



Research



RESHAPING MARITIME TRADE IN THE BLACK SEA: THE EFFECTS OF THE RUSSO-UKRAINIAN WAR

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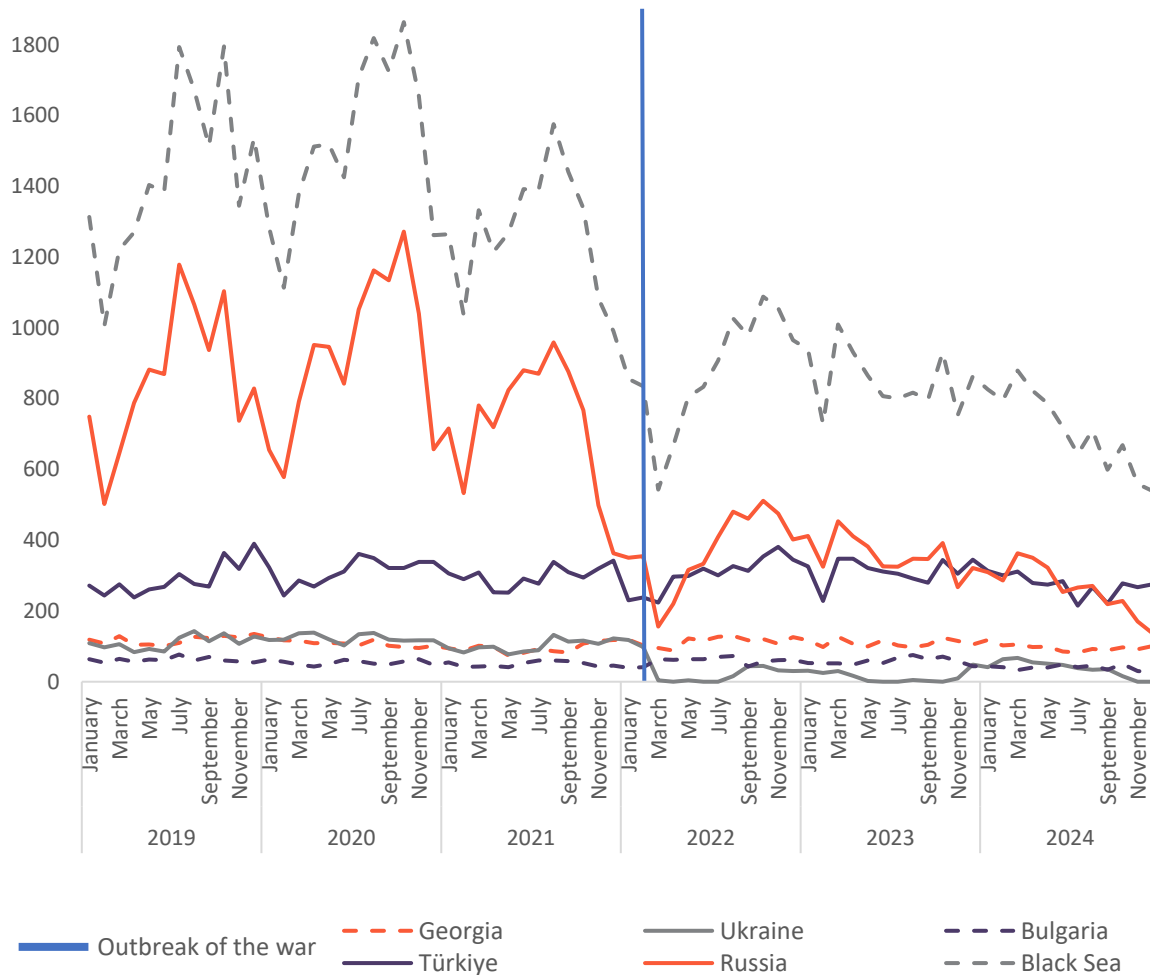
Anastasia Chkhenkeli
Mariam Jikia

