

RED SEA CRISIS: IMPACT ON MARITIME AND OVERLAND CARGO TRAFFIC



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INTRODUCTION

With the global population continuing to grow, the world needs more goods, and the transport system ensures their steady and reliable supply. This means that transport is the core component of international trade, and a minor disruption can cause grave consequences for the transport and logistics industry that includes sea, rail and air cargo traffic. Even though occasionally the consumers may take the transport and logistics system for granted, any disruption takes a toll on consumers by higher prices or supply shortages, meaning that in order to be efficient modern economic processes must rely on stable transport and logistics system, which ensures proper functioning of various economic sectors and, eventually, the well-being of consumers.

This overview focuses on cargo traffic between the EU and China. From the transport and logistics perspective, the EU — China trade is among the world's key cargo traffic destinations totalling €738 million in 2023, which makes sustainable transport system servicing this route as important as ever for the efficient functioning of the global economy. However, global crises are heavily impacting the China — Europe — China cargo traffic. These crises include the following:

- 1. Pandemics.** Restrictions and border closures during the Covid-19 pandemic led to a reduction in cargo traffic. The pandemic showed what a “static” world looks like and highlighted the transport's central role in the global economy.
- 2. Economic downturns.** Clearly, the transport industry and the economy are interrelated. Just like greater efficiency of a nation's economy entails the expansion of the transport industry, a recession leads to a decline in infrastructure investment, making it more difficult to expand and modernise the transport system.
- 3. Conflicts.** Events such as wars and terrorist attacks affect international politics and international logistics alike. For example, in December 2023, the political situation in the Middle East escalated, which led to shelling attacks on merchant ships in the Bab-el-Mandeb Strait connecting the Red Sea and the Gulf of Aden. As a result, shippers had to look for alternative routes. The sea route across the Red Sea provides access to the Suez Canal, which is the shortest sea route between Europe and China. Bypassing the African continent around the Cape of Good Hope is an alternative to the Suez Canal. This route adds 14–15 days to the 28 days taken by the standard voyage across the Red Sea and is a wasteful solution for shippers due to higher transport costs, among other things.

The situation in the Red Sea is complicating global trade and forces shippers to consider other transport routes, including overland. Previously, during the pandemic-induced crisis, China — Europe — China maritime cargo traffic has seen disruptions in global supply chains, which exacerbated structural market imbalances and led to container congestion in Europe and a steep rise in cargo rates. On the contrary, railway proved to be immune to coronavirus restrictions, securing the title of a reliable and predictable mode of transport. The Red Sea crisis was a new challenge for maritime shipping, which begs the question of whether the maritime shipping market will be able to adapt to new circumstances or whether the unstable situation in the Red Sea will push shippers to switch to rail transport.

CHINA — EUROPE — CHINA CARGO TRAFFIC: ACTUAL STATE AND FORECAST

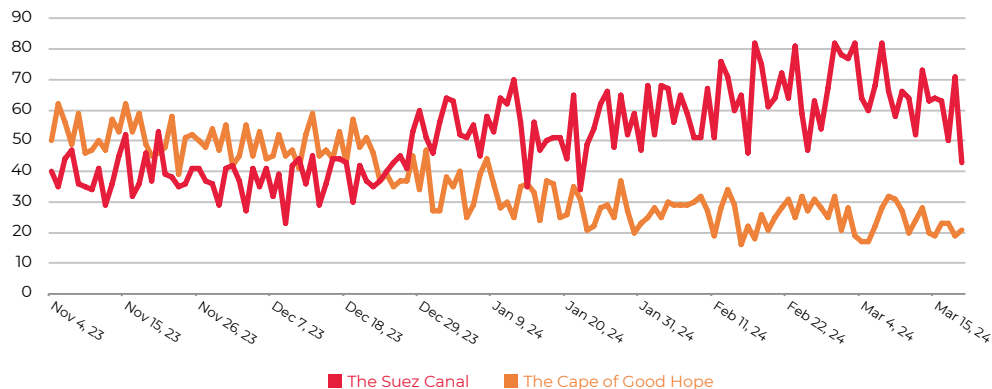
Maritime cargo traffic market

For the global logistics, the year 2024 started out with a crisis that has disrupted one of the world's busiest maritime routes. The EU and China are the most important trading partners for one another. The bulk of their supply chains include shipping across the Red Sea. The route from Rotterdam to southern Chinese ports is among the most popular routes in the global shipping industry. If using the Suez Canal, the route is 10,000 nautical miles, or 18,500 kilometres, long, and is covered in 28–30 days.

The Suez Canal connects the Mediterranean Sea to the Red Sea and is 163 kilometres long. It is the world's longest man-made waterway accounting for 10–12 percent of the global maritime cargo traffic. Dozens of ships going from Europe to Asia and back use the canal daily without having to make a long voyage around Africa.

The cargo ship transit across the Suez Canal was reduced to a minimum after the Ever Given container ship had run aground in the Suez Canal in March 2021, blocking all traffic for six days. Considering this and to avoid the risk of being fired at or hijacked, merchant ships have changed their routes and are now bypassing the Suez Canal, which is the shortest route connecting Europe and Asia, and are now navigating around the Cape of Good Hope. In the first half of March 2024, the average number of daily crossings of the Suez Canal fell to 23 cargo ships compared to 49 ships in the first half of September 2023, while traffic around the Cape of Good Hope grew to 66 in March 2024, up from 41 in September 2023.

