

## Elements of ship finance

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### ABSTRACT

The author would like to describe ship finance in this paper, which is one of the paramount components in the capital management of modern shipping enterprises. How to make decision scientifically, lower capital cost and maximize the value of the enterprise and the shareholders have become an important object in the modern shipping enterprise research field. The article systematically explains the decision-making theology in ship finance, financing instrument, credit risk review and prevention, and decision-making theology in financing.

**Keywords:** Ship finance; Ship finance types; Risk in ship finance; Ship finance evaluation;

### 1. SHIP FINANCE

There are about two definitions of financing in most textbooks and works: first is capital financing, that means enterprise financing by its assets credit; second is transform from savings to invention (S—I transform). And there are two types for S—I transform: inside source financing and outside source financing.

#### 1.1 SHIP FINANCE AND DECISION

Generally speaking, ship financing means that shipping companies get investment on ship from financial markets. Shipping is a capital intensive and high-risk trade, so on one hand shipping company try its best to widen ship financing ways in order to enlarge fleet and be more competitive; on an other hand along with other trade, financial institutions will be more careful in shipping investment. While deciding investment, they not only examine the company's asset credit, such as gearing ratio, profit, conditions of capital flux, developing history and asset credit, but also require warrant or mortgage, which make shipping financing of shipping company more difficulty.

#### 1.2 DECISION OF SHIP FINANCE

There are many ways of ship finance, different ways deal with different capital cost, term and way to pay back and other conditions. Environment of ship finance is very complicate too, besides capital structure and management level of the company, there are so many objective environment will influence ship finance of shipping company. Such as politics, economic legislation of a country and change of international financial and shipping market. Under such condition, if a shipping

company want to get enough money to enlarge shipping capacity at lower cost and controllable risk of ship finance, it must do a good job in ship finance decision.

Ship finance means selection of the optimum one in many practicable schemes and equilibrium between minimal cost and minimal risk, which can maximize the expansion of enterprise at certain money. The procedure of ship finance decision can be exemplified in figure 1. According to principle of finance lever, when before-tax ratio of profit is higher than interest of borrowed capital, more borrowed capital means higher rate of yield for self-owned capital. But at the same time risk of liabilities is higher too. So in order to assure the smooth going of enterprise under liabilities, we must analyse scale of ship finance, structure of debt and influence to liabilities risk caused by economic environment change.

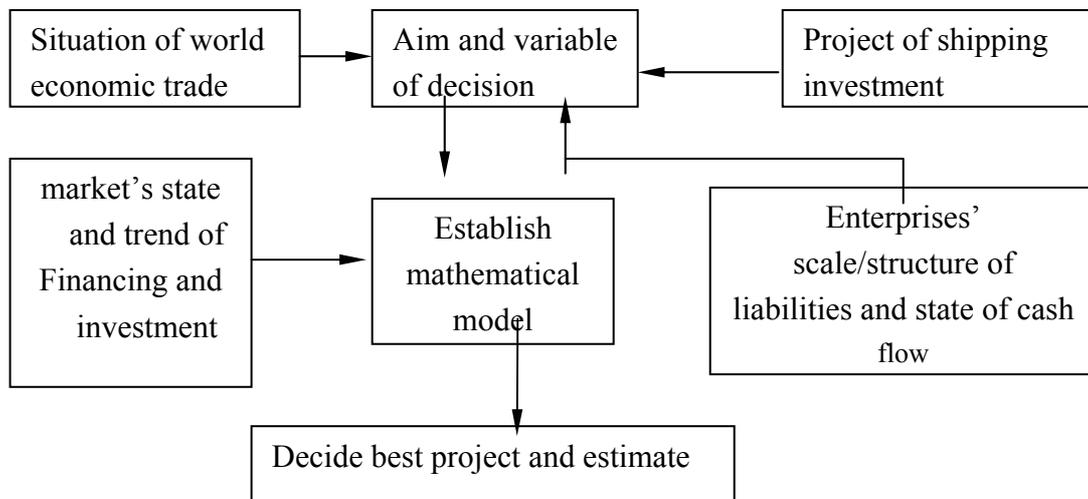


Figure 1: Program of shipping financing decision

### 1.3 PRINCIPLE OF SHIP FINANCE

Principle is the basic rules of doing business, shipping company should follow these basic principles in ship finance:

1. Reasonable amount of needed capital
2. Lowest cost of financing capital
3. Optimum structure of capital
4. Modifiable ways of capital

These principles can help enterprise to realize optimum structure of financing, make full use of capital, enhance ability of self-reform, self-develop and reaction to change of market.

