Ahmed Salem Ahmed Seif

## The repercussions of Covid-19 and the Russian-Ukrainian war on shipping industry in Egypt

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### Abstract:

Shipping market has witnessed a great confusion due to the Russian attacks on Ukrainian, as the number of lines suspended reservations from the Ukrainian until March next year 2023, such as the shipping line Maersk, which considered the second most important shipping line in the world. The Russia-Ukraine war is severely disrupting shipping freight. Russian forces are cutting off shipping routes, logistics firms are suspending services and freight rates are skyrocketing. This research aims to define the impact of the Russian attacks on Ukrainian on maritime transportation and maritime industry as a whole and maritime transportation in Egypt during the year 2022. This paper is a literature review paper; follows inductive research approach.

Keywords: Russian, Ukrainian, Maritime Transportation, Egypt.

Ahmed Salem Ahmed Seif

تداعيات كوفيد ـ ١٩ والحرب الروسية الأوكرانية على صناعة النقل البحري في مصر

الملخص:

شهد سوق الشحن إرتباكًا كبيرًا بسبب الهجمات الروسية على أوكرانيا، حيث تم تعليق عدد من حجوزات الخطوط الأوكرانية حتى مارس من العام المقبل ٢٠٢٣، مثل خط ملاحي ميرسك والذي يعتبر ثاني أهم خط ملاحي في العالم وتسببت الحرب الروسية الأوكرانية في تعطيل شحن البضائع بشدة حيث قامت القوات الروسية بقطع طرق الشحن، وقامت شركات الخدمات اللوجستية بتعليق خدماتها وارتفعت أسعار الشحن بشكل كبير. يهدف البحث إلى تحديد أثير الهجمات الروسية على الأوكرانيين وعلى النقل البحري والصناعة البحرية ككل وعلى النقل البحري في مصر خلال عام الكلمات الإفتتاحية: روسيا، أوكرانيا، النقل البحري، مصر.

### 1. Introduction:

Maritime transport bears responsibility for transporting 90% of the total global trade volume, which considered the lifeblood of the global economy. Furthermore, without maritime transport, no achievement in commercial transactions will be possible between the different continents of the world in terms of raw materials, food, or manufactured products (UNCTAD, 2018).

The spread of Covid-19 in all countries of the world has negatively affected not only the maritime transport sector, but also the movement of air, travel, trade, and shipping. Indeed, this has been negatively reflected in the decline and fluctuation of financial markets and the decline in oil prices to their lowest levels. In

العدد الرابع ـ اكتوبر ٢٠٢٢

Ahmed Salem Ahmed Seif

addition, disturbance in world trade and supply has caused a decline in global manufacturing activity. Consequently, this has led to lower rates of both economic growth and global trade. As many flights were cancelled due to the new Covid-19 and the number of empty ships, voyages have greatly increased due to the lack of shipping routes reservations for very long distances.

Three years are ending, and the maritime transport sector did not recover from the Covid-19 pandemic until a war began between Russian and Ukrainian. The war in Ukraine is one of several major issues currently affecting international maritime transport, compounding other challenges such as port congestion and Covid-19 pandemic.

Jacob (2022), explained that the reason behind the closure of the Ukrainian ports was because there was a very large disruption in the European supply chains and led to a shortage of maritime logistics services, and also maritime transport was greatly affected by the war of Russia, as well as the ports, and that there was the shedding of merchant ships damaged because of the war, and shipping operators of cargo have to redirect the transport of goods and transfer the ships to another safe destination.

Most of the large companies have stopped shipments under the pretext of the war between Russia and Ukraine, and the Russian navy ships have been injured at least 10 commercial ships since the war began, he prevented about 80 merchant ships in the Black Sea

Ahmed Salem Ahmed Seif

from arriving, and confirmed that before the start of the war, the Black Sea ports reached 90% of the country's exports of grain and seeds, a third of which is shipped to Africa, China and Europe, but with the supply chain disrupted and There is no redirection of goods to roads and railways, and this has led to congestion at the stations and this puts the logistics services at risk.

