

Can the West Afford to Let the World Go Hungry? Overcoming Challenges to Establishing a Humanitarian Corridor in the Black Sea

by Isak Runarsson

ABSTRACT

While economic interdependencies do not prevent war, witnessed most recently by Russia's naked war of conquest in Ukraine, the costs of war in a globalised world spread far and wide. Russia has taken the world's food markets hostage by blockading Ukrainian ports in the Black Sea. The resulting food price increases make a humanitarian crisis in the world's poorest countries increasingly likely; this, in turn may lead to regime fragility and turmoil in the international system. The question of lifting the blockade by establishing a human corridor into the port of Odessa has recently been much discussed. There are challenges to any such effort, both strategic and operational. Yet a careful analysis reveals that the costs and risks of non-intervention are greater than the risks of intervening. An international naval force, co-led by the EU or its member states and Turkey is the best option for such a mission.

Black Sea | Ports | Blockade | Ukraine | Russia | Turkey | Food security

keywords

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1. The case for humanitarian intervention

Ukraine is one of the world's bread baskets. Its vast and expansive plains, the steppes, are among the most fertile areas for growing crops worldwide. In the harvest season of 2020–2021, Ukraine produced just over 8 per cent of all wheat traded on world markets, 13 per cent of corn and 14 per cent of barley.¹ Further, it exported 44 per cent of all internationally traded sunflower oil,² which according to one report has vanished from markets – no matter the price.³ Depending on reports, an estimated 20–30 million tonnes of grains are now stuck in granaries and silos across Ukraine after Russia effectively blockaded the Black Sea for Ukrainian exports.⁴

Ukraine's inability to export has started to affect prices worldwide. The impact of Russia's invasion into Ukraine comes on top of prior increases in food prices due to Covid-19 supply chain issues, natural disasters, and low yields.⁵ This deadly

¹ US Department of Agriculture, *Grain: World Markets and Trade*, Washington, June 2022, <https://www.fas.usda.gov/node/934>.

² FAOStat: *Crops and Livestock Products*, last updated 26 April 2022, <https://www.fao.org/faostat/en/#data/TCL>.

³ Christine Hauser, "Sunflower Oil 'Vanishes' as Ukraine War Grinds On", in *The New York Times*, 30 April 2022, <https://www.nytimes.com/2022/04/30/world/europe/cooking-oil-shortage-ukraine.html>.

⁴ Max Seddon, "Ukraine Warns that Only Lifting Black Sea Blockade Can Avert Global Food Crisis", in *The Financial Times*, 4 June 2022, <https://www.ft.com/content/bbaa9e19-c07c-4222-a7f3-ce35cc4b1f1b>; "Ukraine Grain Exports via Poland and Romania Face Bottlenecks, Says Deputy Foreign Minister", in *CNBC*, 12 June 2022, <https://www.cnbc.com/2022/06/12/ukraine-grain-exports-via-poland-and-romania-face-bottlenecks-says-deputy-foreign-minister.html>.

⁵ FAO, "The FAO Food Price Index fell for the Second Consecutive Month in May", in *FAO Food Price Index*, Rome, 3 June 2022, <https://www.fao.org/worldfoodsituation/foodpricesindex/en>.

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combination of forces is now producing record prices in many essential food categories. The resulting pain will not be evenly felt. In more affluent countries, rising food prices will squeeze the budgets of households, with the greatest pressures put on low-income families and individuals. For many citizens of poorer countries, however, the effects may be a matter of life and death.

A recent World Bank brief posits that the impact of the war in Ukraine will push millions of people into acute food insecurity.⁶ Consider the impacts of a single product. Sunflower oil represents around 13 per cent of a group of largely substitutable products labelled as vegetable oils. The term vegetable oils also includes palm oil, soybean oil and canola oil in addition to lower volume oils, such as olive oil. They are heavily traded. About 40 per cent of world supply is traded through international markets (compared to 20 per cent for grains) and approximately 75 per cent of countries depend on imports for at least half of their vegetable oil needs. Thus, when the price of sunflower oil skyrockets, the price of other vegetable oils tends to follow. To be sure, Europe heavily relies on vegetable oils in terms of import share of consumption, but so too do African and Asian nations that in many cases have limited abilities to adapt to the shock. In total, vegetable oils represent about 10 per cent of the daily calorie intake of the average person which makes them the second most important food group after cereals.⁷

Prior to the war, food insecurity had already grown rapidly as a result of the economic effects of policies implemented worldwide to slow the spread of Covid. At the start of 2022, there were 276 million people facing acute hunger,⁸ up from 155 million in 2020.⁹ Millions more will be added to the tally if no relieving action in the Black Sea is taken. The international community, and especially its poorest nations, will thus have to choose between going hungry or breaking Russia's blockade.

