CONTEMPORARY STATISTICAL TRENDS OF FOREIGN TRADE BY SEA TRANSPORT BY COUNTRY GROUPS

Abstract. At the modern stage of economic development, under the conditions of deepening globalization, the use of correct logistics is becoming more and more relevant, which plays an important role in the development of trade relations between countries and ensuring correct fragmentation of the economy.

Today, the situation is such that the presence of certain threats in sea transportation determines the high risk of the possibility of an increase in transportation prices, which is why its influence on price volatility is quite strong. Based on the current situation, the research of maritime logistics issues is becoming more and more relevant in this regard, because the analysis of quantitative indicators of shipments, determination of risk expectations, detection of trends, identification of problems, etc. is an indicator of increasing the effectiveness of maritime logistics. This issue becomes even more important when the issue concerns the activation of trade relations with groups of different countries of the world by sea transport. This process is actively taking place in Georgia today, which is a prerequisite for diversification of transportation by different types of transport and increasing its intensity in the future, and there are signs of this in the country. As of today, the geographical area of trade relations of Georgia in terms of types
of transport is wide, although the quantitative characteristics of foreign trade are differentiated
according to individual countries and groups of countries.

**The main goal** of the paper was to identify and analyze the statistical trends of Georgia’s foreign
trade relations with EU, CIS, BSEC, OECD, GUAM, and EFTA countries.

During the stages of statistical research, the methods of statistical observation, gathering-
grouping, and analysis are used in the research process. Therefore, the article discusses studies and
analyzes the dynamics of foreign trade relations of Georgia with EU, CIS, BSEC, OECD,
GUAM, and EFTA countries groups by sea transport. The main statistical indicators of foreign
trade turnover, export-import, local export re-export, and the characteristics of the commodity
structure are analyzed according to all indicators. The main statistical trends of foreign trade
with non-specified country groups are identified and regularities are established. Relevant
conclusions are made.

**Conclusions.** Foreign trade relations in Georgia are primarily carried out by road transport,
although marine transport with a 32.6% share firmly occupies the second place in dynamics; In
exports, the advantage of the use of road transport is evident, compared to imports. EU, CIS,
BSEC, OECD, GUAM, EFTA countries, the rate of foreign trade by sea transport is increasing; In
2016-2023, on average, the share of the EU in foreign trade by country groups increased by
5.3%. Changing trends are observed in case of exports of EU, BSEC, OECD countries groups.
From 2019, the predominant growth of the BSEC indicator was revealed, but in 2023, the EU
was again the highest indicator with a share of 67.4% in export relations. In the case of imports
to the EU, CIS, BSEC, OECD, GUAM, EFTA countries, there is a pronounced trend: the
European Union is the undisputed leader in the group of mentioned countries. In 2016-2023, the
EU's share of maritime transport imports grew by an average of 2.6% annually. The growth of
EU indicators is recorded in local exports, while a completely different picture was revealed in
re-exports of sea transport, due to the intensification of trade relations with the CIS
countries. From these EU, CIS, BSEC, OECD, GUAM, EFTA countries, Motor cars, Petroleum
and petroleum oils are the most imported to Georgia, the share of which in imports is 68% and
32%.

Copper ores and concentrates are the most exported, whose share in the motor exports of EU,
CIS, BSEC, OECD, GUAM, EFTA is 38% and 17%. No significant changes have been observed
in the commodity structure of both exports and imports in recent years.

**Key words:** Trends, Sea Transport, Export, Import, Country Groups.

**JEL classification:** C0
აბსტრაქტი:
ეკონომიკის განვითარების თანამედროვე ეტაპზე, გლობალიზაციის გამოტანის პირობებში, სულ უფრო აქტუალური ხდება სწორი ლოგისტიკის გამოყენება, რაც მნიშვნელოვნად ასრულებს ქვეყნებს შორის სავაჭრო ურთიერთობების გამოყენებისა და მსოფლიოს სწორ ფრაგმენტაციის უზრუნველყოფაში.

