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INTEGRATION STRATEGIES FOR SUSTAINABLE POSITIONING OF SHIPPING COMPANIES IN THE MARITIME TRADE MARKET SYSTEM

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Introduction. The maritime transport of individual countries, operating in a single space of the World Ocean, determines the tasks and problems of creating standard requirements for the reliability of cargo flows and system security of operation. This significantly differentiates the conditions for the development of maritime transport as a subsystem of the global maritime transport market between its individual structures, on the one hand, and national maritime transport complexes, on the other. This is what determines the expediency of various integration processes in the system of the maritime trade market.

Aim and tasks. The study examined the role of integration technologies in the global maritime trade market and the analysis of the development of the country's maritime transport complex in relation to its real needs for participation in integration processes, as well as possible strategies for integration principles and finding ways to implement such strategies in the activities of the country.

Results. The study resulted in the identification of three approaches to the forms of integration in the maritime trade market. The first form includes the processes of creating the gross national product based on the international division of labor, when the global sectoral equilibrium is achieved by combining the technology of producers of one country with the resources and territory of another state. The second form of integration is the M&A strategy for the further development of shipping companies and other enterprises of the maritime complex. The third form is the interaction of individual maritime transport enterprises in intermodal connections. The implementation of all the above forms of integration is in line with globalization trends in the socio-economic development, achievements of technological progress and strategic interests of shipping companies.

Conclusions. The development of maritime transport in terms of integration characteristics and technical priorities reflects the principle of sustainability. At the same time, activities are separated in the system of achieving a balance in the state of the main components of the transport services market according to the criteria for optimizing the investment flow. The latter necessitates a constant search for optimization of the fleet's carrying capacity and cargo terminal throughput. The main thing is to study the optimization of development from the perspective of both macroeconomic and business structures.

Keywords: integration strategies, shipping, sustainability, ports.

1. Introduction.

The interdependence of the parameters of merchant fleet and port development on the state of global trade and the reverse effect on the efficiency of the formation of shipping market sectors determines the task of improving the management of these processes. However, despite the systemic interest in optimizing the situation on the part of the International Maritime Organization and business structures, the problem of integration processes of development persists. Without focusing on the adopted classification system for the development and status of maritime transport enterprises, it should be noted that their role in ensuring the effective sustainability of the international division of labor is growing. The competitiveness of the fleet and stevedoring complexes of maritime regions is differentiated by two factors. The first is the strengthening of the position of certain multimodal transportation routes. The second is the rationality of managing the position in servicing transit cargo flows and the availability of investment resources based on integration approaches (Wagner, & Wiśnicki, 2022).

Prioritizing the availability of their own investment resources, a group of ports has formed that strictly adhere to the parameters of maritime cargo turnover. Integration is becoming a competitive strategy for achieving innovative technologies and maintaining a position in the international maritime trade market. Centers for the flow of investment resources have been formed. The main goal is to achieve conditions of fair bilateral efficiency. In the process of integration, a cash flow of several hundred billion dollars should be noted. This emphasizes both the importance of the respective seaports and the entrepreneurial interests of investors (Kostetska et al., 2020). Given the above, the main objective of this study is to attempt to formulate a general pattern of sustainable positioning of maritime transport enterprises in the context of the actual transformation of the global maritime trade market.

Given the lack of development resources and necessary state support in the ports of some countries, the conditions for concessioning problem ports were adopted. The main thing is to maintain the position of servicing the priority sector of vessels of the relevant classification.

The total amount of funds should ensure the competitive positioning of shipping companies in integration technologies, which is conditioned by the expansion of the position of innovative service of East-West cargo flow based on intermodal technologies.

2. Literature review.

A wide range of both Ukrainian and foreign scholars have studied the main aspects and problems of the transport sector development and integration issues. Primachev, & Frasinuk (2019) considered the problems of sustainable development of subsystems of the global maritime transport industry, and provided tools for managing the results of fleet and port development from an integration perspective. Golubkova et al. (2021) paid attention to the economic mechanisms of merchant shipping development in Ukraine and the world's maritime complex, identified the features of maritime industry management in the context of globalization, i.e., taking into account integration processes in shipping. Zhykharieva et al. (2019) covered the development of Ukraine's transport complex in the processes of international integration, reforming the organizational and economic structure of the management of commercial seaports, as well as factors limiting integration processes in maritime transport and current trends in protectionism in shipping.

