

The Impact and Challenges on the Maritime Industry in the Wake of Russia's Invasion of Ukraine

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1. Introduction

The onset of COVID-19 in early December 2019, starting from its first reported case in Wuhan, China, had rapidly spread on a global scale within a matter of months, greatly impacting human behaviors including socio-economic activities and cultural exchanges. The maritime industry, a major transport sector underpinning the world economy, also suffered substantial effects such as a surge in fuel and insurance costs, and issues regarding crew changeovers.¹⁾²⁾

In this context, the invasion of Ukraine by Russia, which commenced on February 24, 2022, raised concerns about further serious implications for the already exhausted maritime industry due to the COVID-19 pandemic. Initially, many experts predicted a unilateral and short-term decisive battle by Russia. However, the resolute response from Ukraine, led by President Zelenskyy, has drawn support from Western nations, and as of May 2023, when this report was written, the situation remains in a state of seesawing progress.

Looking at the current status of the Ukraine invasion, often referred to as a proxy war between Russia and Western countries, the Ukrainian military is resisting the Russian invasion using weapons supplied by Western nations. The Russian military, on the other hand, is struggling with the impact of economic sanctions imposed by Western countries, an unexpected number of casualties, equipment shortages, and declining morale, and does not seem to be able to gain control of the entire territory in the short term. In this sense, one could argue

that Western countries have an upper hand in their relations with Russia. However, Ukraine, the country on the front line, is being pushed into launching a counteroffensive against Russia due to mounting calls for tangible military successes in anticipation of ceasefire negotiations supported by Western countries and concerns over fatigue from their assistance.

Bearing in mind the complexities and protracted nature of the Ukraine invasion by Russia, which has greatly impacted the maritime industry, this report aims to provide an overview of the effects of the Ukraine invasion on the maritime industry while contemplating the actions required of it.

2. Impact on Global Trade

The invasion of Ukraine by Russia, an unusually large-scale interstate conflict in recent years, raised concerns about its impact on trade, including the global maritime industry. On February 23, 2023, a year after the invasion, the World Trade Organization (WTO) released a report titled "One Year of the Ukraine War: Impact Assessment on Global Trade and Development." The report pointed out that, despite facing the Ukrainian conflict, global trade was able to prevent the worst-case scenario predicted at the onset of the war by suppressing price increases and supply shortages, thanks to the openness of the international trade system and cooperation among national governments.

Figure: WTO 2022 Trade Forecast and Real Growth Rate



Blue Line : WTO forecast for April 2022

Red Line : Lowest expected WTO forecast for April 2022

Green Line : Real Economic Growth

Source: World Trade Organization. "One Year of War in Ukraine" (page 6)

However, Ukraine's exports in 2022 fell 30% compared to the previous year, and while Russia's exports, in monetary terms, increased by 15.6% due to a rise in prices of fuel, fertilizers, and grains, they slightly decreased in quantity.³⁾ Notable declines in exports were seen in industrial goods related to automobiles and aircraft, which are heavily regulated by Western countries.

The maritime industry has also felt the impact, with the direct effects mostly concentrated in the Black Sea region over the year following the Ukrainian invasion. In the Black Sea, the industry faces numerous issues, such as loss of lives and vessels, disruption of trade between Russia and Ukraine, increased sanctions, and daily operational challenges. These challenges include crewing, cost and availability of bunker fuel, and increased cyber risks.⁴⁾

Vessels operating in the Black Sea and those trading with Russia are particularly affected. The major Ukrainian port of Odessa has been closed due to a blockade by the Russian Navy. Many of Ukraine's key export items, such as grains, iron and steel products, and ores, are exported by sea. For example, 95% of grain exports, including wheat and corn, are shipped from the Black Sea.⁵⁽⁶⁾

Since the onset of the Russian invasion of Ukraine, 331 crew members and 61 vessels have been trapped in Ukrainian ports in the Black and Azov seas, exposed to potential dangers such as torpedoes and missiles, without being able to disembark or return to their home countries.

The maritime industry has been urging United Nations Secretary-General António Guterres to facilitate their immediate release.⁷⁾

While the impacts on export amounts and direct effects in the maritime industry are mainly confined to the area around the Black Sea, the invasion of Ukraine by Russia is also indirectly affecting the maritime industry in areas beyond the conflict zone. Specifically, it has led to the suspension and surge in maritime insurance, which is indispensable to the industry, and has exacerbated the crew shortage, which was already critical due to the effects of COVID-19. This situation is expected to lead to higher transport costs and commodity prices, disruption of logistics, and impacts on the global economy. The following sections will provide an overview of the impacts on soaring fuel costs due to sanctions on Russia, increased insurance premiums by insurers worldwide, and the chronic crew shortage faced by the maritime industry.