COMPARISON OF CARGO VESSEL TRAFFIC THROUGH THE SUEZ CANAL AND AROUND THE CAPE OF GOOD HOPE

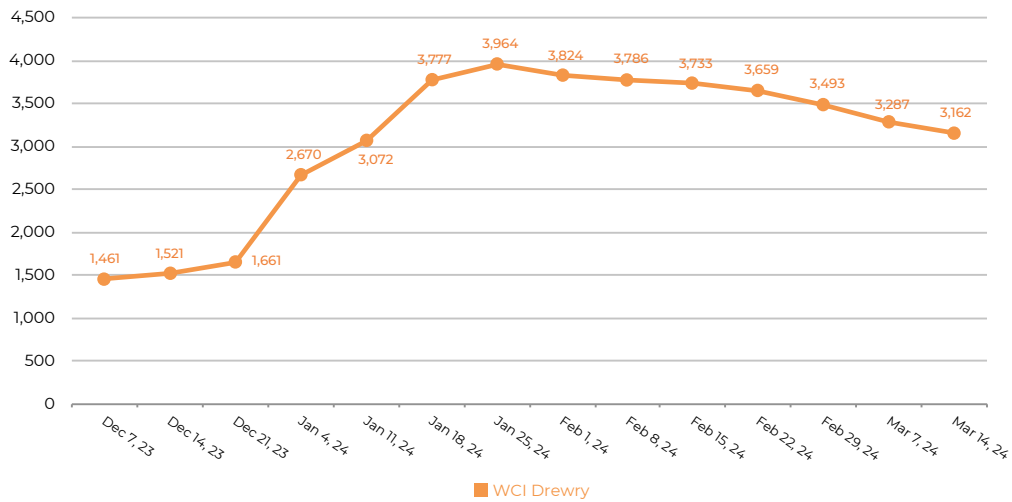


Source: [International Monetary Fund, Oxford University](#)

The route across the Suez Canal is the second most important route in global logistics that handles over a billion tonnes of cargo yearly. However, its importance relies not just on the quantity, but also on the structure of cargoes crossing these waters. Globally, the entire global maritime transport market is divided into three parts: approximately one third of ships carry liquid cargoes (petroleum, LNG, and refined products), one third carry bulk cargoes (coal, grain, ore, etc.) and one third carry containers. Half of the cargo carried across the Suez Canal is containerised.

The costs of maritime container shipping between China and Europe in early 2024 were driven up primarily by the escalation in the Red Sea. Forced redirection of the containerised cargo traffic to the route around Africa has significantly increased the shipping costs. In addition, higher maritime rates were to some extent pushed even higher in January 2024 by the traditionally high season in the run-up to the Chinese New Year. Drewry World Container Index (WCI) shows peak shipping costs for a 40-foot container in China — Europe — China traffic reaching \$3,964 per FEU in January 2024. The inclusion of the maritime transport in the [European Emissions Trading System](#), effective January 1, 2024, has also led to rate increases. Additional charges range from €24 to €41 per TEU, depending on the shipping line. However, gradual adaptation of the market to new conditions, as well as the end of the February New Year holidays in China, contributed to a stepwise decrease in maritime rates. By mid-March 2024, the WCI maritime rate stabilised at the January level of \$3,162 per FEU.

WCI DREWRY DYNAMICS, US DOLLARS PER FEU



Source: [ERA1](#)

The maritime cargo shipping costs were driven up mostly by higher freight costs for cargo going from China to four major destinations: Rotterdam, Genoa, Los Angeles and New York. Even though the Pacific cargo flows between China and the United States do not come under attacks, the shipping costs on this route have increased as well. Rapid growth in Chinese exports coupled with the drought season in the [Panama Canal](#), which is limiting its capacity, was instrumental in doubling freight costs between Shanghai and the US East Coast. The way the market operates is that longer routes and greater occupancy of containers and container ships servicing the Europe — Asia traffic have led to a decline in the supply in global merchant shipping, while the demand has remained unchanged. All of that has sent containerised cargo shipping rates higher.

After a sharp increase, the China — Europe route adapted to the Red Sea crisis faster than others. According to Drewry WCI, the Shanghai — Rotterdam maritime freight costs fell by 18 percent to \$3,650 per FEU in March 2024 from February 2024.

Table 1.

