# **CURRENT TRENDS OF PROTECTIONISM IN SHIPPING INDUSTRY (2015–2018)**

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#### INTRODUCTION

The shipping industry serving foreign trade has a strategic importance for economy, in recent years it occupied more than 80 % in the world on volume of transportation and more than 70 % at cost<sup>1</sup>. High capital value of vessels and volatility of freight rates lead to financial difficulties for the ship owners during periods of low conjuncture of the freight markets. During the different historical periods the developed and developing countries used various methods of the state protectionism in shipping industry. Taking into account the changes of approaches to the state protectionism, features and volumes of their application in different countries, emergence of new measures, studying the current tendencies of protectionism in shipping, detection of pros and cons of their application, improvement of classification of protectionist methods in shipping industry are important and actual.

Most of authors researched protectionist measures in the sphere of trade and their influence on shipping industry. The protectionist measures were used in the 1980s and their influence on the international shipping are considered in the book by A. Odeke<sup>2</sup>. The tendency of trade and services liberalization in 1970-1980s on the basis of the General Agreement on Tariffs and Trade (GATT) and the main directions of use of the indirect protectionist measures by the developed European countries are considered in the article by G. N. Yannopoulos<sup>3</sup>. The barriers to trade in maritime transport services and regulatory framework of the World Trade Organisation (WTO) and the General Agreement on trade in services (GATS) were researched in the paper of B. Parameswaran<sup>4</sup>.

<sup>&</sup>lt;sup>1</sup> Odeke A. (1984) Protectionism and the Future of International Shipping. Dordrecht: Martinus Nijhoff Publishers.

<sup>&</sup>lt;sup>2</sup> Yannopoulos G. N. (1989) World Shipping: Between Liberalism and Protectionism. *North Carolina Journal of International Low and Commercial Regulation*, vol. 14, no. 1, pp. 45–53.

<sup>&</sup>lt;sup>3</sup> Parameswaran B. (2004) The liberalization of Maritime Transport Services. Berlin: Springer-Verlag Berlin and Heidelberg GmbH & Co. KG.

<sup>&</sup>lt;sup>4</sup> Kirk A. (2017) Protectionism is on the rise as US and EU implement thousands of restrictive trade measures. *The Telegraph* (electronic journal), 28 November 2017. URL: https://www.telegraph.co.uk/business/2017/11/28/mapped-protectionism-rise-us-eu-implement-thousands-restrictive/ (accessed 2 November 2018).

In the article by A. Kirk<sup>5</sup> a growth of use of the protectionist measures in the trade by the different countries after financial crisis of 2008-2009 is considered. It is specified that 60 countries use more than 7000 measures directed to protection of foreign trade. Significant amount of the protectionist measures is used by United States, India, Argentina, Russian Federation, Japan, the United Kingdom, Germany, Italy, France and Poland.

Shipping companies of the EU faced growth of protectionism in many parts of the world; at the same time the foreign shipping policy of the EU has to be aimed at the development of the global open markets and providing equal conditions of access to sea transport services<sup>6</sup>.

The research aims on systematization of practical experience of state protectionism in shipping industry at the current stage of its development, improvement of the classification of protectionist measures in shipping, allocation of the main trends of the state protectionism in shipping, the analysis of reasons, advantages and disadvantages of the state protectionism in maritime industry from macroeconomic and microeconomic points of view.

The methodological basis of the research is: system approach, economic regularities, general provisions of maritime economics, the principles of shipping management, scientific works of the leading scientists and experts in maritime economics. During the research scientific theoretical and empirical methods were used: analysis and synthesis of results and retrospective, logic and analytical methods, method of statistical information processing.

## PRECONDITIONS FOR APPLICATION OF PROTECTIONIST MEASURES IN SHIPPING INDUSTRY

Broad application of protectionist measures in the world shipping industry is connected with the aspiration of governments to develop national fleets, to ensure economic security, as well as with using by ship owners of "flags of convenience" at registration of vessels in offshore jurisdictions and the low level of profitability of the shipping business connected with a high shipbuilding value and capital costs, very high level of competition and volatility on the international freight markets. This statement is confirmed by the following statistical data.

In 2017 more than 70 % of the tonnage of the world commercial fleet was registered under the flags, that differed from flags of the fleet ownership countries. The rating of 20 countries, which were the largest ship owners in 2016–2017, the growth rates of the general deadweight and the tonnage registered under foreign flags, are presented in tab. 1.

<sup>&</sup>lt;sup>5</sup> European Community Shipowners' Association (2017) Shipping and global trade. Toward to EU external shipping policy, Brussels: ECSA.

