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CONSTANT CHANGES – REGULARITY OF POSITIONING OF SUBSYSTEMS OF THE MARITIME TRANSPORT INDUSTRY

Summary

The contradictory nature of the economic growth of the structural subdivisions of the global division of labor predetermines the special requirements for the development of the maritime trade market. Despite the sustainable significance of the maritime transport industry for the formation of effective foreign economic relations, there are constant systemic changes in the structure of merchant shipping. A modern feature of the functioning of the global maritime trade market and of the positioning of several shipping companies is the asymmetry of the stability parameters of enterprises and the volatility of the external conditions of their operator and investment activities. Therefore, the features of managing the stability of the positioning of individual subsystems of the marine complex are considered from the position of global needs of international trade and the efficiency of entrepreneurial activity of shipowners and operators.

Keywords: stability of positioning, shipping company, efficiency of development, maritime trade market, decision-making.

Introduction

Parametric characteristics of the maritime transport industry are traditionally predetermined by the dynamic nature of the international division of labor. From the position of shipowning structures in this process it is very important to assess the efficiency and advisability of development of the maritime transport potential by the criteria of entrepreneurial interests (Примачев, 2009; Примачев, Klimek, 2014). However, in the conditions of limiting the rates of economic

growth and implementing various aspects of preventive policy by individual countries, there are factors of uncertainty in the development of the maritime transport industry. First of all, the priorities of political assessment of non-standard situations and the use of the principle of sanctions and embargoes, as a rule, against economically less developed countries are included here.

The duration of the embargo against Iran and the sanctions against Russia in recent history can be considered as an example. This process cannot stop the flow of products, which are necessary for normal vital activity of the country, so regions of alternative supply of necessary products join the process. This changes the correlation between the real carrying capacity of the fleet and the opportunities for entering new markets. It is also necessary to take into account the rigidity of the statement: "The theory of constraints focuses on optimization of marginal profit on the basis of carrying capacity in the shortest prospect, and assumes that operational costs are constant costs" (АТКИССОН, 2015).

In this respect, new flows of refrigerated and containerized cargo from South America to ports of Russia and from ports of Northern Europe to the ports of Africa and Asia were formed. At the same time, the increase of the shipment of oil from the ports of Iran and the emergence of freight flows of industrial products from the countries of the European Union and North America are expected. This process cannot be clearly reflected in the shipbuilding program. The management of the optimal correlation of the inevitable changes in the development of maritime trade market and the achievement of the normalized stability of the main operators of the maritime transport industry become the main.

1. Current state of the problem

The changeable dynamism of the global economic processes predetermines the systemic reaction of subdivisions that provide the necessary pace of development of the real economy (Figure 1). The maritime transport fleet traditionally has a special and growing position in such conditions. This statement is also emphasized by accentuating the attention of world statistics and analytical centers (UNCTAD, 2017; BRS, 2016).

There are two periods in the development of the global economy and in the change of role of maritime transport: before and after 1991. In the beginning, world maritime trade in terms of development outstripped the dynamics of global economic relations and the pace of development of the countries, that forming the structure of the OECD. Despite a certain restraint in the growth rates of the fleet's carrying capacity during this period, extensive forms of development of the potential of maritime transport enterprises turned out to be priority.

Structural changes in production and its location, which began in the 90s of the 20th century and strengthened with the beginning of the 21st century due to the outstripping growth of the economies of China and India, led to changes in

the patterns and character of the balance of development of subsystems of global maritime transport.