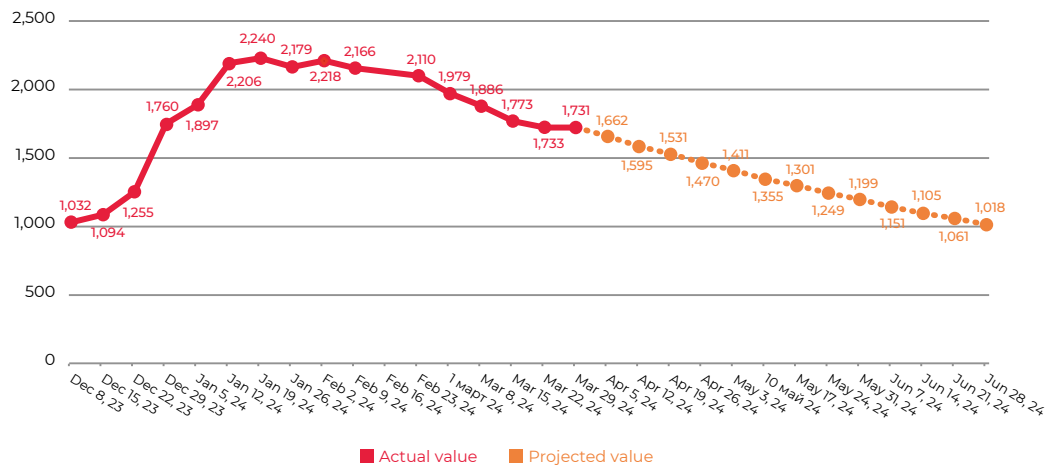
SEA FREIGHT COSTS, US DOLLARS PER FEU

Route	Dec 7, 2023	Jan 4, 2024	Feb 8, 2024	Mar 7, 2024
Shanghai – Rotterdam	1,343	3,577 (166%▲)	4,426 (24%▲)	3,650 (-18%▼)
Shanghai – Genoa	1,608	4,178 (160%▲)	5,225 (25%▲)	4,449 (-15%▼)
Shanghai – Los Angeles	1,939	2,726 (41%▲)	4,771 (75%▲)	4,272 (-10%▼)
Shanghai – New York	2,747	3,858 (40%▲)	6,268 (63%▲)	5,458 (-13%▼)

Source: [Drewry Supply Chain Advisors](#)

The Shanghai Containerised Freight Index (SCFI) for spot maritime cargo shipping rates from China to 13 destinations is updated daily and clearly shows the ongoing maritime cargo traffic crisis. The maritime cargo rate stood at \$1,032 per TEU in early December 2023, but by mid-January 2024 the index rose 117 percent to \$2,240 per TEU. After the index peaked out, it started trending down and reached \$1,773 per TEU in mid-March 2024. So, we will know that the global maritime cargo traffic has adapted to the crisis once the rates return to the December 2023 level. The calculations show that rates fall by about 4 percent weekly on average. This number can be used to forecast that in an optimistic Red Sea scenario the rates will fall to the December levels in 12 to 13 weeks. Unlike the pandemic-related supply/demand imbalance when demand exceeded supply, the container ships are now available in excess supply, which is another reason for cutting maritime rates.

SCFI INDEX DYNAMICS, US DOLLARS PER TEU



Source: [индекс SCFI](#)

Almost all [major line operators](#), including French CMA CGM, Danish Maersk, Swiss MSC, and German Hapag-Lloyd discontinued container shipping across the Red Sea in December 2023. These four leading companies account for about 54 percent of the maritime container capacity. However, the maritime crisis has led to higher maritime cargo rates and higher rates charged by insurance companies, which the carriers cannot do without.

The worsening security situation in the Red Sea has led to tighter insurance policies. The Joint War Committee of the London insurance company market announced the widening of the [high risk area](#) in the Red Sea. This statement has led to insurers charging higher premiums. Prior to the conflict in the Middle East which broke out in October 2023, the war risk premiums in the Red Sea stood at 0.07 percent, but then rose to 0.5–0.7 percent by late December to hit 2 percent in early February. In addition, the re-routed China — Europe — China voyage via the Cape of Good Hope in southernmost Africa had increased travel time by 14–15 days, which also increases insurance costs.

The Schedule Reliability of container carriers is an important indicator that measures the percentage of ship arrivals and departures without schedule disruptions (delays, cancellations, returns or redirections). In January 2024, the [average value of the indicator](#) fell to 51.6 percent, 10 p.p. below its pre-crisis level in November 2023. CMA CGM, a major maritime cargo carrier, has become the most reliable carrier with schedule compliance of 54.7 percent, even with transit across the Red Sea for some Navy-escorted vessels continuing in January. The remaining top three ocean carriers (MSC, Maersk and Hapag-Lloyd) had a compliance rate of around 40 percent between November 2023 and January 2024. In addition, due to redirected traffic now going around the African continent, the average arrival delay increased from 5.06 days in November 2023 to 6.01 days in January 2024. Poor safety and schedule disruptions have a direct impact on shippers and consignees, since increased sea travel time halts production lines due to shortage of goods that are not supplied on schedule.