<sup>&</sup>lt;sup>6</sup> Zhykharieva V., Shyriaieva L., Vlasenko O. (2019) Current trends of protectionism in shipping industry. *Transport Problems*, vol. 14, issue 2, pp. 89–100. DOI: 10.20858/tp.2019.14.2.8

Apparently from the submitted data, the majority of the countries have a significant share of the tonnage under foreign flags. The greatest growth rate of this indicator in the analysed period is shown by the Russian Federation, Singapore and Switzerland. Besides in the majority of the countries the growth rate of the deadweight tonnage under foreign flags exceeds growth rate of the total tonnage.

Growth rates of the fleet by flags registration are presented in tab. 2. In this rating such typical offshore jurisdictions as Panama, Liberia and the Marshall Islands are in the lead, and the tonnage of the registered fleet continued to grow in 2016–2017. The significant tonnage is registered under the flags of traditional maritime nations – China, Greece, the United Kingdom, Japan and Norway.

The financial results of the three global container carriers in 2016–2017 are shown in tab. 3. In 2017 A.P Moller – Maersk took the first place among container operators, CMA CGM – the third place and Hapag-Lloyd – the fifth place. The data demonstrate the low level of EBITDA margin on the considered companies, which did not exceed 11.4 % in 2016–2017, besides these companies, and their losses and profits significantly fluctuate by years.

Table 1 **Top 20 countries and territories by world fleet ownership** 

	2016				2017			
y or ory		thousands of deadweight tons ಜ್ಞ		thousands of deadweight tons			weight ige 2016	n flag 2016
Country or territory	foreign flag	total	foreign flag as % of total	foreign flag	total	foreign flag as % of total	% dead-weight tonnage 2017–2016	% foreign flag 2017–2016
Greece	228 383	293 087	77.9	243 240	308 837	78.8	105.4	106.5
Japan	200 206	228 980	87.4	192 270	223 856	85.9	97.8	96.0
Germany	107 866	119 181	90.5	101 688	112 028	90.8	94.0	94.3
China	84 778	158 884	53.4	89 282	165 430	54.0	104.1	105.3
The Republic of Korea	62 727	78 834	79.6	66 385	80 977	82.0	102.7	105.8
The United States	52 123	60 279	86.5	57 525	67 101	85.7	111.3	110.4
Bermuda	47 950	48 453	99.0	47 545	48 059	98.9	99.2	99.2
Taiwan the Province of China	41 047	46 141	89.0	42 469	46 865	90.6	101.6	103.5
The United Kingdom	46 194	51 441	89.8	41 202	51 151	80.6	99.4	89.2
Singapore	33 549	95 312	35.2	40 743	104 414	39.0	109.5	121.4

Table 1 (ending)

	2016				2017		8,	
y or ry	thousands of deadweight tons		ag		thousands of adweight tons		eight ge 316	n flag 016
Country o	foreign flag	total	foreign flag as % of total	foreign flag	total	foreign flag as % of total	% dead-weight tonnage 2017–2016	% foreign fla 2017–2016
Norway	30 611	48 188	63.5	33 489	51 824	64.6	107.5	109.4
Monaco	29 892	29 892	100.0	31 630	31 630	100.0	105.8	105.8
Hong Kong (China)	19 853	87 375	22.7	22 452	93 630	24.0	107.2	113.1
Switzerland	18 956	20 480	92.6	21 931	23 688	92.6	115.7	115.7
Denmark	22 235	38 315	58.0	20 359	36 356	56.0	94.9	91.6
Turkey	19 639	27 951	70.3	19 848	27 733	71.6	99.2	101.1
Belgium	14 575	22 098	66.0	15 969	23 550	67.8	106.6	109.6
The Russian Federation	11 416	18 144	62.9	14 857	22 050	67.4	121.5	130.1
India	5 978	21 678	27.6	6 199	22 665	27.4	104.6	103.7
Italy	7 312	22 739	32.2	6 051	20 610	29.4	90.6	82.8

Source: calculated by the authors on the basis of data of UNCTAD, Review of Maritime Transport (2017)

Application of various measures of the state protectionism in shipping industry is characterized by certain advantages and shortcomings. Pros and cons of direct protectionist measures should be considered both from the macroeconomic point of view, and from the point of view of shipping companies. From the point of view of ship owners the advantages are: restriction of the competition and simplification of access to cargo base.