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- ❖ The Black Sea, connecting Europe and Asia, holds significant strategic importance, yet the potential of trade through it remains significantly unfulfilled. Despite a 700-million-ton port traffic capacity, only 22% of this was utilized in 2021, with this figure subsequently dropping to 17% by 2024 due largely to war-related disruptions. Moreover, in 2021, Black Sea countries accounted for only 2.4% of global container throughput.
- ❖ Shortly after Russia's full-scale invasion of Ukraine in February 2022, maritime trade flows in the Black Sea were significantly reshaped, with the most pronounced impact being on the grain trade. The blockade of Ukrainian ports led to a near-total halt in shipping activities from February to August 2022, severely disrupting global grain supplies. While the establishment of the Black Sea Grain Initiative (BSGI) in July 2022 allowed for some recovery in grain shipments, the broader impact of the war extended beyond grain. For instance, global sanctions on Russia affected its shipping operations and market access, as evidenced by a 24% decline in Russia's oil and gas revenues in 2023 compared to 2022.
- ❖ As the war continued, further developments affected trade in the Black Sea. In particular, Russia adjusted its trade patterns to mitigate the effects of sanctions and, in July 2023, suspended the BSGI, leading to renewed tensions. By 2024, despite the war still raging on, the partial restoration of shipping routes and enhanced security measures laid the foundations for the recovery of Black Sea maritime trade. For example, a new coastal shipping route has enabled Ukraine to export agricultural products more securely.
- ❖ The profound impact of the Russo-Ukrainian War on Black Sea trade underscores the importance of thoroughly analyzing how the region has adapted to such disruptions. This publication builds upon [the previous edition](#), examining how maritime trade in the Black Sea region has evolved over the three years since the start of the war. While we have primarily analyzed 2023 data, insights into 2024's developments are provided, supplemented by desk research.

For detailed analysis, please refer to the full publication: **[Reshaping Maritime Trade in the Black Sea: The Effects of the Russo-Ukrainian War.](#)**

Number of port calls in the Black Sea region (2019-2024)

