

# Global Maritime Container Transport Market Under The Covid-19 Crises; Its Evolvment, Integration And Regulatory Challenges

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**ABSTRACT:** The main research issue refers to the identification and analysis of the key features and trends revealed on the global maritime container transport market in the years 2020-2022, as well as its general assessment in terms of the effects that such a highly concentrated market's supply side can cause for shippers and container shipping operators. The research is aimed at determining the main premises and factors stimulating the consolidation processes of the container shipping operators and ongoing market vertical and horizontal integration, as well as assessing the risks and effects resulting from maintaining the current system of regulation of this oligopolistic market. While conducting this research, the following methods were applied: factor analysis (FA), market analysis (MA) based on statistical data concerning the supply side, as well as desk research (DR), i.e. in-depth analysis of many reports, opinions, bulletins and data issued by international maritime organisations as well as research institutes.

The obtained research results indicate that: 1. the very advanced consolidation processes among the leading container shipping operators and, consequently, further integration of the container market, radically changes the balance of power in favour of shipping operators and creates the potential to generate serious disruptions in this market and other links in the global supply chains, 2/ regulatory antitrust authorities need to take appropriate regulatory action to limit their market power via legal measures regarding competition.

## 1 INTRODUCTION

To better recognize and assess the global container shipping companies' operational and medium term strategies applied during the Covid-19 pandemic crisis as well as evaluate correctly direct and indirect effects, they have caused for global trade and logistics sector, it is necessary to determine properly the main features and structure of the global maritime container market. It is a vital component of their real, operational sphere, being at the same time its key regulator, autonomously impacting the maritime container carriers' behaviours and decisions [14].

Moreover, it constitutes crucial, strategically important link of the global logistics supply chains, absorbing on one hand and transferring on the other all shocks which are generated within the global supply chains [15]. Therefore, there is a need to present the real regulatory strength of the market mechanism, viewed in terms of its impact on the short and medium term decisions of leading maritime container carriers taken during the turbulent market environment. In this context, however, the public international system of regulation of this sphere of maritime transport activity must not be forgotten. The last one is perceived in form of the typical for this sector international shipping policy which have been set by IMO, EC and other anti-trust entities [20].

For this reason, aimed at answering the question whether the former one is at this stage a really effective tool capable of limiting the market power of the shipping consortia operating on oligopoly-type-container markets, it is also necessary to confront both regulatory mechanisms. Only in this way will it be possible to achieve the adopted objective of the undertaken research and to provide an answer, what were the basic premises and factors conditioning the implementation of an aggressive pricing strategy by container shipping operators and what consequences resulted from this for them and other participants of the global supply chains, i.e. mainly for shippers and international forwarders which were seriously affected by adopted pricing strategy of leading container shipping operators.

The study cannot ignore either the other negative effects resulting from the selfish behaviour of oligopolists in the operational sphere, focusing only on the realization of short-term own financial interests during the Covid-19 crisis. Ignoring the interests of other parties of the global supply chains has exacerbated extensive disruptions in the world trade and international logistics sector [6]. They have generated huge economic and financial consequences within all sectors of the global economy, impacting the significant rise of imported by sea goods' prices to the detriment of their consumers and via higher inflation rate deteriorated world economic stabilization [27; 32].

To meet the research main assumptions and goals of the study focusing on in-depth analysis of the global container shipping market along with its extensive relationship with the global commodity market in the recent 3 years, the author has decided to apply typical analytical approach to the examined issue. It made it necessary to take into account predominantly such research methods as: FA, MA and DR. For this reason, the focus was also on the selection of literature and data on the adopted research timeframe, i.e. predominantly on the selected reports and expertise of the international research centres and institutes as well as organizations and industry associations issuing the updated results of the conducted surveys in form of the insight bulletins along with the statistical data.

## 2 GLOBAL CONTAINER SHIPPING MARKET VERSUS GLOBAL COMMODITY MARKET; AN ANALYTICAL APPROACH

Transport plays a crucial role in ensuring the smooth and logistically efficient movement of world trade volumes and thus the functioning of global supply chains. Among the main segments of the global transport market, the maritime freight market plays a particularly important role. At present, in volume terms it handles more than 82 % of the world trade commodities [27; 29]. Maritime carriers, having at their disposal fleet of over 2.1 bn dwt, transferred on average, in the years 2019-2021, 11.0 bn t of cargo, i.e. 1.4 t per one inhabitant of the globe.

