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THE FUNCTIONING OF THE WORLD TRANSPORT SYSTEM IN CONDITIONS OF INSTABILITY: THE EXPERIENCE OF THE LAST DECADE

The modern system of international cargo transportation functions in conditions of constant global crises and economic instability, which significantly increases its vulnerability to changes in the foreign economic environment. During the last decade, there have been a number of global shocks, including: the COVID-19 pandemic, the escalation of international conflicts, the blocking of the Suez Canal, the crisis in the Red Sea, energy instability and geopolitical tensions.

The combination of these factors has had a negative impact on the international transport system, causing massive disruptions, higher transportation costs, increased delivery times and the need to adapt to new realities. For a more detailed understanding of the impact of the key crises of the last decade on the international transport system, the main events and their consequences are summarized in Table 1.

Table 1. Impact of global crises on the functioning of international transport chains (2020 – 2026)

Crisis	Period	Main consequences
The COVID-19 pandemic	2020 – 2022.	*Maritime transport.* A 5% drop in turnover in Q1 2020 and 27% in Q2 2020, a reduction in ship calls by 8.7%, cancellation of up to 53% of flights, an increase in freight rates 443% above the median, a shortage of containers, as well as a shortage of drivers and port workers. *Air transport.* Reduction in freight traffic by 10.6% due to passenger stoppage (loss of 50-60% of compartment capacity). *Road transport.* Border delays of up to 9 days, volume drop in China to 15% of 2019 levels, queues at EU borders up to 37 miles. *Rail transport.* The most sustainable sector (fall of only 4-6.7%), the growing role of China–Europe routes as an alternative. *Pipeline transport.* Oil pumping reduced by 10% and gas by 2-5% due to falling global demand.
Blockade of the Suez Canal	March 2021.	Delay of 12% of world turnover, daily trade losses of approximately 9.6 billion USD, shortage of free capacity in Europe's ports, rising cost of sea freight and lengthening of delivery times by 1-2 weeks.
Crisis in the Red Sea	2023 – 2024.	Reduction of traffic through the Suez Canal by 50–60%, extension of routes by 10–14 days (via Africa), increase in fuel costs (approximately 1 million USD per voyage), increase in freight rates by 2–3 times, increase in CO2 emissions by 20–30%.
Blockade of the Strait of Hormuz	March 2026.	Reduction of the intensity of ship traffic by 90 %, stoppage of transit of 20 % of world oil and liquefied natural gas, blocking of approximately 170 container ships (450 thousand. TEU). A sharp increase in the price of Brent oil (over 110 dollars/bar).

Source: compiled by the author based on [2, 3, 4, 5].

The analysis of the dynamics of world cargo turnover in the period 2020–2026 allows us to state that the degree of vulnerability of logistics chains to global shocks directly depends on the specifics of the type of transport. From the given data in Table 1, it can be concluded that the COVID-19 pandemic caused significant damage primarily to maritime transport, as it provides more than 70–80% of the total volume of international cargo transportation. At the same time, the pandemic also had a negative impact on other types of transport.

In particular, the volume of air freight transport decreased by 10.6% in 2020 compared to 2019 [5], in the field of road freight transport, significant difficulties arose as a result of the introduction of lockdowns and temporary closure of borders, which led to delays in transportation and disruption of traffic flows, shortage of drivers, which was especially acutely felt in China, India and the EU.

Rail transport proved to be the most resistant to the consequences of the pandemic, the sector showing a drop of only 4–6.7%, becoming a reliable alternative to sea routes. Pipeline transport has proven to be the most unwavering to physical limitations thanks to high automation and fixed infrastructure. However, the sector was indirectly affected by the drop in global energy demand: oil pumping decreased by 10%, gas — by 2–5%. In addition, due to economic uncertainty, capital investments in new industry projects fell by 30–40%.

The blockade of the Suez Canal by the container ship Ever Given in March 2021 was one of the most significant crises, as about 12% of world trade, about one million barrels of oil and about 8% of liquefied natural gas pass through this route every day. Data from Lloyd's List showed that the stranded vessel delayed trading on the waterway by about 9.6 billion USD each day [3]. The incident caused the fleet to be diverted around the Cape of Good Hope, which extended delivery by 1 to 2 weeks and dramatically increased fuel costs. Even after the ship was removed from the shoal, the ports of Europe faced excessive overloading of terminals and a shortage of empty containers.

An even more serious challenge to global logistics was the Red Sea crisis caused by Yemeni Houthi attacks on the commercial fleet in late 2023. Due to the threat to shipping safety, most companies changed routes to bypass Africa around the Cape of Good Hope, avoiding the Suez Canal. Given the strategic role of the Suez Canal as a hub between the Indian Ocean and the Atlantic, the market response was immediate: by the first half of February 2024, container tonnage crossing the canal had decreased by 82%, and total canal traffic had fallen by 50–60% . The consequences were a 20-30% increase in CO2 emissions and a three-fold increase in freight rates on Asia–Europe routes.

In 2026, the crisis in the Red Sea region entered a critical phase due to a direct escalation of the military conflict, where the role of Iran and increased military intervention by the United States became a key factor. At the peak of the 2024–2025 campaign, container traffic in the Red Sea decreased by approximately 75% [1]. After a pause in October 2025, air carriers began to return cautiously, but by March 1, 2026, they had completely changed course.

The blockade of the Strait of Hormuz, through which 20% of world oil trade passes, has become a global threat [1]. Unlike the Suez Canal, there is no similar sea bypass for Hormuz. As of March 2026, ship traffic in the strait has declined by 90%, triggering a sharp rise in oil prices and the threat of a global recession.

Therefore, the modern system of international cargo transportation shows a significant dependence on global economic and geopolitical processes, which makes it particularly vulnerable to crisis phenomena. The events of the last decade caused the redirection of transport routes, an increase in transportation costs, and an extension of delivery time. In this regard, strengthening the resilience of international transport systems, diversifying routes and developing alternative logistics solutions of crucial importance are becoming strategic priorities.

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