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RUSSIA-UKRAINE CONFLICT: INSIGHTS ON IMPLICATIONS OF WAR FOR BUSINESSES

ABSTRACT

Ongoing conflict between Ukraine and Russia is one of the most pressing issues for international businesses. The topic is gaining enough attention from mainstream business press, but there is no much academic work on the issue from Russia Ukraine conflict in 2022. To address the gap, this review article addresses the impact of Ukraine crisis on the firms operating in Russia and Ukraine and on the global industries considered to be highly affected in war. Research design adopted for the review paper is exploratory research that is built on analysis of secondary data for a period of three months following the war, i.e., February to April, 2022. Sources of the data includes e- newspaper, scholarly articles, relevant government and non-government publications and expert interviews. Evidence from literature indicates that the war has a lethal effect on businesses which belongs to or are trading with Russia and Ukraine but the entire world has started to feel discomfort of the war as major global industries are suffering due to crisis. The study contributes as a conceptual foundation to the knowledge on implications of geopolitical crisis on international businesses and can be utilized to link them to the next major crisis world will have to face.

Keywords: Russia-Ukraine war, businesses, oil companies, food industry, semiconductors

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INTRODUCTION

In February 2022, when the world was still recovering from COVID 19 pandemic, Russia invaded Ukraine to prevent them from joining National Atlantic Treaty Organizations (NATO). World leaders considered it as start of a war and imposed tough sanctions against Russia, in response to which Russia implemented sanctions on those countries as well (Ahmed, Hasan and Kamal, 2022). There had been some symbolic sanctions as well, such as suspending sports competition and cultural events involving Russia, to bring the feeling of isolation from rest of the world. But are the sanctions affective only against Russia? Does the war have consequences only for Ukraine and Russia? The answer is straight forward. The war will have global consequences, immediate and long-term consequences, first-order and second-order consequences (Kumar, 2022).

The human cost of the invasion within Ukraine is already tragic, but the possibility of other potential impacts due to the involved country's pivotal importance in the supply of essential commodities used by households and industries worldwide, cannot be ignored (Ratten, 2022). In the wake of sanctions and counter sanctions from Russia, one group to have been largely affected is businesses all around the world, by leaving behind assets to war, losing customers, investors and most importantly losing suppliers. In words of Lim et al. (2022), war is “a condition where a devastating fight (e.g., armed conflict, economic embargo) occurs between opposing forces of great influence (e.g., countries, groups of people), thereby impacting the entities under siege (e.g., business and society within opposing forces) and their equivalent stakeholders (e.g., business and society) outside opposing forces”.

Despite significant consequences of geopolitical conflict for international business, research on such conflicts and international business is finite (Curan and Zignazo, 2011; Sigurjonsson and Mixa, 2011). Among the studies from latest crisis world had to face, Lemaire (2020) and Liuhto (2020) examined the impact of COVID 19 pandemic on global economy, specifically on international business. Several previous studies have assessed the economic implications of 2014 Russia-Ukraine. Venkuviene and Masteikiene (2015) examined the effect of Russia and Ukraine geopolitical crisis and following Russian embargo on the Central and Eastern European countries business environment, for which they found dairy and meat sector to be suffered most from the war. Shida (2019) and Kuzmak (2015) empirically examined the impact of Russia Ukraine 2014 crisis at micro level and therefore asked managers of firms for implications of war on their business activities in Russia and Ukraine, respectively. At the same time studies were conducted to assess the effect of

Ukraine 2014 crisis at macro level as well (e.g., Singh, 2015). In fact, possible implications of Russia Ukraine 2022 conflict on global business world are being highly discussed in mainstream business press but not much quality academic publication is available till now, as conflict is still ongoing with new updates getting released every day. Our business world which recently accepted to 'new normal' due to the pandemic, will have to add a number of new elements as well. Even though the actual impact of the war will be fully known only at the end of it, this paper is created to investigate the consequences, which businesses from countries at war and anyone trading with them is facing in initial days of the war (till April 2022). Further industries being affected at the global level and possible flow of globalization after the war is also discussed in the write-up.