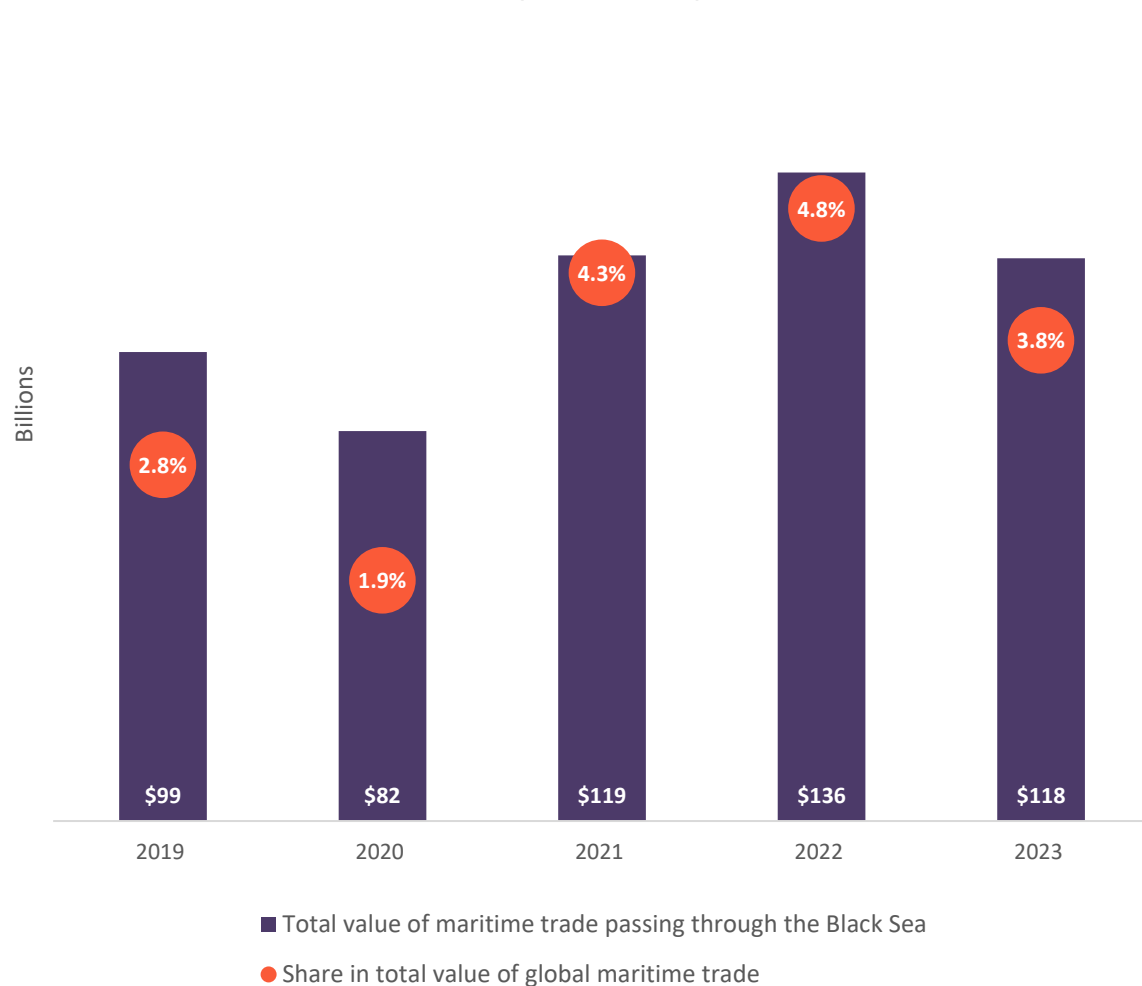


Prior to the war, the number of port calls in the Black Sea region was relatively stable, with some seasonal fluctuations. However, the conflict brought immediate disruptions, particularly for Russia and Ukraine, as the timeline of developments below shows:

- ❖ **November 2021** - Port calls in Russia drop significantly, potentially due to military preparations for the looming war.
- ❖ **March 2022** - Port calls in Ukraine nearly come to a total halt, reflecting the severe impact of the conflict.
- ❖ **August 2022** - Port calls in Ukraine begin to recover, largely due to the BSGI, established in July 2022.
- ❖ **May 2023** - Port calls in Ukraine fall sharply to almost zero after Russia excludes Pivdennyi from the BSGI.
- ❖ **July 2023** - Russia announces its decision to end the BSGI, further disrupting trade.
- ❖ **August 2023** - Ukraine develops new shipping routes through Reni, Izmail, and the western Black Sea.
- ❖ **December 2023** - Port call activity begins to recover due to Ukraine's new shipping scheme.
- ❖ **November-December 2024** - Port calls in Ukraine drop to zero and decline significantly in Russia due to escalations in the conflict and Ukraine's refusal to extend its transit agreement with Gazprom.