A large number of foreign scholars have also paid attention to the study of integration processes in urban transport. Lupi et al. (2017) presented an analysis of methods for optimizing multimodal container transportation. An overview of multimodal transportation involving inland waterway transport was reviewed by Inghels, Dullaert, & Vigo (2016), who cited benefits not only by reducing costs, optimizing the operation of the transport system, but also for the environment. Strategic and tactical decisions on the development of integration processes in the organization of both fleet and port operations were made by Pasha et al. (2020), Tan et al. (2018). Qu et al. (2019) provide an overview of issues related to planning the organization of multimodal transportation, which ensures high operational flexibility and coordination.

The manifestation of integration aspects in the form of the M&A strategy in shipping is discussed in detail in George Alexandrou et al. (2014). A comprehensive analysis of the consequences of the merger of COSCO and CSCL in liner shipping was conducted by Wang et al. (2020).

However, the topic of integration processes in maritime transport in all its forms is still not fully covered.

3. Methodology.

The economic results of shipowners in violation of environmental standards create risks for the effective positioning of maritime transport enterprises in a particular maritime region. In the performance assessment system (Morosini & Steger, (2003) of shipping, in addition to business interests, it is necessary to comply with new requirements and standards. The following characteristics begin to be monitored: seafarers' well-being, decarbonization processes, and response to cybersecurity issues.

The role of the priority of a clear start of specialized activities is evidenced by the development of Singapore. Under different conditions of achieving individual interests, general principles of implementing intermodal technologies on the basis of specialized shipping companies in local transport ranges are being formed, based on the criteria for managing the technical competitive sustainability of commercial positioning (UNCTAD, 2022b).

Given the focus on achieving entrepreneurial interests, the role of optimizing the level of innovative technologies and competence of the crew and management of a shipping company is growing. It is their orientation that ensures the efficiency of the use of the enterprise's fixed capital (Pasha et al. (2020). At the same time, the requirement to optimize the use of working capital, which is concentrated in cargoes during the period of delivery to the relevant market, is increasing.

It is important to clarify the nature of the manifestation of the factors of transformation of transport and economic relations in order to subordinate this process to the technical and organizational development of shipping companies in the course of iterative

improvement of the system of specialization of transport services for business structures that are developing according to compliance standards (Alexandrou et al., 2014). Even in the context of innovative changes in the allocation of productive forces both on a global scale and in the region of operation, other factors affecting the requirements for the system of maritime transportation of goods and passengers are increasing.

From this point of view, the areas of priority approaches should be optimized in terms of the necessary sustainability between segments, routes, and technologies for servicing cargo flows. This is how EU countries implement transport priorities in their own foreign trade operations. To some extent, this is a hidden form of lobbying for special interests, despite the well-known freedom of operation in the structure of the global maritime trade market.

The system of implementation of priority projects shows the nature of the restrictions on the choice of integration strategies in shaping the position of a shipping company or seaport in the maritime trade market system. The initial certain freedom of operating activities is being adjusted by the options of new conditions. In this regard, the implementation of integration projects allows us to form an alternative. The main criterion was considered to be an approach to increasing the socio-economic and transport potential of states (Primachev & Frasinuk, 2019). Particular attention is focused on fleet construction and port development. The amount of investment should provide for the achievement of the entire set of results. The freedom to service coastal shipping from certain states is particularly important in the system of integration processes.

This emphasizes the special economic potential of the industry. In this aspect, unfortunately, Ukraine has not prioritized the development of the merchant fleet. Only the capacity of individual entrepreneurial stevedoring companies in seaports has been growing. However, it is necessary to take into account the formation of efficiency based on the optimization of the price factor and the cost-effectiveness of technologies (1):

$$\Delta E_{fr} = \Delta Q_r (p_{ca} - p_{cb}) + C_{sa} \geq e_n \Delta K_{pr}, \quad (1)$$

ΔQ_r – planned increase in transportation work; p_{ca} , p_{cb} – price characteristic of cargo flow service in the alternative and basic variants; C_{sa} – current costs of transportation activities under the development option; e_n – the standard for the efficiency of the use of development capital assets (ΔK_{pr}).

In any case, for the effective development of the national flag merchant fleet (Amado & Ambrose, 2001), the taxation system should be oriented not so much on domestic regulations as on the standards of the global system of alternative ship registration. The state register should meet the conditions of the UK and Norway in terms of quality and cost characteristics.