Methodologically, the paper is built on secondary data analysis over a period of three months i.e., February to April 2022 and official trade reports published by concerned government and international agencies. The authors recorded and reported real-time events from national and international e-newspapers, and updated any major development about noticeable influence of Ukraine crisis on business world, in the records. The rationale behind using newspaper publication as main source of data is the modernity of the topic. Any relevant interview videos on the topic in contemplation for this study and scholarly articles on background of Russia-Ukraine conflict was also considered sources of data. The study is basically an overview of viewpoints expressed on topic of interest and author's interpretation from the published facts (Hirsch, 2021). The vital keywords used to search for the related article are 'Ukraine crisis and businesses', 'Russia Ukraine war and businesses', 'Russia-Ukraine Conflict and Businesses'.

BUSINESS IN RUSSIA, UKRAINE AND THE TRADING COUNTRIES AMID WAR

This module will discuss on the position of various business establishments in (a) Russia and Ukraine amid war and (b) any other country involved in doing business with them.

The case of Russia

Russia's invasion of Ukraine has invited sanctions for Russia by a notable number of countries. These sanctions that target (i) individuals close to President Putin (including Putin himself), (ii) government and state-owned Russian companies, (iii) banks, (iv) military focused firms, (v) export and import of certain goods and technologies, will not only trouble

Russian enterprises but any of the business interests who keeps close trade relations with Russia (Grieverson, Artem, Landesmann, and Pindyuk, 2022). Furthermore, international sanctions against Russia have been responded in the form of Russian sanctions on various countries.

With the sweeping sanctions, number of companies decided to limit, put on hold or completely suspend business activities in and with Russia (Al Arabiya News, March 2 2022). As per the data, accessed on 30th May, 2022 and maintained by Yale School of Management, almost 1000 Multinational companies have decided to boycott Russia since the invasion (Yale School of Management, May 30 2022), but these actions by companies came at a cost. It is estimated that exit of MNCs from Russia had wasted almost \$500 billion which came as foreign direct investment (Dettoni and Irwin-Hunt, 2022).

Russia temporarily banned foreign investors from selling off their Russian assets. Few days back, Wall Street Journal and Business Today reported that with the collapsing economy in the effect of Western sanctions, Russian authorities tried to take a hold on companies' decision and threatened them with arrests and assets seizures (Business Standard, March 15 2022b). This made it clear for the companies divesting from Russia means facing heavy write-downs (Maurer, 2022). However, those 1000 MNCs divested from Russia were reported to be leaving voluntarily to some extent, going beyond what is asked by their respective governments or through sanctions. These *self-sanctions* were because of company's concern for Ukraine or to save the company image (Business Standard, March 3 2022a), or to follow the rivals in the industry. Companies, such as Shell, were reluctant to cut the ties with Russia right away, due to huge write-off for the firm, resulted in severe backlash from the market (Naroff, 2022). To put additional pressure on companies to suspend business with Russia, a non-profit civic participation organization- Good Lobby, initiated *Ukraine corporate index*, which keeps a track of MNCs responses to Ukraine crisis, with subsidiaries or joint ventures in Russia. The records are being shared on social media, so that public can respond accordingly (Segal, 2022). The index is aimed to praise the companies who have reacted to the crisis and shame those who has not. Apart from sanctions, self-sanctions had been a term in discussion from the beginning of the Ukraine crisis. Some companies had been exiting the region, due to logistic issues as well (Business Standard, March 3 2022a).