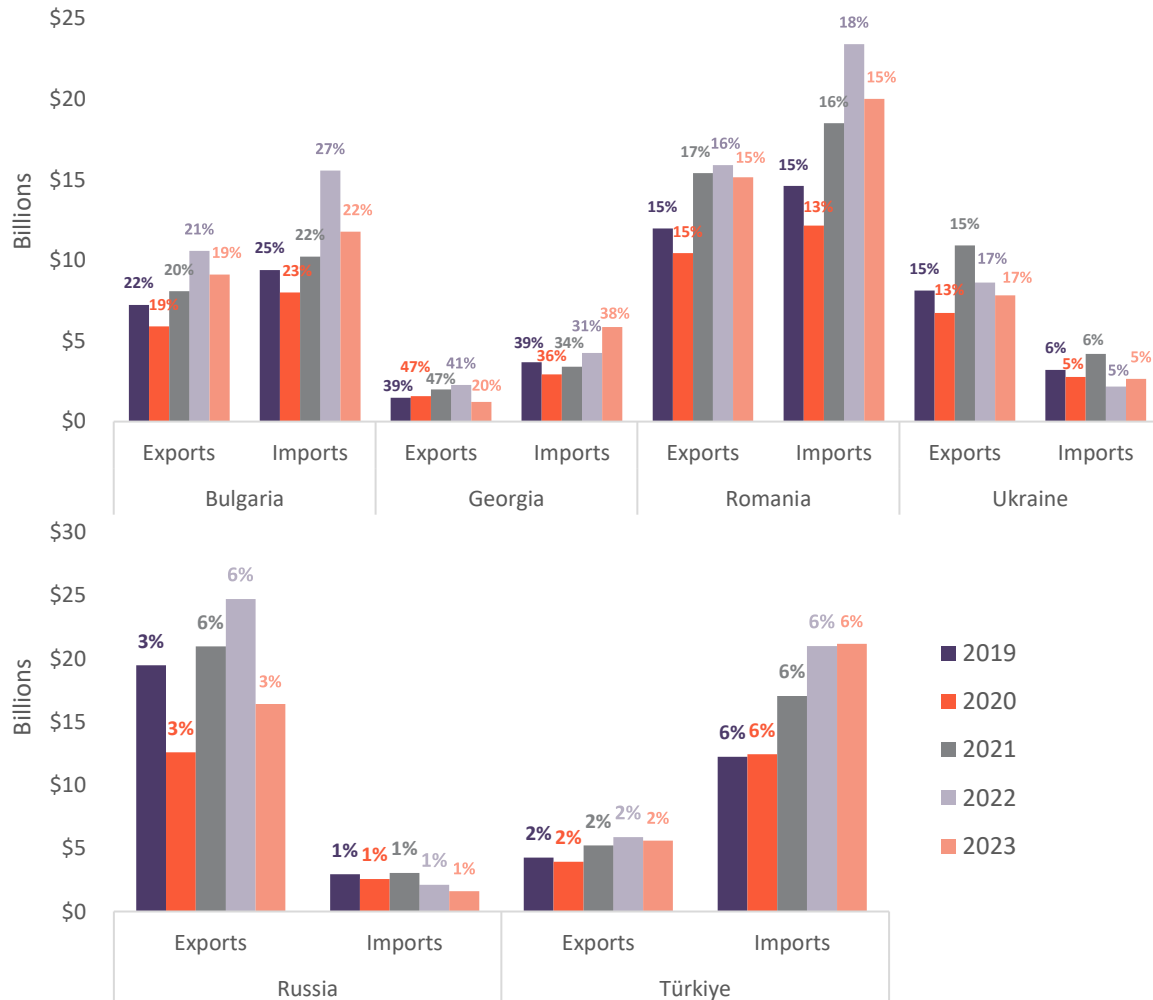
Meanwhile, Türkiye, Bulgaria, and Georgia saw increased port calls in 2022-23 but returned to pre-war levels in 2024.

Total value of maritime trade through and within the Black Sea (2019-2023)



- ❖ In 2019, the total value of maritime trade through and within the Black Sea was \$99 billion, representing 2.8% of global maritime trade. This figure declined in 2020, likely due to the onset of the COVID-19 pandemic. By 2021, the region had not only recovered but had surpassed pre-pandemic levels.
- ❖ In 2022, despite the outbreak of the Russo-Ukrainian War, the total value of maritime trade passing through the Black Sea increased by 14.6%, reaching its highest level during the analyzed period. However, in 2023, the trend reversed. The total value of maritime trade in the region declined by 13.2% YoY, resulting in a 1.0 pp reduction in its share in global maritime trade.
- ❖ This downturn underscores the prolonged effects of geopolitical tensions, expanding sanctions, and shifting trade routes on maritime trade in the Black Sea. It also reflects how countries and shipping companies have adapted to disruptions in supply chains and market access, rerouting cargo away from conflict-prone Black Sea ports to minimize risks such as higher insurance costs and potential military action.