1.1 A global food crisis could be disastrous for the global order

The food crisis may well spiral into a period of international turbulence. As historian Niall Ferguson has recently reminded us, disasters do not neatly happen one at a time.¹⁰ Historically, disasters such as the war in Ukraine may often beget

⁶ World Bank, *Food Security Update | 2022 Brief on Rising Food Insecurity*, last updated 22 June 2022, <https://www.worldbank.org/en/topic/agriculture/brief/food-security-update>.

⁷ Joseph Glauber, David Laborde and Abdullah Mamun, "The Impact of the Ukraine Crisis on the Global Vegetable Oil Market", in *IFPRI Blog Series: High Food/Fertilizer Prices and War in Ukraine*, 3 May 2022, <https://www.ifpri.org/node/66345>.

⁸ World Food Programme (WFP), *WFP Calls for Urgent Opening of Ukrainian Ports to Help Rein in Global Hunger Crisis*, 6 May 2022, <https://www.wfp.org/node/26768>.

⁹ FSIN and Global Network Against Food Crisis, *Global Report on Food Crises 2021*, Rome, World Food Programme, 2021, p. 10, <https://www.wfp.org/node/24395>.

¹⁰ Niall Ferguson, "America, China, Russia and the Avalanche of History", in *Bloomberg*, 20 May 2022, <https://www.bloomberg.com/opinion/articles/2022-05-20/niall-ferguson-america-china-russia-and-the-avalanche-of-history>.

other disasters. Signs of strain or regime fragility are already showing in multiple countries. In Pakistan the ousting of Prime Minister Imran Khan coincided with surging food and fuel prices. In Ethiopia in East Africa a civil war rages which could turn uglier if and when oil and food become scarce. In Nigeria where presidential elections take place in early 2023 things could turn sour in times of elevated food prices. In Latin America, El Salvador stands out as an economically fragile country. Already, 47.1 per cent of the population experiences moderate or severe food insecurity.¹¹ Add a global food supply crisis and a disastrous bet on cryptocurrencies and it sounds like a recipe for disaster. In Lebanon in the Middle East, poverty, inflation and a debt crisis coincide with heavy reliance on Ukrainian and Russian grain. In general, where governments are weak, revolution is little more than three meals away as the saying goes. One does not have to delve further into history than 2011, to see how high food prices magnified social unrest during the Arab Spring to create revolutions in multiple countries across the Middle East.¹² The fallout has included a humanitarian crisis, an immigration crisis, and the breakdown of order for protracted periods of time in large geographical areas. It is thus obvious that the consequences of a humanitarian food crises for global order could turn out disastrous.

For states such as Russia, China and other that overtly seek multipolarity and do not put a premium on human life, such upheaval following a crises of food insecurity among less developed countries may be seen as an opportunity, albeit a painful one. For statist powers in general and the West in particular, geopolitical considerations and humanitarian imperatives go hand in hand.

2. Three diplomatic and strategic challenges to a humanitarian corridor

A humanitarian corridor is a demilitarised zone in a war intended to allow safe passage of humanitarian aid or for civilians to escape conflict.¹³ Usually both warring parties must agree to their establishment. However, a humanitarian corridor in the Black Sea would be somewhat extraordinary as the humanitarian aid in question, is the grain sitting in Ukraine's storage facilities, intended for consumption by civilians whose states are not participants in the war. Typically, humanitarian corridors are negotiated by the United Nations. While not strictly speaking a humanitarian corridor, the precedent of US efforts to keep the strait of Hormuz open for oil exports in the Iran-Iraq war has been cited as a possible blueprint for action in the Black Sea. In the strait of Hormuz, US naval vessels

¹¹ FAO et al., "Annex 1A: Statistical Tables to Chapter 2", in *The State of Food Security and Nutrition in the World 2021*, Rome, FAO, 2021, p. 137, <https://doi.org/10.4060/cb4474en>.