The medium- and high-value goods constitute more than 70% of the entire shipping volume [30; 23]. The majority of this volume is moved in containers. In

the year 2021, the container fleet, including almost 6400 vessels with the joint carrying capacity of 307.1 ml dwt, i.e. ca. 14% of the world fleet's capacity, and the tonnage of 25.6 ml TEU, transported approximately 1.97 bn t of cargo on the main ocean routes (in 2020 – 1.85 bn t). It constituted 17.9% of the maritime trade volume.

In the year 2020, strongly affected by Covid-19 pandemic crisis, 149 ml TEU were transported by sea. The decrease amounted by merely 1.1% as compared to 8.4% in the former world's crisis year 2009 [26; 30]. In the year 2021, global container fleet transported ca. 160 ml TEU (+ 7.4 %). The three main shipping relations, i.e. Trans-Pacific, Europe-Asia and Transatlantic ones, have been most intensively used.

The cargo transported by sea constituted in 2020 almost 65.4% of the total world trade value, which was at the level of USD 22 trn [31]. This means that the so-called maritime trade reached the value of USD 14.39 tn. In the year 2021, as a result of substantial growth of the total world trade value to USD 28.5 trn (+ 13% in relation to the year 2019, and as much as 25% in relation to 2020), the share of maritime trade in its servicing increased to 66.5%, thus reaching the level of USD 18.9 trn [15; 17; 24].

As estimated, the container shipping market, which is the most dynamically developing segment of the global maritime freight market, participated in the year 2020 in 62% in the global maritime trade measured in terms of value [15; 28; 30]. Its value was estimated at the amount of USD 8.9 tn [15; 23]. In the year 2021, the value of the maritime container shipping market already rose to USD 11.4 tn. However, its share in the value of maritime trade amounted to 60.3%, so below the level reached in 2020 [25; 31]. That was caused by disruptions in the global supply chains and serious disturbances that occurred in that maritime freight market segment.

The conducted analysis of the global maritime container market during the pandemic crises indicates that it constitutes a strategic link in the global supply chains and is able to influence directly their remaining links with great force and efficiency. As a result, it determines currently to a great extent the quality of logistic processes realized in the supply chains, and the logistic standard of services provided to shippers and forwarders as well as operators of the maritime container terminals and indirectly other providers of global intermodal services, i.e. transport operators [16]. Above all, however, it is an essential factor ensuring efficient and effective handling of global cargo flows and as such is a major driving force for the development of the global economy.

## 3 GLOBAL MARITIME CONTAINER MARKET AND ITS TYPOLOGY; METHODOLOGICAL ISSUES

Due to the fact that global container shipping operators provide commonly standard services in terms of their quality and the demand side expectations, the maritime container transport market has typically homogeneous characteristics in the area of all its main segments. This creates a possibility to

analyse the structure of the supply side of the global market, which is therefore very susceptible to processes of both capital as well as commercial and operational integration. Based on Alphaliner's data, the current structure of the supply side of this market can be presented [2; 5].

Detailed analysis shows that the group of 12 largest shipping operators with the market share exceeding 1% of the global container fleet capacity existed in the end of 2022, had at their disposal the container carriage capacity of 87.4% of the total one [2; 5]. 10 of them concentrated 84.7% of the world's container fleet capacity, and only the top five had 65% share in the world container fleet's potential. This trend on the container market over the last 11 years is presented in Figure 1.

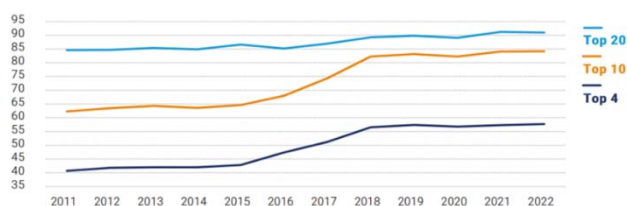


Figure 1. Market shares of top four, top ten and top twenty carriers, 2011-2022  
Source: [ 27 ]

What is more, the portfolio of new orders in this group of carriers was also the largest one at the end of 2022. This means that more than 120 container carriers operated on the maritime container market, both in global and regional scale, currently own as little as 12.6% of total carrying capacity [4; 29]. In the years 2012-2013 their share was still around 70% [3 ;28]. This is the proof that the concentration of the container fleet carrying potential within a narrow group of leaders operating on this market is far advanced.