Black Sea countries' trade via Black Sea ports: exports and imports and share in total trade (2019-2023)



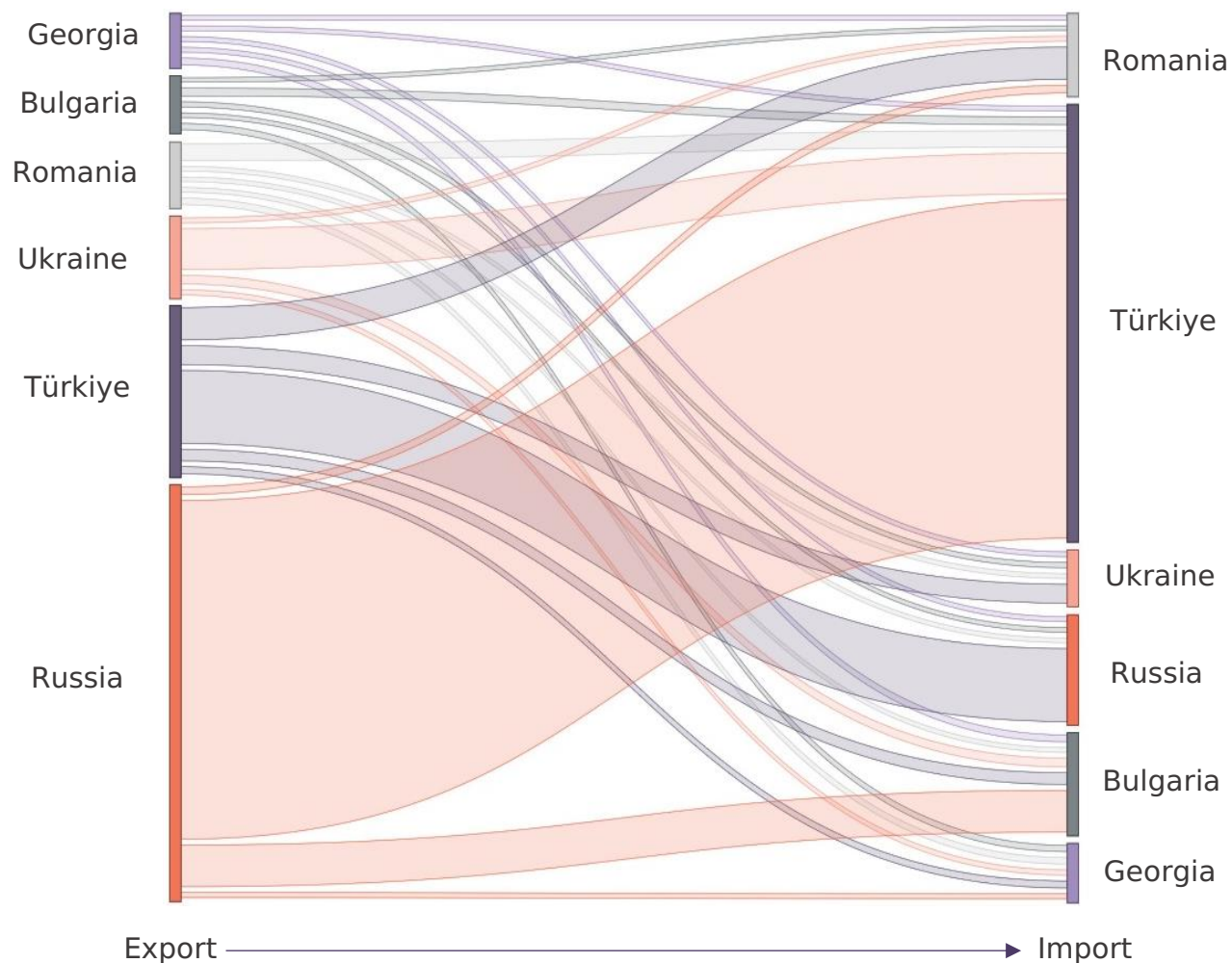
- ❖ In 2022, Ukraine, victim to the war, saw substantial YoY declines in maritime exports (-21.0%) and imports (-48.5%). In 2023, imports recovered (+22.6% YoY), largely driven by increased imports from the EU and China. However, exports continued to decline (-9.4% YoY), primarily due to a global drop in grain prices, despite an increase in the volume of goods sold.
- ❖ In Russia, maritime imports fell in 2022 (-30.2% YoY), while exports grew (+17.8%) largely due to the weak enforcement of sanctions. To counter restrictions, Russia expanded its “shadow fleet” and strengthened ties with China and India. However, after sanctions intensified in 2023, exports also declined (-33.6%) as redirection to Asia failed to offset lower oil and gas prices.
- ❖ Other Black Sea countries experienced trade growth in 2022 due to redirected flows. However, in 2023, trade slowed, and in Bulgaria and Türkiye, both exports and imports declined, signaling a shift away from the conflict-affected region.
- ❖ Of the analyzed countries, Georgia is the most reliant on Black Sea maritime trade, though its export reliance dropped sharply in 2024. Meanwhile, Ukraine's reliance on Black Sea ports for exports has slightly increased since the war broke out. In contrast, Türkiye and Russia remain the least dependent.