### 2. Research problem:

There is great agreement in the transport sector that the repercussions of the current situation in Russia and Ukraine played a major role in freight rates (UNCTAD, 2022b). Russian invasion of Ukraine caused a global economic crisis in Europe. And that this war greatly affected the global growth that was suffering from the repercussions of the Corona pandemic, which hindered the economies of the world through measures to close the ports, and that the military operations carried out by Russia in Ukraine contributed to disrupting the global supply chain that still, even during the war, did not recover from the negative effects of the epidemic "International Transport" expects high freight rates affected by the war and a golden opportunity for the Egyptian ports, 2022).

Therefore, due to the outbreak of the war between Russia and Ukraine, the war caused the destruction of vital infrastructure, increased insurance costs, high fuel prices, high costs due to delayed shipments, and confusion in the movement of sea

Ahmed Salem Ahmed Seif

shipments in the Black Sea, and not only that, but there is a rise in sea freight prices, resulting in the emergence of global logistical obstacles. This increases shipping distances, transit times and costs.

# 3. Reviewing Covid-19 and the Russian-Ukrainian war on shipping industry

## 3.1 The impact of Covid 19 on shipping industry:

There are a decrease in the global container trade volume by 8.6% in February 2020, and a notable decrease in containers, especially in the Far East. In this content, Henry (2020) stated that COVID-19 had a devastating impact on the global economy, the supply chain and that shipping is entirely responsible for 80% of global trade. Maritime Labor explained that there are special exceptions among stakeholders, and the author finally revealed that COVID-19 would continue to impact seaports and aviation as well. Countries cannot close their doors to import and export products and all countries depend on basic commodities and the global supply chain and digitization processes.

Dorofeev et al., (2020) found that freight by road transport is the basis of the economic situation in all countries of the world. However, since the spread of the Covid-19 pandemic, there has been an economic deterioration, which led to a decrease in the GDP of many countries, as well as a drop in oil prices. Consequently, this has led to a sharp drop in demand for

Ahmed Salem Ahmed Seif

gasoline. Lose (2020) explained that since the spread of Covid-19, there have been restrictions in communication, complete closure, and travel restrictions. This has a great effect on global economy, and consequently on the transportation of goods and passengers which strongly disrupted supplies.

Furthermore, Covid-19 affected the volume of transportation and the dynamics of cargo capacity. Actually, there are results indicated by the author that the more cases of covid-19, the more negative effect on the growth of the volume of dry products' transport.

Recently, COVID-19 has caused an economic crisis for East Asia as a whole; as a result, the virus will cause global losses, estimated as more than two trillion dollars. The spread of the virus reflected in economic growth and global oil demand. Indeed, the spread of this epidemic has negatively affected investors' sentiment, prompting many of them to turn towards safe assets, such as gold, which seen as a haven for hedging in times of crisis (Thomas, 2020).

Because of the spread of Covid-19 in China, the global logistics sector has started to block the arteries feeding the service sector. Moreover, measures taken by governments have hindered the demand for goods and threatened to disrupt global supply chains. It may not come as a surprise to customers who have ordered products online that their orders cancelled due to the spread of this virus, and the evidence for this is a slowdown in impact.

Ahmed Salem Ahmed Seif

China considered as an important source of end products. Therefore, manufacturers and retailers around the world do not have goods available due to the spread of Covid-19.

Some ports have experienced a very terrible backlog since the outbreak of this epidemic, and some retailers and manufacturers have failed to receive the goods due to the new COVID-19 outbreak. Moreover, that this epidemic has caused shipping pressures, especially Maersk, which has stopped working since the outbreak of the epidemic, and drivers have stopped international shipping experts who recently discovered a significant decrease in container shipping movement due to the spread of the Covid-19.

In fact, when the covid-19 virus spread around the world, international port technology released statistics on the most influential ports, especially in China, because large ports contain amounts of loading and unloading and low traffic, many countries did not have an adequate response to not imposing port closures or restrictions on the move. This is because this would cause disruptions in the supply chain as well as a ban on basic commodities and food during the COVID-19 pause (Thomas, 2020).

## 3.2 Russian and Ukrainian War threaten the global maritime transportation:

Akhbaria, (2022) recently has mentioned that the war between Ukraine and Russia put the world economy in economic and

Ahmed Salem Ahmed Seif

financial instability for the two countries and led to political tension in the world. In addition, in terms of economic losses, they reached about a trillion dollars in the form of a global GDP contraction of about 1% by the end of 2022, and this will lead to an increase in global inflation by 3%.