¹² Giulia Soffiantini, "Food Insecurity and Political Instability during the Arab Spring", in *Global Food Security*, Vol. 26 (September 2020), Article 100400, <https://doi.org/10.1016/j.gfs.2020.100400>.

¹³ UN in Ukraine, *Glossary of Humanitarian Terms on Pauses During Conflict*, 14 March 2022, <https://ukraine.un.org/en/node/174777>.

provided security for Kuwait oil tankers to ship oil onto world markets as oil prices had skyrocketed in the war. Establishing such a corridor in the Black Sea from the Bosphorus to the Port of Odessa, in order to provide security for food shipments from Ukraine could go a long way in stabilising food supply and thereby potentially many of the world's most fragile states, to say nothing of the 44 million people worldwide currently marching towards starvation.¹⁴ However, multiple challenges, must be overcome for such a mission to be successful.

Out of all the challenges to establishing a humanitarian corridor, the most critical are those associated with the strategic positioning of the belligerents plus Turkey, the gatekeeper of the Black Sea. Each party must come to see their strategic position furthered or at least not diminished as a result of reopening the Black Sea for shipping agricultural products. In general terms, successful action requires that the costs of inaction must be stressed and increased, and the costs of action minimised. For Ukraine this means guarantees that Russia will not use the opening to invade from sea. Currently, Moscow thinks it can have its cake and eat it too by blaming the situation on Ukraine and the west. Needless to say, this assessment has to change. Russia must be put in a situation where she has to choose between maintaining the little support and neutrality it has managed to garner internationally and continuing its blockade of the Black Sea. Lastly, Turkey has to come to see the situation as a huge opportunity to establish itself as a leader in the Islamic world and the global south.

2.1 Ukraine

Of the three, Ukraine has the most straightforward strategic assessment. It desperately needs to ship the 20–30 million tonnes of grain it has accumulated in stocks since the invasion halted exports by sea. Depending on reports, the grain sitting in silos is worth roughly six to nine billion US dollars.¹⁵ This is a nontrivial amount given that Ukraine's GDP in 2020 was a little over 150 billion US dollars, although a recent estimate concludes the war will shrink pre-war GDP by roughly half.¹⁶ The sitting grain could therefore be worth as much as 10 per cent of Ukraine's current GDP. Further, Ukraine needs to clear the way for the next year's harvest as grain silos are mostly full.

On the other hand, Ukraine has sought to do everything in its power to stop Russia from landing troops by sea through the port of Odessa. The latter is the only

¹⁴ WFP, *WFP Calls for Urgent Opening of Ukrainian Ports to Help Rein in Global Hunger Crisis*, cit.

¹⁵ Sharon Marris, "Billions of Pounds of Ukrainian Wheat Cannot Be Exported Amid Food Crisis in Developing Countries", in *Sky News*, 11 May 2022, <https://news.sky.com/story/billions-of-pounds-of-ukrainian-wheat-cannot-be-exported-amid-food-crisis-in-developing-countries-12609814>; Silvia Aloisi and Pavel Polityuk, "Ukraine Could Lose \$6 Bln in Grain Exports with Ports Blocked", in *Reuters*, 21 March 2022, <https://www.reuters.com/business/ukraine-could-lose-6-bln-grain-exports-with-ports-blocked-2022-03-21>.

¹⁶ World Bank, *Europe and Central Asia Economic Update, Spring 2022: War in the Region*, Washington, World Bank, 2022, p. 99-100, <http://hdl.handle.net/10986/37268>.

Ukrainian deep-water port, the main avenue of grain export for the country and as such of critical strategic importance to Kyiv.¹⁷ To stop Russia from advancing through the Black Sea, Ukrainian forces have planted sea mines around the port of Odessa, which has already resulted in two sunk cargo ships early in the war.¹⁸

Any lifting of the Russian blockade will require sweeping for and disarming said mines, which would consequently increase the Kremlin's ability to assault Odessa from the Black Sea. Ukraine considers such a move a non-starter without credible guarantees of security. Needless to say, taking President Vladimir Putin's word for Russian nonaggression is a dicey proposition. Consequently, international involvement will be required to operationalise a humanitarian corridor from Odessa.