## 2. SHIP FINANCE TYPES

Bankers will tell us there are really only two sources of finance: debt and equity finance, each of which can be sub-divided into different types. However, often in ship financing the finished product is a combination of debt and equity.

### 2.1 DEBT

Debt financing is probably the most popular source of vessel financing. It is a flexible form

and does not remove ownership from the owner.

### 2.1.1 COMMERCIAL LOANS

The most common form of ship finance is the commercial term loan. The first stage of the loan process is the loan application and issue by the bank of a term sheet. The borrower will make an application to a bank for a loan and provide all the relevant information documents. Following credit risk analysis and approval by the bank's credit committee, the bank will draft a term sheet or offer letter. The purpose of the term sheet is to record the principal term of the transaction. It is signed by the parties but is not usually intended to be contractually binding. It is important to note that a term sheet is not a loan agreement in itself but merely a summary of the key terms.

The key areas of the commercial term loan facility are the following:

- (1)Term: this is the length of the loan. The loan may be offered for a shorter period of two years to 15 years depending upon the circumstances. Loans for certain types of vessel may extend beyond 15 years.
- (2)Loan to value ratio: the ratio of the loan to the value of the asset i.e. the value of the ship is an important factor in determining how much the bank is prepared to lend. Different banks have different policies which take account of ship type, age and exposure to certain types of shipping business. The amount of loan a bank is prepared to offer will vary between nearly 40% and 80% and most recently we have seen schemes where 100% financing is possible through sophisticated financial structure.
- (3)Repayment schedule: commonly loans are repaid over a period of time by equal quarterly, semi-annual or yearly instalments. In the London Inter Bank Market instalments are usually paid every six months. There are possibilities for inclusion of a balloon repayment at the end of the loan period. Annuity style amortization of debt is also possible. The repayment schedule will be assessed in conjunction with the review of estimated earnings of the vessels and the life the vessel.
- (4)Currency: since most of the income is in Dollars most loans have been made in United States Dollars, however, other currencies are used e.g. Pounds Sterling, Deutsche Marks and of course now the Euro.
- (5)Interest rates: interest can be fixed or floating. Most commercial banks lend on a floating rate at which it can borrow in the Inter Bank Market. The spread upon the rate it can obtain on the Inter Bank Market is called the margin.
- (6)Commission/fees: commitment commission or a commitment fee will be payable by the borrower if there is a period between when the loan agreement is signed and when the loan is drawn down. A management

fee or an arrangement fee can also be charged on a one off or annual basis.

(7)Syndication: increasingly banks are syndicating their loans to other banks. In a syndicated loan a number of banks make the loan available in the proportions agreed amongst themselves. Usually a bank known as the agent will lead the syndicate and be responsible for administrating the loan and the relationship between the banks and the borrower.

(8)Security: we have previously discussed typical shipping securities.

(9)Representations and warranties.

(10)Covenants

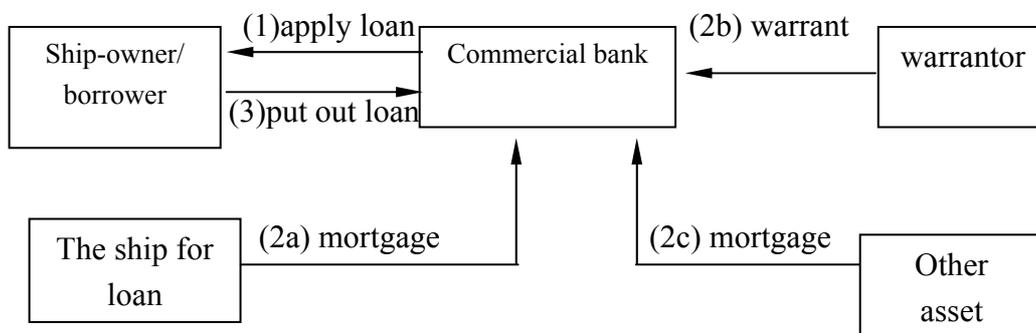


Figure 2 Program of commercial bank loan

**2.1.2 LEASE**

Leasing is an entire subject on its own. Leasing ships have derived from the legal concept of leasing real estate and buildings. The owner of an asset passes possession over to the lessee who is free to use the asset as though he owned it in return for payment of a rental.