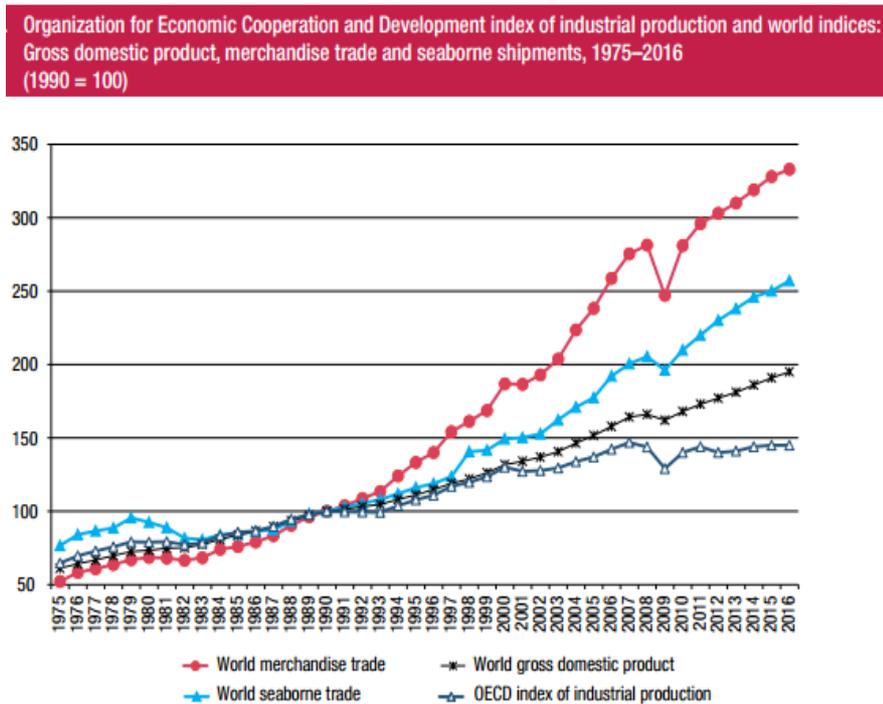


Figure 1. Character of the balance of global economy and maritime trade market

Source: Review of Maritime Transport. Report by the UNCTAD, 2017.

The recent decades are characterized by a priority growth in the pace of world trade in goods. That is why the role of the maritime transport enterprises, that provide intercontinental transport and economic relations, is increasing. Herewith, a relatively even accretion of the pace of the sea transportation of goods becomes characteristic. However, this condition is not taken into account in activities that prioritize increasing the carrying capacity of the fleet in segments of the maritime trade market that are characterized by high temporal efficiency. The imbalance in conditions of new shipbuilding and writing-off the current transport fleet predetermines the problems of maintaining of commercial efficiency in a number of segments of the maritime trade market.

The data on the Figure 1 also reveals the complexity of accounting of the unstable dynamism of the world gross product in managing the development of the production potential of the maritime transport industry. There is an increase in the gap in the rates of formation of interrelated indicators of the world economy

and the economic potential of transport subsystems of the marine complex. It complicates the problems of achieving effective investment activity in shipbuilding and seafaring. Consequently, the attention of researchers is increasing on the disclosure of the main problems of effective development of sea transport. In this aspect it suffices to mention the works Котлубай (2011), Сенько, Фрасинюк (2015), Webster (1997). Nevertheless, the constantly emerging changes require a new understanding of the principles of normalizing the development of subsystems of the maritime transport industry. It is important to take into account the character of the influence of innovative technologies on the change in the efficiency of merchant shipping as a whole.

2. Features of transformation processes in the maritime transport industry

Volatility of the pace and structure of the characteristic of the formation of international economic relations predetermine the tasks of improving the methods of managing the balance of growth of the carrying capacity of the world merchant fleet. Therefore, an assessment of the perspective trend of change in the main characteristics of cargo flows becomes fundamental. At the same time, there are systemic changes in the nature of economic relations between individual states and their associations. The unevenness of economic growth by groups of states predetermines the features of the change in the flow of raw materials and finished products. This process is characterized by a certain probability, which makes it difficult to balance the growth of cargo flows and carrying capacity for the main types of fleet.

Such conditions of the formation of parameters of the global maritime trade market predetermine the risk of timeliness of reimbursement of capital costs. Therefore, the countries that predetermine the priorities of economic growth (China and India), in fact, form a strategy for the normalization of cargo flows. Recently, the project "One Belt and One Road" gets special significance in this regard. The implementation of this idea significantly changes the tasks of managing the transport service of freight flows and causes problems of investment planning.

In this regard, it is important to assess and control the factors that predetermine the change in the dynamism and stability of the deadweight supply, taking into account the perceived value of the transportation process. The search of regularities and factors of the formation of specialized subsystems of the maritime trade market is the main goal of the research. At the same time, attention is drawn to increasing the requirements for the continuity of the handling of cargo flows, which is reflected in the "just-in-time" strategy. It causes a change of the entrepreneurial effect and the results of synergy.

3. Goal-setting in the system of management of the sustainability of the development of the maritime transport industry

The current stage in the development of regional and sectoral subsystems of the world economy is characterized by a significant change of the ratio of economic growth by the separate production subsystems that form the added value (UNCTAD, 2017). The differentiation of the level of added value in various export positions predetermines certain contradictions, even in the structure of traditional economic relations between the USA, the European Union and the post-industrial countries of the Asia-Pacific region. However, this process is not clearly taken into account in the formation of the main parameters of the maritime trade market. Finally, it is difficult to optimize the structural characteristics of the potential of the maritime transport industry. It is important to reduce the consequences of asymmetry of development on the criteria of normalized use of the economic potential of the fleet and ports.