Maritime trade balances in goods (2019-2023)



- ❖ **Russia and Ukraine are the only Black Sea countries with a maritime trade surplus.** In 2022, Russia’s surplus increased by 25.9% YoY to \$22.6 billion, mainly driven by rising exports and declining imports. However, in 2023, the trade surplus fell sharply by 34.5% YoY, nearly reversing the previous year’s growth, albeit this is likely to be a temporary consequence of the war. Meanwhile, Ukraine’s surplus declined by 3.8% in 2022 as the absolute decrease in exports exceeded the decline in imports. The downturn accelerated in 2023 (-20.1%) as exports fell further, while imports rebounded.
- ❖ **In 2022, maritime trade deficits deepened across all other Black Sea countries after the war began.** Türkiye recorded the largest deficit (\$15.1 billion), increasing by 27.9% due to a rise in imports, particularly from Russia. Meanwhile, the deficits of Romania and Bulgaria grew most significantly, by 143.3% and 133.7%, respectively.
- ❖ **However, in 2023, signs of stabilization began to emerge in some countries.** The trade deficits in Bulgaria (-46.9%) and Romania (-35.4%) markedly decreased YoY, while in Türkiye, the growth slowed down. In contrast, trade deficits in Georgia continued to worsen, reaching \$4.6 billion.

Dynamics of maritime exports and imports between and among Black Sea countries (2023)



- ❖ **Intra-Black Sea maritime trade declined significantly by 10.4% YoY in 2023, primarily due to reduced trade between and among almost all Black Sea countries.** Notably, Romania's imports from Russia (-94.4%) and Bulgaria (-89.4%) saw the sharpest declines. Russia's exports decreased to all Black Sea countries except Türkiye, which saw a 10.2% YoY increase in 2023. Similarly, Türkiye's exports to Russia grew by 16.9%, largely driven by its refusal to join Western economic and financial sanctions on Russia.
- ❖ **Türkiye's exports to Ukraine also rose by 14.8%, mainly attributed to its neutral stance in the Russo-Ukrainian war and its role as a mediator between the two countries.**
- ❖ **Meanwhile, Romania's exports to Ukraine increased by 28.7% YoY in 2023, strengthening their strategic partnership.** Romania has also become a key logistics hub for Ukrainian exports of grain and iron and steel products. However, the redirection of Ukrainian exports has placed significant strain on ports like Romania's Constanta, resulting in bottlenecks, infrastructure challenges, and delays. In contrast, Georgia's exports to Ukraine fell sharply (-79.8% YoY).