There are various types of ship leases:

- bareboat charters
- contracts of affreightment/time charters/voyage charters
- finance leases
- operating leases
- hire purchase

The author intends to focus here on finance leases and operating leases.

An operating lease is one where the right to use the assets is passed to a user or “lessee”. Operating leases are typically used for hiring equipment and are generally short term. Most risks remain with the lessor. Maintenance is carried out by the lessor and at the end of the lease period the asset reverts to the lessor.

In a financing lease the majority of the risk and rewards of ownership rest with the charterer.

The owner is simply the risk financier. Charterhire will “repay” the lessor’s cost of acquiring the assets plus interest. All operating responsibilities fall on the lessee and accordingly the lessor will have little to do with the assets save for ownership. Finance leases are generally for long periods.

Perhaps the most complex form of lease financing is tax based leases. In certain jurisdictions governments encourage investment by providing tax incentives such as accelerated depreciation or tax credits. The schemes allow tax payers with large profits to obtain tax relief i.e. pay lower tax bills on their assets. Similar benefits can then be passed on to the lessee by way of lower charterhire.

A typical structure is set out below:

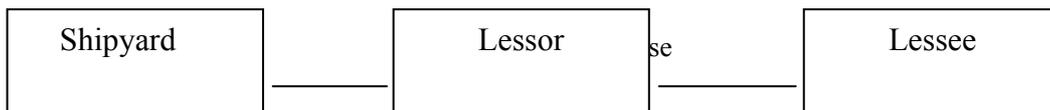


Figure 3 leasing structure

Different jurisdictions have different rules for obtaining depreciation allowances. In the UK there are special rules relating to ships. Generally the UK tax authorities grant allowances of 25% on a reducing balance basis.

The sources of lease finance vary from country to country. In the United Kingdom for example lessors are frequently large UK banks who wish to reduce their tax bill or “shelter their taxable profits”.

The advantages of tax leases include:

Owner/Lessor: able to take advantage of capital allowances and thereby reduce its liability to tax

: owner more likely to secure a cheaper cost of funding

Charterer/Lessee : unrestricted use of the vessel

: no upfront capital payment

: lower rate of hire reflecting capital allowances available to the owner

Problems to be addressed include:

- as a lessor can you be satisfied the lessee can perform its obligations under the lease?
- tax based schemes are generally long term and selling the assets mid term can unwind some of the benefits gained.
- changes in tax laws can be a problem.
- Tax schemes are often sophisticate, involve considerable documentation and are expensive to put in place. They appear to be best suited to established shipping companies.

### 2.1.3 BONDS

Bonds have been an important feature on the ship finance landscape in recent years, particularly the so called “Junk Bonds”. A bond is a piece of paper issued by a company(the issuer)

to repay borrowed money on a specified date or dates at a prescribed rate of interest to the holder of the piece of paper. Bonds are typically traded many times before they are finally redeemed. Interest can be fixed or floating. Often bonds are issued at a discount but redeemed at face value on their maturity date.

Bonds come in two forms: registered bonds and bearer bonds. With registered bonds, registered interest and redemption monies are paid to the registered holder whereas in the case of bearer bonds, interest and redemption monies are paid to whoever presents the Bond to the issuer.

It is possible to secure payments due under a bond by a mortgage over vessels which are held by a security trustee on behalf of all bondholders. Many of the recent shipping bond issues have been unsecured.

A word on “junk bonds” or “high yield bonds”. All bonds are rated by a credit rating organization e.g. Moodys or Standard & Poor. A credit rating less than “BBB” is known as a junk bond. Here the bond or note holder will receive a high rate of interest compared with current market rates but will only do so whilst the company is solvent and the bonds do not go into. In other words you get a high rate of interest for high risks involved.