In the case of Nokian tyres, one of the seven international tyre companies in Russia, has shifted production of some of its vital product line to US and Finland. Such companies deciding to shift the production facility is suffering great amount of *shifting cost* (Al Arabiya

News, March 2 2022). Thus, every option has its own downside. If a company decide to stay, they will have to face repercussion from the market. If a business wants to shift, it has to go through shifting cost. Whereas, if they decide to move out from Russia, they will have to sell off the business in immense loss or nominal value. As per the above discussion, in case of a company deciding to leave, it can be one of three reasons: sanctions, self-sanctions and logistic problems in the region.

The crisis has impacted a range of industries in Russia, from financial companies to travel firms, automakers, aircraft companies, consumer goods, banks (Al Arabiya News, March 2 2022; Naroff, 2022), but worst hit is taken by energy companies, since the oil companies has a significant investment in Russia (MacDonald and Stiff, 2022).

BP, British oil and gas company, received half of reserves from Rosneft (Russian oil company) and owned 19.75 percent of stake in the same, had quit Russia bearing a loss of \$25 billion (Hurst, 2022). Equinor, a Norwegian energy company, stood at production of 25,000 barrels of oil equivalent per day in Russia, followed BP and decided to end its 30-year business relation with Russia and to make no further investment there (Al Arabiya News, March 2 2022). Next, Shell (British oil and gas company) decided to quit its joint venture and all its Russian operations, including its involvement with flagship Sakhalin 2 LNG plant in which it owns 27.5 percent stake. They also cancelled their participation in Nord Stream 2 project aims to take natural gas pipeline from Russia to Germany (Barklie, 2022; MacDonald and Stiff, 2022). Shell also declared to not buy any Russian oil, which they hesitated to do right away, but under market pressure they confirmed and implemented the decision (Naroff, 2022). Following the rivals, American oil and natural gas company- Exxon Mobil, confirmed that they are ending all their operations in Russia that is valued more than \$ 4 billion and will make no new investments. The list is still getting longer (Barklie, 2022; MacDonald and Stiff, 2022). Oil giants spends year to form these collaborations which collapsed in days following Russian rampage in Ukraine.

All the companies mentioned, before they believed their business is their only business, they did not take any action when Russia annexed Crimea in 2014. But they probably realized that the cost of staying in Russia will outweigh cost of leaving this time.

The current crisis may impact banking sector as well. Domestic Russian banks with European banks having subsidiaries in Russia are the most exposed financial institution to the sanctions. As per the information provided by agency Fitch, the French bank BNP Paribas and Credit Agricole with maximum number of subsidiaries in Russia, they are most

vulnerable in this case (Aminnu, 2022). There is a strong likelihood that the debts provided to Russia and Ukraine will face potential default. US investment research firm Morning Star reported that due to debt failure default, European, US and Japanese banks could suffer noticeable losses, that could reach up to US\$150 billion (*ibid.*) Some international banks are banned from keeping any transaction with Russia; hence, they will lose a huge customer base (Mirdha *et al.*, 2022).

Russian airline and tourism industry was hoping to rebound after the havoc caused by two years of pandemic, but sanctions and airspace restrictions has stolen away that hope. Sanctions and the war itself are making foreign tourists boycott Russia, which used to be 25 million a year (Geerts, 2022). Also, list of the possible places to visit has depleted for Russian tourists in the effect of sanctions worldwide (Proctor, 2022). Even for those countries reluctant to impose travel sanctions on Russia, after suspension of SWIFT (Society for Worldwide Interbank Financial Telecommunication) services for major Russian banks, it became quite difficult for Russians to make payments for airline tickets and hotels abroad (*ibid.*).

Non-Russian airlines boycotting Russia, leasing companies recalling leased planes, companies like Boeing and Airbus deciding to suspend providing maintenance to Russian Airlines have led to limited number of airlines available in working condition for Russia (Geerts, 2022). The sequel to the said action is expensive flights, which makes it difficult for average Russian to afford travelling while their income and future is already shaken.