3. Escalation of Fuel Costs and Insurance Premiums

As economic activities recover from the COVID-19 pandemic, the demand for energy, primarily oil, has rapidly increased. In response to Russia's invasion of Ukraine, countries including Japan, the United States, and the European Union have imposed various economic sanctions on Russia. These sanctions encompass asset freezes of the Central Bank of Russia, exclusion of Russia from the SWIFT network, export restrictions to Russia, and import restrictions from Russia.⁸⁾ These measures have further driven up the historically high energy prices that have persisted since the latter half of 2021.⁹⁾

Russia is one of the world's largest crude oil producers, accounting for about 13% of the world's total oil supply in 2021.¹⁰⁾ The economic sanctions against Russia have a direct impact on the shipping industry, which relies heavily on bunker fuel refined from crude oil. The recent surge in oil prices is attributed to the reduction in Russia's oil production capacity due to decreased investment in its oil industry caused by sanctions, as well as restrictions on

transactions necessary for Russia to export its oil, thus reducing its crude oil supply to the market.

Moreover, marine insurance, an indispensable element of the shipping industry, has also soared due to Russia's invasion of Ukraine. Marine insurance covers damage and loss of the ship itself, and potential damages to the cargo as commissioned by the shipper.

In Japan, the leading providers of marine insurance are the three major domestic insurance companies: Tokyo Marine & Nichido Fire Insurance Co., Ltd., Sampo Japan Nipponkoa Insurance Inc., and Mitsui Sumitomo Insurance Co., Ltd. Globally, influential insurance companies include Allianz Global Corporate & Specialty (AGCS) headquartered in Germany, American insurance giant AIG, Zurich Insurance Group from Switzerland, and the world's largest insurance market, Lloyd's of London.

These insurance companies not only provide standard marine insurance but also offer war risk insurance for ships covering damage or seizure due to war (including acts of piracy), and loss of earnings insurance to compensate for the economic loss due to the ship's inoperability resulting from damage. However, the unpredictable nature of the ongoing Ukraine invasion has led to increased insurance premiums and refusal of underwriting.

Reports suggest that immediately after the Ukraine invasion, Lloyd's of London and others designated areas around Ukraine as 'High Risk Areas', resulting in a rise in marine insurance premiums.¹¹⁾ The three major Japanese domestic insurance companies followed suit. Furthermore, in June 2022, they halted cargo insurance and decided to cease offering war risk insurance for ships in the nearby waters of Russia, Ukraine, and Belarus from January 1st of this year.^{12) 13)}

Subsequent negotiations with reinsurance companies ensured the continued provision of war risk insurance. However, insurance premiums have been increased by about 80% since the end of that month.¹⁴⁾ Reports indicate that this could lead to the largest ever insurance payout since records began in 2013.¹⁵⁾ The ongoing Ukraine invasion and subsequent economic

sanctions are causing a rise in fuel costs and insurance premiums, thus increasing logistics costs. Additionally, the need to avoid hazardous maritime areas by taking alternative routes increases transportation distances, necessitating more fuel and extending transportation time. This is expected to continue having significant economic impacts on the shipping industry.

4. Worsening Shortage of Seafarers

Maritime trade accounts for approximately 90% of global trade, with more than 50,000 merchant vessels and about 2 million seafarers said to be supporting the world economy. These approximately 2 million seafarers have faced unprecedented challenges due to the COVID-19 pandemic. Many have been denied landing in numerous countries and held onboard at sea for extended periods. Even when they managed to land, flights back to their home countries often were not operating, resulting in seafarers being stranded onshore. Moreover, those on vacation couldn't join onboard duties, leading to a cessation of wage income.¹⁶⁾ The United Nations has described this situation as a "humanitarian crisis of seafarers."¹⁷⁾

Looking at the nationalities of the seafarers supporting the world economy, regions such as the Philippines, Indonesia, China, and India provide the majority. However, Russian seafarers, who are involved in the Ukraine invasion, make up 10.5% of the total, and Ukraine also accounts for 4%.¹⁸⁾

In other words, about one-seventh of all seafarers worldwide are either Russian or Ukrainian. The invasion of Ukraine has led to the closure of the Black Sea, leaving these seafarers held at sea for extended periods and exacerbating the global maritime labor shortage caused by the COVID-19 pandemic.

The IMO has announced that since the start of the invasion of Ukraine, 94 foreign freighters and about 2,000 seafarers have been trapped in Ukrainian ports. In addition, trapped seafarers are exposed to the threat of violence, an event that didn't occur during the COVID-19 pandemic. The IMO has reported incidents such as

the Japanese-affiliated vessel, *Namura Queen*, being shelled off the coast of Ukraine, and at least eight merchant vessels have been attacked.^{19) 20)} In such a situation, access to food and medical supplies is also limited, which can be described as a "humanitarian crisis of seafarers," similar to the situation during the COVID-19 pandemic.

