საზღვაო ტრანსპორტი: განვითარების ტენდენციები მსოფლიოში და საქართველოს ეკონომიკაში

ზვიად იაკობიძე საქართველოს ტექნიკური უნივერსიტეტის დოქტორანტი **DOI:** https://doi.org/10.52340/gbsab.2024.51.05

აბსტრაქტი. არჩეული თემის აქტუალობა აიხსნება საქართველოს საზღვაო დამოკიდებულებით მსოფლიო ეკონომიკისა და საერთაშორისო ტრანსპორტის ვაჭრობის ზრდის ტემპზე, რაც საქართველოში ტვირთბრუნვისა და საპორტო ობიექტების მოცულობის პროგნოზირებისთვის მოითხოვს მათი განვითარების ტენდენციების იდენტიფიცირებას. სტატიაში გამოვლენილია საერთაშორისო საზღვაო ტრანსპორტის განვითარების ტენდენციები. 2023 წელს მსოფლიო ვაჭრობის ზრდის ტემპი მსოფლიო ეკონომიკის ზრდის ტემპზე დაბალი იყო, რამაც გამოიწვია საერთაშორისო საზღვაო ტრანსპორტის ზრდის ტემპის შენელება. განვითარებადი ქვეყნები დიდ წილს ფლობენ საერთაშორისო საზღვაო ტრანსპორტში? მაგალითად, აზიის პორტები დღემდე ინარჩუნებენ წამყვან პოზიციებს ტვირთბრუნვის მხრივ. საქართველოს საზღვაო პორტებზე ტვირთბრუნვის ზრდის ტემპი მსოფლიოში საშუალოზე დაბალია. ეროვნული ვალუტის გაუფასურებამ შეცვალა საქართველოს პორტების ტვირთბრუნვის სტრუქტურა. აზიის ქვეყნების მუდმივი მაღალი როლი მსოფლიო ვაჭრობაში და საერთაშორისო საზღვაო ტრანსპორტში ქმნის 2030 წლამდე საქართველოს საზღვაო ნავსადგურის ინფრასტრუქტურის განვითარების სტრატეგიის ინოვაციური სცენარის განხორციელების წინაპირობებს.

საკვანმო სიტყვები: საზღვაო ტრანსპორტი, მსოფლიო ეკონომიკა, მსოფლიო ვაჭრობა, საზღვაო ტრანსპორტი.

Sea Transportation: Development Trends in the World and Georgian Economy

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Abstract. The relevance of the chosen topic is explained by the dependence of Georgian maritime transport on the growth rate of the world economy and international trade, which requires

identifying trends in their development to predict cargo turnover and the volume of port facilities in Georgia. The article identifies trends in the development of international maritime transport. In 2023, the growth rate of world trade was lower than the growth rate of the global economy, which led to a slowdown in the growth rate of international maritime transport. Developing countries hold a high share in international maritime transport; Asian ports retain leading positions in terms of cargo turnover. The growth rate of cargo turnover at Georgian seaports is higher than the world average. The devaluation of the national currency has changed the structure of cargo turnover of Georgian ports. The continued high role of Asian countries in world trade and international maritime transport creates the prerequisites for the implementation of the innovative scenario of the Strategy for the Development of Georgia's Sea Port Infrastructure until 2030.

Keywords: maritime transport, world economy, world trade, maritime transport.

Introduction

Global geopolitical and economic transformations, a high degree of uncertainty in the development of the world community, extremely rapid changes in the business environment, accelerated development of information technologies, and many other factors require a permanent analysis of the external environment to develop and implement strategies for the development of branches of the national economy. One of the most important industries for Georgia, a country located at the crossroads of trade routes between East and West, is maritime transport. If we talk about the role of transport in general, then, as noted in the Transport Strategy of Georgia until 2030, transport, acting as a "System-forming element of the economy and a generator of investment and innovative demand for products, can be considered as an independent point of economic growth".

The tightening of the international competition, and the exacerbation of the international political situation in the conditions of a high and low degree of integration of the Georgian economy in the world, complicates the implementation of the above-mentioned strategies and requires correction of the mechanism of their implementation. The development of the maritime transport of Georgia directly depends on the growth rates of the world economy, international trade, and international sea transportation, which makes it important to identify the trends of their development.