4. Results.

4.1. Principles of differentiation of integration processes

The standard development of the most important components of the maritime transport industry ensures transport safety and determines the optimization of the current account. Therefore, active maritime powers have formed the necessary production potential of the fleet and ports and control the position in the sectors of specialization according to the integration parameters. Beneficial ownership of the global fleet is presented in Fig. 1.

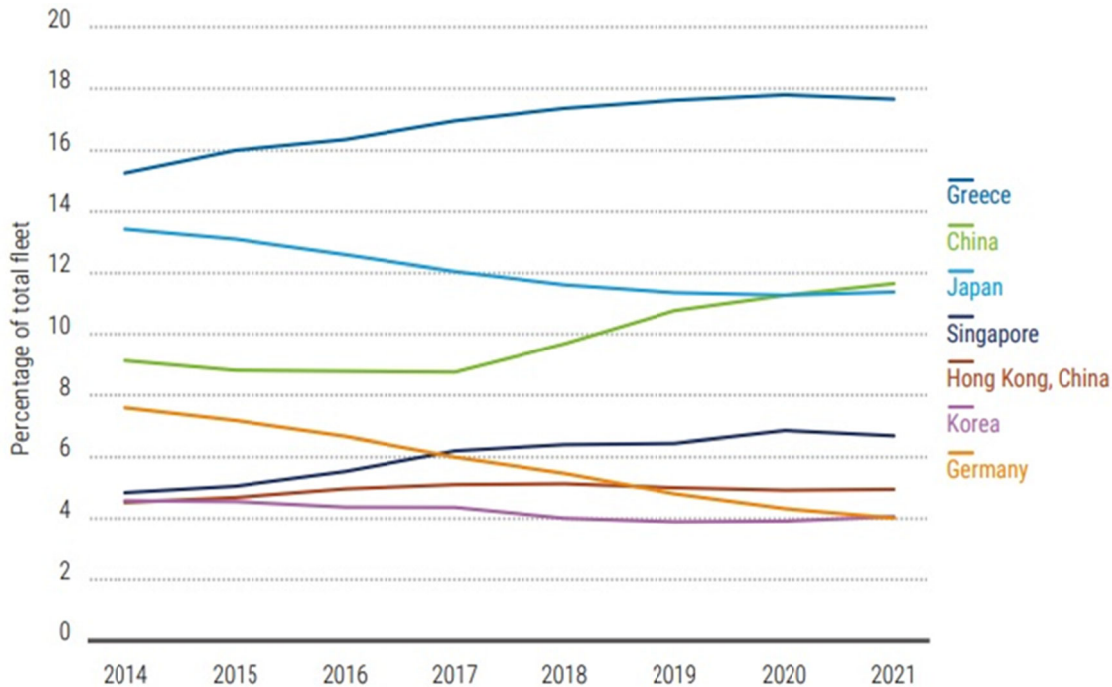


Fig. 1. Beneficial ownership of the global fleet, percentage share, top 7 ship-owning countries, 2014-2021, deadweight tonnage.

Source: based on UNCTAD (2022a).

Therefore, the problems and patterns of formation of the national shipping and stevedoring business are being actively considered. This, in particular, is disclosed in a number of scientific research Primachev, & Frasinuk (2019), Golubkova et al. (2021), Zhykharieva et al. (2019). Particular attention is paid to the way the national transport agency uses the advantages of a balanced positioning in cargo flows.

Unfortunately, due to the imbalance in the formation of the production potential of the shipping complex and the throughput capacity of port terminals and the uncompetitiveness of the Ukrainian flag fleet, more than 90 percent of port cargo turnover is handled by vessels of foreign registers. The limited availability of necessary investment resources remains a problem for the development of shipping companies and commercial ports.

Given the fact that the maritime trade market system has positive correlations between different tariff rates and average costs of servicing cargo flows, any form of investment support is effective. This is demonstrated by the ports of the European Union, China, India and other countries. Statistics widely reflect the actual equivalence of the efficiency of three sources of investment activity: own, credit and concession. The main thing to consider is the expansion of the position (Crammenos, 2020) of national enterprises in the global maritime trade market. Unfortunately, the outflow of port dues from enterprises to the administrative structure limits their independence.