Moreover, as fewer ships are calling at Russian and Ukrainian ports, seafarers from these two countries are facing issues similar to those during the COVID-19 pandemic. They are unable to be relieved by other seafarers and have no clear return schedule. While the impact of the Ukraine invasion on world trade has been limited so far, if the situation continues, it could significantly affect the entire shipping industry and, by extension, the global supply chain.

From the perspective of maritime labor, there has always been a chronic shortage of seafarers. Crew members on foreign merchant ships who usually sail for several months need regular rotation to ensure their vacations, but it takes years of education and training to cultivate replacement personnel. In July 2021, a *Seafarer Workforce Report* compiled by the International Chamber of Shipping (ICS) and the Baltic and International Maritime Council (BIMCO) warned that unless measures to improve training and recruitment frequency for seafarers are implemented, there would be a significant shortage of ship officers by 2026.²¹⁾

The invasion of Ukraine has further aggravated the existing issue of seafarer shortage, which was highlighted and exacerbated by the COVID-19 pandemic, necessitating urgent measures. In particular, there is a pressing need to increase officer recruitment through the enhancement of appropriate education, training, and recruitment frequency.

Thus, protracted conflicts bring about deeper economic and political challenges and may have significant impacts on the global economy.

5. Challenges and Opportunities in the Maritime Industry

The Ukrainian invasion, occurring just as the COVID-19

outbreak in China was beginning to wind down, has aggravated existing issues in the maritime industry, such as soaring fuel costs, increased insurance premiums, extended transport times, and crew shortages. These complex circumstances, along with changes in trade routes, escalating uncertainties, sanction implementations, and direct damage from the war, are likely to impact global supply chains, resulting in cost inflation and supply deficiencies for consumers worldwide. Specifically, issues like logistics disruptions, increasing logistics costs, and personnel shortages could continue to pressure the industry over an extended period. On the other hand, these challenges also present new opportunities, such as transitioning to more sustainable fuels and digitization.

The COVID-19 pandemic and the war in Ukraine have brought about challenges the maritime industry has never experienced before. How the industry as a whole responds and overcomes these challenges will significantly impact its future development.

As the international security environment changes, including the invasion of Ukraine, the maritime industry will continually need to adapt and adjust. These adjustments affect ship operations, crew safety, supplies, and ultimately, the supply of goods to people worldwide. Therefore, it requires the maritime industry as a whole to cooperate, and all stakeholders to act in unison.

Such difficult circumstances may also prompt the maritime industry to revisit traditional operations and seek more sustainable and efficient methods. For instance, transitioning to cleaner energy sources, such as decarbonization, moving away from fossil fuels, and utilizing renewable energy, can address not only climate change but also security risks associated with surging oil prices and reduced access to Russian oil supplies due to sanctions caused by the Ukrainian invasion.

Moreover, the unmanned ship project "MEGURI2040" by the Nippon Foundation, utilizing the latest digital technology and communication systems, is expected to address the shortage of crew in the maritime industry, improve working conditions at sea, and prevent maritime accidents due to human factors. It can also be a highly

effective measure in terms of protecting human life during conflicts.²²⁾

However, such changes and adaptations take time. In the interim, the maritime industry will continue to face three main issues: economic hardship, the safety and health of the crew, and impacts on the global supply chain.

The future development of the maritime industry depends not only on the war in Ukraine but also on appropriately understanding and flexibly responding to challenges and opportunities considering numerous factors like the COVID-19 pandemic, climate change, and technological advancements. This is essential for the sustainable growth of the maritime industry.

6. In Conclusion

The invasion of Ukraine by Russia, which has already persisted for over a year, raises concerns about further complexities and protraction. Given its anticipated significant impact on the maritime industry, which underpins the global economy, this report has focused on the direct effects on the maritime industry, such as

soaring fuel costs and insurance premiums, and crew shortages, while pondering the actions required in the maritime industry moving forward.

The war in Ukraine has inflicted additional severe impacts on the maritime industry, already grappling with difficulties brought about by the COVID-19 pandemic. This has intensified the severity of the challenges the industry faces, such as the rise in logistics costs and the issue of crew shortages.

These problems significantly impact global supply chains and negatively affect overall logistics efficiency. Particularly, trade restrictions with Russia and concerns for the safety of the crew are expected to continue influencing the industry as a whole.

However, these challenging circumstances also have the potential to create new opportunities. Solutions like transitioning to sustainable fuels and introducing unmanned ships will likely be sought. These initiatives should provide a roadmap for addressing the various challenges the maritime industry is set to face in the future.

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