— Rail cargo traffic market

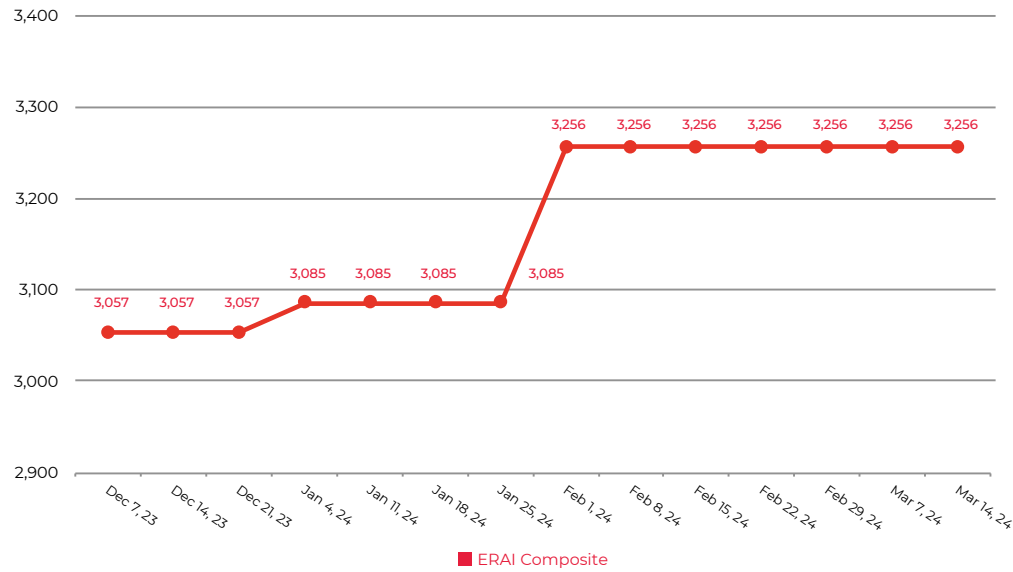
Costly air transport and time-consuming maritime cargo traffic between Europe and China have catalysed the development of an overland rail bridge in Eurasia. Currently, the Europe — China rail transport is using four routes, namely, Kazakhstan, Russia, and Belarus (Dostyk and Altynkol border crossings); Russia (Zabaikalsk border crossing, Far Eastern ports); Mongolia and Russia (Naushki border crossing); and multimodal Trans-Caspian international transport route (Kazakhstan, Caspian Sea, Azerbaijan, Georgia, Turkey, and Black Sea).

The Eurasian route via Belarus, Kazakhstan and Russia holds the leading position among railway routes in the China — EU — China traffic. According to [border crossing statistics](#), in 2023, the Eurasian route accounted for 96 percent of the container flow, or 211 thousand TEU.

The 2020 pandemic had a significant impact on the China — Europe — China cargo industry. However, amid stagnating air and maritime cargo traffic, rail transport stood out as an industry that is less susceptible to the coronavirus restrictions, and is more reliable and predictable. The Red Sea crisis largely follows the 2020 trend. Now that the main sea route between Europe and China has been disrupted, rail transport is once again in the spotlight.

Container rail transport came under an increased pressure after significant amounts of cargo went from sea to rail. The rail rates' stability has always been a competitive advantage, but strong demand in late December 2023 has led to a slight increase in the border-to-border container traffic cost using the 1,520 mm gauge. In early January 2024, ERAI was up by a mere 1 percent at \$3,085 per FEU. The rate stayed at this level for a month. The increased demand for China — Europe — China transit traffic in February 2024 has sent the index 5.5 percent up to \$3,256 per FEU.

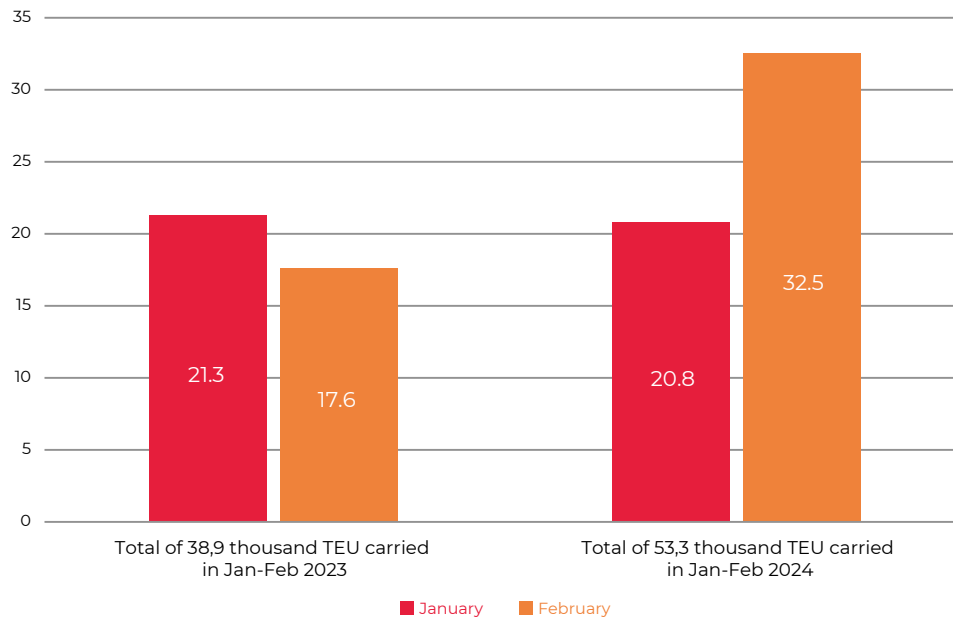
ERAI COMPOSITE DYNAMICS, US DOLLARS PER FEU



Source: [ERAI](#)

Against the backdrop of instability in the Red Sea, shippers are considering alternative ways for transporting goods along the China — Europe — China route, which has boosted the demand for the Eurasian rail route via Kazakhstan, Russia and Belarus. Quick delivery of cargo is what makes this route appealing above all. Transit time along the route amounts to seven days, and the entire journey takes anywhere from 14 to 25 days, depending on the point of departure and the point of destination. For comparison, Shanghai — Rotterdam shipping by sea takes about 30 days, and 14 to 15 more days are added to this now that the route includes a detour around the Cape of Good Hope.