And the noticeable rise in oil around the world, which recorded 130 dollars per barrel in March 2022, and also the increase in basic food commodities, especially wheat, by 40% to reach 396 dollars per ton, and also the increase in corn prices by 21%, as a result of the disruption of the movement of agricultural exports in Ukraine, The Black Sea was classified as a dangerous area due to an increase in the insurance prices required for shipping goods, shipment delays, and port congestion. Ship charter prices by 20% because of the rise in marine fuel because it is linked to oil prices.

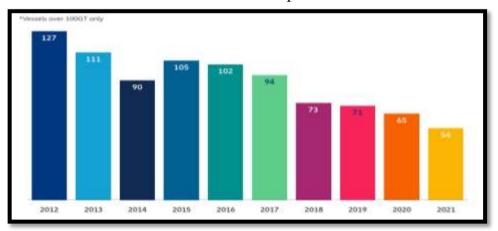


Figure (1) Total shipping losses by year. Source: Lloyd's List Intelligence Casualty Statistics, 2022.

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العدد الرابع ـ اكتوبر ٢٠٢٢
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Ahmed Salem Ahmed Seif

There is great agreement in transportation sector that the repercussions of the current situation in Russia and Ukraine will play a major role in freight rates. Disrupted regional logistics, the crippling of port operations in Ukraine, the destruction of vital infrastructure, increased insurance costs, and higher fuel prices, have all contributed to the logistical obstacles arising in the world. Therefore, shipping distances increased and along transit times and costs rises. Nevertheless, it is clear that the disruptions and the higher ton-mile demand caused by the war in Ukraine contribute strongly to higher shipping costs; as shown in the next figure (2):.

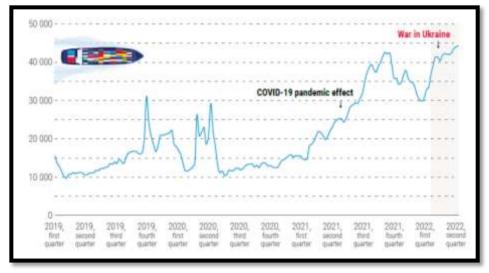


Figure (2) Rising of shipping cost. Reference: Clarksons Research Studies, 2022.

The war in Ukraine is increasing ongoing disruptions to global logistics and supply chains, contributing to further elevated levels

Ahmed Salem Ahmed Seif

of delay across the global maritime transportation system. Port congestion remains a major contributor to elevated freight and strong market conditions in many shipping segments. It is unclear to what extent this will reduce commodity supplies coming from Ukraine and Russia, but trade restrictions, airspace closures, contractor uncertainty, and security concerns are complicating all trade routes going through Ukraine and Russia, a key sector of the Eurasian Land Bridge. Spot freight rates continue at historically very high levels, although they have been declining over the last weeks despite the logistics issues caused by the Ukraine crisis, mostly due to seasonal reasons. Rates to charter container ships are at historical highs (Canuto, 2022).

The suspension of maritime transport and shipping traffic in the Sea of Azov due to the war between Russia and Ukraine, and Russia is considered among the largest exporters of wheat in the world via the Black Sea, but because of the war, the oil recorded a significant increase in price to exceed or break The barrier of 100 dollars per barrel, and on the other hand, traders began not to import goods from Ukraine because of the war, but traders see that there are some countries that can be imported from, such as Egypt and Turkey, and that these countries are aware of the high cost of shipping by about 10 to 15 % due to the increase in the price of oil.

In this context, suffering and crisis between Ukraine and Russia represented a conflict for the global economy that led to growth

Ahmed Salem Ahmed Seif

and price hikes, a slowdown in growth and an increase in inflation, the most important of which was an increase in the price of commodities such as food and energy, and conflicts exist especially In trade and supply chains, Russia and Ukraine are among the largest wheat producing countries, but because of the war the supply chains were cut off, and this led to a significant increase in world prices, especially natural gas and oil, not only oil, but also in the cost of food such as wheat. Russia accounts for 30% of world wheat exports,

Chains et al., (2022) recently noted in the last stage that the war between Russia and Ukraine caused not only a psychological impact, but also the economies of the countries, which were affected by it, and spread a state of fear in terms of supply chains that provide foodstuffs and other commodities, but also the basic tools that It supports the industrial and agricultural sector in the country and has led to the collapse. On the other hand, sanctions have been imposed on the Russian economy, and this has led to the suspension of companies' activity in companies that amount to more than 750 companies spread around the world, including in North America and Europe. The publisher expects that there is a decrease in the economic value of the inflation rate from 25% to 30%.