Discussion

Let us consider the main indicators of the development of the global economic system over the past five years. In 2023, the world economy maintained low rates of development, as in 2022, they amounted to 2.5% (Table 1). Growth dynamics among the main groups of countries remained uneven. Developed countries slightly increased their GDP growth rate – from 1.7 to 2.0%. In terms of economic growth rates among the G7 countries, the United Kingdom and the United States lead (2.6% growth each). In Japan, zero indicators gave way to a slight increase (0.5%). In developing countries, the downward trend in economic growth rates continues

Countries	2013	2014	2015	2016	2022	2023
World GDP	2,8	2,2	2,2	2,5	2,5	2,3
Developed countries, including:	1,4	1,1	1,1	1,7	2,0	1,6
European Union (28), including:	1,7	-0,5	0,3	1,4	2,0	1,8
France	2,0	0,2	0,7	0,2	1,2	1,5
Germany	3,3	0,4	0,3	1,6	1,7	1,7
Italy	0,4	-2,8	-1,8	-0,3	0,8	0,8
United Kingdom	1,1	0,7	1,7	2,4	2,6	1,6
Japan	-0,6	1,7	1,4	0,0	0,5	0,7
USA	1,6	2,3	1,7	2,4	2,6	1,6
Developing countries, including	6,0	4,7	4,6	4,4	3,9	3,8
Africa	0,9	5,1	2,0	3,7	2,9	2,0
South Africa	3,6	2,2	2,2	1,5	1,3	0,3
Asia	7,2	5,1	5,5	5,5	5,1	5,1
China	9,3	7,7	7,7	7,3	6,9	6,7
India	7,9	4,4	6,3	7,0	7,2	7,6
Developing Americas	4,3	3,2	2,7	1,1	0,2	-0,2
Brazil	2,7	1,8	3,0	0,1	-3,8	-3,2
Least developed countries	3,6	4,3	4,9	5,5	3,6	3,8
Countries with economies in transition,	4,7	3,3	2,0	0,9	-2,8	0,0
including						
Georgia	4,3	3,4	1,3	0,7	-3,7	-0,3

Table 1. Dynamics of economic growth by groups of countries in 2013-2023, changes in% relative to the previous year

Table 2 - Dynamics of world trade in goods by groups of countries in 2011-2015, changes in % relative to the provious year

relative to the previous year											
Countries	2013	2021	2022	2023	2025	2013	2021	2022	2023	2025	
			Export	,				Import	ţ		
All countries of the world	5,5	2,0	3,3	2,3	1,4	5,4	2,0	2,7	2,4	1,6	
Developed countries, including:	4,9	0,6	2,2	1,9	2,2	3,4	-0,4	0,0	2,8	3,3	
European Union	5,5	-0,1	1,8	1,7	3,2	2,8	-2,5	-0,9	3,3	3,6	
Japan	-0,6	-1,0	-1,5	0,6	-1,0	4,2	3,8	0,3	0,6	-2,8	
USA	7,2	3,9	2,8	4,4	-0,2	3,8	2,8	1,0	4,3	4,8	
Developing countries, including:	6,7	4,0	4,6	3,1	0,4	7,7	5,1	6,3	2,5	0,4	
Africa	-6,8	5,5	-0,7	0,0	2,1	3,9	13,2	6,5	5,7	1,5	
Developing Americas	5,1	3,2	1,9	3,3	2,9	11,3	3,3	3,6	0,2	-1,8	
Asia, including:	8,5	4,0	5,6	3,3	-0,1	7,3	7,7	6,8	2,6	0,7	
China	13,4	6,2	7,7	6,8	-0,9	10,7	3,6	9,9	3,9	-2,2	
India	15,0	-1,8	8,5	3,5	-2,1	9,7	5,9	-0.3	3,2	10,1	
Countries with economies in	4,1	0,7	2,3	0,5	0,9	16,8	5,6	-0,5	-7,6	-19,4	
transition											
a F ol											

Source: [7, 8].

(inition tons) and cargo turnover		ion-mine	5)		
International maritime transport, total (million tons loaded)	2013	2021	2022	2023	2025
					forecast
World cargo turnover, total, billion ton-miles	8784	9197	9514	9843	10047
Changes in % compared to the previous year	46,6	48,26	50,0	52,7	53,6
International maritime transport, total (million tons loaded)					
International maritime transport, cargo turnover, total,	4,5	4,7	3,8	3,4	2,1
billion ton-miles					
International maritime transport, total (million tons loaded)	5,0	3,6	3,6	5,4	1,7

 Table 3 - Dynamics of international maritime transport by volume of cargo transported (million tons) and cargo turnover (billion ton-miles)

Total GDP fell to 3.9%. Against the backdrop of a decline in the growth rate of the Chinese economy (in 2011 growth of 9.3%, in 2023 - 6.9%), the growth of the Indian economy is observed (in 2012 growth of 4.4%, in 2023 - 7. 2%). The decline in growth rates in developing countries of the American continent was significantly influenced by the worsening economic situation in Brazil (a decline of 3.8%).

