

Impact of COVID-19 and the Russia-Ukraine War on Maritime Trade and Turkish Straits Traffic

Global Maritime Trade During the COVID-19 Pandemic

The COVID-19 pandemic led to a sharp but short-lived downturn in global trade and shipping. In the first half of 2020, worldwide merchandise trade volume plummeted – at one point 16% lower than the same period in 2019[1]. Overall, international seaborne trade contracted by about 3.8% in 2020 compared to the prior year[2]. This decline was significant but not as catastrophic as initially feared by organizations like the WTO, which had warned of potential drops up to 13–32% under worst-case scenarios[3]. The most severe impacts were seen in early 2020 during strict lockdowns, when many ports and supply chains ground to a halt. Certain shipping segments essentially collapsed – for example, passenger cruises were “decimated” as voyages were canceled en masse[4].

By late 2020 and into 2021, global shipping rebounded strongly. China’s swift reopening and stimulus-fueled demand helped restart seaborne trade[5]. In 2021, maritime trade volumes grew ~3.2%, recovering much of the pandemic dip (though still just below pre-COVID levels)[2]. Container shipping saw especially rapid recovery with surging demand for goods, leading to port congestion and record-high freight rates in 2021[6][7]. In short, COVID-19 caused a steep but temporary drop in global maritime commerce. Trade bounced back by 2021 once lockdowns eased, indicating the pandemic’s impact on shipping demand was large but not permanent.

COVID-19’s Impact on Turkey’s Straits Traffic

Turkey’s strategic waterways – the Bosphorus and Dardanelles – also saw reduced vessel traffic in 2020 amid the pandemic. In 2019, over 41,000 ships passed through the Istanbul (Bosphorus) Strait[8]. Pandemic disruptions and weaker trade in 2020 caused that number to fall by a few thousand (a high-single-digit percentage drop). One clear indicator is energy shipments: oil transit via the Turkish Straits declined from about 3.5 million barrels/day in 2019 to under 3.3 million in 2020 as global oil demand collapsed during COVID lockdowns[9]. This aligns with worldwide trends – studies found maritime traffic decreased in over 70% of countries’ coastal waters during the first half of 2020[10].

Despite fewer ships in 2020, it’s notable that the total cargo tonnage through the straits did not fall as steeply. Larger vessels continued to carry essential goods (like oil, grains, and containers), partially offsetting the decline in vessel count. Indeed, the Turkish Straits have seen a long-term trend of fewer but bigger ships. For example, the Bosphorus handled 334 million tons of cargo in 2005 and this grew to 457 million tons in 2020 – a 73% increase – even though annual transit counts remained roughly in the 40k range[11]. In short, COVID-19 dented the number of transits through Turkey’s waters in

2020, but not dramatically, and activity began normalizing in 2021 as global trade recovered.

Impact of the Russia-Ukraine War on Global Trade and Shipping

Russia's invasion of Ukraine in February 2022 has been another major shock – yet its overall impact on global trade volumes has been moderate rather than catastrophic. Initial fears were that the war and sanctions would severely disrupt supply chains. The WTO warned in April 2022 that the conflict had “darkened” the economic outlook and revised its 2022 trade growth forecast down from 4.7% to 3.0%[12]. In practice, world merchandise trade *did* slow in 2022 but still grew roughly ~2–3% for the year[12]. The war's damage was partly blunted by rerouting of commerce and commodity flows rather than an absolute collapse.

There were significant *redistributions* in trade patterns. Ukraine's exports plunged by about 30% in 2022 as the war shut down its ports and production[13]. However, other countries filled some gaps – for instance, other grain exporters stepped up supplies, and Europe sourced energy from new routes. Notably, despite Western sanctions, Russia's own exports actually *increased* by ~15.6% in 2022 (by value), largely due to high oil and gas prices and continued demand in Asia[13]. In other words, Russian commodities kept flowing, albeit to different buyers, which meant global shipping volumes for oil, gas, and coal remained robust. Many Russian-bound container services were suspended by major carriers[14], but this mainly affected trade in manufactured goods; energy and bulk trades simply shifted to alternate carriers and ports.