A significant increase in the volume of cargo traffic along the China — Europe — China route is an indication that shippers have opted for railway cargo traffic. [According to ERAI](#), transit traffic along the Eurasian route grew by 37 percent from January to February 2024. Most of the growth took place in February 2024, when the volume of cargo traffic doubled compared to February 2023.

CARGO CARRIED IN THE FIRST TWO MONTHS, 2023–2024, IN THOUSANDS TEUSource: [ERA](#)

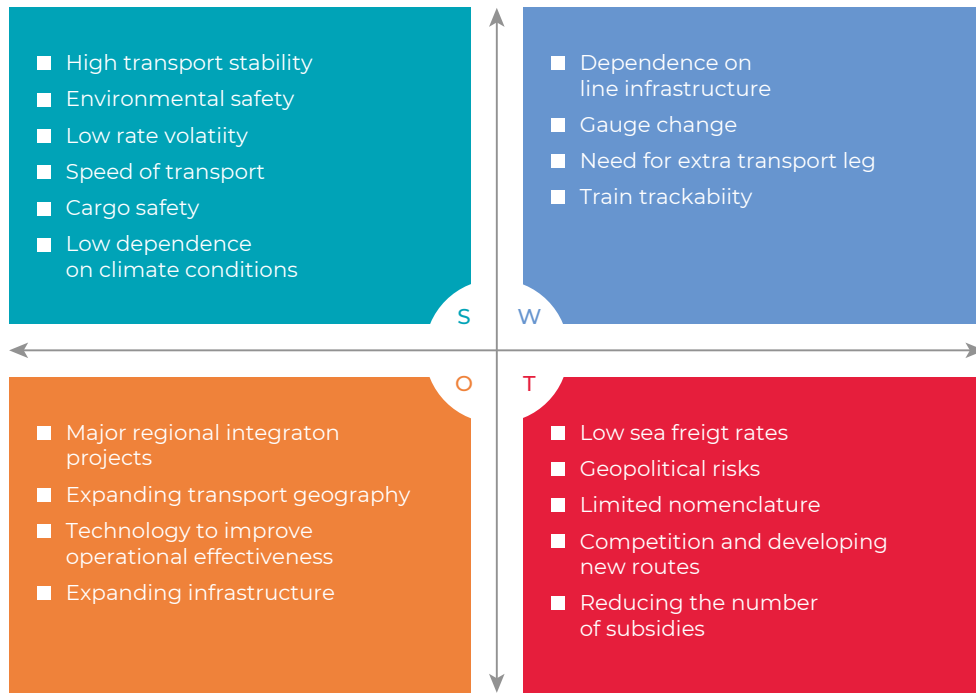
COMPARATIVE ANALYSIS OF MARITIME AND RAIL CONTAINER CARGO TRAFFIC

Stepping up transport and logistics connections is a key to expanding integration processes on a global and regional scale. Container transport is currently recognised as the most efficient way to carry cargo. The universal nature of containerised cargo shipment is backed up by its widespread use around the world with the employment of different modes of transport.

The specifics of building logistic chains for container cargo delivery along the China — Europe — China route can cause a certain competition between sea and rail modes of transport. The SWOT analysis below is an effective tool for comparing them.

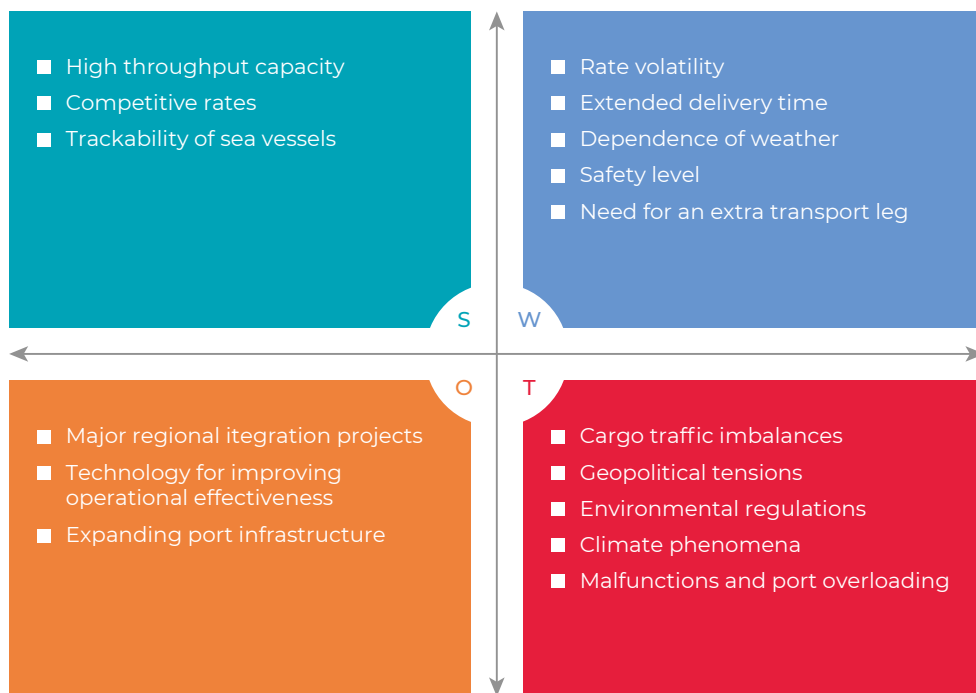
The SWOT analysis makes it possible to carry out a comprehensive assessment of the object of study, its advantages and disadvantages with account taken of internal and external factors. Strengths (S) and weaknesses (W) reflect the state of the internal environment of the industry, which market participants can influence, while opportunities (O) and threats (T) are beyond their control and describe the situation in a country, a region, and around the world.