დღეს სიტუაცია ისეთია, რომ საზღვაო ტრანსპორტირებისას გარკვეული საფრთხეს უწოდებს გაზრდის ალბათობის მაღალ რისკს, რის გამოც მისი გავლენა ფასების ცვალებაზე საკმაოდ ძლიერია. არსებული ვითარებიდან გამომდინარე, საზღვაო ლოგისტიკის საკითხების კვლევა ამ კუთხით სულ უფრო აქტუალური ხდება, რადგამც გადაზიდვების რაოდენობრივი მახასიათებლების ანალიზი, ტენდენციების გამოყენება, პრობლემების იდენტიფიკაცია, ა.შ. საზღვაო ლოგისტიკის ეფექტობის გაზრდის ინდიკატორს წარმოადგენს. ეს კითხვა კიდევ უფრო მნიშვნელოვან ხდება როდესაც საკითხი ეხება საზღვაო ტრანსპორტთა მსოფლიოს სხვადასხვა ქვეყნების ჯგუფებთან სავაჭრო ურთიერთობების გააკტიურება. ეს პროცესი დღეს საქართველოში აქტიურად მიმდინარეობს, რაც ტრანსპორტის სხვა
At the modern stage of economic development, under conditions of deepening globalization, the use of correct and efficient logistics is becoming more and more relevant, which plays an important role in the development of trade relations between countries and ensuring correct fragmentation. This is evidenced by active trade operations taking into account the advantages of using different trade corridors. Among the means of transport available today, maritime transport is relevant and often the most convenient for Georgia. (Abesadze, Robitashvili, Abesadze, & Kinkladze, 2022) Today, the issue of the middle corridor is very relevant in shipping. For several years, the middle corridor has gained special relevance. Just fifteen years ago, the Middle Corridor did not look very strong compared to the main competing corridors (from the North - from China through Russia, and from the South - from China through Afghanistan and Iran). The main disadvantages of the middle corridor are - the need for multimodal transportation and crossing several borders, long time, low level of...
infrastructure and high tariffs. 3 main indicators are used to compare competitors - 1. The cost of cargo carried in the corridor. 2. Transit time. 3 Security.

The growth of the perspective of the Middle Corridor was especially facilitated by the withdrawal from the world economic structure due to the sanctions of the key participant of the most competitive northern route - Russia. However, the northern direction was already a well-proven and shortest route for transporting Asian cargo, and the largest part of Chinese cargo moved along this route, due to the well-developed railway system of Russia and the lack of border barriers, which in turn contributed to the reduction of tariffs and transit time.

There is another competitor of the Transcaucasian corridor - the so-called Southern Road Corridor. This corridor connects China to Europe through Iran and Afghanistan. In terms of transit time and tariffs, the Southern Corridor is also more attractive than the Middle Corridor, but due to the long distance, faulty and unprofitable services, and the factor of two politically unstable countries - Afghanistan and Iran, and complicated border crossing procedures, the said route has never been significantly busy for East-West trade and The events that took place between Iran and Israel a few days ago made the mentioned route even less relevant.

The emerging geopolitical situation made such factors of competitiveness as tariffs and time secondary, and safety came to the fore. Against this background, it is clear that the busyness of the middle corridor has become more urgent and, accordingly, the mobilization of the necessary political and financial capital. In 2022, the governments of Kazakhstan, Azerbaijan, Georgia and Turkey reached an agreement to create a joint venture on the route. In order to develop freight transportation on the Trans-Caspian international transport route, a container hub will be created in the Aktau sea port within the framework of the free economic zone.

Other countries of Central Asia are also active: for example, Uzbekistan has agreed with Turkmenistan, Georgia and Azerbaijan to provide discounts on transit of goods.

China is increasingly interested in the Middle Corridor, and even if sanctions are lifted for Russia, it will definitely leave an alternative path in the form of the Middle Corridor.

In this regard, the work process is progressing and for the moment, the status is quite encouraging.

In parallel with the increase in the importance of the middle corridor, the area of use of sea transport in cargo transportation is increasing.