Table 2 **Top 20 flags of registration with the largest registered fleets** 

		2016		2017		
Flag	number of vessels	thousands of deadweight tons	number of vessels	thousands of deadweight tons	% number of vessels 2017–2016	% deadweight tons 2017–2016
Panama	8 153	334 368	8 052	343 398	98.8	102.7
Liberia	3 185	206 351	3 296	219 397	103.5	106.3
The Marshall Islands	2 942	200 069	3 199	216 616	108.7	108.3

Table 2 (ending)

	2016			2017	Tauk	z Z (enumg
Flag	number of vessels	thousands of deadweight tons	number of vessels	thousands of deadweight tons	% number of vessels 2017–2016	% deadweight tons 2017–2016
Hong Kong (China)	2 515	161 787	2 576	173 318	102.4	107.1
Singapore	3 605	127 193	3 558	124 238	98.7	97.7
Malta	2 101	94 992	2 170	99 216	103.3	104.4
Bahamas	1 450	79 541	1 440	79 842	99.3	100.4
China	4 052	75 850	4 287	78 400	105.8	103.4
Greece	1 386	73 568	1 364	74 638	98.4	101.5
The United Kingdom	1 167	37 118	1 551	40 986	132.9	110.4
Japan	5 320	31 869	5 289	34 529	99.4	108.3
Cyprus	1 053	33 313	1 022	33 765	97.1	101.4
Norway	1 561	20 697	1 585	21 900	101.5	105.8
Indonesia	7 843	18 117	8 782	20 144	112.0	111.2
India	1 625	16 338	1 674	17 254	103.0	105.6
Denmark	671	17 185	654	16 893	97.5	98.3
Italy	1 376	16 470	1 430	15 944	103.9	96.8
The Republic of Korea	1 906	16 820	1 907	15 171	100.1	90.2
Portugal	373	8 878	466	13 753	124.9	154.9
The United States	3 570	11 841	3 611	11 798	101.1	99.6
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Source: calculated by the authors on the basis of data of UNCTAD, Review of Maritime Transport (2017)

From the macroeconomic point of view the benefit is development of national shipping industry, an increase in receipts in the government budget from operation of vessels under national flag and activity of shipbuilding enterprises as well as additional demand for manpower.

Table 3 **Key financial figures of the global container shipping companies** 

		Moll		CMA CGM,			Hapag-Lloyd, million EUR /		
		Maersk, million US dollars / %			million US dollars / %			million EUR / %	
Key figures	CB		%	- 65	Goman	%		70	%
	2016	2017	Change,	2016	2017	Change,	2016	2017	Change,
			Ch			Ch			Ch
Revenue	27266	30945	113	15980	21120	132	7734	9973	129
Profit before depreciation, amortization and impairment losses, etc. (EBITDA)	2475	3532	143	67	1575	543	607.4	1054	174
EBITDA margin, %	9.1	11.4	126	0.18	5.7	n. m.	6,7	10,6	135
Profit / loss	-1897	-1164	m.m.	755	101	n. m.	-93.1	32.1	n. m.

Source: A.P. Møller – Mærsk A/S (2017) Annual report, Copenhagen: Maersk; CMA CGM (2018) Annual Financial Results, Marseille: CMA CGM; Hapag Lloyd (2017) Annual Report, Hamburg: Hapag Lloyd.

Taking into account a difference in the cost of manpower in the developed and developing countries, it is necessary to refer to shortcomings in macroeconomic aspect: growth of transport tariffs due to an increase in capital expenses of ship owners on shipbuilding on shipyards of the countries with the high cost of a manpower and operational costs of the ship owners using national crews. As a result of growth of freight rates, the cost of the goods transported by the sea increases, it negatively affects consumers of these goods. In connection with considerable negative impact of restriction of the competition on cost of the transported goods and development of the coasting fleet, many countries, including the United Kingdom, Australia and China, refused similar direct measures of the state protectionism<sup>7</sup>.

Obvious advantage of application of indirect measures of protectionism in microeconomic aspect is a decrease in tax payments and a possibility of accumulation of money for investment into the new fleet, modernization and renovation. According to the ship owners the advantages of the tonnage tax are the possibility of the decrease in tax expenses; use of the fixed rates that allows to predict a size of tax payments easily; encouragement of development of

<sup>&</sup>lt;sup>7</sup> Primachev N. T., Primachev A. N. (2006) *Printsipy integratsii v torgovom sudokhodstve* [Principals of integration in trade shipping]. Odessa: Feniks. [in Russian]

shipping business as the companies using the tonnage tax systems have to operate with vessels; introduction of the tonnage tax contributes to the development of investment activities of shipping companies, allows accumulating money for reproduction of fixed assets.

From the macroeconomic point of view the main advantage consists in a possibility of return of vessels under national flag and the corresponding monetary receipts in the government budget. Negative side of application of indirect measures of the state protectionism in macroeconomic aspect is violation of equal conditions of the competition between shipping companies of the different countries, moving of the fleet belonging to ship owners from the countries, which are not applying similar measures, under the "flags of convenience".