A global trend has emerged to expand the integration development of commercial ports, taking into account concession projects. However, the priorities of the port's positioning and scale of operations are taken into account. The limited spatial and technical characteristics of the facilities and their cost do not guarantee the effectiveness of the above approaches.

After all, the cost of building one terminal requires several million dollars. If the state as the owner cannot provide the necessary development, it is advisable to privatize it under current market conditions. The second option is usually the choice of the form and principle of ownership based on the terms of payback of capital assets for the owner (UNCTAD, 2021b).

The development of shipping and stevedoring companies on the basis of private initiative demonstrates the possibility of effective development of the maritime cluster structure. In this case, the Swiss company participating in the concession project is only interested in owning the oil handling facilities. But for any commercial port, this is only a certain part of the production potential. The main task is to ensure that the condition of the port's capital assets meets the requirements for competitive servicing of the main cargo flows (Friedlob, & Plewa, 2002). The facilities owned by such a company leave only income tax and employee salaries in the country. The main issue is to achieve the port's competitiveness in multimodal cargo handling technologies.

4.2. Optimizing the development of maritime transport subsystems.

It should be borne in mind that the choice of the integration project indicates the owner's intention to achieve competitive sustainability of the enterprise within the framework of the internal strategy. The provision that the receipt of the relevant investment costs over a long period of the contract actually creates a problem of profit distribution is ignored. The country may only have to pay income tax and incur expenses.

The port's territorial position is activated based on the differentiation of concession costs and the corresponding effect. In other words, the owner of investment resources, who makes only decisions that are favorable to him, wins. This is confirmed by the introduction of a special clause on the period of job retention.

Given these conditions, the most important thing is to find the accents that determine the systemic advantage of the enterprise's position in the structure of the developing maritime trade market. Attention should be focused on the conditions of current efficiency based on the choice of an alternative solution.

The choice of current and future goals for the development of merchant shipping subsystems is to some extent reflected in a set of indicators that reveal various aspects of the effectiveness of the integration aspects of the development of the maritime trade market (Golubkova et al., 2021) (Fig. 2).

Accordingly, three main forms of economic integration are considered. The first one involves integration processes in the creation of gross national product on the basis of combining the technology of producers of one state with the resources and territory of another state. This integration process necessitates the development of maritime transport, as demonstrated by China and the European Union with the formation of East-West cargo flows. Another type of integration processes is considered under the M&A strategy (Primachev, & Frasinuk, 2019).