In such conditions, Georgia has a chance to take the place of the main logistics conduit among the alternative transcaucasan transit channels connecting the European and Asian regions. It is important that the Government of Georgia adequately respond to the demands and challenges created in the field of logistics systems, reduce the administrative barriers imposed in this field and increase the transit capacity of Georgia. (Katamadze & Katamadze, G., 2023)

The modern acceleration of economic development in the country is largely attributed to the development of information, marketing, and logistics technologies, which has led to a change in the subject of competition within most economic activities. (Fedotova I. & Bocharova N., 2023)

In the modern conditions of globalization, the use of correct and effective logistics is becoming more and more relevant, which is one of the powerful levers for the development of trade relations between countries. (Abesadze, A., Abesadze, A., & Paresashvili, 2023)
Globalization, along with technological revolutions in transport sector such as containerisation and multimodalism, has reshaped the maritime industry. (Hussein & Song, DW, Maritime Logistics for the Next Decade: Challenges, Opportunities and Required Skills. Global Logistics and Supply Chain Strategies for the 2020s: Vital Skills for the Next Generation,, (2022)

At the modern stageliner and tramp shipping are consideredas the two major service patterns for international seaborne trade. In concept, liner shipping services have fixed routes and offer port calls at regular intervals, while tramp shipping services have no fixed route and can call at any port for loading and discharging cargo upon demand. (Sahoo, Karamperidis, S., Song, D., & Ersoy, E., 2019) This is where the importance of the right logistics is revealed, because in order to ensure a profitable business, having defined a framework on the integration, we suggest maritime logistics as a meaningful business context for its validation using prevailing cases in the industry. (Palmieri, Parola,, F., Song, D., & Baglieri, E., 2019) This line of research is served as an indicator of a good strategic direction for the practitioners engaged in the maritime transport and logistics industry, in order for them to become better integrated entities in a global logistics system as well as maximize their competitive advantages. (Lee & Song, D., The effect of shipping knowledge and absorptive capacity on organizational, 2015)

It is known that visitors to the country come mainly by land and air. Cruise traffic capabilities are underestimated, so the scale of its use is uncertain. Clearly, increasing the intensity of cruise traffic will also contribute to the development of cruise tours. To do this, first of all, it is necessary to pay attention to the pilot regions, where the flows of potential visitors can increase. It is necessary to ensure the diversity of cruise tourism products, even in the segment of the domestic tourism market, which should be accompanied by training to provide appropriate services to staff based on training, use of innovative methods of cruise tour business planning, etc. (Abesadze, Kinkladze, R., Giorgobiani, M., & Robitashvili, N., 2021)

Aim and tasks. In the conditions of existing fragmentation, it is important to analyze trade relations according to the groups of EU, CIS, BSEC, OECD, GUAM, EFTA countries, therefore

The main goal of the work is to outline the statistical trends of foreign trade in terms of sea transport according to the EU, CIS, BSEC, OECD, GUAM, EFTA countries and to determine the main parameters.

Methodology
Analysis, synthesis, induction, deduction, as well as specific statistical methods: observation, grouping and analysis were used in the research process. For analytical evaluations, data were processed and indicators were calculated using EXELL and SPSS computer programs.

Results. Today, foreign trade relations in Georgia are primarily carried out by road transport, although marine transport with a 32.6% share firmly occupies the second place in dynamics. t is true that the advantages of using the modes of transport are not structurally violated, but the percentage ratios change in the case of exports and imports. (See Fig.1)
In exports, the advantage of the use of road transport is evident, compared to imports. It is enough to note that in 2023, almost 70% of exports were carried out by road transport, while the share of sea transport increased to 37.5% during imports. (See Fig.2)