Although the Russian Federation and Ukraine are not deeply integrated into global container shipping, the conflict and trade restrictions have also affected this shipping sector. Container

Ahmed Salem Ahmed Seif

carriers cut ship carrying capacity assigned to the Russian Federation, which cause suspending operations at Ukrainian seaports, as shown in the next figure (3):

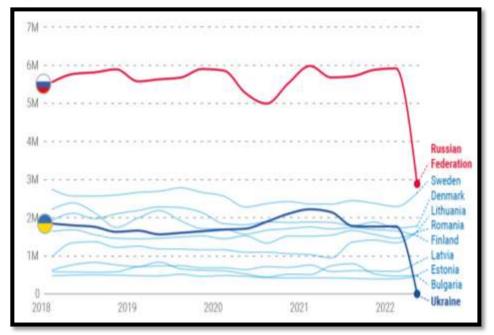


Figure (3) Container shipping deployment for the Russian Federation and Ukraine.

#### Reference: Clarksons Research Studies, 2022.

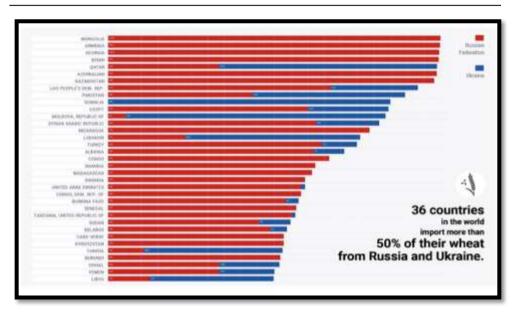
The main reason for the war between Russia and Ukraine is that Russia's security fear is that Ukraine will not join NATO and not expand from the eastern side, considering that Russia's entry into NATO will lead to an imbalance of power and Security on the western side of Russia and the reduction of Russia's geographical influence Supply and a lack of economic growth around the world,

Ahmed Salem Ahmed Seif

and also the other side that the confidence of workers in Germany declined due to a shortage of diesel equipment and shipping equipment that passes through the North Sea, and all because of the repercussions of the war with its coincidence with the new mutation Omicron, which also forced the country The economic embargo, especially the impact of China also on exports.

The impacts of the war in Ukraine are being felt not only regionally, but also around the world because of the region's significant contribution to food and energy supplies. In relation to food, there are production and export challenges: these are already associated with reduced availability and price rises. Food and energy import bills are already at record levels, and it seems inevitable that these will continue to rise. This will have widespread impacts that could be far-reaching, but the consequences for poorer and vulnerable people, will be particularly severe.

Many food producers are not able to access the agricultural inputs they need, so the impact of current market disturbances may be felt through 2023. There is value in urgent coordinated efforts that respond to needs, are human-centered, take advantage of opportunities, adapt to the context, and implemented with a focus on delivering the 2030 Agenda for Sustainable Development.



Ahmed Salem Ahmed Seif

Figure (4) Most exposed countries to wheat from Russian Federation and Ukraine.

#### Source: <u>https://www.developmentaid.org/news-stream/post/142833/global-</u> <u>economic-impacts-of-russias-war-against-ukraine</u>

## 3.3 The repercussions of Covid-19 and the Russian-Ukrainian war on shipping industry in Egypt

Food and fuel are one of the main areas of concern for commodity markets and the Russian Federation and Ukraine are the main countries controlling the agriculture food markets (Fig. 5). Russia and Ukraine account for 53 percent of the world trade share in sunflower oil and its seeds, and 27 percent of the world trade share in wheat. In the field of fuel, global energy prices are rising dramatically with the possibility of declines in purchases

Ahmed Salem Ahmed Seif

of oil, gas and coal from Russian Federation. The Russian Federation is also a major global supplier of chemical products especially fertilizers, as well as metals and wood products.