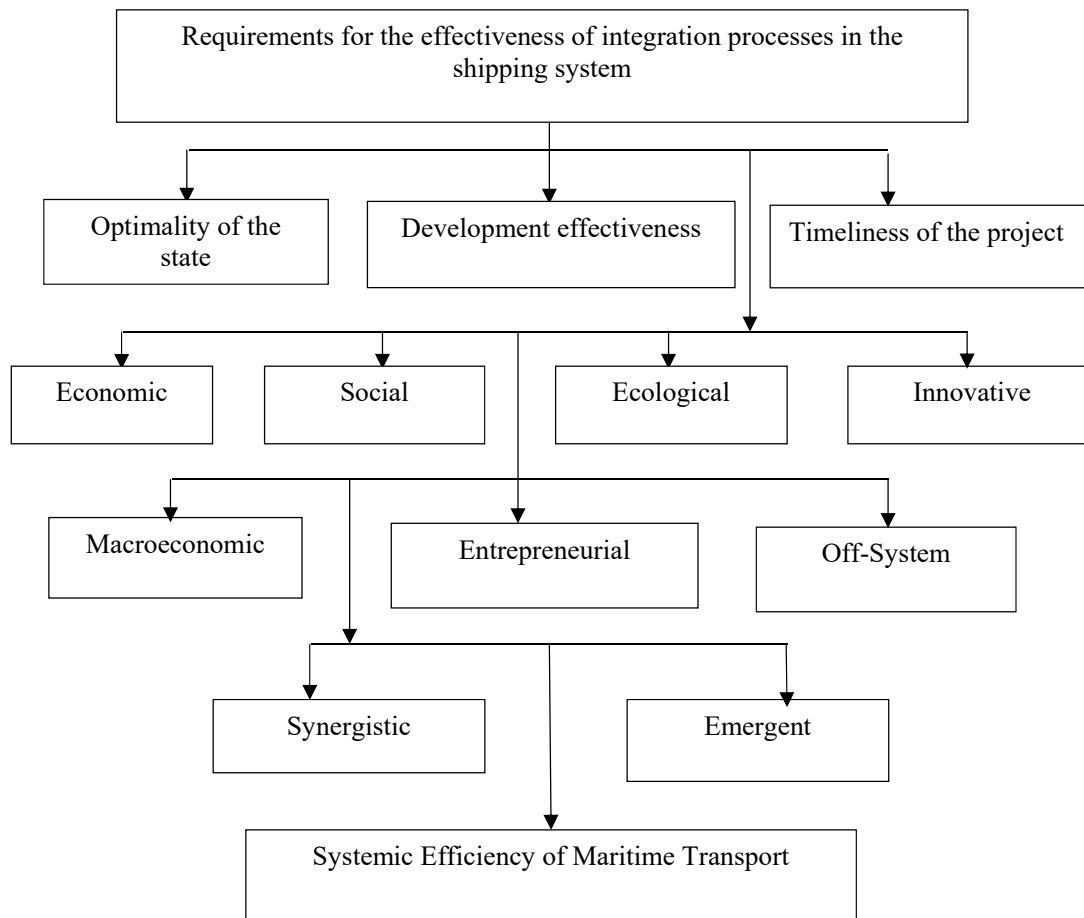


Fig. 2. Forms of efficiency of merchant shipping development.

Source: based on Golubkova et al. (2021).

In the system of commercial ports, this includes concession projects. In Ukraine, this includes the development of the Odesa container terminal by the port of Hamburg, as well as investments by foreign grain traders in grain terminals.

The efficiency for the owner is evidenced by the fact that the throughput capacity of the terminals is twice the annual grain flow (Filipishyna et al., 2018; Mohd Salleh et al., 2021).

And the third block, according to the requirements of the study, determines the nature of interaction between individual maritime transport enterprises of different countries. These are multimodal connections and transport corridors (Primachev, & Frasinuk, 2019).

4.3. Principles of systemic development of maritime transport.

The fundamental pattern of participation of various maritime transport enterprises in the East-West relationship is the choice of competitive stability based on the selection and implementation of innovative technical and organizational solutions. This is what determines the direction of the selection of appropriate projects to ensure the stability and estimated speed of cargo delivery (Krikigianni et al., 2022). To ensure the stability of the positioning of maritime transport business structures based on initiative investment resources, two guarantees are needed: confidence in the inviolability of ownership and the maintenance of competitive advantages.

Therefore, the main thing is to prevent changes in administrative approaches from being based on one-sided priorities. Regardless of the source of investment funds, the priority of their return to the legal owner remains important. The system of principles for the development of subsystems of the maritime economic complex is significantly differentiated by the priorities of individual states.

A variety of characteristics of the maritime trade market volatility determines different possibilities for the further development of individual subsystems and the choice of an alternative approach (UNCTAD, 2022a). The problem of the national maritime transport industry development strategy remains the assessment of the future demand for mineral and energy resources for the stability of the global economy. The inaccuracy of the estimate determines the nature of the imbalance between cargo flows and supply in accordance with the carrying capacity of the fleet.

The attractiveness of operating activities in the global maritime trade market system determines the formation and use of a strategy for prioritizing the positioning of shipping companies and ports. Therefore, it is crucial to develop competitive advantages as a condition that guarantees the necessary advance. Given a system of regularities in the formation of cargo flows, separate transport systems emerge that provide the main condition for the functioning of an intermodal route (Filipishyna et al., 2018).

The structure of strategic levers of economic growth should consider public approaches to effective positioning in the system of global relations and at the same time ensure growth priorities according to domestic requirements. This is what determines the nature of maritime transport development and the level of growth of the national economy (Bernard, 2012). Strategies based on real development factors are becoming attractive to potential investors. Traditionally, the maritime industry has been active in both national structures and global capital-oriented companies. However, in the real conditions of the country, the former have limited flows of investment resources. The latter do not see the country as a reliable field for long-term investment activity due to known socio-economic problems and the risk of losing property (Ozerova, 2022).

The most important thing in the system of managing the balance of the maritime transport industry in terms of compliance with the restrictions of the global maritime trade market is the choice of an effective development strategy in a consistent manner (Mohd Salleh et al., 2021):

- assessing the feasibility of entering the required segment of the maritime trade market;
- assessing the risk of making appropriate investment decisions;
- search for innovative and investment solutions for a strategic approach to the implementation of priorities.