Shares of major commodities exported by sea from Black Sea countries in 2021

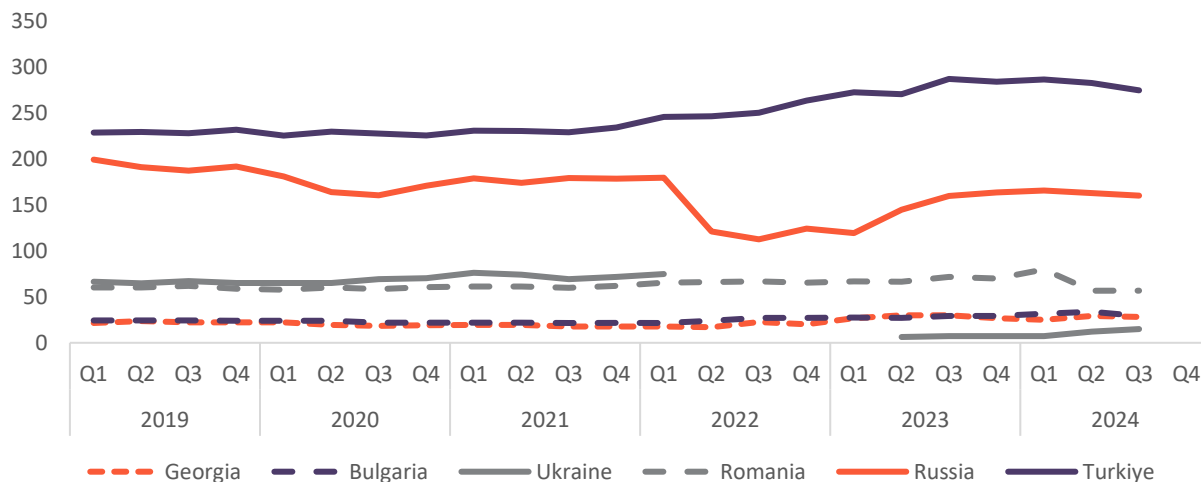


Shares of major commodities imported by sea from Black Sea countries in 2021

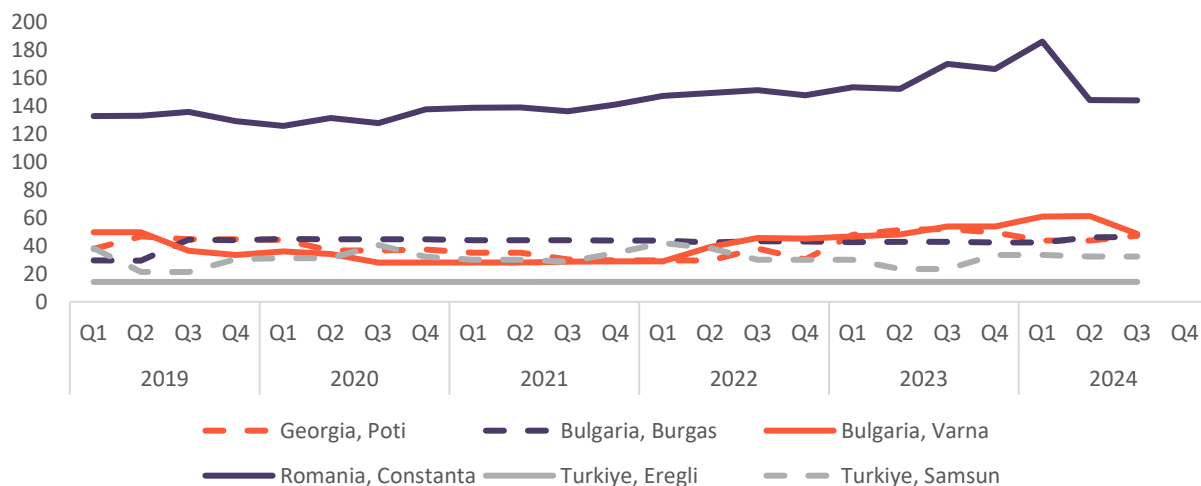


- ❖ Despite the lack of recent data, it is still worthwhile to examine which products were primarily traded through Black Sea countries before the war began. In 2021, mineral fuels were the primary export commodity traded through the Black Sea, totaling \$855 million, reflecting the region's reliance on energy resources and the importance of the Black Sea as a trade route for vital products. That category was followed by iron and steel (\$551 million) and plastics and articles thereof (\$135 million). Moreover, the shares of mineral fuels and iron and steel in total major commodities increased by 5.5 pp and 5.6 pp in 2021 YoY, respectively.
- ❖ In 2021, mineral fuels was also the leading import commodity traded through the Black Sea, totaling \$630 million. This was followed by iron and steel (\$205 million) and nuclear reactors, boilers, machinery, and mechanical appliances (\$120 million). Notably, the share of mineral fuels increased significantly in 2021 by 20.1 pp YoY.

