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ANALYSIS OF PRACTICES OF PURCHASING VESSELS BY WAY OF LEASING ON TERMS OF BAREBOAT CHARTER

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АНАЛІЗ ПРАКТИКИ ПРИДБАННЯ СУДЕН ЧЕРЕЗ ФОРМУ ОРЕНДИ НА УМОВАХ БЕРБОУТ-ЧАРТЕРУ

Setting the problem. Expanding of fleet, either by the state or by shipping companies, require considerable financial resources. In order to optimize their use, the international practice developed several methods of financing the purchase or construction of vessels [2; 10]. The centerpiece of these methods is a form called long-term lease of vessels, during which the credit granted in the amount equivalent to the cost of the leased vessel shall be repaid. Such form of purchase of vessels is called leasing or bareboat charter leasing, which depends on the characteristic features of maritime transport. A lot of maritime transport workers, including those who implemented similar commercial project in the past, suggest using this form of lease for purchasing vessels [3; 4].

The analysis of recent research and publications. Solutions for expanding the fleet via bareboat charter or leasing are well-grounded in several studies [7; 9]. Many studies are dedicated to very specific yet important issues of the leasing under review: methods of economic evaluation of making decision on purchasing vessels as per this commercial scheme [6; 10; 11]. Finally, the resolutions of the National Security and Defense Council of Ukraine dated May 16, 2008 state the necessity of using long-term lease of vessels for expanding the country's fleet. The National Security and Defense Council of Ukraine offers the government "to deem it expedient to create a state-run leasing company in order to stimulate the formation of and development of national ship owners..."

However, in spite of such attention to the issues of expanding the fleet via bareboat charter leasing, the exploratory studies and conclusions of its implementation practice have not been generalized and have been used insufficiently. Some studies [5; 8] only give total results of such purchase of foreign vessels.

Setting the objective. The purpose of this article is to develop of organizational and economic foundations for the replenishment of the fleet by the bareboat charter, and also to generalize the practices of purchasing vessels on terms of bareboat charter in the USSR and Ukraine, and to formulate, on its basis, the conclusions which will help to organize an efficient implementation of similar projects when restoring the Ukrainian fleet.

The main material of research. Of course, the project implemented in 80 - 90s by the Ministry of Maritime Fleet for purchasing of foreign vessels through a leasing scheme is, on many items, unique and instructive; it enriched the maritime practice greatly. The principal feature of it was that it was held on the initiative of and in the best interests of the state which created all necessary conditions to make this new method of expanding domestic shipping companies' fleet most efficient. The government vested this task in the MMF to be carried out in the foreign market and it issued a special permit to lease foreign vessels in bareboat charter with the right of repurchase. In view of the fact that no legal framework or practice is existed for the implementation of this task, some issues were solved at various levels. The country's maritime law regularized the right to form the fleet of the USSR with bareboat chartered vessels; this legalized this type of commercial activity. Governmental documents in the maritime industry clearly defined that leasing foreign vessels in bareboat charter aims to replenish the domestic fleet with various vessels without using budgetary funds. I.e., the costs of such purchase of vessels shall be reimbursed only by the income of their operation while in lease.

New forms of loans are granted by the Foreign Trade Bank (FTB) and the procedure of their repayment. The institutional mechanism and a special nature of servicing the settlements for bareboat charter leasing of vessels, providing them with fuel, spare parts, making repairs etc. were established at that time. The characteristic feature of this purchase of vessels on these terms is the fact that the bareboat charter lease in the MMF was carried out for the first time, the number of transactions, of acquired vessels

and their types is enormous, and the project implementation lasted for a long period (nearly 17 years). Finally, this work was carried out on a free freight market in compliance with the state monopoly on foreign trade by lease holders (buyers) of the vessels. The project should be divided into two periods by the character of organization of bareboat charter and by their operation while in lease for the entire duration of the project. The first one lasted from 1973 to 1986, and the second one - from 1987 to 1990.

The first period was distinguished by the fact that all commercial activity under review was carried out with the direct participation and the strict control of the central management bodies of the MMF represented by: State Self-Supporting Associations (SSSA), Offices of Fleet and Port Operations (OFPO), Economic Planning Administration (EPA) etc., as well as the exclusive broker - Sovfracht All-Union Association (Sovfracht Foreign Trade Association). Their functional responsibilities as to the lease of vessels and their operation were exclusively regulated by specifically issued orders, directives and instructions of the MMF and shipping companies.