No less significant for the market is the trend of horizontal consolidation. [UNCTAD, 2022]. Container shipping companies have long been horizontally integrated through mergers, acquisitions, and occasionally because of bankruptcies, frequently in reaction to overcapacity. As a consequence, from 1996 to 2022, the top 20 carriers' share of the container carrying capacity increased from 48 to 91 percent [27; 29]. In more recent times, that share has stayed steady, however the four major carriers among these 20 have seen a rise in their share. The top four have controlled more than half of the world's capacity since 2017, and since 2018, each has had a market share of more than 10%, as it is seen in the Figure 1 [3; 25; 28].

In turn, referring to the number of local companies as a marker of this trend, it can be stated that between 2006 and 2022 the average number decreased from 18 to 13. Germany, e.g. in 2006 had 97 carriers but by 2022 the number dropped to 37. Meanwhile, the size of the world's largest container ships more than doubled, from 9,380 to 23,992 TEU. During the same period, containerized trade also grew [7; 21; 27; 29].

These changes lessened competitiveness. The rate of return on assets decreased when ship sizes increased more quickly than volume. Due to their inability to provide the same services or compete on pricing with the larger carriers, smaller shipping businesses found it increasingly difficult to stay in

business [9; 24; 27]. Thus, trend of horizontal consolidation and market integration is being reflected in the amount of companies working on the most dynamically evolving maritime freight market.

The second characteristic feature of the global container shipping market is its high degree of concentration on the main shipping routes that can be treated as separate market segments. It results from strong economic interdependences which exist between commodity and container shipping markets. This is a consequence of very advanced world trade concentration within the three main regions and directions of the exchange of goods in the East-West relations, i. e. the Far East, the EU and North America [30; 31]. The high degree of intensity in the exchange of goods between the Far East countries on one side and the USA and Canada on the other, has created the trans-Pacific trade and shipping route.

In total, in the three main relations, i. e. the trans-Pacific, the Europe-Asia and the transatlantic ones, 59.2 ml TEU were shipped in the year 2020, whereas in the year 2021 it was already 65.5 ml TEU. That constituted, respectively, 39.7% and 40.9% of the total number of containers shipped by sea on a global scale [10; 26; 27]. This means that over the last two years approximately 60% of shipments on average were realized outside the configuration of the main shipping routes. Although it indicates that the dominance of shipments with sea ports in developing countries still exists, it has to be taken into consideration that shipments in these relations are realized on more than 120 loops, while the number of containers transported in these relations never exceeds the level of 7% of the aggregate shipment volume [27].

The three main container shipping routes, regarded by operators as the most lucrative transport relations in existence on the East-West direction, which indicate advanced spatial concentration of the global maritime container shipping market, are still gaining importance. This is where shipowners concentrate, to a higher and higher degree, their shipping potential, often at the expense of its reduction on the routes with regional importance – in Asia, Europe and on the links with Africa. In accordance with the data provided by Alphaliner [2; 5], 43.7% of the total capacity of container fleet were engaged in shipments on the trans-Pacific and Asia-Europe routes. The year before it was 38.1%. At the beginning of the year 2022, 22% of the container tonnage were servicing the Asia-North America relation, whereas the year before (1st January 2021) this share amounted to 17.5%. In the year 2022, Alphaliner [2; 5] submitted the data showing that 702 container vessels with the capacity of as much as 5.75 ml TEU, i. e. 24% more than at the same time the year before, were employed in shipments on this route. In turn, on the Asia-EU route, the shipping potential in the year 2022 increased by 10.2% in comparison with the year 2021 [2; 27].

Concentration of shipments and tonnage occurring in spatial configuration is also visible at the level of shipowner companies, belonging to the group of the main world leaders servicing these relations. This tendency, as well as the direction of changes introduced in this largest segment of the maritime

container shipping market, is presented using the example of the trans-Pacific relation (Fig. 2). Tendencies similar in character also occur on the two remaining main container shipping routes.