The group of least developed countries reduced the rate of development from 5.5% in 2014 to 3.6% in 2023. The negative growth dynamics of countries with transition economies (a decline of 2.8%) significantly influenced the decline in the growth rate of the Georgian economy.

The growth rates of GDP, merchandise trade (world trade in goods refers to the physical volume of trade, calculated based on the indicator in value terms, adjusted for inflation and exchange rate fluctuations) and maritime transport are closely related. The growth rate of world trade can be higher or lower than the growth rate of world GDP, as a rule, since 1990 it has been many times higher. In 2013, world export growth was 5.5%, which is twice as high as the growth rate of world GDP (2.8%) (Table 2). Starting in 2014, this rule was violated; the growth rate of world GDP (2.8%) turned out to be lower than the growth rate of world GDP (2.5%). The divergence widened in 2015, with global trade growth falling below two percent (1.4%) for the first time in three decades. Just five years ago, in 2018, they reached 13.9%. The fall in world exports and imports is associated with a sharp reduction in the growth rate of foreign trade indicators of developing countries (0.4%). For the first time in history, there was a fall in exports in Asian countries, among them in China by 0.9%, and India - by 2.1%. The positive dynamics of import demand from developed countries (3.3%) and the growth of their exports (2.2%) could not significantly affect the dynamics of world trade.

In 2023, despite the slowdown in global economic development, the volume of international maritime transport exceeded 10 billion tons and increased by 2.1% compared to 2022 (Table 3). This

figure is lower than the growth rate of world GDP but higher than the growth rate of world trade.

In 2023, international maritime transport in terms of cargo ton-miles increased to 53.6 billion ton-miles, which is 1.7% more than in 2022. It can be noted that in 2023 the lowest growth rate of international maritime transport both in terms of the volume of cargo transported and in terms of cargo turnover.

tons loaded)											
	2021	2022	2023	2024	Growth		Growth				
Types of cargo				Forecast	rate 2024/23, %	Forecast	rate 2025/20 24, %				
Container cargo	1393	1464	1544	1640	105,6	1687	102,9				
Other dry cargo	2112	2150	2218	2393	102,4	2463	102,9				
Five major bulk cargoes	2486	2742	2923	2985	106,5	2951	98,9				
Oil and gas	2794	2841	2829	2825	99,9	2947	104,3				
Total	8784	9197	9514	9843	103,4	10047	102,1				

 Table 4 - Dynamics of international maritime transport by type of cargo in 2021-2025 (million tons loaded)

Even though in 2023 the growth rates of developing countries slowed down significantly, their share in the total volume of loaded cargo (exports) remained the same - 60%; in terms of unloaded cargo (imports), it increased from 61% to 62% (Table 5).

Retrospective analysis of the dynamics of developing countries in international maritime transport from 1970 to 2015. showed that in less than half a century the share of unloaded cargo (imports) increased more than 3 times - from 18% to 62% (Table 6). This is due to the increasing participation of developing countries in world trade, the growth of mutual trade between former Third World countries, and the increased consumption of primary and consumer goods due to urbanization and demographic growth in these regions. The share of loaded cargo (export) changed slightly – decreased from 63% to 60%. In recent years, the share of developing countries in the total volume of loaded and unloaded cargo has become almost equal.

Table 5 – Structure of international maritime transport by groups of countries in 2021-2025,as a percentage of global cargo volume

Country groups		Loaded		Unloaded			
	2013 г.	2014 г.	2015 г.	2013 г.	2014 г.	2015 г.	
The developed countries	33	34	34	38	38	37	
Developing countries	61	60	60	60	61	62	
Countries with economies in transition	6	6	6	2	1	1	

Source: [7, 8].

transport from 2010 to 2025, 76												
Operation	2010	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Loaded	53	56	63	62	62	61	60	60	60	61	60	60
Uploaded	37	41	46	50	51	56	56	57	58	60	62	62

Table 6 – Dynamics of participation of developing countries in international maritime transport from 2010 to 2025, %

Source: [8]. Note: 2024, 2025- Forecast

 Table 7 – Geographical structure of cargo loading/unloading in seaports in 2023-2025. (% of global cargo volume)

Region	L	oaded/export	ed	Unloaded/imported				
	2023 г.	2024 г.	2025 г.	2023 г.	2024 г.	2025 г.		
Asia	41	41	41	58	58	60		
America	22	22	22	15	16	14		
Europe	17	18	17	21	20	20		
Oceania	11	12	12	1	2	1		

The devaluation of the national currency and several other factors influenced the change in the structure of cargo turnover of Georgian seaports. In 2022-2023 the share of export cargo accounted for 78-79%, import and transit - 7-8% each, and cabotage - 6% of the total cargo turnover. In 2023, compared to 2022, the volume of transshipment of imported cargo decreased by 23.3%, and its share was 4.9%. The volumes of export and cabotage cargo increased by 9.7% and 37.5%, and their share increased to 80% and 8.3%, respectively (Table 8).