2.2 Russia

Moscow seems to see the brewing humanitarian crisis as key to gaining ground in the propaganda war. Many of the states that have resisted calls to denounce Russia's and its leaders' actions depend heavily on Black Sea agricultural exports. In order not to become completely isolated in the international community, it is imperative for Moscow to avoid being blamed for the food crisis – especially in the eyes of the global south.

Thus, Putin maintains that Ukrainian grain can easily be exported to world markets and has voiced three options. First, to ship grain through the ports of Mariupol and Berdyansk,¹⁹ both of which have recently come under Moscow's control. That option is obviously unacceptable to Kyiv at this point. For one, Ukraine utilising the ports would increase the legitimacy of Russia's conquest of the port cities. Secondly, reports of Russia stealing Ukrainian grain and selling it on world markets implies that Moscow would likely simply seize the grain once it gets into Russian held territory and export it to its own benefit.²⁰

The second option entails shipping grain via rail through Belarus, to the Baltic Sea. However, this would require lifting sanctions against Belarus which would be the equivalent to easing sanctions on Russia, given the former country's economic and political dependence on the latter.²¹ Besides the uncertainty of the logistical

¹⁷ Cătălin Alin Costea, "The Strategic Importance of the Port of Odessa", in *Romanian Centre for Russian Studies Articles*, 25 March 2022, <https://russianstudiesromania.eu/?p=1226>.

¹⁸ "One Killed as Two Cargo Ships Hit by Explosions off Ukraine", in *Al Jazeera*, 3 March 2022, <https://aje.io/xv5n5t>.

¹⁹ AFP, "Putin Says 'No Problem' to Export Grain from Ukraine", in *The Times of India*, 4 June 2022, <https://timesofindia.indiatimes.com/world/europe/putin-says-no-problem-to-export-grain-from-ukraine/articleshow/92001150.cms>.

²⁰ Declan Walsh and Valerie Hopkins, "Russia Seeks Buyers for Plundered Ukraine Grain, U.S. Warns", in *The New York Times*, 5 June 2022, <https://www.nytimes.com/2022/06/05/world/africa/ukraine-grain-russia-sales.html>.

²¹ Brian Whitmore, "Putin's Black Sea Blackmail Sets Stage for Belarus 'Deal with the Devil'", in

feasibility of the option, for Ukraine and the West, capitulating to Putin on sanctions would be a devastating psychological blow and serve to give the Kremlin economic breathing space.

Lastly, Putin suggests that Kyiv is free to demine Odessa and resume trading from its port maintaining that Moscow will not seize the opportunity to use the port as a landing ground for invading forces. This is not a credible guarantee – coming from the man who said he would not invade Ukraine only days before doing so.

All three options are unpalatable to Ukraine and the west and Putin knows it. In this case, the outcome of the propaganda battle is crucial. Admittedly, Putin's strategy seems to be yielding some results. Macky Sall, the Senegalese president and chairman of the African Union, voiced support for Russia's narrative, calling on "all partners to lift sanctions targeting wheat and fertilizer".²² To be sure, Ukraine, the EU and the United States need to step up their efforts to counter Moscow's propaganda.

However, Russia's insistence that it is not the party hindering the establishment of a humanitarian agricultural export corridor reveals a weakness in its strategic position. Namely, that it desperately wants and needs to hold on to the little remaining international support it has. In other words, it would cost Russia a great deal to escalate, should an international coalition properly conceived decide to establish a humanitarian corridor to Odessa. Russian missiles flying towards an international humanitarian convoy would not only damage ships but also destroy the narrative that Russia is working for a humanitarian corridor, not against it, assuredly stripping Moscow of all but its most loyal sycophants internationally. Consequently, while Moscow's outright support of a humanitarian corridor is unlikely, there is a strong possibility it will acquiesce, given enough pressure.

Moreover, it must be stressed that the nature of a humanitarian corridor in the Black Sea is vastly different from a no-fly zone – an idea Ukraine pushed at the onset of the Russian invasion but rejected by NATO as escalatory. A no-fly zone in practice means forcibly removing aircraft from an airspace, requiring the powers that impose a no-fly zone to shoot down Russian planes if they challenged such a zone. Additionally, it would effectively require eliminating all Russian air defences as well. Significantly, a no-fly zone would thus be an act of aggression vis-à-vis Russia. An analogous naval action to a no-fly zone would be to essentially impose a blockade on the Russian Navy in the Black Sea, committing to naval battles if Moscow resisted. The establishment of a humanitarian corridor on the other hand, would require no act of aggression. It would simply require the clearance of dangerous objects (sea mines) and sailing without incident through the Russian blockade. As a result, a humanitarian corridor should not be construed as putting

BelarusAlert, 1 June 2022, <https://www.atlanticcouncil.org/?p=531869>.