In order to optimize organizational and management efficiency of the entire vessels' lease and operation process, the MMF and shipping companies created subdivisions for work with bareboat chartered vessels. This management structure looked as follows. Sovfracht Foreign Trade Association was the exclusive charterer (lessee) of foreign vessels on the part of the MMF in all bareboat charter transactions. Commercial transactions at Sovfracht Foreign Trade Association were carried out by a specially created subdivision: Commercial Transactions Bureau (CTB) which was given very wide powers.

To finance the acquisition of vessels through leasing, Currency Revolving Fund of Commercial Transactions (CRFCT) was created in the structure of the Ministry of Maritime Fleet. It was formed with the participation of the shipping companies which transferred a part of the currency funds received from the operation of bareboat chartered vessels to its account. The funds were used a par with bank loans to pay for the lease or purchase of vessels.

Payment of the vessels' leasing to foreign companies, as well as repayment of loans was done by a specialized Central Currency Agency (CCA) of the MMF. It kept records of the income and expenses for each leased vessel and shipping company; it also controlled the flow of the CRFCT funds. At some SSSA, leased vessels were monitored by specially created subdivisions: bareboat charter fleet operation departments. They managed the production, economic, planning and financial, technical activities of the SSSA fleet; they also coordinated the actions of SSSA and shipping companies in organization of functioning of this fleet upon transportation of domestic and foreign goods.

In some shipping companies (Black Sea Shipping Company, Novorossiysk Sea Shipping Company), operation of bareboat vessels was organized by specialized self-supporting operational vessel groups - bareboat charter SSSOVG. Their main task was to ensure the efficient operation of bareboat chartered vessels assigned to the shipping company.

The established procedure of bareboat chartering and operation, for the period from 1973 to 1986, can be summarized as follows.

Since any foreign tonnage was purchased with a specific purpose for specific shipping companies, they were customers in conclusion of lease contracts for specific types of vessels. To perform such freight operations, shipping companies gave Sovfracht Foreign Trade Association orders which indicated which vessels (type, size and specifications) should be taken in bareboat charter.

Given the fact that the bareboat charter lease market is a closed one, Sovfracht Foreign Trade Association built its work through foreign brokers. In the first place, they were instructed to conduct appropriate market quotes, and after obtaining the required information, the association picked out proposals of available vessels and transferred them for consideration to the shipping companies being the customers.

The latter prepared a well-grounded feasibility report for selecting an acceptable proposal and a calculation of economic expediency of conclusion of a lease contract for this vessel. Such feasibility reports coordinated with Sovfracht Foreign Trade Association were sent to SSSA which gave its permission or refusal to conclude this bareboat charter contract. Justifying calculations of expediency of leasing of vessels were performed using the appropriate "Methods" [11].

The criterion of feasibility of conclusion of a bareboat charter contract in such "Methods" was based on a comparison of the values of net foreign exchange earnings from operation of the leased vessel and the expenses for its lease. A positive decision was made provided that the resulting net currency revenue from operation of the vessel for the period of the lease should fully cover the costs of the payment of the lease

and the costs for loan resources. $\Delta F T$ I.e., the following condition shall be met:

$$\sum_{t=1}^T \Delta F \geq \sum_{t=1}^T K, \quad (1)$$

where K are the costs for lease and loans for the period T .
 These costs are defined as follows

$$\sum_{t=1}^T K = K_c + \sum_{t=1}^T \Delta K; \quad (2)$$

where K_c are the costs for compensating the market value of the leased vessel;

ΔK is the payment for using load resources for the period T .

The net foreign currency earnings for the period T is

$$\sum_{t=1}^T \Delta F = \sum_{t=1}^T F - \sum_{t=1}^T R; \quad (3)$$

where F is the income from operation of the leased vessel for the period T ;

R are the total expenses for operation of the vessel for the period of lease T .

