, fixed income, interest bearing bonds are not permissible in Islam, hence Sukuk are securities that comply with the Islamic law and its investment principles, which prohibits the charging, or paying of interest. Sukuk is a certificate of equal value representing undivided shares in ownership of tangible assets, usufruct and services or (in the ownership of) the assets of particular projects or investment activity.
- **Takaful:** Islamic insurance. Structured as charitable collective pool of funds based on the idea of mutual assistance, Takaful schemes are designed to avoid the elements of conventional insurance (i.e., interest and gambling) that are problematic for Muslims.
- **Tawarruq:** Reverse Murabahah. As used in personal financing, a customer with a genuine need buys something on credit from the bank on a deferred payment basis and then immediately resells it for cash to a third party. In this way, the customer can obtain cash without taking an interest-based loan.

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*“Islamic Finance is about ethics, integrity, accountability, and social responsibility, it encourages business and entrepreneurship purely on profit and loss sharing basis and completely prohibits fixed incomes. Sharing of risk and returns by Investors and Entrepreneurs is an integral crux of Islamic finance.”*

*Dr Sheik Ziyaad Muhammad*