²² Macky Sall, "President #Putin expressed to us his readiness to facilitate Ukrainian wheat exports", *Twitter post*, 3 June 2022, https://twitter.com/macky_sall/status/1532815016998719488.

NATO on the path to World War III.

2.3 Turkey

Turkey's control of the sole access point from the Mediterranean to the Black Sea, the straits of Bosphorus, positions it as a key strategic actor for any effort to establish a humanitarian corridor.

An international agreement, the Montreux convention of 1936, governs how Turkey can exercise control over the Bosphorus.²³ During peacetime, the agreement sets a range of restrictions on the movements of warships and the build-up of naval power in the Black Sea. Most notably that the total tonnage of non-Black Sea fleets in the Black Sea may not exceed 45,000 deadweight tonnage (DWT) and each vessel cannot remain more than 21 days in the Black Sea. During wartime however, Turkey is given greater discretion in controlling the access to the Black Sea. If its Turkey is not a participant in a war, it still has the ability to block passage of warships by the belligerents through the Bosphorus under article 19 of the convention. However, if Turkey is a participant in a war or assesses itself as under acute threat of attack it essentially has full discretion over passage through the Bosphorus and thus has the right to block all ships, or none, if it so pleases, under articles 20 and 21.

On 28 February, Turkey's Foreign Minister, Mevlüt Çavuşoğlu, invoked what seems to be article 19 of the Montreux convention noting that "When Turkey is not a belligerent in the conflict, it has the authority to restrict the passage of the warring states' warships across the straits."²⁴ However, Çavuşoğlu continued to say that all governments, not just the belligerents, had been warned and should not send warships across the Bosphorus. The latter statement is more in line with article 21 of the convention, as article 19 only gives Ankara the right to limit the passage of the belligerents. Significantly, under article 21, Ankara has essentially full discretion over the straits and can either block any humanitarian effort to re-establish trade or allow such an effort without the limitations inherent in article 19, on size and duration of presence of fleets employed in such an effort.

Turkey's allies are unlikely to challenge its assessment of the situation and consequently its employment of the Montreux convention. In fact, the United States signalled allied approval of the move to close the straits to all warships shortly after it was announced.²⁵ This means that Ankara must approve of any effort to open for trade through Odessa.

²³ Great Britain et al., *Convention Regarding the Regime of the Straits*, Montreux, 20 July 1936, in League of Nations, *Treaty Series*, Vol. 173, p. 213-241, <https://treaties.un.org/pages/showDetails.aspx?objid=0800000280166981>.

²⁴ Tayfun Ozberk, "Turkey Closes the Dardanelles and Bosphorus to Warships", in *Naval News*, 28 February 2022, <https://www.navalnews.com/?p=30885>.

²⁵ "US Thanks Turkey for Shutting Down Black Sea Straits for Warships", in *Euractiv*, 1 March 2022, <https://www.euractiv.com/?p=1721084>.

Turkey has sought to maintain an aura of neutrality in the conflict between Russia and Ukraine. Ankara has leveraged its position in the region to broker peace talks and hosted Russian foreign minister, Sergei Lavrov, early in June for talks on grain exports.²⁶ Crucially, however, Ukraine was left out of these talks. As a result of Ankara's positioning, Kyiv feels that it cannot trust Turkey to take on full responsibility for opening up and maintaining security in a humanitarian corridor. From Kyiv's perspective, Turkey is not seen as a credible partner to keep the Russians out, should they seek to use the opportunity to invade Odessa from sea.

Yet, taking a leadership role in relieving the world's food markets is a huge strategic opportunity for Turkey. Ankara has sought to establish itself as a leader, both in the Middle East and North Africa region and in the Muslim world more generally. Incidentally, in 2020 the nine largest importers of Ukrainian wheat were majority or predominantly Muslim countries, with five of them located in the Middle East, besides Turkey itself which is the fifth largest importer of Ukrainian wheat.²⁷ It is thus obvious that providing leadership in solving this important issue would solidify Turkey's bid for leadership within the Islamic world and in the Middle East.