In their turn, the total operating expenses are composed of commercial $\sum_{t=1}^T R_{pe}$ and technical

$\sum_{t=1}^T R_{ne}$ operation expenses, i.e.

$$\sum_{t=1}^T R = \sum_{t=1}^T R_{ne} + \sum_{t=1}^T R_{pe}; \quad (4)$$

Upon 100% use of loan resources, the amount of payment towards them is defined as follows

$$\sum_{i=1}^T \Delta K = \left[K_c - \frac{K_c}{T}(t-1) \right] * \kappa; \quad (5)$$

Inserting in (1) accordingly (3), (4) and (2), (5), we will get a model of economic feasibility criterion of the lease of vessels under bareboat charter in such expanded form:

$$\sum_{t=1}^T F - \sum_{t=1}^T R_{ne} - \sum_{t=1}^T R_{pe} \geq K_c + \left[K_c - \frac{K_c}{T}(t-1) \right] * \kappa; \quad (6)$$

When making final decision on leasing a vessel, apart from the economic criterion, its technical condition and compliance with its operational requirements were taken into account. After this, the time, place and procedure of vessel's inspection were coordinated with the shipowner. The inspection was carried out by the shipping company's and the Register's experts who defined, upon inspection, the list of necessary repairs and their cost. Then an inspection report was made, using which, Sovfracht Foreign Trade Association gave its final conclusion as to the lease of the relevant vessel. Upon a positive decision, a bareboat charter in written form was entered with the shipowner.

The structure of organization, commercial and financial support of the lease of vessels upon bareboat charter is shown on Fig. 1.

Upon chartering any vessels under construction, the client (a foreign shipowner) transferred Sovfracht Foreign Trade Association a contract for construction and a contract for financial support of the vessel's construction. In accordance with their terms and conditions, the representatives of Sovfracht Foreign Trade Association, of the Register and of the shipping companies controlled and supervised the building, and then accepted the ready-made vessel from the builders. The final procedure was also formalized as a bareboat charter contract.

Apart from the main vessel lease contract, which is bareboat charter, the transaction was accompanied by a loan agreement. It is a separate contract, apart from the bareboat charter, between the charterer and the bank, but it restricts, in some degree, the rights of the charterer when operating the vessel.

The vessels taken in lease were assigned to the relevant shipping companies by special orders; they were registered under the USSR flag and under new names.

The shipping company carried out commercial and technical operation of the leased vessels like others, but with a glance to the peculiarities related to the liabilities to make all timely payment in the relevant currency for the leasing and the loans. They provided the vessels with all which was necessary for their efficient operation, namely: they maintained the hired crews, made repairs, carried out technical maintenance, they conducted classification and insurance of the vessels, provided them with spare parts, bunkering, purchased oils, service water etc.