The war did exacerbate supply-chain frictions and fuel costs. European importers faced higher energy freight rates and some rerouting (e.g. importing LNG from the US or Middle East via tanker instead of Russian pipeline gas). This actually *boosted* certain shipping segments: analysts observed a surge in oil and LNG tanker activity as energy trade routes rearranged, leading to higher demand for those ships[15]. One study found that in the two years after the war's start, global shipping *CO₂ emissions* (a proxy for activity) rose ~1.6% annually, with the largest increases coming from oil tankers (+3.8%) and gas carriers (+2.4%) as ships took longer voyages to new destinations[16]. Overall, while the Ukraine conflict added stress and cost to the maritime industry (e.g. higher insurance premiums and volatile fuel prices[17]), it did not drastically reduce worldwide shipping volumes – it altered where and how goods moved rather than whether they moved at all.

War's Impact on Black Sea Trade and Turkish Straits Transit

In the Black Sea region specifically, the war's impact was more pronounced, especially during 2022. The Turkish Straits form the only outlet from the Black Sea to global oceans, so the conflict directly affected traffic there. Indeed, vessel transits through the Bosphorus Strait dropped about 9% in 2022 compared to the prior year[18]. According to official data, 35,146 ships passed through Istanbul's strait in 2022, down from 38,500 in 2021[18]. This decline was largely due to the loss of Ukrainian trade and heightened security risks in the Black Sea. Key categories of ships saw significant reductions:

- Bulk cargo ships (dry bulk) – down 18.5% year-on-year (fewer grain, ore, and coal shipments)[19].
- Container ships – down 11.3% (many liners halted calls to warzone ports)[19].
- General cargo vessels – down about 9%[19].
- Livestock carriers – down 13%[19].

By contrast, tanker traffic was relatively resilient. Chemical tankers *increased* slightly (+3% in 2022) and other liquid tankers (crude and product tankers) actually rose by 7.1%[20]. This reflects how Russian oil exports through the Black Sea continued (or even grew) despite the war. In fact, by early 2023, observers noted Russia was shipping out more crude oil via its Black Sea ports – trying to beat EU embargo deadlines and sell to Asia – which led to Russian crude traffic “tending to increase” through the Bosphorus in January 2023 despite sanctions[21].

The steep drop on the dry cargo side was directly linked to Ukraine’s situation. At the outbreak of war, Ukraine’s ports (like Odesa) were blockaded, effectively halting commercial shipping from Ukraine for months[22]. This cut off one of the world’s largest grain exporters. A Black Sea Grain Initiative was later established to allow some grain ships safe passage, but the throughput remained far below normal levels. Even with the grain deal, only about 2.5 vessels per day were leaving Ukrainian ports by late 2022, compared to ~5–6 per day previously[22]. This ongoing disruption to Ukraine’s exports – grain, steel, etc. – explains the reduced bulk carrier count through the Turkish Straits. In short, the war significantly dented Black Sea trade flows in 2022, with thousands fewer ship transits and tens of millions of tons less cargo than would have been expected in peacetime.

By 2023, however, Black Sea traffic showed some recovery as stakeholders adapted. Turkey, for example, reported increased Bosphorus transits in the first half of 2023 versus the same period in 2022, as more ships navigated the strait once the initial shock passed (and grain shipments partially resumed). Oil and gas shipments remained strong, and Russia re-routed much of its trade rather than lose it entirely. The net result is that total transit numbers in Turkish waters did not collapse – they dipped during the most intense crisis, but by late 2022 and 2023 the traffic was on an upswing again (though still below pre-war Ukrainian levels)[23][22].

Outlook for the Next 10–20 Years in Regional Demand

Looking ahead, neither COVID nor the Ukraine war appear likely to cause a major lasting slump or a dramatic post-crisis “boom” in shipping demand for the Turkish Straits. Instead, the evidence points to a return to gradual growth and the continuation of long-term trends:

- Global trade growth is slowing, but remains positive: The pandemic rebound of 2021 was strong, but going forward trade expansion is expected to be more modest. UNCTAD projects world seaborne trade will grow only about 1.4% in 2022 and average ~2.1% annual growth from 2023–2027[24] – a slower pace

than the ~3%+ per year typical in past decades. This reflects higher energy costs, economic uncertainties, and shifts toward regionalization. In other words, the baseline demand for shipping will rise, but not surge wildly.