Every Russian domestic and international business has a lot to lose in the conflict, including international consumer market, long-term foreign partners, logistic system and market price to negative in international stock exchanges such as World exchange and London Stock exchange (Statista Research Department, May 6 2022). Due to dismissal of major Russian banks from SWIFT network, which is gateway to the international money transfer, Russian businesses find it difficult to access financial markets, or to pay to their traders or be paid by them. (Ropes and Gray, March 3 2022). In some cases, shares of Russian companies, classed as Global Depository Receipts (GDR) and American Depository Receipts (ADR), are being suspended, causing some pain for the foreign shareholders but severe loss to the companies (Gard, 2022). Small Russian firms engaged in tourism activities, importing or exporting goods in Russia and selling those imported goods will be insolvent (Aleksashenko, 2022).

Trade sanctions and other war-owned consequences has dealt a major blow to the global trade (export and import) for both the sides involved (Kumar, 2022). For instance,

Indian textile sector is witnessing a serious threat in export as Russia and Europe are crucial markets for them but the region has been inactive in trade activities, which would affect the profit for textile sector of India (Agarwal, 2022)

From the record of global trade in 2020, available on Trade Map, it is evident that those countries who are active in sanctioning Russia are among top five in export with Russia (China, Netherlands, United Kingdom, Germany, Belarus) and top three in import (China, Germany, United States of America). This indicates the abundance of companies suffering from bans on trade with Russia (International Trade Centre, 2020a).

In another set of unwanted action for Russia, not only banks are denying to finance trading of commodities from Russia, *trade credit insurers*, who act as a safety net for exporter or importer, for any loss due to non-payment by the client, are staying out from any deal involving Russia or Ukraine (Kamath, 2022; The Telegraph Online, March 5 2022).

The case of Ukraine

Ukraine being a war-hit country is significantly disrupted for running a business (Sullivan and Granitz, 2022). Everyone has lost their market in Ukraine, and in some cases, negative consequences may reach to neighboring countries (Mirdha *et al.*, 2022). As per GlobalData's Multinational Companies Database, around 300 MNCs have at least one subsidiary in Ukraine, indicates tough times for the subsidiaries of these MNCs (Barklie, 2022). Most of the companies in Ukraine have already suspended their operations due to ongoing crisis in the country. For instance, Bunge, an American agribusiness and food company, Scatec, a Norwegian company specializes in renewable power production, each with ten subsidiaries in Ukraine has temporarily suspended their business in the country. Similar actions are taken by others such as Henkel, Inditex, Nestle (*ibid.*).

From Trade Map database published for global trade in 2020, Ukraine's export and import is 0.3 percent of world's total export and import (International Trade Centre, 2020b and 2020c), but in case of scarcity of supplies from Ukraine, especially industrial commodities, industries are going stagnant on the receiving end. Taking an example, Leoni AG, a global supplier of wire, cables and wiring system, had to shut down two of its factories in Ukraine. Leoni AG supplies wiring system made in Ukraine to European automakers and in absence of the same, Volkswagen AG and BMW had to temporarily suspend its plant in Germany (Business Today.In, March 2 2022a; Simchi-Levi and Haren, 2022).

Ukraine is a major hub for IT and tech industries, with the increment of 36 percent in the export of IT development services between 2020 to 2021 (Chakravorti, 2022). But with the Russian invasion, the tech cluster of the country had been imperiled (*ibid.*) It is argued that due to nature of services, IT sector employees can be shifted to neighboring countries and continue their services from there, which is not possible in case of less agile operations such as food processing companies or manufacturing (Shehadi and Whiteaker, 2022). Nonetheless, due to restriction for Ukrainian males between 18 to 60 to leave the country (Gilbert, 2022), this kind of shifting for IT sector employees may not be a practical option.

Ukraine, which was a recognized tourist destination in its own way, will miss out on the revenue from 14 million tourists a year (Globetrender, April 28 2022). Besides, war has destroyed Ukrainian national and cultural heritage such as historical buildings, monuments, causing disfigurement of tourism sector in Ukraine (Radio Free Europe Radio Liberty, April 27 2022).