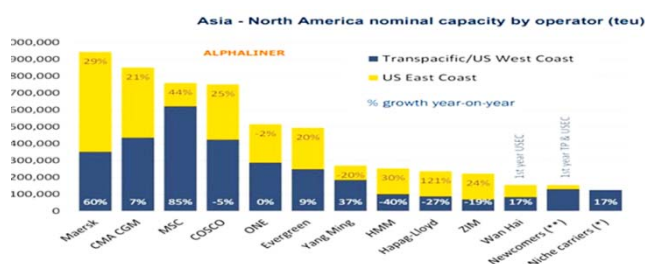


Figure 2. Nominal capacity of tonnage employed in trans-Pacific relation (US East and West coast) by 13 container shipping operators in TEU, and its percentage increase in 2022 in relation to 2021.

Source: [ 5 ]

The change of container operators' market shares in servicing the key strategic routes, results from their operational strategies, targeted at optimizing the tonnage utilization and maximizing the EBIDTA on one side, as well as, on the other, from the necessity of operational adapting to the considerable volumes imbalance existing between exported and imported goods transported in both relations, i.e. eastbound and westbound [26]. The scale of an asymmetry with regard to the container shipments – in particular on the trans-Pacific routes from East Asia and on the Asia-Europe routes is very large. In the Asia-USA relation the exported to the US containerized goods constitute as much as 77.2% of the total number of containers transported in these relations, while on the East Asia-Europe route the volume of shipments from Asia to European ports amounts to 70.3% in the aggregate amount of shipments [21; 27]. The smallest share, i. e. merely 65% of all the shipments on the transatlantic route belongs to container shipments from Europe to North America.

Such asymmetrically formed transport of containers by sea in both directions on the main routes, formed by the configuration of commodity markets, is another proof of concentration occurring in this sphere. This concentration results from imbalance of freight volumes in the export-import relations and affects significantly the tonnage exploitation costs, as well as the average cost of shipping 1 TEU. In consequence, such an eastbound and westbound imbalanced in volume terms container transport structure, co-defines the decisions concerning prices practices, taken by shipowners, as well as their operational strategies and behaviour towards shippers. It also shapes, to a great extent, the shipowners' policy with regard to establishing contract rates versus spot-type rates.

Focusing on identification and analysis of basic processes and tendencies occurring in the maritime container shipping market, it is also necessary to take into consideration the third phenomenon typical for this market. It concerns its supply side, namely the existence and development of shipping consortia. These consortia, which have been appearing in container shipping since the mid-1990s, are shipping alliances, created by two or more operators undertaking cooperation [8]. It enables them to use

their common resources more effectively, as well as fully integrate the system servicing the network of shipping connections. The strategic aim of such a form of cooperation is to reduce both, the investment risk, which is relatively high in this segment of the freight market, as well as the exploitation risk, i. e. the low degree of utilizing the owned fleet capacity under the periodically occurring crisis situations (e.g. a drop in effective demand in the first half of 2020). Another aim is to achieve possibly maximum effects of economies of scale [8; 12]. Such effects may be achieved within this kind of cooperation in the form of decreasing the costs of tonnage exploitation including, first and foremost, the costs of day-to-day operational activities. At the same time, the parties to such agreements, as opposed to shipowners operating earlier within liner conferences, which have the character of typical shipping cartel, declare their willingness and readiness to ensure a number of advantages for the remaining participants of the global logistic supply chain, whose integral component they are, in particular shippers, freight forwarders and operators of port terminals.

These external effects of shipping alliances should be visible in the form of improving, in terms of logistical standards, the existed network of shipping routes. Such an improvement could be achieved by way of extending this network, increasing the frequency of ports' calls and the level of service reliability, improving the quality of provided services, as well as ensuring a relatively stable, foreseeable price system (mainly spot rates) and reducing logistic expenses in the global supply chain.

Such "benefits declarations" made by the parties of created alliances had the following aims: 1. calm the fears of shippers and of the widely understood global logistics sector, concerning a new, increasing wave of integration of shipping companies and markets in this sector, which potentially means further concentration of the supply side and the increase in market power of container shipping operators; 2. create a friendly image of the new cooperation formula of the global maritime container shipping market, acceptable for anti-trust authorities in leading maritime countries, including the European Union (EC), the USA (FMC), Singapore, South Korea and China.