Bond issues are complex, highly regulated and generally expensive. They often involve very large sums of money. Accordingly they are only suitable for certain types of shipowners. They place considerable burdens on the shipowner. In particular the disclosure requirements are significant since bonds are in essence an offer to investors to purchase bonds. Bond issues must comply with the requisite disclosure requirements. This will involve full disclosure of past performance, forecasts, plans and budgets operations. The high level of disclosure is followed by verification of that disclosure by way of due diligence by teams of lawyers, accountants and investment bankers. “Due diligence” is followed by: “road shows” where the issuer and the underwriters sell the bond in the markets. All of this adds up to expense and hence my comment that this is only suitable for certain types of companies. Furthermore shipowners are inherently publicity adverse and generally do not wish to disclose information relating to the company or its operations.

#### **2.1.4 MEZZANINE FINANCE**

Mezzanine finance is a banker’s term which refers to finance between bank debt and equity. If a bank is only prepared to lend between 60% and 80% of the cost of the ship the shipowner may not be able to raise 20% to 40% equity. Mezzanine finance is the lending of a part of the 20% to 40% required by the shipowner. The risks involved in such lending are relatively high and the margin on the loans are consequently also high. Frequently an “equity kicker” is added as part of the mezzanine finance. This is where the mezzanine financier shares in the profits of the project.

Mezzanine financing has not been very popular in shipping. Specialist shipping knowledge is involved and there are very few institutions who can offer this form of finance.

**2.2 EQUITY**

Turning finally to equity it should be noted that there is no strict division between debt and equity financing and often the division is artificial. What is equity? There are a number of forms of equity, the first of which is not really a form of finance.

**2.2.1 OWNER EQUITY**

This is the part of the purchase price of a vessel which is funded by the owner out of his own funds. It is usually funded out of retained profits or profits or proceeds of asset sales. It can of course be family wealth. Most shipping companies finance a part of the ship via interval equity: the proportion varies from project to project.

**2.2.2 ISSUE OF SHARES**

Typically a company may issue shares publicly or privately. A public issue involves distribution of a prospectus for sale to the general public and perhaps obtaining a listing on a recognized stock exchange. Alternatively a private share issue is one to a select number of investors. Raising equity in the stock markets for shipping has received mixed success. Indeed it is only really the large corporates who have been successful in this area. A public issue of shares can be expensive and time consuming since a prospectus will need to be issued.

The markets in which the shares are issued will most usually have strict rules on offering shares to the public. The company and its directors are required to provide detailed information on the business and future prospects which will be published in a prospectus. The relevant stock exchange will impose strict rules on disclosure and the amount of information required to be stated. Of course these requirements are prudent and aim to minimize the possibility for fraud. Nevertheless, the whole procedure is expensive and, until recently, has been limited in number in shipping.

**2.3 CAPITAL COST RATIO**

For comparatively calculating, capital cost usually can be measured by capital

cost ratio. Its formula is: 
$$u = \frac{C}{Q(1-f)} \tag{1}$$

*u* ---capital cost ratio    *C* ---cost of raising fund

*Q* ---raise fund amount    *f* --- fund raising cost ratio

Table 1: Capital Cost Ratio Formula

| Ship finance types | Capital Cost Formula          | Meanings for letters  |
|--------------------|-------------------------------|---|
| Long-term bonds    | $\mu = \frac{I(1-T)}{Q(1-f)}$ | <i>I</i> —interest paid per year<br><i>T</i> —corporate income tax rate |

|           |                              |  |
|-----------|------------------------------|--|
|           |                              | $f$ —fund raising cost ratio<br>$Q$ —raise fund amount   |
| Bank loan | $\mu = \frac{I(1-T)}{Q}$     | $I$ —interest per year<br>$T$ —corporate income tax rate<br>$Q$ —raise fund amount                                       |
| Stock     | $\mu = \frac{I}{p(1-f)} + g$ | $I$ —interest per year<br>$p$ —Stock price on sales<br>$f$ —fund raising cost ratio<br>$g$ —fixed increase rate per year |

In fact, we usually get many financing types in one plan. In order to compare these capital cost ratios with each other, we must calculate a ratio which can reflect the plan's total capital cost ratio, we called this ratio weighted average cost of capital ratio. When we calculate this ratio, capital sum of all these financing kinds is net raise fund amount.