3. Four operational challenges

In addition to political complexities, there are numerous operational challenges to launching a successful mission to relieve grain exports from Odessa. Four of them stand out as imperative to solve. First, sea mines around Odessa and in the Black Sea would need to be disposed of. Second, the loading capacity of the Port of Odessa might not be sufficient to provide adequate relieve to food markets. Third, obtaining enough ships and moving them fast enough might be difficult. Fourth, insurance might be prohibitively expensive or not available at all for commercial vessels in the Black Sea, even with naval escort.

3.1 Clearing sea mines will require considerable resources and time

Clearing the coast around Odessa of sea mines will be operationally complex and time consuming. Hundreds of mines have been placed by both the Ukrainians and Russians in and around Odessa. Reports differ on the total number of mines that would have to be de-mined to open the port. In March, the Russian Defence Ministry said that approximately 370 mines had been laid around the coast of

²⁶ "Lavrov Arrives in Turkey for Talks on Grain Exports", in *RFE/RL*, 7 June 2022, <https://www.rferl.org/a/31887746.html>.

²⁷ These countries are Egypt, Indonesia, Bangladesh, Pakistan, Turkey, Tunisia, Morocco, Yemen and Lebanon; FAOStat: *Detailed Trade Matrix*, last updated 21 December 2021, <https://www.fao.org/faostat/en/#data/TM>.

Odessa, of which an estimated ten had broken loose.²⁸ In addition, there have been claims that the Russian navy also laid down sea mines around the Black Sea, which are thought to number in the hundreds – in March one Ukrainian official claimed that Russian mines totalled 372.²⁹ More recently, an advisor to the Agrarian and Food Minister of Ukraine, Markiyan Dmytrasevych, said that thousands of mines were floating around the port of Odessa and elsewhere and that it would take six months to clear the mines. However, such statements may be a tactic of deterrence on account of the Ukrainians.

De-mining operations could realistically take a month, even if a considerable force of mine countermeasure ships is mustered. According to one American military source on de-mining operations in the Persian Gulf during Operation Desert Storm, it was estimated that it would take seven American mine countermeasure vessels two to three weeks to clear 1,600 mines with 70 per cent certainty.³⁰ The source claimed that the relationship between time and number of ships was linear. Based on that estimate, each minesweeping vessel can clear on average around 11–16 mines per day. If these assumptions hold, an international force that could muster ten mine countermeasure ships would be able to clear 400–1,000 sea mines in roughly 3–9 days. It is likely, however, that a higher degree of certainty would be required in the Black Sea than in Operation Desert Storm since civilian vessels will take part in the operations and conditions might be more difficult due to drifting mines. As the degree of certainty and de-mining duration have an exponential relationship, it is not implausible that the de-mining time from the baseline scenario needs to be doubled or tripled. However, the process could be sped up if Ukraine is willing and able to give out the precise location of all mines.

3.2 Odessa's port loading capacity needs to be restored

In a regular year, the port of Odessa is among the busiest ports in the world. In 2021, it handled a total of 22.5 million tonnes of cargo.³¹ At maximum, the port is claimed to have an annual loading capacity of 40 million tonnes, which is divided into 15 million tonnes of dry cargo capacity and 25 million tonnes of liquid bulk.³²

However, in addition to the placement of mines, barges and cranes have been sunk in the port as part of its defences. It is thus uncertain how much actual loading

²⁸ Jan D. Walter and Elmas Topcu, "Experts Warn Black Sea Mines Pose Serious Maritime Threat", in *Deutsche Welle*, 2 April 2022, <https://p.dw.com/p/49Lvj>.

²⁹ Jonathan Saul, "Analysis: The Sea Mines Floating between Ukraine's Grain Stocks and the World", in *Reuters*, 10 June 2022, <https://www.reuters.com/markets/commodities/sea-mines-floating-between-ukraines-grain-stocks-world-2022-06-10>.

³⁰ James F. Ball, *The Effects of Sea Mining Upon Amphibious Warfare*, Master's thesis, Army Command and General Staff College, 5 June 1992, <https://apps.dtic.mil/sti/citations/ADA255564>.

³¹ "2021 Yearly Results of Odessa Sea Port", in *The Odessa Journal*, 16 January 2022, <https://odessa-journal.com/?p=23222>.