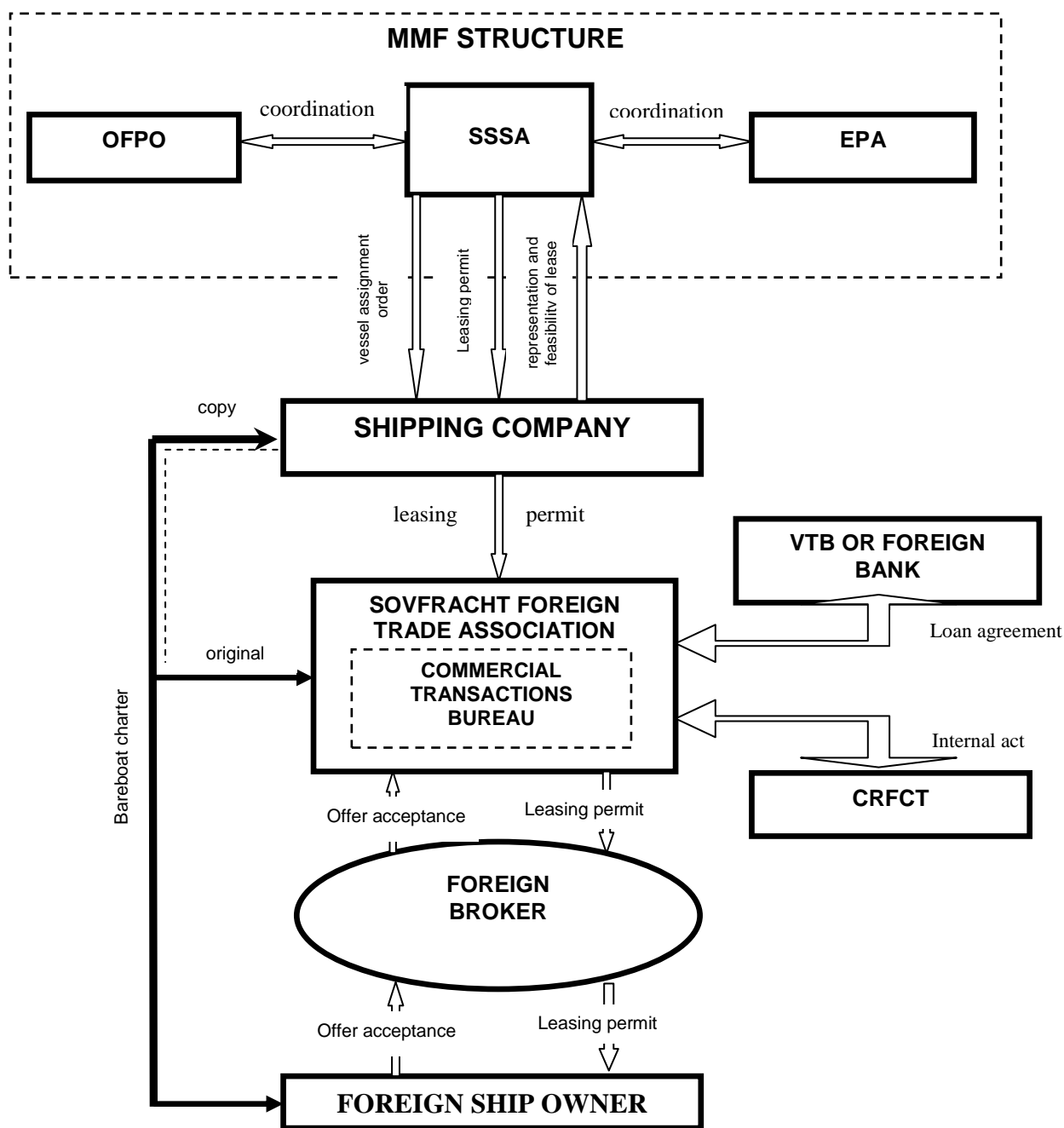


Fig. 1. Organizational and commercial structure of lease of vessels under bareboat charter
 Source: It was developed by the author

The shipping companies collected the freight, made payments for sublease and other income of which the bareboat charter lease was paid; they paid the operating costs and transferred monies to the accounts of CRFCT. Depreciation charges, fund charges, surcharges to currency revenues and expenditures, as a special kind of financial operations used for ordinary vessels of the shipping companies did not apply to the bareboat chartered vessels. Planning and reporting of the shipping companies on revenues and expenditures associated with the operation of the leased vessels somewhat differed from other tonnage, giving the former some preferential conditions. Bareboat chartered vessels, as a rule, were used to transport cargoes of foreign charterers or in foreign sublease. However, if the freight rates in the international market decreased below the listed rates, the vessels were transferred to domestic foreign trade cargo transportation.

Sovfracht Foreign Trade Association and SSSA informed the shipping company on the status and prospects of development of the freight market conditions and made suggestions about the appropriate ways or forms of use of the leased vessels, but the final decisions on their operation were taken, in consultation with SSSA, by the shipping companies. After paying the last installment to the shipowner or to the bank for

the leased vessels, the latter were transferred, by an order, to the shipping company which operated the relevant leased vessels.

Some of the results of the 10 years [1; 8] of the commercial project held in 1973-1986 are shown in the table 1.

Table 1

**Summarized data on project implementation, carried out in the MMF
during the period 1973-1986**

Summarized data on the project implementation	Values of the data
Leased tonnage:	
- number of cargo vessels	84
- deadweight, thousand ton	773.1
Tonnage credited to the balance:	
- number of vessels	19
- deadweight, thousand ton	320.0
Amount of payments for the vessels, mln roubles	185.3
- growth of the fleet funds, mln roubles	195.2