## CLASSIFICATION OF METHODS OF THE STATE PROTECTIONISM IN SHIPPING INDUSTRY

In the publications of the Ukrainian authors, approaches of systematization of the protectionist measures in shipping industry are proposed. In the papers of N. T. Primachev and A. N. Primachev<sup>8</sup>, V. Chekalovets and L. Rozhen<sup>9</sup> the state entrepreneurship and various methods of legal regulation of shipping are referred to administrative-legal protectionist methods. In the monograph by O. M. Kotlubai<sup>10</sup> administrative and credit-financial protectionist methods in shipping are allocated.

A number of publications are devoted to certain protectionist methods in shipping industry. In the article by W. Murray<sup>11</sup> modern aspects of use of the Merchant Marine Act of 1920, known as the Jones Act, regulating U.S. domestic transportation, are considered. In the paper of I. A. Rusinov,

<sup>&</sup>lt;sup>8</sup> Chekalovets V., Rozhen L. (1999) Predprinimatel'skaya deyatel'nost' v sfere morskikh torgovykh perevozok (Rol' gosudarstva) [Entrepreneurial activity in the sphere of maritime transport (Role of State)]. *Business-Inform*, no. 17-18, pp. 52–59.

<sup>&</sup>lt;sup>9</sup> Kotlubai O. M. (2004) Ekonomichni mekhanizmy rozvytku torhovelnoho moreplavannia v Ukraini [Economical mechanisms of development of trade shipping in Ukraine]. Odessa: Institute of market problems and economical and ecological research. [in Ukrainian]

<sup>10</sup> Murray W. (2017) End Protectionism in the Shipping Industry. *Real Clear Policy* (electronic journal), July 22, 2017. URL: https://www.realclearpolicy.com/articles/2017/07/22/end\_protectionism\_in\_the\_shipping\_industry.html (accessed November 2, 2018).

Rusinov I. A., Gavrilova I. A., Nelogov, A. G. (2016) Vopros regulirovaniya lineynogo sudokhodstva na osnove analiza polozheniy Konventsii OON o Kodekse povedeniya lineynykh konferentsiy [Question of liner shipping regulation on the base of United Nations Convention on a Code of Conduct for Liner Conferences]. *Bulletin of the Admiral Makarov State University of marine and inland shipping*, no. 3(37), pp. 53–64. [in Russian]

I. A. Gavrilova and A. G. Nelogov<sup>12</sup> the purposes and the principles of the United Nations Convention on a Code of Conduct for Liner Conferences are considered.

In the article by M. Kalouptsidi<sup>13</sup> models of governmental subsidizing of world shipbuilding industry allowing a decrease in shipbuilding expenses are developed. In the paper of D. Pupavac, L. Krpan and R. Marsanic<sup>14</sup> it is shown that subsidies in maritime transport make sense only on the condition of improvement of the quality of transport services.

To direct methods of the state protectionism in shipping industry it is necessary to carry the measures, which are directly limiting the competition in the market of sea transport services. The leader in use of direct measures of protectionism in shipping is the United States. There are bilateral agreements with the countries exporting commodities to the United States according to which these transportations have to be made by vessels under the U.S. flag. Transportation within military orders and government programs are legislatively reserved to the U.S. fleet, the percentage of cargo is required to be carried on U.S. – flag vessels is: 100 % for military cargo (governed by Military Cargo Preference Act of 1904); 100 % for Export Import Bank (governed by Public Resolution 17); at least 50 % for Civilian Agencies cargo and 50 % for agricultural cargoes (governed by Cargo Preference Act of 1954)<sup>15</sup>. Despite the decrease in application of cargo reservation in the world in recent years, cargo preferences were applied in some countries of Africa, Asia and Latin America.

The UNCTAD Code of Conduct for Liner Conferences<sup>16</sup> defining shares of national carriers is an example of the multilateral agreement between the countries. The principle enshrined in the Code (principle 40:40:20) comes down to the fact that the group of national shipping lines of each of two countries has the equal rights for participation in transportation on a freight and quantity of the cargoes relating to their mutual foreign trade and which are carried out by a Conference. Shipping lines of the third countries, which participate in a Conference, can receive 20 % of the transportation concerning this trade on a freight and quantity of cargo.

<sup>&</sup>lt;sup>12</sup> Kalouptsidi M. (2017) Detection and Impact of Industrial Subsidies: The Case of Chinese Shipbuilding. Cambridge: Department of Economics, Harvard University.

<sup>&</sup>lt;sup>13</sup> Pupavac D., Krpan L., Marsanic R. (2017) The Effect of Subsidies on the Offer of Sea Transport. *Our sea*, no. 64(2), pp. 54–57.