In total foreign trade turnover, maritime transport holds 32.6%, which is 1.5 percentage points less than the previous year's figure and 5 percentage points behind the level of 2016. Analysis of data by EU, CIS, BSEC, OECD, GUAM, and EFTA country groups showed that the rate of foreign trade by sea transport is increasing, as according to the latest data it reached its maximum in the last 4 years at 69%, but it is 3.7% below the pre-pandemic period and 1.8% compared to the data of 2016. (See Fig.3)
If we examine in detail the data of foreign trade turnover of EU, CIS, BSEC, OECD, GUAM, and EFTA countries, more than half of foreign trade came to EU countries every year. The range of the percentage share varied between 57% - 83.9%, and as can be seen from Figure 4, it reached its maximum in 2023, when it exceeded the previous year by 17.7%, and by 25.6 percent points compared to 2016 and was equal to 83.9%. In 2016-2023, on average, the share of the EU in foreign trade by country groups increased by 5.3%.
It is noteworthy that indicators of countries of GUAM and BSEC, OECD groups, whose share in the group's foreign trade turnover in 2023 amounted to 32.7% and 18.9%, respectively. Changing trends were revealed in the case of exports. Initially, it is worth noting here the almost equal indicators of the specific share of EU, BSEC, and OECD country groups, but since 2019, a predominant increase of the BSEC indicator has been highlighted, whose share indicator exceeded the EU indicator by 13.4 percentage points and amounted to 65.6. This trend was maintained in the following year as well. However, in 2023, in export relations, the European Union again advanced and moved to first place among the countries of the mentioned group with a share of 67.4%. The indicator of the structure of the countries has also changed. The OECD group also surpassed BSEC with a rate of 57.4%, the role's share in exports decreased by 8.7 percentage points compared to the previous year and equaled 47.2% in 2023. (See Fig.5)

![Fig. 5. Export share of groups of countries in sea transport exports](https://ex-trade.geostat.ge/en, n.d.)

In the case of imports to EU, CIS, BSEC, OECD, GUAM, and EFTA countries, there is a pronounced trend: it is characterized by an increasing trend of the share of the European Union, and every year it is the unconditional leader in the group of mentioned countries. The EU share ranges between 59.9-88.6%. In 2016-2023, the EU’s share of maritime transport imports grew by an average of 2.6% annually.
When analyzing exports, it is important to analyze local export indicators. According to the data of the last two years, a high share of the EU is recorded here, respectively 57.8% and 67.7%, but BSEC countries were in the lead in all years until 2021, whose percentage share in the local export of marine transport ranged from 55.2% to 70.3%. The share of OECD countries should also be taken into account. (See Fig. 7)

A completely different picture was revealed when analyzing re-exports. Here, the activation of trade relations with the CIS countries can be seen, especially until 2022, when its specific share in the case of re-export by sea transport varied from 19.2% to 73%. In 2023, it was completely replaced by the high indicators of the OECD and EU countries, with a share of 79.5% and 66.2%, respectively.
Fig. 7. Re-export share of groups of countries in sea transport exports


What is the commodity structure of export and import by sea transport?

EU, CIS, BSEC, OECD, GUAM, EFTA

Motor cars, Petroleum and petroleum oils, Tractors, Unglazed ceramic flags and paving, hearth or wall tiles are imported into Georgia from these countries; mosaic cubes and the like, Motor vehicles for the transport of goods and others. But the most Motor cars, Petroleum and petroleum oils, whose share in import is 68% and 32%.

Table 1. Import commodity structure

<table>
<thead>
<tr>
<th>N</th>
<th>The name of the goods</th>
<th>Thsd,USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Motor cars</td>
<td>218190.65</td>
</tr>
<tr>
<td>2.</td>
<td>Petroleum and petroleum oils</td>
<td>12009.68</td>
</tr>
<tr>
<td>3.</td>
<td>Tractors</td>
<td>6014.04</td>
</tr>
<tr>
<td></td>
<td>Unglazed ceramic flags and paving, hearth or wall tiles; mosaic cubes and the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>like</td>
<td>4391.13</td>
</tr>
<tr>
<td>4.</td>
<td>Motor vehicles for the transport of goods</td>
<td>4329.47</td>
</tr>
<tr>
<td>5.</td>
<td>Other commodities</td>
<td>3437.24</td>
</tr>
<tr>
<td>6.</td>
<td>New pneumatic tyres, of rubber</td>
<td>2805.27</td>
</tr>
<tr>
<td>7.</td>
<td>Fish, frozen</td>
<td>2522.90</td>
</tr>
<tr>
<td>8.</td>
<td>Trailers; other vehicles, not mechanically propelled; parts thereof</td>
<td>2025.64</td>
</tr>
<tr>
<td>9.</td>
<td>Self-propelled bulldozers, graders, levellers, scrapers, tamping machines</td>
<td>1901.18</td>
</tr>
</tbody>
</table>