Source: It was developed by the author

During this period, different types of vessels, both old ones (used) and newly-made, were taken in bareboat charter. The used vessels, as a rule, were not older than 10 years. The vessels' deadweight varied within a considerable range: dry cargo vessels: 16 to 73 thousand ton; tankers: 32 to 112 thousand ton; passenger vessels: 21 to 25 thousand ton. Many chartered vessels were of the same type. The terms of leasing were rather short. Old vessels were in lease for 2 to 6 years, while new ones were in lease for 8 years. The amount of payments for a single vessel was 1.0 to 20.0 mln USD. The perfection of organization of foreign trade activity which began in 1987 affected and changed the activity of Sovfracht Foreign Trade Association. First of all, it ceased to be the exclusive lessee of the vessels under bareboat charter. One of CTB was excluded from it; soon it was converted into a separate specialized Joint-Stock Commercial Enterprise "Joint Commercial Fleet" (Sovkomflot JSCE). It defined the second stage of the project of purchase of foreign vessels as per the scheme of bareboat charter lease. Sovkomflot JSCE, in addition to the main activity in leasing of vessels, started transactions in leasing and purchase of vessel equipment, containers and other property for the maritime branch. Sovkomflot JSCE started building its activities in long term lease of vessels based on market relations, both with the MMF shipping companies, some of which became its shareholders, and with foreign shipping companies. In its main activities - leasing of vessels with the right of redemption - Sovkomflot JSCE is not only a lessee, but a broker in purchasing or selling of vessels, as well as a manager with broad powers to operate vessels, a shipowner accepting the purchased vessels etc. When leasing vessels under bareboat charter, these chartered vessels were transferred to operation to both domestic and foreign shipping companies. In order to formalize such relations, Sovkomflot JSCE developed a special form of management agreement and it also used Shipman BIMCO form for this purpose.

The vessels acquired through leasing became the property of Sovkomflot JSCE or were transferred to the domestic shipping companies or foreign shipping companies which issued orders for the lease of vessels and often were involved in their operation during the lease period. This business stopped with the collapse of the USSR. However, Sovkomflot JSCE not only survived, but also became a major Russian shipping company. On the results of the activity of Sovkomflot JSCE show the following data. By early 1991, it possessed of 3 million tons deadweight tonnage; it also transferred vessels and various equipment for an amount of USD 500 million [5] to other companies in the industry.

In the independent Ukraine, bareboat charter lease of vessels has been used occasionally. However, companies do not have much experience in it. Since 1990, the shipping companies of Ukraine, as well as of other CIS countries, started letting vessels on lease, instead of leasing them under bareboat charter. The reason was the absence, during that period, of necessary cargo base, and sometimes, large external debts, which were covered by giving the vessels in bareboat charter with the right of redemption. A significant number of vessels were leased for operational bareboat charter (without the right of redemption). For example, in 1996 the Black Sea Shipping Company had about 25 different vessels in bareboat charter, which was about 18% of the total tonnage of the shipping company.

The Ministry of Transport of Ukraine made an attempt to purchase vessels through bareboat charter in 2001. For this purpose, it created a special shipping company in the form of association entitled "Ukrainian Commercial Fleet", to which a number of vessels previously owned by Ukrainian Shipping Company State-Run Enterprise and by Sea Trident Financial Holding were transferred. Further expansion of the fixed assets of the company was planned on the account of leasing of foreign vessels. The State Leasing Fund was created for this project. But in 2002 this fund was only given 36% (40 mln.) of the planned amount, which was the beginning of the end of the project of Ukrainian fleet extension by leasing. An efficient practice implemented in 2000-2008 was the project of extension of the fleet of Ukrrichflot JSSC. It used bareboat

charter lease as a form of transfer of vessels to the JSSC. The participants and the organizational and commercial scheme of this project are shown in Fig. 2.

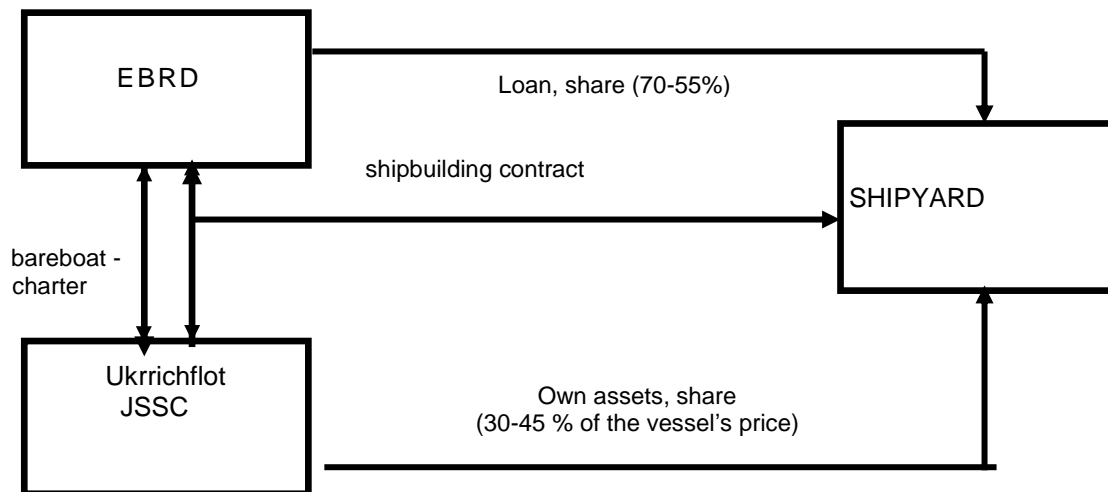


Fig. 2. Organizational and commercial scheme for the construction and leasing of the vessels of Ukrrichflot JSSC.