<sup>&</sup>lt;sup>14</sup> Maritime Administration (MARAD) (1954) Cargo Preference Act of 1954, Washington: MARAD.

<sup>&</sup>lt;sup>15</sup> Admiralty and Maritime Law Guide (1974) Convention on a Code of Conduct for Liner Conferences, Geneva: Admiralty and Maritime law guide.

<sup>&</sup>lt;sup>16</sup> U.S. Senate Commerce Committee (1920) The Merchant Marine Act of 1920, Washington: Commerce Committee.

In the majority of countries domestic transportation are legislatively assigned to the fleet under national flag within public policy of protectionism that limits the competition from foreign carriers and gives national shipping companies guaranteed cargo base. A classic example is the Jones Act<sup>17</sup> adopted in the United States in 1920. The law establishes that shipping of cargo between the U.S. ports should be carried out by the vessels built in the United States, at least for 75 % belonging to U.S. citizens, operating under the U.S. flag with the crew of the U.S. citizens. In recent years the monopoly position of the American carriers leads to the increase of capital and operational costs of ship owners, growth of transport tariffs and consumer expenses, causes damage to economy of the United States, has negative effect on economies of Alaska, Hawaii and Puerto Rico<sup>18</sup>.

The Russian Federation since 2018 imposed a ban on transportation by vessels under foreign flags across the Northern Sea Route of oil, natural gas, gas condensate and coal extracted in the territory of the Russian Federation and in the territory which is under its jurisdiction<sup>19</sup>. Icebreaking and pilot vessels, the coastal fleet and vessels for shelf resource researches also have to be under the Russian flag. The purpose is the receipt in the budget of the Russian Federation of revenues from transportation of the Russian cargo. Also, Russian shipbuilding enterprises can receive benefit from these measures.

One more example is the restriction of export of liquid palm oil and coal by the vessels controlled by the Indonesian carriers, entered in 2018 by the Ministry of Trade of the Republic of Indonesia<sup>20</sup>.

Thus, the direct methods of protectionism, applied today in the shipping industry, include: bilateral and multilateral agreements in the sphere of shipping between the countries; cargo reservation on transportation of domestic cargo for vessels under national flags; cargo reservation on transportation within state programs (strategic cargo, military cargo, food and others) to the national fleet.

<sup>&</sup>lt;sup>17</sup> Grennes T. (2017) An Economic Analysis of the Jones Act. Washington: Mercatus Center of George Mason University.

<sup>&</sup>lt;sup>18</sup> State Duma of Russian Federation (1999) Kodeks torgovogo moreplavaniya Rossiyskoy Federatsii [Merchant Shipping Code Of The Russian Federation]. Moscow: State Duma of Russian Federation.

<sup>&</sup>lt;sup>19</sup> The Maritime Executive (2018) Protectionism makes a comeback in international shipping. *The Maritime Executive* (electronic journal), February 14, 2018. URL: https://www.maritime-executive.com/article/protectionism-makes-a-comeback-in-international-shipping#gs.508\_E\_8 (accessed November 1, 2019).

Tax Consultants International (2017) The Dutch tax regime and incentives for shipping companies. *Tax Consultants International* (electronic journal), January 19, 2017. URL: https://www.tax-consultants-international.com/read/The\_Dutch\_tonnage\_tax\_regime (accessed November 1, 2019).

Despite application of direct measures of protectionism in the certain countries, taking into account the high level of competition in the market of sea transport services and requirements of the GATT, the WTO and The Organization for Co-operation and Development (OECD), under the conditions of trade and shipping liberalization, time of direct measures of the state protectionism passed. Efforts of the majority of developed countries are directed to the increase of the competitiveness of the national transport. Adjustment policy of the EU shipping is based on openness of the global markets, equal access for all participants to the market of sea transport services, at the same time the EU countries do not refuse indirect methods of protectionism concerning shipping industry.

The international ship registers in the majority of the countries provide the ship owners with different types of the tax benefits including the alternative system of taxation – the tonnage tax regime. Application of the tonnage tax in developed countries since the 1990s is connected with outflow of the fleet under "flags of convenience". The tonnage tax regimes are applied in Greece, the Netherlands. Germany, Belgium, Denmark, Italy, France, Norway, the United Kingdom, Finland, Poland, China, Japan, India and others countries including a number of offshore jurisdictions. The schemes of the tonnage tax have different forms in various countries.