As for exports, the following are sent out of the country by sea transport: Copper ores and concentrates, Ferro-alloys, Motor cars, Undenatured ethyl alcohol, spirits, liqueurs, and other spirituous beverages and others, the most Copper ores and concentrates, whose share in sea exports of EU, CIS, BSEC, OECD, GUAM, EFTA is 38% and 17%.
Table 2. Export commodity structure

<table>
<thead>
<tr>
<th>No</th>
<th>The name of the goods</th>
<th>Thsd,USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Copper ores and concentrates</td>
<td>260799.67</td>
</tr>
<tr>
<td>2.</td>
<td>Ferro-alloys</td>
<td>127067.93</td>
</tr>
<tr>
<td>3.</td>
<td>Motor cars</td>
<td>44817.88</td>
</tr>
<tr>
<td>4.</td>
<td>Undenatured ethyl alcohol, spirits, liqueurs and other spirituous beverages</td>
<td>39353.53</td>
</tr>
<tr>
<td>5.</td>
<td>Mineral or chemical fertilizers, nitrogenous</td>
<td>36792.03</td>
</tr>
<tr>
<td>6.</td>
<td>Wine of fresh grapes</td>
<td>26310.78</td>
</tr>
<tr>
<td>7.</td>
<td>Hazelnuts and other nuts</td>
<td>25467.00</td>
</tr>
<tr>
<td>8.</td>
<td>Petroleum and petroleum oils</td>
<td>20160.36</td>
</tr>
<tr>
<td>9.</td>
<td>New pneumatic tyres, of rubber</td>
<td>12554.76</td>
</tr>
<tr>
<td>10.</td>
<td>Automatic data processing machines and units thereof</td>
<td>12048.01</td>
</tr>
</tbody>
</table>


No significant changes have been observed in the commodity structure of both export and import in recent years.

Local exports include: Copper ores and concentrates, Ferro-alloys, Mineral or chemical fertilizers, Wine of fresh grapes, Hazelnuts and other nuts, Undenatured ethyl alcohol, spirits, liqueurs, and other spirituous beverages, Other made up articles, including dress patterns, Petroleum and others

And in re-export: Motor cars, Undenatured ethyl alcohol, spirits, liqueurs, and other spirituous beverages, New pneumatic tyres, of rubber, Automatic data processing machines and units thereof, Petroleum and petroleum oils, Electric instantaneous or storage water heaters, space, and soil heating apparatus

Conclusions, proposals, recommendations

➢ Foreign trade relations in Georgia are primarily carried out by road transport, although marine transport with a 32.6% share firmly occupies the second place in dynamics;
➢ In exports, the advantage of the use of road transport is evident, compared to imports.
➢ EU, CIS, BSEC, OECD, GUAM, EFTA countries, the rate of foreign trade by sea transport is increasing;
➢ In 2016-2023, on average, the share of the EU in foreign trade by country groups increased by 5.3%.
➢ Changing trends are observed in case of exports of EU, BSEC, OECD countries groups. From 2019, the predominant growth of the BSEC indicator was revealed, but in 2023, the EU was again the highest indicator with a share of 67.4% in export relations.
➢ In the case of imports to the EU, CIS, BSEC, OECD, GUAM, EFTA countries, there is a pronounced trend: the European Union is the undisputed leader in the group of...
mentioned countries. In 2016-2023, the EU’s share of maritime transport imports grew by an average of 2.6% annually
➢ The growth of EU indicators is recorded in local exports, while a completely different picture was revealed in re-exports of sea transport, due to the intensification of trade relations with the CIS countries.
➢ From these EU, CIS, BSEC, OECD, GUAM, EFTA countries, Motor cars, Petroleum and petroleum oils are the most imported to Georgia, the share of which in imports is 68% and 32%.
➢ Copper ores and concentrates are the most exported, whose share in the motor exports of EU, CIS, BSEC, OECD, GUAM, EFTA is 38% and 17%.
➢ No significant changes have been observed in the commodity structure of both exports and imports in recent years.

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