SWOT ANALYSIS OF RAIL CARGO TRAFFIC



Source: Author's own compilation

SWOT ANALYSIS OF THE MARITIME CARGO TRAFFIC



Source: Author's own compilation

Timeline and cost. The high speed of cargo delivery, which is largely due to the regular schedule and evenly spaced shipment intervals, is the rail container transport's key advantage. Maritime shipping is characterised by less frequent cargo shipments and extended delivery times. Compared to the rail rate, the cost of maritime freight is lower by an order of magnitude, including due to economies of scale (greater carrying capacity) and efficient fuel consumption. However, the maritime freight rate is adjusted almost weekly in line with the market demand and external factors, which makes it quite volatile and predictable only in the short run. As opposed to it, the cost of rail transport rarely changes, except during crises that affect global logistics, but the rates fluctuate insignificantly. Thus, railway tariffs allow shippers to manage long-distance costs in the long run due to their reliability and predictability in the long and medium term.

Working Capital. When choosing between rail and maritime shipping, the main focus is on the working capital-related cost savings, i.e. the choice of a transport mode which makes it possible to use the working capital more efficiently. For example, with a given quantity of containers in 1000 TEU per year with an average cost of cargo of \$50 thousand per TEU, the working capital for maritime transport is \$548 per TEU, and by rail \$205 per TEU. Thus, savings on working capital per year in rail transport will amount to \$343 thousand or \$343 dollars per TEU. Two factors affect the amount of the working capital. First, the transit time which makes it possible to streamline the amount of the working capital by reducing production and financial cycles and to calculate the total amount of the working capital that is enough to conduct business in the coming periods. It takes 15 days to deliver the railway container cargo to the destination using the China — Europe — China route, and 40 days if using shipping by sea. The cost of cargo comes second: the more expensive the cargo, the greater the economies, which means that rail transport is mainly used to transport high-value cargoes. For example, with cargo valued at \$70 thousand per TEU, the savings on the working capital in rail transport will amount to \$480 per TEU. Considering this, choosing rail transport due to shorter transit time combined with the high value of cargo can save hundreds of thousands of dollars per year.

Environmental safety. In the era of growing environmental awareness, the carbon footprint left by a transport mode matters. The volume of carbon dioxide emitted during transport is the key measure of a particular mode of transport's environmental safety. Thus, on conversion to one container transported by rail along the China — Europe — China route, the [volume of direct CO₂ emissions](#) amounts to 110.3 kg per TEU, and to 526.1 kg per TEU if shipped by sea. The low environmental impact of rail transport is due to the low specific fuel consumption per transport work unit, as well as the use of electric traction. With regard to maritime transport, the International Maritime Organisation had projected zero emissions by 2050, but the need to send ships around the African continent has worsened the CO₂ emissions situation and has put zero emissions by the target date in doubt. The route around the Cape of Good Hope extends the time of voyage by 30 percent. The ships are trying to go faster to shorten the transit time, thereby increasing fuel consumption and, consequently, emissions. At the same time, maritime transport emissions were included in the EU's cap-and-trade programme ([EUETS](#)) since the beginning of 2024. As a result, shipping companies using European ports will be required to monitor their emissions and to purchase EUAs for each tonne of registered CO₂ emissions. So, factoring in the amount of emissions and the newly arisen obstacles to cut them, maritime transport is inferior to rail transport in terms of environmental impact.

Capacity and nomenclature. Maritime container transport remains dominant in terms of the potential it offers to ensure mass-scale intercontinental cargo traffic due to the unlimited line carrying capacity of the sea, which makes it possible to build ships with enormous carrying capacity. To put this in perspective, the largest container vessel can hold up to 24 thousand TEU, at a time where a container train can carry about 100 TEU per trip, which is in stark contrast to a container vessel and clearly demonstrates the advantage of maritime cargo traffic in terms of carrying capacity. In addition, maritime container transport can carry any type of cargo nomenclature, whereas rail transport is limited by cargo size and weight, as well as restrictions imposed by administrative authorities. For example, the Chinese railway authorities have imposed restrictions on transporting by rail hazardous items, including EV batteries, which enjoy demand in Europe. Due to these restrictions, these items can be carried by sea only.