Results of the comparative analysis of Dutch tonnage tax regime and Norwegian Special Tax System for the Shipping are represented in tab. 4. The Dutch tonnage tax regime is the most widespread tonnage tax scheme. On this model a taxation subject is not the real profit of shipping company, but the settlement size of profit that will be defined by multiplication of the net tonnage of vessels of the company by the standard size of daily profit per ton established by the legislation<sup>21</sup>. Such settlement profit for one or several vessels is assessed on the established corporate tax rate. The Dutch regime can be used for the vessels operating in the international transportation, dredging and other kinds of activity and can be applied for ten years. At the same time the shipping company has to be registered in the Netherlands. There is no requirement about registration of vessels under the Netherlands flag, but vessels have to be registered under the flag of the EU Member State. The method of the accelerated tax depreciation and reduction of wage tax cannot be applied under the condition of the choice of the tonnage tax regime.

The Norwegian Special Tax System for Shipping assumes calculation of a tax on the basis of a uniform rate depending on the NT of vessels<sup>22</sup>.

<sup>&</sup>lt;sup>21</sup> Ministry of Trade, Industries and Fisheries (Norway) (2017) The Norwegian Special Tax System for Shipping 2018-2027. Oslo: Ministry of Trade, Industries and Fisheries.

<sup>&</sup>lt;sup>22</sup> The Norwegian Tax Administration (2018) Depreciation rates in Norway. Oslo: The Norwegian Tax Administration.

Table 4 **Comparing Dutch and Norwegian tonnage tax schemes** 

Dutch tonnage to	ax regime	Norwegian Special Tax System for Shipping			
J		es of fixed profit			
Net tonnage (NT)	Fixed profit per		Fixed profit per		
of ship	1000 NT per da		1 000 NT per day		
0-1 000 NT	€9.08	0-1 000 NT NOK 0.9 per 100			
up to 10 000 NT €6.81		for the first 1 000 NT	NOK 9 per 1 000 NT		
up to 2 000 NT	€4.54	from 1 001 to 10 000 NT	OK 18 per 1 000 NT		
up to 50 000 NT	€2.27	from 10 001 to 25 000 NT	NOK 12 per 1 000 NT		
50 000 NT or more	€0.50	above 25 000 NT	NOK 6 per 1 000 NT		
		nds of activity			
Operating of ves commercial and techni used in international cargo and passengers research activity and oth	transportation of , for dredging,	Operating of transport ships owned or chartered (passenger and cargo ships, cable laying vessels and others), support vessels in petroleum activities, ancillary activities are closely connected to the transport activities (loading, unloading and storage of goods, leasing out of containers, sale of goods and services for consumption on board and others).			
	Duration of applic	cation of the taxation scheme			
10 years, then it is possi use the tonnage tax or usual corporate tax sy cancelled earlier.	to return to the	1 year or more (from 1 January 2018 until 31 December 2027).			
	Meth	od of calculation			
The tonnage tax is bar determined by five size §		The tonnage tax is based on NT and determined by four size groups. In the 0 to 1 000 NT interval, the tonnage will be rounded to the nearest 100 NT. Tonnage exceeding 1 000 NT will be rounded to the nearest thousand NT.			
		Flag			
Ship should be register Member State (exception for ships under the "thin join an existing fleet).	ons are available rd flag" that will				
A 1: :		egal features	1. 1.		
A shipping company commercial and management in the N vessel which it own excepting of ships contacted charter.	technical ship Jetherlands of a s and co-owns, hartered out on ls under bareboat	A company must own eith interests in limited liability of controlled foreign corporate company can perform full in the operated under voyage bareboat charter.	companies, partnerships or ions that own ships. A nanagement. Vessels may		

Source: produced by the authors

The tonnage tax may be reduced by up to 25 % based on the environmental rating of the vessel. The tonnage tax scheme can be applied by private and public limited companies carrying out shipping activities. Vessels can also be

held through domestic or foreign partnership and controlled by foreign corporations based in low tax countries, a company have to own a vessel or shares or interests in companies, partnerships or controlled by a foreign corporation that own such a ship. In the Norwegian system there are no entry and exit barriers, unlike the Dutch tonnage tax regime.

One of the most widespread methods of indirect protectionism is the accelerated tax depreciation for vessels. The accelerated tax depreciation provides write-off of the most part of a vessel value in the first years of operation. The value of fixed capital being subject to depreciation can be equal to the sum of initial expenses or is reduced by the sum that can be received on delivery of the vessel on demolition. For example, the Netherlands shipping companies at the choice of the corporate tax can use the accelerated tax depreciation with the maximum annual rate of 20 % of the estimated residual value of the vessel. However, if a profit is not enough for a depreciation sum covering, then the part that was not utilized can be carried forward to the subsequent year. In Norway the rate of depreciation of 14 % a year of book value is applied to the vessels<sup>23</sup>.