Overcoming crisis phenomena in the economy and guaranteeing economic security are reasonably associated with the elaboration of a complex of social and economic measures for the development of the national maritime transport industry (Figure 2). The necessity of accurate consideration of the features of the formation of parameters of the sustainable positioning of shipping companies in the maritime transport market system becomes the main in this process.

The events of 2008-2009 years and the subsequent period until 2017 reflect a rigid interconnection of all economic processes: the gross world output, the activity of structural changes in the consumption of current goods and services. Complication of the activities in the real investment segment, aimed at optimizing the parameters of international trade and the condition of the maritime transport industry, is connected with it. The BRICS countries and a number of Asian and African countries supported economic recovery. The European consumer market did not show a noticeable growth, which led to an imbalance in the supply of tonnage and cargo flows - the main form of demand on the potential of the transport fleet.

Figure 2 shows that problems of economic growth are differentiated by zones of formation of regulations of development. This is, first of all, the optimization of the international division of labor, which predetermines the demand for maritime transport technologies. At the same time, the development of any subsystem of the maritime transport industry should take into account the patterns of dynamic changes in competitive technologies in the system of sustainable positioning of shipowning structures.

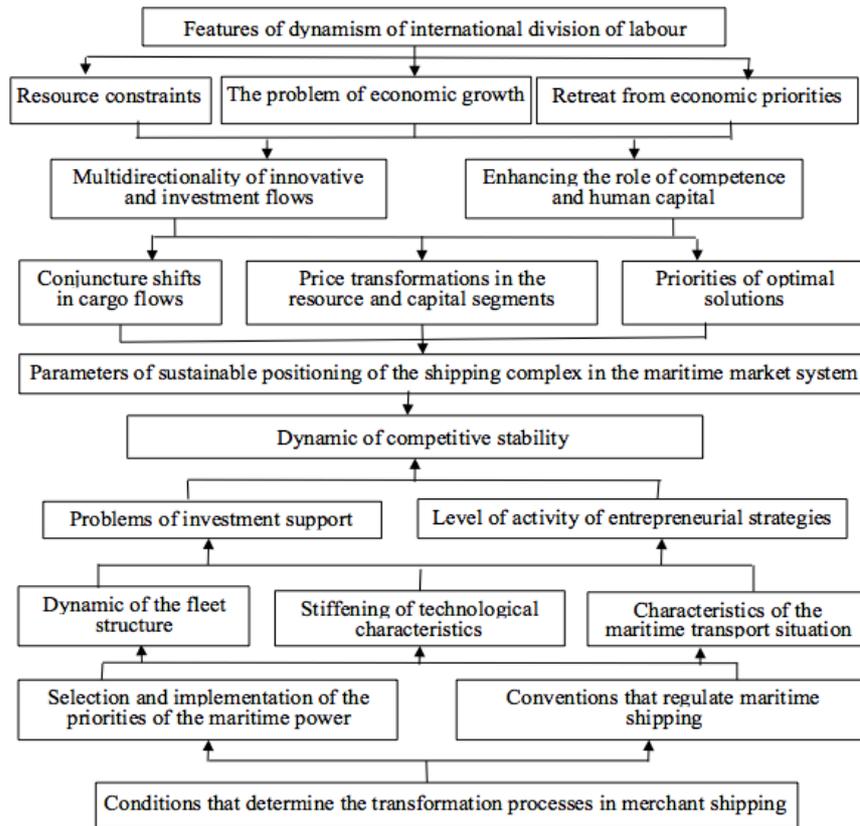


Figure 2. The subsystem of managing the stability of shipping by criteria of changes of conditions

Source: own research.

The necessity of assessment of the specific managerial decisions and evaluation of the chosen development strategy remains principal in these conditions and constraints. In the form of a generalized indicator of the effectiveness of balanced development, reflecting the interaction of the main participants of the global maritime industry in assessing the need to develop the production potential of transport and economic relations, it is sufficient to consider the following logical correlation (Formula 1):

$$\frac{(C_{Sp} - C_{Sf}) - C_{Sa} - \frac{k_{Pr} \alpha_{ij}}{T_L}}{l_q k_{Pr} - k_{Pk}} \geq e_n \quad (1)$$

where:

C_{sp} - prime cost of delivery of goods on a priority route, based on the criteria of anticipating transport processes;

C_{sf} - prime cost of cargo flow servicing under the alternative variant of transport and economic relations;

C_{st} - amortization and depreciation under the base transport potential (using the EBITDA method);

k_{pr} - capital intensity of development by the competitive technology of cargo flow servicing;

T_L - life cycle of the project of the development of integrated transport systems;

l_q - index of growth of quality of transport service of cargo flows on the basis of integration technologies;

k_{pc} - capital intensity by the basic variant of cargo flow servicing.