Safety and security. Rail cargo traffic provides almost absolute cargo safety and security. In particular, the Eurasian rail route across Belarus, Kazakhstan and Russia provides a 99.9-percent level of safety. The security of transit across Russia is ensured by the transit container navigation sealing system, which can be tracked electronically. Shippers who need to transport expensive goods find this feature particularly useful. Unlike rail transport, maritime carriers face piracy and military conflicts. The threat of piracy in particular geographic regions, including the Gulf of Aden, not only threatens the safety of the cargo, but also impacts the shipping costs, because of higher insurance premiums or expenses involved in hiring escorts. Military conflicts affect the maritime transport market as well. For example, in connection with hostilities in the Middle East, the Yemeni Houthis announced, in mid-November, their plans to assault any Israeli ship in the Red Sea. In November and January, dozens of ships were attacked by the Houthis in the Bab-el-Mandeb Strait. Against this background, major shipping lines decided to suspend shipping operations via the Suez Canal and redirected their ships to the route around the Cape of Good Hope to ensure their safety.

Weather conditions. Maritime transport is more susceptible to severe weather outbreaks than rail transport. Dependence on weather (high winds, fog, tsunamis, etc.) often leads to delaying or occasionally even cancelling a maritime voyage, which negatively affects shippers and consignees. This becomes a particularly grave problem when cargo must be delivered within a fixed deadline. Rail transport is less susceptible to weather changes. However, snowfall and icy rails can also disrupt train traffic in some countries during the winter. In addition, speaking of the Eurasian rail route, strong winds at the Dostyk border crossing between China and Kazakhstan are not uncommon and can add several days to transit time. Overall, though, the maritime transport is more susceptible to intense weather conditions.

Logistics. Railway and maritime containerised cargo traffic alike do not include first and last mile services. Limited geographical coverage of railway tracks makes delivering cargo to the end consumer impossible, so, other means of transport must be used to deliver the cargo from a railway terminal to the end recipient. However, the integration of railway sections into international rail corridors expands the scale of cargo traffic coverage and diversifies end destinations. In the case of maritime cargo traffic, the inland location of the shipper mandates the use of multimodal logistics arrangements, including lorries or rail transport. In addition, using the same vessel for maritime shipping to all regions is often impossible. Large container ships deliver cargo to hub ports, where containers are reloaded onto feeder vessels for further transport to regional ports, from where the cargo is taken to the destination by other modes of transport. Thus, both modes of transport require an extra transport leg.

Infrastructure. A ramified rail track network that connects different regions is also part of the rail container transport infrastructure. China has been particularly active in investing in the construction of new rail tracks in Europe and Central Asia under the Belt and Road Initiative. In 2024, a [new route to Serbia](#) opened as part of the China — Europe cargo rail link. The China — Kyrgyzstan — Uzbekistan railway project, the implementation of which across Central Asian countries will create a new route for the China — Europe link, is pending approval. It is particularly important to expand railway infrastructure in Kazakhstan, Russia and Belarus, since the Eurasian transit route passes across these countries. For example, alternate tracks are being built on the Dostyk — Moyinty section, Kazakhstan, to increase the capacity of the Dostyk border station between Kazakhstan and China, which is the key point for the China — Europe transit. The construction of a new Bakhty — Ayagoz railway line began in late 2022. Once completed, it will open the third border crossing between Kazakhstan and China. Thus, the new border crossing will unload the southern border crossing points and attract additional transit volumes. In addition to expanding the rail infrastructure, developing port infrastructure is an important component of the Belt and Road Initiative. For example, in 2024, China plans to begin the construction of a [new container terminal Xiaoyangshan](#) in the port of Shanghai, which will speed up the loading and unloading of containers.

Throughput capacity. Just like railway transport, maritime shipping relies on throughput capacity. Ports, canals and straits create bottlenecks for the maritime transport. A vessel may arrive at a port on time and then get stuck in line for unloading because of a port failure or overloading, or waste time waiting for its turn to pass through a canal. Limited throughput capacity at border crossings and time spent waiting for reloading represent constraints for rail cargo traffic. In addition, railway container cargo traffic along the China — Europe — China route involves a change of gauge from the Chinese 1,435 mm to 1,520 mm at the border with Kazakhstan, and then another change to the European gauge of 1,435 mm at the border with Belarus, meaning extra container reloading operations have to be made during the change of gauge.

Operational efficiency. The efficiency of cargo traffic largely depends on the operational efficiency, including advanced technology and digitalisation, which play a crucial role in increasing the speed and improving transparency and traceability of cargo traffic. For example, the use of a train pooling scheme (2-in-1 or 3-in-2 system) on the China — Europe — China Eurasian rail route helps streamline train schedules and increase the throughput capacity of railway sections at transborder division points. In addition, seamless electronic paperwork used in rail cargo traffic that involves the use of lorries significantly cuts the time needed for transport clearance and ensures cargo tracking along the entire route. The main innovative maritime transport technologies are used at seaports. For example, the introduction of a remote crane control system for loading and unloading containers onto a ship in the Port of Rotterdam has reduced the average docked time. The introduction of an automated AI-enabled planning system in the port of Hamburg cut vessel downtime and increased the port's throughput capacity as well. In addition to infrastructural innovations, the transparency of maritime cargo traffic has improved thanks to online platforms, which make it possible to track vessels worldwide in real time. At the same time, despite the developed rail service, the lack of train tracking services makes maritime transport more transparent than rail transport.