Container shipping alliances which have been created since the year 1994 went through a long period of evolvement, including the phases of important structural transformations and reconstructions [25]. They resulted in progressive integration of the greatest container shipping operators and simultaneous consolidation of the market. Finally, in the year 2017, there emerged a group of only three strong alliances, namely 2M, Ocean Alliance and THE Alliance. 10 world's largest containerized shipping lines fully cooperate with each other within these consortia. The existing container shipping consortia and their structure, together with respective share markets are presented in Figure 3.

The three consortia currently in existence jointly control 84.60% of the world container shipping market. This means that as little as 15.40% of the market are serviced by the remaining container shipping operators. The scale of intensification in market consolidation can be reflected in the fact that,

in the year 2000, 10 largest container shipping companies serviced 51% of the global maritime shipping market. Furthermore, in the years 2000-2021, due to the wave of numerous bankruptcies and takeovers which occurred in this sector, approximately 60 of 100 largest maritime container carriers disappeared from the market [22; 25; 28]. Among them was the Korean container shipping operator, Hanjin, the sixth largest operator at that time, which went bankrupt in the year 2016.

Global Shipping Alliance Share - 2021

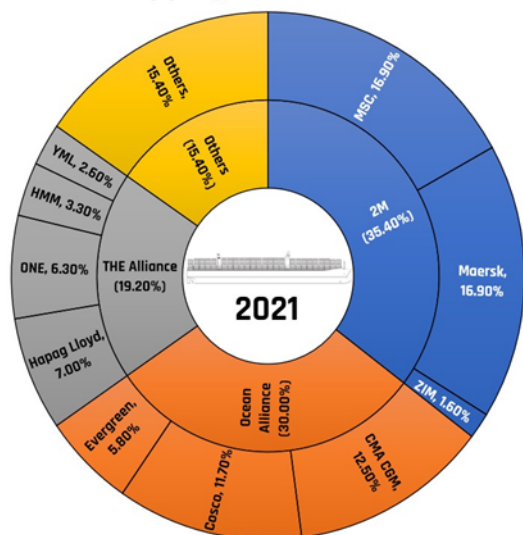


Figure 3. Global shipping alliances, their structure and market shares. Source: [24]

The supply structure, formed in such a way and approved by regulatory authorities granting access to the global maritime container shipping market, coupled with relatively spatially dispersed, as well as incomparably more numerous and diversified demand side, with considerably less negotiating power and fewer possibilities to construct a common ground for understanding and influencing such a strongly consolidated supply structure, has resulted in a global oligopoly, with unprecedentedly strong impact on the remaining links in the global supply chain. This oligopoly has great freedom within the scope of shaping price policies. Its autonomy in that respect, as well as the scale of possibilities with regard to price fixing in main transport relations were particularly visible during the 2020-2021 crisis.

#### 4 INTERNATIONAL PUBLIC REGULATORY MECHANISM; LEGAL ASPECTS

Without the approval of the main internationally influential competition protection authorities, it would be impossible to create container shipping consortia in the form, they have been functioning for almost 30 year. Formal acceptance of alliances and admitting them to joint servicing selected by them container terminals, requires making a decision which, in fact, excludes such a form of shipowner cooperation within a defined period of time from a commonly binding regulation ensuring the

internationally accepted market's competitiveness standard [8; 12]. Such a decision is made by the commonly recognized regulatory bodies of the major maritime countries. The European Commission (EC) plays a key role in this respect, cooperating with the US Federal Maritime Administration as well as the antitrust authorities of China and South Korea. The mechanism of exemptions from the applicable competition rules in all these countries is practically the same. This mechanism is presented on the example of the EU.