Weighted average cost of capital ratio: 
$$\bar{u} = \sum_{i=0}^n u_i k_i \tag{2}$$

$n$  ---financing types' number  $u_i$ ---capital cost ratio by i finance type  
 $k_i$ ---i finance type rate raise fund amount

**2.4 ESTABLISH MODEL WITH MINIMAL SHIP-FINANCE RISK**

In practice, getting capital from some different resources is usually better way. Generally we use stock combination theory to establish minimal ship-finance risk model. If the shipping company selects n types of ship-finance, then weighted average cost of capital ratio's formula is (2). Let risk in all types finance be  $\sigma_i$ , then finance

combination risk is 
$$\sigma = \sqrt{\sum_{i=1}^n k_i^2 \sigma_i^2} \tag{3}$$

Where  $\sum_{i=1}^n k_i = 1$ , also can be written  $F_n^T K = 1 \tag{4}$

We know  $F_n$  is  $[1, 1 \dots 1]^T$  and  $K$  is  $[k_1, k_2 \dots k_n]^T$ .

If we make  $A = \begin{bmatrix} \mu_1 & \mu_2 & K & \mu_n \\ 1 & 1 & K & 1 \end{bmatrix}$   $B = \begin{bmatrix} \bar{\mu} \\ 1 \end{bmatrix}$ , then s.t. (2),(4) can be written as

$AK = B$ . We can get many finance combinations that can equal to the fixed weighted average cost of capital ratio in theory. But we should find the optimum result. For instance, if we get optimum finance combination for risk, we can establish minimal

ship-finance risk model as follows: 
$$\text{Min} \sigma = \sqrt{\sum_{i=1}^n k_i^2 \sigma_i^2}$$

$$\text{s.t.} \begin{cases} AK = B \\ k_i \geq 0 \quad i = 1, 2, \dots, n \end{cases}$$

### 3. RISK IN SHIP FINANCE

Due to the nature of derivation of the international shipping market, as well as to the complexity and uncertainty of both internal and external circumstance, shipping enterprises must exercise analysis, evaluation and judgement over the various unmeasurable elements in such situation, so that it can control the process of decision-making and gain the most favorable result from it. This will reduce the risk of ship financing.

The risk of ship finance refers to the chance that any unforeseeable negative elements may occur in the future and its scope of influence on the value of vessels. Comparing with risks of financing in other branches of business, shipping financing has its own features in explaining type of risk and risk elements.

To avoid risk in shipping financing is in fact to learn how one should recognise, measure and analyze these risks. It is a scientific management that tries to obtain a maximum safety at a minimum cost. The process of risk recognition is in fact a process of picking out the best among various financing possibilities, i.e. choosing the best financier, the best scheme and best loan size to gain the lowest cost and largest profit. This process requires knowledge in management, accounting, finance, statistics, strategy and probabilities.

#### 3.1 TYPE OF SHIP-FINANCE RISK AND HOW TO AVOID

Risk of ship-finance consists mainly of risk of economy, technology, law, accounting and finance.

##### 3.1.1 RISK IN ECONOMICAL CIRCUMSTANCE

Risk in economical circumstance refers to the uncertain elements that exist in economy and influence the profit perspective of shipping enterprise which in normal cases will not be able to control the pattern of change of these risks. Political, cultural, financial, taxational and government policy, etc. that may have impact upon macroscopic economical circumstance will affect the business operation of the company. The most effective way of avoiding risk in economical circumstance is to reinforce the work of collecting and analysing political as well as economical information from other countries, to best forecast future political risk by digesting the information and relying upon experience from the past.

##### 3.1.2 RISK OF TECHNOLOGY

Risk of technology refers to risks in ship-finance brought forth by the development of science and technology. It appears in the following form:

- (1) technical advantage of the financed vessel, e.g. if she complies with the present international shipping regulations and environmental legislation demand;
- (2) if the shipyard chosen is capable in experience and technique of building such a vessel;
- (3) if the ship-owner is experienced in operating such a vessel and if they have sufficient management resource, etc.