Source: It was developed by the author

Ukrrichflot JSSC received loans from the European Bank for Reconstruction and Development (EBRD) by several tranches with the purpose of vessels construction. The loan for the first series of vessels having deadweight of 3800 t (m/v DESNA type) was 70% of the vessels' price, and 30% of them were paid by the company itself. These vessels, containing 7 units per series, were built at a Romanian shipyard during five years (2000-2005). Then, by order of Ukrrichflot JSSC, a series of vessels was built at Damen Shipyards Ocean JSC; it consisted of nine vessels with deadweight of 6300 t each (m/v BUG type). The construction was financed by payment of 55% (EBRD loan) and 45% (at the company's expense). Crediting was made by two tranches and, accordingly, 4 vessels were built in 2005-2006 and 5 vessels were built in 2006-2008.

One of the features of this project was the fact that the vessels built were leased to Ukrrichflot JSSC under bareboat charter. The title of the lessee (JSSC) to the vessels was transferred after paying the last installment towards the EBRD loan.

In this case, bareboat charter lease was in the interests of both JSSC and EBRD. The former got the vessels right after their commissioning and the bank, by the bareboat charter, was provided by a mortgage guarantee for a timely and complete return of the loans issued.

This commercial project showed that purchasing new vessels using loans for their building, with subsequent transfer to bareboat charter can be carried out efficiently on a small scale by individual companies without participation of the state. This last fact differentiates this scheme (Fig. 2) from the scheme of purchasing new vessels used by the MMF of the USSR.

Conclusions and further research. The commercial project of purchasing vessels via leasing under bareboat charter with subsequent transfer of title to the lessee which was implemented by the MMF of the USSR in the 80s was one of the greatest by the time of implementation and by the number of contracts concluded.

1. This project resulted in the purchase of more than 200 different transport vessels, barges and auxiliary vessels for many shipping companies. The vessels were purchased on the basis of a complete self repayment only, including foreign currency funds, i.e. not involving the state budget funds.

2. At the first stage (1973-1986), transactions for bareboat charter lease of vessels and their operation were governed by orders, provisions, instructions and other normative acts of the MMF and of the shipping companies.

3. This project was implemented via a newly created system of main executives (SSSA, Sovfracht Foreign Trade Association, domestic shipping companies) which had specialized subdivisions with specific powers and functions for leasing of vessels, their operation and foreign currency transactions.

4. During the period (1973-1986) of the state monopoly for the commercial activity under review, and during the period (1987-1990) of its liberalization, the whole range of transactions related to the purchase of vessels using lease options was carried out and supervised by the specific leading subdivision, i.e., Sovfracht Foreign Trade Association or Sovkomflot JSCE accordingly.

5. When implementing such projects, there is a need in creating funds which allow decreasing the level of the risks related to an untimely fulfillment, by the lessee, of its contractual liabilities. In the project

implemented by the MMF, the role of such stabilization fund was performed by CRFCT which accumulated the proceeds from the operation of the bareboat chartered vessels.

6. Practice shows that the project of purchasing vessels under bareboat charter is very efficient if several shipping companies participate in it (it resonates with the previous conclusion), and the state create certain favorable conditions of operating such tonnage.

7. The second stage of the project (1986-1990) differed by its implementation and by the fact that the commercial work was not governed by departmental acts but by concluding partner contracts, agreements and treaties, i.e. market relations without a strict regulation on the part of the state were applied.