Despite the fact that the EU generally prohibits conclusion of agreements which limit competition (Art. 101(1)) between companies, it was in the year 2009 that it undertook this kind of exclusion of shipping alliances from the accepted standards ensuring market competitiveness [8; 12]. It was then concluded that agreements such as the existing container shipping consortia may be regarded, in light of the provisions of Art. 101 p. 2 of the TFEU, as complying with competition standards within a single market, as they meet the established requirements, i. e. contribute to "improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit without eliminating competition" [8; 12]. This exclusion, called the "Consortia Block Exemption Regulation (CBER), which actually is controversial, and against which strong misgivings were voiced by the ITF and ESC (European Shippers' Council), was approved in the year 2009 and remained in force for 5 years. Afterwards, in the year 2014, it was extended for the subsequent 5 years, i. e. until the 25th of April 2020 and, in the year 2020, in face of turbulences on the shipping market occurring in the first half of that year (significant drop in demand), by the next 5 years until the 25th of April 2024 [13].

The Regulation [13] concerning group exclusion of shipping consortia from the obligation to conform with general principles concerning competition, enables the liner shipping operators with their total market share not exceeding 30% to conclude cooperation agreements in order to render joint liner shipping services (alliances). However, such agreements cannot include price fixing or market division, and therefore no joint sales, marketing, evaluation or co-ownership of assets, either. This, in fact, distinguishes this form of shipowners' cooperation from other possible forms of partnership in the global shipping sector.

Nevertheless, it does not exclude the possibility of undertaking, by members of the consortia, other forms of developing the company value and gaining market advantages, such as, for example, mergers, acquisitions or joint venture cooperation, which lead to further concentration, vertical, horizontal and functional, of the shipping market. However, such actions, which often occur with high intensity in the container shipping market, e.g. years 2016-2019 and 2022, require each time additional approval granted by an anti-trust authority.

Cooperation of partners within alliances is usually based on typical for the shipping segment forms, such as Slot Charter Agreements (SCA) and Vessel Sharing Agreements (VSA). It may also cover, which has

recently been a particularly common occurrence, reciprocal access to assets (assets sharing agreements) [13; 17]. In addition, what became particularly evident during the crisis caused by the Covid-19 pandemic, there have been intensified forms of cooperation among container carriers based on the creation of common digital platforms (e.g. platform collaboration within Container xChange, TradLens, DCSA – Digital Container Shipping Association and FIT Alliance).

Such digital platforms strongly integrate maritime container transport operators with other participants in the global supply chains, allowing them through mergers and acquisition of certain logistics entities, building much stronger position in the entire supply chain as it was the case in recent two years [15; 17]. That's why, the EC approval for excluding shipping consortia from observing general competition principles, has already been controversial for a number of companies operating within the global supply chains since the very beginning [16; 17].

## 5 INTERNATIONAL PUBLIC REGULATORY MECHANISM VERSUS MARKET AUTONOMOUS ONE; RESEARCH RESULTS AND DISCUSSION

As shown by the results of analysis of the functioning of the maritime container transport market, operating there in parallel two regulatory subsystems, i.e. the public and autonomous, i.e. the market one, are not fully consistent with each other under current conditions. The first one, which has been operating in an essentially unchanged formula for 14 years, does not sufficiently take into account the steadily growing strength and market position of global leading container operators. Thanks to the commonly approved market driven processes of strong consolidation of the companies and the container market integration, this group of the operators have already achieved unimaginably high market shares. As the global oligopolists, they can make operational and strategic decisions that are in economic and financial terms only beneficial to them. Moreover, even in the period of deep disruption of global logistics supply chains, as it was in the years 2020-2022, their pricing strategies strongly oriented on profit maximization and other of such kind activities, are not restricted by antitrust authorities which created such public regulatory mechanism of the global container market. In fact, since 2017, the market regulatory mechanism has gained an upper hand over the first one.

For global shippers and forwarders, the high degree of tolerance of the EC and other antitrust authorities in relation to periodically repeated pro-fiscal actions spontaneously undertaken by container shipowners as the members of strong alliances has been hard to understand and accept. This concerned the application of a special freight rate equalization mechanism with regard to fixing spot-type freight rates (the General Rate Increase System – GRI) in the years 2013-2015. It destabilized the container transport market, making it impossible to make rational, predictable decisions concerning freight rates quoting which plays a crucial for smooth container flows, as

well as for shippers and forwarders activities while disrupting their business transparency. Moreover, such pricing strategy was supported by successive introduction into exploitation of mega container vessels with carrying capacity exceeding 18 000 TEU [7]. Such market oriented activities, have contributed to considerable increase in integration of the maritime container shipping market. As a result, the position of the remaining entities operating on the demand side of that market, in particular shippers and maritime freight forwarders, has been weakened even further [16; 19]. The authorities in charge for promoting market competition didn't react on such actions of capital-strong oligopolists which in fact have destabilized the existed global container market order at that time [15, 16; 19].