The formation of new transport routes based on state approaches can be attributed to new manifestations of the Keynesian principle of activating the national economy. It should be noted that this theory is not limited in its scope, but rather its effective manifestation in standard crisis conditions. In the mid-twentieth century, the economic growth of Western economies achieved rates of economic development and living standards that required the priority of intensive innovative solutions. The path of extensive development is coming to an end with the emergence of new priorities. And this does not mean that the role of Keynesian principles has been exhausted.

The maritime transport industry remains important in ensuring the effectiveness of participation in the international division of labor and the function of systemic security for solving certain problems, such as energy independence, is being strengthened. The country needs to take into account the increasing role of maritime delivery of liquefied natural gas in the current confrontation in the energy delivery system.

The principles of sustainable positioning of shipping companies have demonstrated their compliance with current trends in the global maritime trade market. It is the continuity of management in situations that determines the preservation of effectiveness in the changing characteristics of supply and demand. The ratio of planning and control over the formation of resources and results remains in place (Kvach, Piatka, & Koval, 2020). For example, the maritime transport system requires a special response to external changes in cargo flows and the construction of new ships, taking into account external environmental impact constraints.

This, in turn, implies strengthening local assessments and support from administrative authorities and investment funds. The main thing is to take into account systemic efficiency (Inghels et al., 2016). In the global maritime trade market, the rule of modern forms of concentration and balance is quite clearly manifested, despite the presence of production potential concentrations. The stability of the system is formed by companies formally associated with the fulfillment of the requirements of the international division of labor (Garg, & Kashav, 2019).

The system of international transport relations has formed and is being strengthened in the absence of violations of the principle of integration of capital resources that ensure functional stability in the priority positioning segment. Agreements between countries should ensure a balanced distribution of results in terms of capital assets and alternatives for maintaining the position. When transforming the value of property into a joint-stock company, separate assignment of shareholdings should be considered. Political and social aspects should determine certain priorities of relations, taking into account interaction in the global maritime trade market. At the same time, the possibility of crisis disputes should be constantly taken into account (Zaderei, 2020).

In the system of rational management of functional activities with a focus on profit margins, it is important to take into account competitive technologies and the possibility of investment activities based on the criteria of innovative advantage. In addition, it is important to minimize the tax burden if there is a risk of reducing the volume of work and employment.

In the maritime transport system, as one of the most important systems of market relations, pricing is based on cost recovery on the supply side and balancing in achieving a balance between supply and demand in a normal competitive environment. In any case, prices (tariffs) must be economically justified. Once they have reached their equilibrium state, any increase or decrease will pose a risk to further economic growth. Changes in the volume of maritime trade in certain time periods and within the most important participants in the maritime trade market should be taken into account (Yuen et al., 2017).

The normalized state of the maritime industry subsectors is determined by two groups of criteria. First, achieving stability of capital assets in terms of profit margin. Secondly, optimization of the time parameters of cargo delivery with minimization of the deadening of the working capital of cargo owners. The natural growth of the production potential of leading shipping companies and commercial ports, as well as mergers and acquisitions, determine the possibility of capital concentration and monopoly control strategies for a certain segment of the maritime trade market. The growth of the market influence of a fleet or port implies the choice of a strategy for the efficient use of investment resources.

5. Conclusions.

The development of the Eastern Pacific Shipping (EPS) shipping company, which has a representative office in Ukraine, is evidence of the realization of positioning priorities. It is one of the factors of Singapore's development. In addition to effective functional activities, the company is implementing a hybrid decarbonization strategy. Thus, the development and maintenance of the position of the national fleet or ports is based on the development of an appropriate strategy. Firstly, the priority positioning of the fleet in the system of a certain segment of export cargo flows, taking into account the realization of both national priority and competitiveness. Secondly, monitoring the state of the sector's positioning in terms of changes in competitive characteristics, especially in terms of the implementation of innovative technologies. Thirdly, forecasting the conditions for optimizing the state of the global maritime trade market and assessing how to achieve the sustainability of the national segment.

This demonstrates the priority of capital asset management in accordance with a clear assessment of the state of the maritime trade market. However, the transformation processes based on the 2022 principles could not be taken into account. While the volume of cargo flows has remained the same, the routing and insurance conditions for production processes have changed significantly. The concentration of priorities from the perspective of certain groups of states determines the change in economic performance.

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