Thus, regardless of the volatility of the price characteristics of the transport segment and the degree of reflection of the quality of cargo delivery, the feasibility of raising the technical and economic level of the transport complex relative to the estimated characteristics of the maritime trade market is reflected. At the same time, strengthening of the role of integration of the processes of servicing of cargo flows of the maritime transport industry should be taken into account. Ultimately, the possibility of comparing the nature of changing of the results of the selected investment program is forming.

The subsystem of managing the sustainability of development and positioning in the priority segment of the maritime trade market of the shipping company should orientate by the criteria of assessing the nature of the changing external conditions of formation the potential of the maritime transport industry. At the same time, the transformation processes in merchant shipping, on the one hand, reflect the nature of the reaction of shipowners to the peculiarities of forming the parameters of the international division of labor, and, on the other hand, complicate the choice of the strategy of competitive retention of the basic position. It predetermines, in conditions of limited access to investment sources, the strengthening of the position of the leading maritime powers and especially of China. Therefore, for such maritime countries as Ukraine, the formation of an active maritime transport policy with the choice of the original form of supporting entrepreneurial structures becomes fundamental.

Conclusions

As a global criterion for the development of the maritime transport industry, it is necessary to consider the achievement of a balance between the condition of cargo flows of international trade and the supply of tonnage by structural and qualitative parameters, taking into account regulatory restrictions on the safety of navigation from the International Maritime Organization. At the same time, the nature of the risk for entrepreneurial structures on sustainability of operator ac-

tivity expects the existence of local criteria that reflect spot transformation processes. It predetermines the complexity of managing the systemic balance of the condition of the maritime trade market.

In conditions of strengthening the role of the principles of globalization and regulating the ecological characteristics of marine transport enterprises, the importance of the technical and economic level in the system of intensifying the production potential of shipping companies or ports is growing. At the same time, its development can be sustainable by achieving the condition in which the enumerated net results during the life cycle will exceed the costs caused by the requirements of longevity and the formation of the perceived value effect. The standard of discounting and profitability should stimulate a competitive level of technical decisions on the priority of quality and economy of providing transport services.

The calculation and control of the movement of the specific capital intensity of the development and functioning of subsystems of the maritime transport industry are necessary for assessing the current condition and selecting subsequent solutions in the system of programming of the effective positioning. The question of improving the structure of the production potential regarding the dynamics of cargo flows and the technical and economic characteristics of the segment of the main operator activity becomes the principal. The management of the adequacy of the specific capital intensity of the delivery of cargo ensures the sustainability of entrepreneurial effectiveness during the problematic periods of the condition of the maritime trade market. Therefore, constant evaluation of permanent changes in the maritime trade market is important.

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STAŁE ZMIANY - PRAWIDŁOWOŚĆ POZYCJONOWANIA PODSYSTEMÓW TRANSPORTU MORSKIEGO

Streszczenie

Sprzeczny charakter wzrostu gospodarczego strukturalnych części globalnego podziału pracy z góry determinuje specyficzne wymagania dotyczące rozwoju rynku handlu morskiego. Pomimo istotnego znaczenia transportu morskiego dla kształtowania efektywnych zagranicznych stosunków gospodarczych, istnieją stałe systemowe zmiany w strukturze żeglugi handlowej. Współczesną cechą funkcjonowania globalnego rynku handlu morskiego i pozycjonowania przedsiębiorstw żeglugowych jest asymetria parametrów stabilności przedsiębiorstw oraz zmienności warunków zewnętrznych ich działalności operatorskiej i inwestycyjnej. W związku z tym cechy zarządzania stabilnością pozycjonowania poszczególnych podsystemów kompleksu morskiego są rozpatrywane z pozycji globalnych potrzeb handlu międzynarodowego i efektywności działalności przedsiębiorczej armatorów i operatorów.

Słowa kluczowe: stabilność pozycjonowania, przedsiębiorstwo żeglugowe, efektywność rozwoju, rynek handlu morskiego, proces decyzyjny.

JEL Classification: D 300, D490, F 100

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