- The war's effects are more about reconfiguration than total volume: If and when the Russia-Ukraine conflict eventually stabilizes, we can expect some *rebound* in Black Sea trade – primarily a restoration of Ukraine's lost exports. For instance, Ukraine's ~30% export drop in 2022 could reverse, meaning millions of tons of grain, metals, and other goods returning to seaborne routes[13]. That would certainly boost vessel traffic through Turkey's straits compared to the depressed war-time levels. However, this would be more of a one-time normalization back to the long-run trajectory, not an outsized boom that exceeds previous highs by far. The 8–9% drop in Bosphorus transits seen in 2022 would likely be regained, bringing counts back into the upper-30-thousands annually. Indeed, during periods of the grain corridor operation, traffic partially recovered. Once peace allows full use of Ukrainian ports, the Bosphorus could see a few thousand additional transits per year (on the order of a 5–10% increase vs. war-time) as grain and steel shipments flow freely again.
- Energy trade likely to remain steady or grow slowly: The Black Sea oil and gas flows adjusted to sanctions without crashing – for example, about 3.2–3.5 million barrels/day of crude oil currently transit the Turkish Straits and forecasts show similar volumes continuing into 2024–2025[25]. Europe's embargo on Russian oil re-routed those barrels to Asia via tanker, which keeps the Straits busy. Going forward, new pipelines (like Kazakhstan's or renewed Iraq-Turkey lines) and shifts to cleaner energy could cap growth in oil transit. But absent any huge new pipelines taking over, the Straits will likely continue handling roughly 5% of global oil trade as they do now[25]. There isn't an obvious reason for a huge spike in oil shipments through this route in the next decade – rather, moderate fluctuations around the 3–3.5 million bpd level are expected, according to energy analysts[26].
- Capacity and infrastructure considerations: It's worth noting that the Turkish government is moving to manage traffic growth via regulations and alternate routes (e.g. the proposed Canal Istanbul project) rather than expecting an uncontrolled surge. The fact that Turkey has repeatedly hiked tolls/fees for Bosphorus transits in recent years[27] and is investing in a new canal suggests an anticipation of gradual growth and ongoing heavy usage, but not an infinite rise in ships. Safety constraints in the narrow Bosphorus also limit how many vessels can pass per day (currently ~105–115 max safely). Therefore, even if trade demand increases, the number of ships might not increase proportionally – larger ships or pipeline alternatives could carry the extra load. Past data already showed stable ship counts but rising tonnage, as mentioned.

In summary, COVID-19 and the Ukraine war caused notable but ultimately temporary dips in maritime traffic in this region. COVID's shock in 2020 was followed by a swift

rebound by 2021. The war slashed Ukraine's seaborne trade in 2022 and nudged some Russian trade onto new routes, but did not collapse overall shipping volumes. Once these disruptions subside, the Turkish Straits are likely to continue handling enormous trade flows much as before. We should not expect a whiplash *boom* in shipping beyond normal growth – rather, a return to the underlying upward trend in cargo volumes (especially as global economy and energy demand grow gradually). Major analyses forecast moderate growth in maritime trade over the next 10–20 years, not a dramatic surge[24].

For the Turkish Straits specifically, demand should remain strong and even inch up in the long run, but within historic ranges. If the Black Sea conflict resolves, some pent-up volume (like Ukrainian grain exports) will come back online, giving a one-time lift to regional traffic. Beyond that, growth will hinge on global economic factors and trade patterns. In essence, these external shocks haven't fundamentally altered the trajectory – they caused short-term contractions rather than any long-term collapse. Once things “settle down,” the data suggest a resumption of normal growth rather than an outsized boom. The Bosphorus will remain one of the world's busiest chokepoints, with tens of thousands of ships annually, and tonnages likely continuing to set new records slowly over time[11] – but the increase will be evolutionary, not explosive.

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