In tab. 5 the different types of tax incentives used in activity of shipping companies in different countries are generalized.

Methods of credit and financial regulation also include subsidizing of ship owners and shipbuilders and preferential crediting. Different types of subsidies to shipping industry were provided in China, South Korea, Taiwan and other countries in recent years<sup>24</sup>. Chinese ship owners received subsidies on scrap of Chinese-flagged vessels at Chinese demolition shipyards and ship building on Chinese shipyards.

The shipbuilding subsidies to shipping companies and the subsidies directed to stimulation of vessels demolition are the most widespread.

An example of preferential crediting is the Norwegian new financing scheme for building of vessels for coastal shipping, which was entered in 2018. The scheme assumes granting export credits to shipping companies and shipbuilding enterprises under guarantees of the Norwegian Guarantee Institute for Export Credits (GIEC), the value of the guarantee is limited in NOK 10 billion<sup>25</sup>.

In fig. 1 the classification of indirect methods of credit and financial regulation in shipping industry is presented. The classification is specified by allocation of various types of tax incentives, subsidizing and preferential crediting.

<sup>&</sup>lt;sup>23</sup> Soren Skou (2018) Calls for an End to Subsidies. *The Maritime Executive*. (electronic journal), April 27, 2018. URL: https://www.maritime-executive.com/article/soeren-skou-calls-for-an-end-to-subsidies (accessed November 4, 2019).

Export credit Norway (2018) New Norwegian ship financing scheme launched. *Export credit Norway* (electronic journal), June 28, 2018. URL: https://www.eksportkreditt.no/en/ 2018/06/28/new-norwegian-ship-financing-scheme-launched/ (accessed November 7, 2019).

Table 5 **Tax incentives in activity of shipping companies** 

Country	Corporate	Toppage toy	Additional tax	Tax
Country	tax	Tonnage tax	concessions	depreciation
Greece	Shipping enterprises don't use corporate tax.	Tonnage tax is defined taking into account gross tonnage and age of vehicle. It is used to Greek-flagged vessels and other vehicles in operating the domestic companies.	Cargo and passenger vehicles which operating between Greek and foreign seaports, or between foreign seaports, have 50 % additional discount from tonnage tax. Ships built in Greece and registered in Greek Vessel Registry have tonnage tax exemption during first 6 years.	n. m.
Germany	Base rate of 15 % (total up to 33 % including trade tax and solidarity tax).	Taxable profit is determined by 4 size groups, it is applied at operation of trade vessels on international cargo and passenger transportation, to German ship managers, to vessels registered in German Shipping Register and the vessels under other flags operated from German territory.	95 % of a capital gain from the sale of shares in a foreign subsidiary or domestic company is exempt from tax when received by a company taxable in Germany.	Straight line method for ships (useful life for tax depends on specific of vehicle). The declining-balance method is not used.
The Netherlands	20–25 % depending on profit value.	Fixed profit is determined by 5 size groups. Vessels can be operated under any EU flag. It can be applied only to operating vehicles in international transportation, including ship management companies.	Corporate tax exemption for foreign shipping companies (gains from the operations of ships in international traffic to and from the Netherlands). VAT exemptions for shipping within EU.	Accelerated method for a corporate income tax purpose. Maximum 20 % a year.

Table 5 (continuance)

Country	Corporate tax	Tonnage tax	Additional tax concessions	Tax depreciation
The United Kingdom	Base rate of 19 %.	Fixed profit is determined by 4 size groups. Commercial or strategic management has to be carried out in the UK. There is no specific requirement for vessels in the regime to be the UK or the EU flagged. The company has to use the system at least 10 years.	There are capital allowances, which are the expense deductions (as alternative of amortization).	Amortization is not deducted when calculating the corporate tax.
Country	Corporate tax	Tonnage tax	Additional tax concessions	Tax depreciation
The United States	21 %	The US does not charge special tonnage tax o n the ships of a particular foreign country if that country does not charge such special tonnage tax o n the U.S. flag ships.	Assistance programs providing tax deferral benefits to U.Sflag operators (The Construction Reserve Fund) and deferment of income taxes (The Capital Construction Fund). From 2018 100 % first-year bonus depreciation deduction is allowed for certain qualified property acquired and placed in service after 27.09.2017 and before 1.01.2023.	Declining-balance (e.g., 200 % double-declining-balance method) or straight-line methods.