Література

1. Архивные материалы ММФ СССР (приказы, положения, инструкции), относящиеся к аренде судов на условиях бербоут-чартера за 1973-1986 гг.
2. Войниченко В. Международная практика финансирования приобретения судов / В. Войниченко // Порты Украины. – Одесса. – 2005. – № 3(53). – С. 28-29.
3. Збарашенко В. Быть или не быть морскому торговому флоту Украины / В. Збарашенко // Порты Украины. – Одесса. – 2002. – № 3(35). – С. 23-25.
4. Лесник А. Для возрождения морского флота / А. Лесник // Порты Украины. – 2002. – № 3(35). – С. 26-27.
5. Министр эпохи «Золотого века» // Судходство. – 1997. – № 12. – С. 6-10.
6. Морозова И.В. Методические основы расчёта платежей в договоре лизинга судов / И.В. Морозова // Розвиток методів управління та господарювання на транспорті. Зб. наук. праць. – 2001. – Вип. 9. – С. 74-80.
7. Никулин С.Г. Проблемы оптимизации процесса обновления флота в переходный период / Никулин С.Г., Курлянд А.М., Постан М.Я. // Методы та засоби управління розвитком транспортних систем: Зб. наук. праць. – 2003. – Вип. 5. – С. 35-44.
8. Рылов С.И. Фрахтование судов на время / С.И. Рылов. – М. : В/О «Мортехинформреклама», 1984. – 40 с.
9. Судник Н.В. Формирование стабилизационного фонда при покупке судов на условиях бербоут-чартера / Н.В. Судник // Сб. научн. труд. Судовождение. – Одесса. : ОНМА, 2009.– Вып. 17. – С. 209-215.
10. Эффективность финансирования морского флота Украины / Я.А. Горшков, Ю.М. Ларкин, Г.С. Махуренко, С.И. Рылов // Вісник ОДМУ. Зб. наук. праць. – Одеса: ОДМУ, 1998. – Вып. 2. – С. 73-78.
11. Ярмолевич Р.П. Методика расчёта экономической целесообразности фрахтования судов на условиях бербоут-чартера / Ярмолевич Р.П., Луговцов А.Ф. – Одесса. – 1982. – 12 с.

References

1. *Arkhivnyye materialy MMF SSSR (prikazy, polozheniya, instruktsii), otnosyashchiesya k arende sudov na usloviyakh berbout-chartera za 1973-1986 gg.* [Archive materials of the MMF of the USSR (orders, provisions, instructions) related to vessels' bareboat charter (for 1973-1986)].
2. Voynichenko, V. (2005), "International practice of finance of vessels' purchase", *Porty Ukrainy*, no. 3 (53), pp. 28-29.
3. Zbarashchenko, V. (2002), "The Ukrainian Maritime Fleet: To be or not", *Porty Ukrainy*, no. 3 (35), pp. 23-25.
4. Lesnik, A. (2002), "Renovation of the maritime fleet", *Porty Ukrainy*, no. 3 (35), pp. 26-27.
5. "Minister of the "Golden Era"" (1997), *Sudokhodstvo*, no. 12, pp. 6-10.
6. Morozova, I.V. (2001), "Guidance for Calculation of Payments in Vessels Lease Agreements", *Rozvytok metodiv upravlinnia ta hospodariuvannia na transporti. Zb. nauk. prats*, issue 9, pp. 74-80.
7. Nikulin, S.G., Kurlyand, A.M., Postan, M.Ya. (2003), "Issues of Optimization of Fleet Renovation in Transition Periods", *Metody ta zasoby upravlinnia rozvytkom transportnykh system: Zb. nauk. prats*, issue 5, pp. 35-44.
8. Rylov, S.I. (1984), *Frakhtovaniye sudov na vremya* [Chartering of Vessels for a Defined Term], V/O «Mortekhinformreklama», 40 p.
9. Sudnik, N.V. (2009), "Creation of a Stabilization Fund when Buying Vessels under Bareboat Charter", *Sb. nauch. trud. Sudovozhdeniye*, issue 17, pp. 209-215.
10. Gorshkov, Yu.A., Larkin, Yu.M., Makhurenko, G.S. and Rylov, S.I. (1998), "Efficiency of financing the Ukrainian maritime fleet", *Visnyk ODMU. Zb. nauk. prats*, issue 2, pp. 73-78.
11. Yarmolovich, R.P. and Lugovtsov, A.F. (1982), *Metodika rascheta ekonomicheskoy tselesoobraznosti frakhtovaniya sudov na usloviyakh berbout-chartera* [Methods of Calculation of Economic Feasibility of Vessels' Bareboat Charter], Odessa, Ukraine, 12 p.

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