³² Rishab Joshi, "8 Facts of Odessa Port You Might Not Know", in *Marine Insight*, 12 April 2022, <https://www.marineinsight.com/?p=1769496>.

capacity remains after the war began. Even if the port maintains full capacity, no more than two to three million tonnes of grain can realistically be exported in the span of a month. It would thus take months to ship the storages that have built-up since the war started. Consequently, a corridor would have to be maintained for extended periods of time and naval resources have to be committed over a long period of time. Further, it is imperative to get an accurate assessment of the current loading capacity of Odessa Port if the Ukrainians put their efforts into scaling up and increasing capacity as much as possible.

3.3 A tight shipping industry and long shipping times might slow down transportation

Given the vast quantities of grain in storage in Ukraine, the decision to open a sea route to Odessa could impact the global shipping industry. The industry has been especially tight after the Covid-19 pandemic with the now infamous global supply chain problems that have been plaguing the global economy. The total global dry bulk vessel fleet as of December 2020 counted just over 12,300 vessels and a cargo capacity of just over 900 million tonnes.³³ As was previously noted, the grain sitting in Ukraine totals around 20–30 million tonnes.

The shipping industry effectively operates on a peak-load pricing model, i.e. supply is fixed in the short term after a certain threshold is reached. Thus, even small marginal increases in demand can lead to relatively large price increases with the industry already operating at or near maximum capacity. However, because the price of grains, vegetable oils and other raw materials has increased drastically since Ukraine and Russia's exports were cut off, increases in shipping costs might be absorbed, at least to a certain extent, by producers. Moreover, a continuous flow of ships, instead of large convoys might mitigate potential impacts on the shipping industry, as operating procedures would not require vast amounts of ships at any given time.

Shipping times can also present an issue, depending on how the corridor is established. If the corridor operated convoys, whereby commercial ships would move in tandem with naval vessels, shipping times (i.e., the time it takes to go from Odessa through the Bosphorus) might adversely impact the capacity. In regular times major shipping companies complete the journey from Odessa to the Bosphorus in anywhere between one and eight days.³⁴ A convoy that would have to continuously watch out for drifting mines and/or nefarious actors might move at a slower pace than that. Additionally, if only a single convoy is operated at a time, port facilities might be effectively inoperable for considerable durations, while the convoy goes back and forth, reducing its load capacity. Optimally then, a continuous flow of ships would be maintained or at minimum two convoys at a

³³ USDA Agricultural Transportation Open Data Platform: *Bulk Vessel Types and Capacity*, last updated 13 July 2022, <https://agtransport.usda.gov/stories/s/bwaz-8sgs>.

³⁴ SeaRates: *Distances & Times*, <https://www.searates.com/services/distances-time>.

time even though operating in such a way will likely require more naval resources.

3.4 Solving the question of insurance might require public sector intervention

Shortly after Russia's invasion of Ukraine began, the impacts on the shipping industry started to come to light. While shipments continued to go through the Black Sea, insurers were among the first to act. Standard premiums are 0.25 per cent of hull value but they quickly rose to as much as 5 per cent of hull value, an astounding twenty-fold increase.³⁵ Later, there were reports of premiums of up to 10 per cent of hull value and that was if insurers would give a quote at all.³⁶

While de-mining and a naval escort will likely be effective in alleviating fears among insurers, premiums are still likely to be high. Risks remain of escalation on Russia's part and the chance that de-mining activities will not be comprehensive enough to completely allay fears of the enormous cargo ships bumping into a stray mine. Therefore, premiums might still be prohibitively high for the private sector or insurers might simply be unwilling to insure vessels. Potentially, governments or international organisations will have to be ready to step in and insure vessels that take part in a humanitarian effort. In such an undertaking, the pre-war premiums can serve as the baseline for government pricing for insurance, potentially with a small markup.

4. To intervene or not to intervene? That is the question

On the central question of a potential intervention, the strategic situation favours an effort to lift the blockade of Odessa. The assessment of Russia's strategic positioning reveals that the costs of escalation for Moscow are higher than what may have originally been expected. There are also not only humanitarian risks of not pursuing action but also risks to the global order that impose huge costs on inaction. Allowing the crisis to progress unaltered could lead to upheaval and conflict in potentially multiple countries and regions, which is not in the interest of the West or of leaders in fragile states.