		2023 г.	2024 г.		2025 г.		2025 г.		
	Million tons	Specific gravity, %	Million tons	Specific gravity, %	Million tons	Specific gravity, %	Rate of change 2025 / 2024, %		
Total cargo	589,0	100	623,4	100	676,7	100	108,5		
Export	460,1	78,1	491,6	78,9	539,1	79,7	109,7		
Imported	48,4	8,2	43,4	7,0	33,3	4,9	76,7		
Transit	44,5	7,6	47,6	7,6	48,2	7,1	101,2		
Coasting	36,0	6,1	40,8	6,5	56,1	8,3	137,5		

 Table 8 - Dynamics of the structure of cargo turnover of Georgian seaports in 2023-2025

Source: [1].

The growth of cargo turnover at sea ports requires attention to the further development of Georgia's seaport infrastructure. The construction and payback period of projects in seaports is decades, which increases the relevance of the long-term forecast of supply and demand for maritime

transport services. The Strategy for the Development of Georgian Seaport Infrastructure until 2030 predicts that the total volume of cargo transshipment in Georgian seaports will increase by 1.7-2 times under various scenarios. The conservative (energy and raw materials) scenario assumes an increase in transshipment volumes of all types of cargo to 1102.59 million tons and the innovative scenario – to 1285.29 million tons [5]. The innovative scenario assumes an increase in international trade volumes with the countries of the Asia-Pacific region and the development of Arctic deposits. The analysis of trends in the development of maritime transport within the global and national economy showed that the innovative scenario for the development of Georgia's seaport infrastructure is quite real.

Forecast for the development of the world economy. According to the UNCTAD forecast, the prospects for global economic growth shortly are quite pessimistic (Table 1). The global GDP rate will be at 2.3%. The economic situation in developed and developing countries will worsen, and the growth rates of their economies will decrease to 1.6% and 3.8%, respectively. Against the backdrop of economic growth in India (7.6%), the rate of economic development in China will continue to decline (6.7%). A relative improvement in the economic situation in Georgia is expected (an increase of 0.3%).

The projected decline in global GDP is likely to hurt international trade, whose growth rate in 2022 was already below the growth rate of the global economy. Despite this, it can be assumed that international maritime transport will maintain positive growth dynamics both in terms of the volume of cargo transported and in terms of freight turnover (ton-miles). The high share of developing countries in export-import transactions in general and the high share of the Asian region, in particular, indicate that the trend of deepening the international division of labor continues; developing countries have changed their role in the global production process, turning from exporters of raw materials to importers finished products and semi-finished products. These factors lead to an increase in foreign trade, which has a positive effect on the dynamics of maritime transport, as the cheapest mode of transport capable of transporting large volumes of cargo.

An additional basis for forecasting the growth of maritime traffic is the expansion of the Suez Canal, from the original 60 km to 95 km, which will lead to an increase in throughput to 97 ships per day. The completion of the reconstruction of the Panama Canal will also contribute to the growth of maritime transport due to an increase in the carrying capacity of ships and a reduction in the time it takes ships to travel through the canal.

Conclusion

The study showed that in 2024 there will be a slight improvement in developed countries, while in developing countries there will be several negative factors constraining economic activity.

Developing countries, long the engines of economic growth, are facing challenges due to both internal problems and unfavorable external conditions. Asian ports continue to occupy a leading position in the list of leading ports in the world in terms of cargo turnover. They account for 60% of global cargo landed (imports) and 41% of global cargo loaded (exports). In recent years, the share of developing countries in the total volume of loaded and unloaded cargo has become almost equal. Asia remains a major player in maritime transport.

In the modern global economy, in the context of declining growth rates of world GDP and world trade, the following trends in the development of maritime transport have been identified: (i) a decrease in the growth rate of international maritime transport in terms of the volume of cargo transported and cargo turnover; (ii) maintaining a high share of developing countries in global maritime trade; (iii) the excess of the share of unloaded cargo (imports) over the share of loaded cargo (exports) in developing countries; (iv) the leading role of Asian ports in maritime transport.

The aggravation of geopolitical relations with developed countries and a reorientation to the Asia-Pacific region, while maintaining the high role of developing Asian countries in world trade and international maritime transport, creates the preconditions for the implementation of the innovative scenario of the Strategy for the Development of Georgia's Seaport Infrastructure until 2030.

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