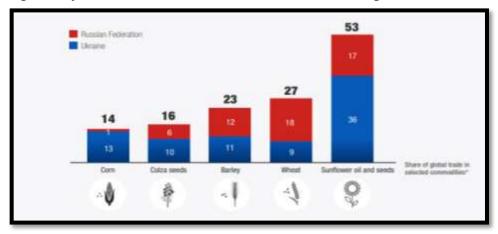


Figure (°) Russian Federation and Ukraine: Global players in agriculture food markets. Source: UNCTAD, 2022.

Wheat markets are the biggest example of this. In the period between 2018 and 2020, Africa imported \$3.7 billion of wheat (32 % of total African wheat imports) from the Russian Federation and another \$1.4 billion from Ukraine (12 %) of total African wheat imports). The wheat imports of the least developed countries from the two countries were, respectively, \$1.4 billion (29 %) and \$0.5 billion (10 %). It should be considered that some African countries, especially some less developed countries, have a much higher degree of dependence for other countries on wheat imports from the Russian Federation and Ukraine than these total

العدد الرابع ـ اكتوبر ٢٠٢٢

Ahmed Salem Ahmed Seif

percentages. Up to 25 African countries, including several LDCs, import more than one-third of their wheat from the two countries, and 15 of them import more than half (Fig. 5).

The import mainly includes North African and East African countries, as well as a few countries already suffering from internal conflicts and precarious food security situations (United Nations Conference on Trade and Development, 2022a).

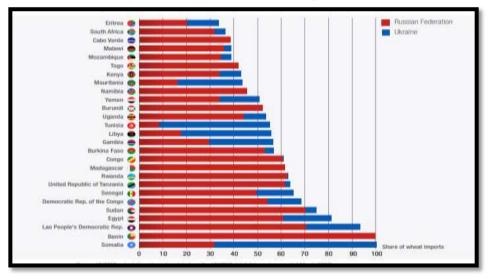


Figure (%) Wheat Dependence in African and Least Developed Countries Source: UNCTAD 2022.

With the outbreak of the Russian-Ukrainian war at the beginning of 2022, an organization formed to address the food security crisis in Egypt due to the threats facing the Egyptian economy. After that situation, the food decline in Egypt stems from the inability of the

Ahmed Salem Ahmed Seif

agricultural sector to produce enough grains, especially wheat and oilseeds, to meet even half of Egypt's domestic demand. Numbering 105 million people. This led to Egypt becoming the largest importer of wheat in the world and among the top 10 importers of sunflower oil in the world (Tanchum, 2022).

Nevertheless, the Russo-Ukrainian war at that time pushed prices to high levels for Egypt, and this led to an increase in the price of wheat by 44% and the price of sunflower oil by almost 32%. This caused alarm after the war threats on the material supply of Egypt because 85% of the wheat it imports from Russia and Ukraine, as well as 73% of the sunflower oil. After activity in Ukraine's ports had completely ceased, it actually allowed Egypt to find alternative suppliers after the war. Meanwhile, Egypt once again faced severe wheat shortages amid rising prices. By the beginning of 2022, just one week after the Russian invasion of Ukraine, the settlement price of the soft wheat contract in March 2022 was around \$389 per ton.

With Russia being the world's largest wheat exporter and Ukraine the world's fifth largest wheat exporter, accounting for a total of 30% of global wheat exports, prices are likely to remain high throughout the war. In addition, this leads to an increase in the cost of importing to Egypt. With more than 88% of Egypt's population enrolled in the bread rationing system, the Egyptian

Ahmed Salem Ahmed Seif

government has allocated \$3.3 billion to subsidize bread in the 2021/2022 budget, an increase of 10%.

And not only bread was affected by the war, but when the war began between Russia and Ukraine, the war contributed to disrupting Egypt's supply of sunflower seed oil, which is the main supply to Egypt, and the government imports 95% of its vegetable oils and provides it to Egyptian consumers. Ukraine and Russia are the world's major exporters, accounting for more than three quarters of the world's export supply of sunflower oil.