To avoid risk of technology effectively, one has to first of all reinforce analysis of the freight market, foresee the requirement of ship type by the future changes in cargo type. Secondly, one has to analyse development tendency of ports and canals in the world, e.g. depth of passways, handling capacity, loading and discharging capacity, etc. are all important elements affecting the development of types of ship. Thirdly, one has to analyse closely the regulations of world shipping and environmental legislation in order to know their requirements in technical specification of future vessels.

### **3.1.3 RISK IN LAW**

The international nature of ship finance will normally involve choice of law application. The risk of law refers to risks brought forth by the difference in law of different countries and regions, which often occurs when choosing the law and preparing related documents. A borrower must make sure that he gets the loan and at the same time have control over the risk of law. He must engage experienced lawyer as judicial adviser to strengthen his power of negotiation.

### **3.1.4 ACCOUNTING RISK**

Financial risks refer to the risks relevant to capital structure of the company. The risk is subject to the liability rate of the company. Heavier liability rates, more risky .

Efforts must be made in following aspects:

- (1) carefully choose the way of repaying loan and make a wise plan for repaying.
- (2) set up risk fund
- (3) place liability ratio under control
- (4) rationally raise the ratio of liquidity, accelerate capital revolving.
- (5) increase financing channels and optimize capital structure.

### **3.1.5 RISK IN FINANCING**

The floating of the interest rate and exchange rate of the future market plays a significant role in financing shipping building capital and have effect on the capability of the company repaying the loan.

- (1) the risk of the interest rate
- (2) the risk of the exchange rate

### **3.1.6 RISK IN CALCULATION**

Table 2: Capital Cost Exactitude Theory Formula

| Ship finance types | Capital cost theory formula  | Meanings for letters  |
|--------------------|--|---|
| Long-term bonds    | $Ln = \sum_{t=0}^n \frac{I(1-Tr)}{(1+KL)^t} + \frac{M}{(1+KL)^n}$  | <p><i>Ln</i> -fund raised by per bond<br/> <i>n</i> -term for bond<br/> <i>I</i> -interest paid per year<br/> <i>Tr</i> -corporate income tax rate<br/> <i>M</i> -fund raising cost per bond<br/> <i>KL</i> -bond capital cost rate</p>   |
| Bank loan          | $Bn = \sum_{t=0}^n \frac{I(1-Tr)}{(1+Kb)^t} + \frac{Bn}{(1+Kb)^n}$ | <p><i>Bn</i> -loan from bank<br/> <i>I</i> -interest per year<br/> <i>Tr</i> -corporate income tax rate<br/> <i>n</i> - loan term<br/> <i>Kb</i> - capital cost for bank loan</p>   |
| Stock              | $Gn = \sum_{t=0}^n \frac{Dt}{(1+Kg)^t}$                            | <p><i>Gn</i> -capital gained by per common stock issued<br/> <i>Dt</i> -capital outlay caused by issuing of per stock in the year T<br/> <i>Kg</i> -capital cost rate of common stock<br/> <i>n</i> - living period of common stock</p>   |
| Lease financing    | $Rn = \sum_{t=0}^n \frac{R(1-F \cdot Tr)}{(1+Kr)^t}$               | <p><i>Rn</i> - fund raised by lease financing<br/> <i>R</i> -lease expense per year<br/> <i>F</i> -lease expense interest as a percentage of the lease expense<br/> <i>Tr</i> -corporate income tax rate<br/> <i>n</i> -lease term(year)<br/> <i>Kr</i> -capital cost for lease financing</p> |

Due to possible changes of all the factors of capital cost, the capital cost rate is not a precise value. The capital cost we calculated out through these formula is the result when n is infinity. Therefore, there is risk in calculation because of differences in reality. Comparing Table 1 with Table 2, you will find the risk in calculation.

#### 4. SHIP FINANCE EVALUATION CRITERION

After analyzing ship finance type and finance risk, company can make sure the finance plan on the whole. In the succedent quantitative analysis, present value and internal rate of return are very important parameter.