Table 5 (ending)

Country	Corporate	Tonnage tax	Additional tax	Tax
	tax	_	concessions	depreciation
Norway	For the resident companies of Norway the usual rate of 23 %.	Taxable profit is determined by 4 size groups. The system is applied to ship owners, charterers and to various activities connected with transport. Ships should be operated under the flag of EEA country.	Tax exemption for capital gains.	The declining-balance method: 14 % for ships, vessels, offshore rigs, etc.
Japan	Base rate of 23.4 %.	Tonnage tax was applied for some large Japanese oceangoing shipping companies during 5 years (since 2009).	The special depreciation scheme for environmentally friendly ships.	Straight line method: from 25 % to 7.7 %; declining-balance method: from 50 % to 15.4 %. Useful life: 4-13 years.
The Russian Federation	20 %	At registration in the Russian International Register of Vessels the state fee at initial registration and annual payment are paid.	From 1.01.2019 operating expenses of the vessels registered in the Russian International Register of Vessels and income from operation and realization of the vessels built by the Russian shipbuilders after 1.01.2010 won't be considered for a taxable basis.	Based on the useful life of vessels, amortization may be calculated using either the reducingbalance method or straight line method.

Source: drew up by the authors

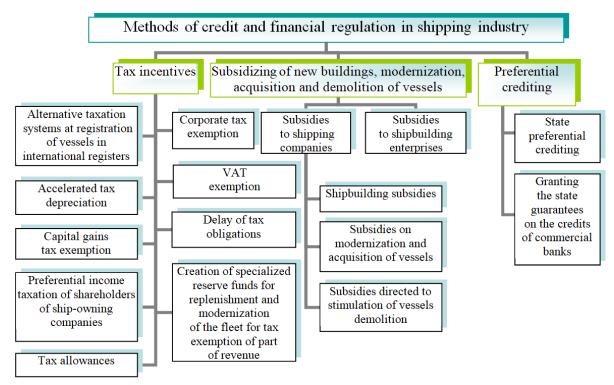


Fig. 1. Classification of methods of credit and financial regulation in shipping industry Source: produced by the authors

#### **CONCLUSIONS**

Application of protectionist measures in shipping industry is caused by low profitability of business, high level of competition and volatility on the international freight markets, the continuing outflow of vessels in offshore jurisdictions and the aspiration of governments to develop national fleets, to ensure economic security.

The classification of protectionist measures in shipping industry is improved by specification of the structure of indirect methods. The scientific representation about state protectionism in shipping industry gained further development by systematization of practical experience of application of direct and indirect measures in shipping and allocation of the main trends of protectionism: prevalence of indirect measures of protectionism over direct methods in connection with the policy of trade and shipping liberalization in the majority of developed countries of the world; expansion in recent years the practice of such direct measures of protectionism as cargo reservation on transportation of domestic and export-import cargo for vessels under national flags and fixing to the national fleet of the cargo transported within state programs; dissemination in developed countries of the tonnage tax regimes and other alternative taxation systems at registration of vessels in international ship registers for fight against outflow of national fleets in offshore jurisdictions; application in a number of developed countries of tax incentives for shipping companies, at the same time in the majority of the countries the specified tax

concessions are applied at the choice of payment of the corporate tax by ship owners and do not work for the tonnage tax regime; application of various types of state subsidizing and preferential crediting for stimulation of national fleet development.

The advantages of protective measures according to the ship owners are: simplification of access to cargo, possibility of maximizing revenue, reductions of tax expenses, capital costs and growth of investments into renewal of the fleet. Among the disadvantages of protectionist measures it is necessary to highlight a growth of transport tariffs due to an increase in capital and operational costs of ship owners, an increase in cost of the goods transported by sea connected with direct competition restrictions, uneven development of shipping industry in the different countries.

#### **SUMMARY**

In the article the practical experience of the state protectionism in shipping industry at the current stage of its development is systematized. The reasons of protectionism on maritime transport are considered; the analysis of the world fleet ownership and flags of registration is conducted. The comparative analysis of the Dutch and Norwegian tonnage tax regimes and other current tax incentives in the different countries is made. The advantages and shortcomings of protectionist measures in shipping industry from the macroeconomic and microeconomic points of view are analysed. The scientific representation of state protectionism in shipping industry gained further development by systematization of international experience of application of direct and indirect measures in shipping and allocation of the main trends of protectionism. The classification of protectionist measures in shipping industry is improved by specification of the structure of indirect methods.

The main advantages of protective measures according to the ship owners are: simplification of access to cargo, possibility of maximizing revenue, reductions of tax expenses, capital costs and growth of investments into renewal of the fleet. Among the main disadvantages of protectionist measures it is necessary to highlight a growth of transport tariffs due to an increase in capital and operational costs of ship owners, an increase in cost of the goods transported by sea connected with direct competition restrictions, uneven development of shipping industry in different countries.

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