Since Ukraine and Russia are the exporters who dominate the export of oils and wheat, Egypt cannot easily find alternative suppliers very easily. The government raised the price of subsidized vegetable oil by 23.5%. While the subsidy cut was helpful in combating the early 2021 wave of COVID-19 from global edible oil inflation, the Russo-Ukrainian war in early 2022 turned that wave into a high-priced tsunami as countries scramble to find alternatives to sunflower oil.

The impact of the Russian-Ukrainian war on shipping in Egypt has increased pressures on the global supply chain, which has strained by the war, as the war has led to a rise in oil prices in rising shipping costs, and container ships have forced to turn to alternative routes because the main ports are closed. And not only that, but the global shipping giants such as MSC, Maersk,

Ahmed Salem Ahmed Seif

and CMA CGM, which are based in Egypt, as all roads to and from Russia were closed until another time.

But in general, there is an increasing difficulty in booking container ships for incoming and outgoing goods, especially as companies face this difficulty when it comes to booking goods on container ships for shipment if they are exported or imported to and from many markets, in addition to the supply chain disruptions that It started with the Covid-19 pandemic, but the main issue led to a rise in demand for goods, and this may prompt that shipping lines are working to withdraw empty container ships from markets and redirect them back to markets, which led to high shipping costs and a shortage of container space.

And with the increase in costs, the prices of inputs such as fuel have also increased, with which the global logistical challenges have also increased, as the logistics sector faces significant increases in cost, as fuel represents 60% of the cost of the sea voyage for commercial ships, and that the increase in oil prices due to the war, this led to Increasing freight rates by an additional 5 to 10%. The freight market in Egypt currently does not have a viable solution to address this shortage of container space independently due to adequate storage options and warehouses and the lack of independent shipping companies.

Ahmed Salem Ahmed Seif

Moreover, the global conglomerates acquired many local shipping and logistics companies in the past few years under the pretext of providing the best-integrated services to their customers.

In addition, Egyptian agricultural trade with Russia and Ukraine in particular is questionable because some shipping lines have suspended their tracks, especially in the Black Sea, and Egyptian exporters have adopted the ZIM line, which runs from Dekheila port in Egypt to the ports of Novorsk in Russia and Odessa in Ukraine. The suspension of this line at this time, which is one of the largest refrigerated container lines in the world, to the continued disruption and suspension of loading and unloading operations in the port of Odessa in Ukraine and the ports of Saint Petersburg and Novorossiysk in Russia due to the result of the war between the two countries.

However, in the end, the Suez Canal may witness an increase in the number of ships transiting between the Gulf States and Europe - especially liquefied natural gas tankers and bulk ships carrying grain - so the Suez Canal considered now as an alternative market for Russia and Ukraine. In addition, the Suez Canal has achieved additional revenues ranging from Between 20 and 22 million pounds per month, especially after the authority decided that the liquefied natural gas companies would pay the entire transit price (Ventures, 2022).

### 4. Conclusion and recommendation:

This new virus has caused the closure, congestion of ports and disruption in the supply chain, especially in the field of import and export. A slowdown in freight detected for some carriers as 111 empty flights arrived in some ports due to COVID-19. The biggest problem is that container-shipping rates have fallen a lot since the spread of COVID-19 all over the world. Therefore, the rate of foreign trade in Shanghai port has decreased by 11%. COVID-19 has affected the blockage of global sectors, especially the logistics sector and impeded demand for goods and global supply chains. We are on the brink of a global debt crisis. Even before the start of this crisis developing countries spent on average 16% of their export earnings in servicing their debt obligations, with Small Island developing states spending more than twice this percent. By comparison, after the Allied Powers restructured Germany's debt in 1953, debt-servicing payments never exceeded 3.4 percent of export revenues in any year.

The following business continuity strategies should be recommended to reduce disruptions to the transport sector in the context of the spread of COVID-19 and the Russian attacks on Ukrainian:

• Enhancing cooperation between the private sector, government authorities, and customs to streamline transportation operations and ensure the smooth running of shipping activity.

Ahmed Salem Ahmed Seif

• Integrating digital channels across all sub-sectors to protect the economic sector from future risks such as the spread of COVID-19, including electronic quotations and electronic bills of lading

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