The Kremlin's propaganda positioning makes it hard for the Russians to intervene militarily against a humanitarian convoy before the eyes of the world. Such escalation on part of Russia would undeniably carry risks, both in term of potential NATO and/or EU response and propaganda setbacks. Even if Moscow decides to escalate, it must be considered the likeliest scenario that Russia would do so with

³⁵ David Osler, "Underwriters Said to Be Refusing Cover for Ukraine War Risks", in *Lloyd's List*, 4 March 2022, <https://lloydslist.maritimeintelligence.informa.com/LL1140066>.

³⁶ Ann Koh and Alaric Nightingale, "The Cost of Insuring Merchant Ships Sailing to the Black Sea Is Up as Much as 10% during Ukraine Invasion", in *Bloomberg*, 8 April 2022, <https://www.bloomberg.com/news/articles/2022-04-08/ships-entering-the-black-sea-are-becoming-almost-uninsurable>.

means of maintaining plausible deniability, such as by sinking a cargo vessel and claiming it was a stray landmine that had not been discarded of, given Moscow's narrative that it is trying enable grain exports. Nevertheless, participating states will have to be aware of the risks involved – namely that of open conflict with Russia. Thus, it will be imperative to pursue risk mitigating actions in all reasonable ways for any international coalition.

To minimise risks, the UN channel should be effectively employed. Russia will likely veto any initiative to get the backing of the UN Security Council for a humanitarian corridor. However, in that instance, the UN General Assembly can utilise the "Uniting for Peace" resolution to approve of such a mission. Even if time constraints make a "Uniting for Peace" resolution unfeasible, an international coalition would have legitimacy under international law if Ukraine invited the constitution of a humanitarian corridor in its territorial waters. If a non-UN solution is pursued, it becomes imperative to gather public support internationally through other diplomatic means, especially among states in the global south. In any case, the UN should be asked to provide inspectors, to independently confirm that no weapons are being shipped into Ukraine, so as not to give Russia any perceived or real reason to escalate. Moreover, it may be prudent to hand exports that come through the corridor over to the World Food Programme to ensure a fair distribution of all exported grains at market prices.

In terms of structuring such a force, Turkey would have to be a major component in the effort – both to gain unrestricted access to the Black Sea for such a coalition and to mitigate risks of Russian aggression. Turkey has established a degree of trust with Russian leaders which would potentially make Russian acquiescence easier to come by and Turkey's leadership can as such be seen as a risk mitigating strategy.

Kyiv has made it clear that it will not de-mine or convey the location of mines to any coalition that lacks active participation from NATO member states. Due to Kyiv's lack of trust towards Ankara, the navies of other NATO members besides Turkey should also take part in the action. However, it could be argued to be tactically prudent for NATO to refrain from positioning American military assets in the Black Sea as the presence of US naval forces may be seen in some quarters as aggressive posturing – i.e. both by Russia and states generally sceptical of the United States.

A solution might be that the EU or individual member states of the EU, who were on good terms with Russia prior to the war, such as Germany, France, and Italy, will lead efforts in conjunction with Turkey. Lastly, broad participation even by smaller non-aligned or neutral countries such as Egypt could be beneficial, to establish beyond doubt that this would be an act of non-aggression. While the operation will require a considerable naval strength, the objective is not to assemble a force that can defeat the Russian Navy in the Black Sea. Rather, to provide limited deterrence to acts of aggression. Consequently, Ukraine must be ready to re-mine the coast around the port in case Russia decides to escalate.

Operationally, the de-mining aspect would be hardest to solve given the timeframe and the drifting mines. The timeline will be tight, as the Ukrainian summer harvest begins in July, but if a sufficiently large coalition is assembled, spearheaded by Turkey, Italy, Germany and France with the participation of other European and non-aligned countries, enough mine countermeasure vessels can be summoned to complete the job in time. On the Ukrainian side, efforts would have to be made to restore and even improve the loading capacity of the port of Odessa. Finally, the EU or even UN institutions could underwrite insurance contracts to ameliorate concerns of the private sector.

Thus, a holistic assessment of strategic and operational challenges, and the costs and benefits of taking action would suggest that not only is it possible to establish a humanitarian corridor in the Black Sea but it is advisable to do so. Risks of escalation must be minimised in all reasonable regard, but even without explicit consent of Russia, an international coalition should in a nonaggressive manner, move forward in establishing a humanitarian corridor to Odessa.

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