The international public antitrust authorities didn't also reacted on the unprecedented freight rates increase in maritime container transport that had place in the years 2020-2022, i.e. during a period of particular intensification of disruptions in the global supply chain. In freight rates, both spot and contract ones [9; 11; 22]. The increase in prices, both spot and contract freight rates, intensified by application of a number of additional charges and surcharges, not only those connected with the necessity of covering costs arising from the existing market perturbations (port congestion, lack of empty containers, etc.), but also the ones introduced with the aim of achieving extra profits (e. g. premium fee and others) [16; 17; 18].

This caused an increase in EBIDTA/EBITD, unprecedented in the history of the shipping. With reference to the data published by the Statista [24] it can be stated that the operating profit achieved by the global maritime container sector only in 2021 alone, was almost three (2.93) times bigger than that generated by the sector over the past 11 years [3; 24]. However, it was realized at the cost of shippers and representatives of the other parties of the global supply chains. They bore the consequences of such drastic increase in the cost of ocean container freight (direct expenses), as well as the costs resulting from the unprecedented decrease in quality of services rendered by container shipping companies (indirect expenses). It was a kind of specific market paradox of the Covid 19 crisis that the increase in freight rates occurred in the circumstances of gradually decreasing quality of shipping services. That was reflected, inter alia, in periodic exclusion of certain relations (loops) from the service (blank-sailings), a high degree of unpunctuality, as well as irregularity of service with respect to the determined shipping timetable [1; 16; 18]. It meant that there had been a dramatic decrease in the reliability of functioning of the existing maritime container freight system and, simultaneously, in the confidence placed in this system by freight forwarders and shippers [16; 19].

The market regulatory mechanism allowing to obtain by maritime container operators such incredibly high financial results, at the same time enabled them to take active measures in the area of mergers and acquisitions oriented towards further integration into the structures of the global supply chains.

Container shipping carriers drive the processes of vertical integration. The four largest container carriers are now among the top ten terminal operators, competing with port companies such as PSA, Hutchison and Dubai Ports [17; 27]. The two largest container terminal operators are associated with major shipping lines. In addition to operating ports and terminals, shipping companies have been buying warehouses and freight-forwarding and other logistics companies. Vertical integration enables shipping companies to provide customers with last-mile delivery. Maersk, for example, has started to manage all logistics operations for the consumer goods multinational Unilever [27]. Thus, thanks to the efficiently operating market mechanism, while maintaining high level of tolerance of the public regulatory mechanism to changes taking place on the maritime container market, the leading container operators can change their current business model, transforming into comprehensive logistics service providers within the global strategic supply chains.

## 6 CONCLUSIONS

The real economic power of the market regulation's mechanism, manifested in the ongoing processes of capital and operational consolidation as well as integration of the maritime container market and the leading shipping companies, what have been done through mergers and acquisitions and the creation of strong shipping alliances, fundamentally have changed the balance of power in the global supply chains. These processes allow to significantly increase the market position and economic power of the leading maritime container operators at the expense of other entities operating within the global supply chains.

The container carriers actions and strategies mainly resulted from the need to lower: a/ rising fixed costs of transport operations and b/ financial risk in a period of market downturn. They are often also aimed at diversifying risks and looking for cost savings or increasing the market advantages. As a result, however, with a mild, very liberal system of public international regulation of this maritime freight sector, it enabled container shipowners as it was during the crisis caused by the pandemic, via adopting strongly pro-fiscal pricing strategies, ruthlessly exploited the strong oligopolistic position they achieved on the global container transport market. From this practice of container carriers' behaviour, possible only on the strongly oligopolistic market, which had a very serious impact on the world trade as well as all consumers of goods imported by sea, appropriate conclusions should be drawn by antitrust authorities. They should strengthen their control over the market by influencing consolidation and integration processes more strongly which occur on the global container transport market.

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