Liner Shipping Connectivity Index (2019-2024)



Port Liner Shipping Connectivity Index (2019-2024)



- ❖ The Liner Shipping Connectivity Index (LSCI) measures the extent of a country's integration into global shipping networks. Georgia, Bulgaria, and Türkiye saw significant improvements from 2022 onwards, maintaining an upward trend. Türkiye's growth was the strongest, rising by 45.84 pp in Q3 2024 compared to Q3 2021. Romania's connectivity initially grew but declined by 23.19 pp in Q2 2024 compared to the previous quarter.
- ❖ In contrast, Ukraine and Russia, both heavily affected by the war, have experienced dramatic declines. Russia's connectivity began to recover in Q2 2023, though it remained 19.3 pp below the Q3 2021 figure. Ukraine's LSCI data are missing from Q2 2022 to Q1 2023, but by Q2 2023 its performance had declined by almost 100% compared to pre-war levels, with only a slight recovery thereafter.
- ❖ The Port Liner Shipping Connectivity Index (PLSCI) measures a port's integration into global shipping networks. All measured Black Sea ports showed increased levels following the outbreak of the war, though their performances varied. Notably, the index for Poti in Georgia significantly increased from an average of 31.1 (2021-2022) to 47.9 (2023-2024).

- ❖ The overall impact of the Russo-Ukrainian War on Black Sea trade has been profound, causing major disruptions in maritime flows, port activity, and trade balances across the region. The blockade of Ukrainian ports, the reorientation of trade routes, and the imposition of global sanctions on Russia have sharply reduced the number of port calls in both countries and led to the redirection of cargo flows through other routes, ultimately diminishing overall port activity, maritime trade, and connectivity despite gradual recoveries in some areas.
- ❖ Upon the outbreak of the Russo-Ukrainian War, port calls in Ukraine and Russia dropped sharply, while other Black Sea countries briefly benefited from redirected trade flows. By late 2023, port calls in Ukraine had gradually recovered, supported by new shipping routes through Romania and Bulgaria. However, serious threats to commercial shipping remained. Meanwhile, Russia's port calls continued to decline due to toughened sanctions, higher insurance costs, and a shift in trade activity toward non-Western markets.
- ❖ The prolonged impact of the conflict is evident in the decline of maritime trade through and within the Black Sea in 2023, along with a drop in intra-Black Sea trade. Ukraine's maritime exports and imports fell sharply in 2022, with a slow recovery in imports in 2023. In Russia, maritime imports declined, while exports initially increased in 2022, possibly due to sanctions being ineffective. However, as the sanctions intensified, exports also fell significantly the following year.
- ❖ Maritime connectivity indicators reflect these shifts with both Russia and Ukraine experiencing a sharp drop in connectivity, while other Black Sea nations have recorded a mixed performance, illustrating the challenge faced by the region of having to navigate short-term disruptions while gradually stabilizing within a still-restricted trading environment.
- ❖ Looking ahead, the future of Black Sea trade will depend on geopolitical developments, the resolution of security risks, international cooperation, and the ability of regional economies to adapt to shifting trade patterns. Furthermore, collaboration between and among Black Sea countries and their joint efforts to enhance security, reliability, and the region's role as a key transit route for international trade flows will also be crucial.

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Giorgi Khishtovani

Research Director

g.khishtovani@pmcginternational.com

Anastasia Chkhenkeli

Researcher

a.chkhenkeli@pmcginternational.com

Mariam Jikia

Junior Researcher

m.jikia@pmcginternational.com

Gocha Kardava

Researcher

g.kardava@pmcginternational.com

Amiran Kvantaliani

Economic Analyst (Contact Person)

a.kvantaliani@pmcginternational.com

Address: 61 Aghmashenebeli Avenue, 3rd floor,
Tbilisi 0102, Georgia.

Tel: (+995 32) 557 170 660

Email: research@pmcginternational.com

Website: pmcresearch.org