##### 4.1 FORMULA OF PRESENT VALUE IN SHIP FINANCE

Change all the net cash flow into present value according to capital cost in the period of the plan and sum them up. We called the summation NPV (net present value). Let  $CF_0$  be preliminary investment,  $CF_t$  be

$$NPV = \sum_{t=1}^n \frac{CF_t}{(1+r)^t} - CF_0 \quad (5)$$

#### 4.1.1 FORMULA OF INVESTMENT NET PRESENT VALUE

If let total capital cost of shipping investment be  $C_0$ , rate of return on investment  $R$ , fixed number of use year  $n$ , then we can educe cash inflow per year:

$$A = C_0 \frac{R}{1 - (1+R)^{-n}} \quad (6)$$

Formula (6) is very important for shipping company investment decision. It expresses the required rate of return under the determinate investment dollars and procreant the promised net cash inflow per year in the fixed number of use year which can decide rent charge on bare-boat charter operating by ship owner. In other words, according to this cash inflow ship owner will decide bare-boat charter rate.

Usually, the present value modulus per year is  $\frac{1 - (1+r)^{-n}}{r}$  ( $r$  is discount rate, commonly it can express opportunity cost), so we have:

$$NPV = A \frac{1 - (1+r)^{-n}}{r} - C_0 = C_0 \frac{R}{1 - (1+R)^{-n}} \frac{1 - (1+r)^{-n}}{r} - C_0 \quad (7)$$

Above formula has not considered the shipping residual value. If after ship using age the ship's net residual value is  $S_n$ , then the present value of ship net residual

value is:

$$P_n = \frac{S_n}{(1+r)^n} \quad (8)$$

now

$$NPV = C_0 \frac{R}{1 - (1+R)^{-n}} \frac{1 - (1+r)^{-n}}{r} - C_0 + P_n \quad (9)$$

then

$$NPV = C_0 \frac{R}{1 - (1+R)^{-n}} \frac{1 - (1+r)^{-n}}{r} - C_0 + \frac{S_n}{(1+r)^n} \quad (10)$$

Obviously, influence of residual value to NPV is mainly up to net residual value ratio, fixed number of using year and discount rate. It will be slight or even negligible when residual value ratio is low, fixed number of using year is long and discount rate is high.

#### 4.1.2 SHIP FINANCE LEASING CASH OUTFLOW PRESENT VALUE

$$P = \sum_{t=1}^n \frac{A_t(1-T)}{(1+r)^t} \quad (11)$$

where  $A_t$  is rent per term,  $T$  is corporate income tax rate,  $r$  is discount rate.

$$\text{Rent } A_t \text{ is: } A_t = C_o \frac{i(1+i)^n}{(1+i)^n - 1} - \frac{R \cdot i}{(1+i)^n - 1} \quad (12)$$

where  $i$  is interest rate of leasing,  $C_o$  is total shipping capital cost,  $R$  is residual value.

#### 4.1.3 BANK LOAN CASH FLOW PRESENT VALUE AFTER TAX

$$P = \sum_{t=1}^n \frac{F_t - (I_t - D_t)T}{(1+r)^t} - \frac{R}{(1+r)^n} \quad (13)$$

where  $P$  is cash outflow present value,  $F_t$  express the debt service payment of period  $i$ ,  $I_t$  express the interest charges of period  $i$ ,  $D_t$  express the ship depreciation charges of period  $i$ ,  $T$  is corporate income tax rate,  $R$  is  $n$  years ship residual value after tax,  $r$  is discount rate.

#### 4.2 INTERNAL RATE OF RETURN

The internal rate of return can be defined as discount rate when cash inflow is equal to cash outflow in the period of the plan or when NPV is zero. We notates it as IRR. When NPV=0, according to formula (5), we can get:

$$\sum_{t=1}^n \frac{CF_t}{(1+IRR)^t} = CF_0 \quad (14)$$

No matter  $CF_t$  is different or not, we can compute out  $IRR$  in different ways.

### 5. CONCLUSION

Shipping industry is regarded as a trade with characters of capital demanding, high risk and low return, the prospect of ship finance is quite severe. The periodic change in the international shipping market requires the ship investors to precisely catch the opportunity of investment. Whether ship investment capital can be guaranteed greatly depends on long-term and steady cargo source protected by freight service contract between ship and cargo owners. As the patterns for ship financing diversify, close cooperation between ship owners and investors to commonly fight against risks is an inevitable trend for the future ship financing.

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