Integration. Major regional integration projects contribute to the creation of a single transport and logistics network infrastructure. China's Belt and Road Initiative combines two projects: the Silk Road Economic Belt (SREB) and the Maritime Silk Road (MSR). In addition to extending China's continental transport arteries to Europe, SREB implies an integration effect stemming from interconnection of the countries in the region by the transport infrastructure. This will make available new transport corridors which will compete for cargo traffic along the China — Europe — China route. For example, the multimodal Trans-Caspian International Transport Route became operational in 2017. It goes through Central and Southwest Asia and provides a connection between China and Europe. In turn, the MSR aims to build or upgrade ports and to expand existing sea routes.

The above leads to a conclusion that rail and sea containerised cargo traffic has a number of advantages and disadvantages. Where rail transport is superior to maritime shipping — speed and stability of transport, and cargo safety — the latter offsets this with the carrying capacity and low rates. Importantly, neither type of cargo traffic can be used independently without an extra transport leg. The infrastructure must be built and upgraded if we want to expand maritime and rail cargo traffic, to eliminate bottlenecks and to increase throughput capacity. Given the circumstances, the cost, the time, and the speed, as well as cargo safety and security, are of overarching importance for shippers. Stable rates and faster delivery with comparable level of security and fewer security risks are the hallmarks of rail cargo traffic.

REORIENTATION OR ADAPTATION?

The global transport logistics industry is constantly being challenged. Since 2020, the industry has been in a turbulence zone as it tried to adapt to newly arising challenges. After the pandemic, the geopolitics reformatted the orderly links and routes in 2022. The situation kept changing and no one was able to say what would come next since all modes of international transport were under attack. The Red Sea crisis posed a challenge for the maritime cargo traffic: will the maritime cargo market adapt to new circumstances, or will the Red Sea instability compel shippers to opt for rail?

The forced redirection of vessels around Africa via the Cape of Good Hope added an extra 3,500 nautical miles to the route, increased sea shipping time, and caused delays in cargo delivery. The inability of transit ports along the alternative route to handle the increased load has also posed a problem. The longer route around the Cape of Good Hope had impacted the speed. At 13 knots per hour on a route from Shanghai to Rotterdam, including an extra 3,500 nautical miles, the transit time would amount to about 44 days. However, at 17 knots per hour, the transit time is reduced to 33 days, but higher speed means higher fuel consumption and higher emission charges, accordingly.

In the short term, the global container transport industry is most likely to cope with the shock. The escalation of the Red Sea conflict coupled with the New Year holidays in China triggered a rapid increase in shipping rates along the China — Europe route. The January – February increase in demand can be attributed to the Chinese New Year, since shippers send their goods before the holidays, because almost all business operations in China come to a halt during the holidays. In mid-February, shipping rates gradually began to decline, largely due to the decline in demand for containerised maritime transport amid festive weeks in China. However, the stabilisation of maritime rates is unlikely to foreshadow a sharp decline in rates in the coming months. The forthcoming recovery of output volumes in China after the New Year holidays poses risks of increased demand for maritime transport. The supply-demand imbalance was observed almost throughout 2023 until the Red Sea conflict broke out and the demand for the maritime transport increased in the run-up to the holidays in China. The activity picked up in the first two months of 2024 thus helping restore the supply/demand balance. However, with a favourable outcome when the maritime traffic will return to the Suez Canal, the maritime market will again face a supply/demand imbalance that will lower the sea freight rates.

Air and rail are an alternative to carrying cargo along the China — Europe — China route. To avoid a long journey around Africa, a lot of shippers have started to use multimodal transport scheme that includes air and sea shipping. Cargo is delivered to the port of Jebel Ali in Dubai by sea and is then airlifted to Europe. Compared to direct China — Europe maritime shipping, transport by air is faster and almost 40 percent cheaper. Rail cargo traffic is another alternative solution. The Eurasian railway route is the main corridor between Europe and China, which has enjoyed great demand since the onset of the Red Sea crisis.

The route across Kazakhstan, Russia and Belarus became an alternative for Chinese and European shippers. In addition, the EU sanctions on Russia have imposed restrictions on transporting cargo by lorries only, not affecting the rail cargo operations. The renewed interest in China — Europe rail traffic provoked a minor increase in rates by 6.5 percent. However, as the Red Sea crisis stabilises, maritime cargo rates will edge down, and shippers will be more likely to return to the maritime shipping.

The comparative analysis of the strengths and weaknesses of rail and maritime container transport has revealed that stable rates and high speed of cargo delivery coupled with minimal safety risks constitute the factors of fundamental importance. As a result, high demand for the overland rail route during instability in the Red Sea can be attributed to the above factors.

Therefore, despite a number of difficulties faced by containerised maritime cargo traffic between China and Europe, the transition to rail and combined maritime transport with air service via Dubai will be a temporary and forced solution, rather than a permanent change. The problems that are complicating the passage along the Red Sea shipping lines are largely of complex international and political nature. It is hard to predict exactly when the crisis will be over, and the maritime traffic through the Suez Canal will fully recover, but it is to be expected that major carriers will not resume transit through the Suez Canal until the risk of attacks on ships is eliminated.