Intimidated with the current conflict, investors will be reluctant to invest in Ukraine in future for some time, moreover, the business infrastructure will be destroyed and will take time to be restored. The time for restoration can be decided only when the war comes to an end.

NEGATIVE CONSEQUENCES OF WAR FOR GLOBAL INDUSTRIES

In the record of JP Morgan Chase, Russia and Ukraine together account for almost 3 percent of global export (Lynch, 2022), but they are crucial being a significant or in some cases biggest exporter of industrial commodities. Industries from aircrafts to pharmaceutical to plastic will all be affected, but following is a discussion on the sectors going to feel considerable burnt. The following industries are selected based on literature available on the topic and level of export done by the two countries involved in the war. To be more specific, the literature available was screened to jot down the business sectors on which implications of Russia-Ukraine war has been discussed and were found to be the one for which Russia and Ukraine shows highest export level.

Energy industry

Initially, heavy sanctions on Russia were designed to avoid targeting vital energy exports. The idea was to not disrupt the supply of Russian crude oil and natural gas due to their requisite nature in households and industries. Eventually countries such as USA, Canada, UK banned or curb import of Russian oil and gas (Posner, 2022), but even for countries with no restriction on Russian oil and gas, companies are facing difficulty as private actors are not willing to do business with Russian oil and gas companies or ports not willing to deliver it. These ‘self-sanctions’ are to avoid any future loss (Gaffen, 2022).

Being one of the top three crude oil producer ([Trading Economics, 2022](#)) and largest natural gas exporter in the world (Kamath, 2022), Russia accounts for 12 percent of global oil and 17 percent of global gas (The Hindu, March 4 2022). Infact, half of the world’s natural gas reserves belongs to Russia, along with Iran and Quatar (Al Jazeera, March 25 2022a). Nearly 40 percent of gas (Gaffen, 2022; Johnson, 2022) and 30 percent of oil in Europe (Johnson, 2022) comes from Russia. The big numbers are easy justification for ongoing oil and gas supply crisis in the world. Even if European countries are willing to buy Russian gas and Russia is willing to export, supply will be disturbed as most of the gas pipes from Russia to Europe passes through war-ravaged Ukraine (Gaffen, 2022).

Supply disruptions is leading to higher prices of oil and gas (The Hindu, March 4 2022), in fact oil export prices have been highest in 50 years (Agence France Presse, April 2 2022). The worry with increasing crude oil prices is that it is sincerely felt by every individual in the world, in form of inflation, especially passing through industries heavily reliant on energy sources (The Hindu, March 4 2022).

Oil industry is one of the most dominant actors in the world economy due to its variety of uses, starting from energy generation in household and factories, to its usage as raw materials for gasoline and other petrochemical products, such as plastic (Sonnichsen, 2022). Hence, fluctuation in oil prices has significant effect on not only consumers but industries (or manufacturing sector) as well.

As crude oil and its by-product are utilized across industries, it is evident that directly or indirectly every sector will be affected, but direct consequences will be felt on aviation, automakers, oil marketing, paint and tyre companies (Karthik, 2022; Oberoi, 2022). A mutual form of indirect effect of oil price is being felt on businesses through higher freight rate/transportation charges, as they will be spending more in transportation.

Transportation industry

Oil and gas prices are soaring as a consequence of Russia-Ukraine war, will have a significant impact on transportation industry, since they are the highest energy-intensive of all major industries (Egan, 2022; The Hindu, March 4 2022). In 2021, due to pandemic, global supply chain reached to a breaking point since borders and ports of countries were closed. It led to delays, shortage of products and skyrocketing transportation cost, over 300 percent from before the pandemic. (Egan, 2022; The Hindu, March 4 2022). Only when companies thought things might get back to normal, a number of sanctions on Russia had shifted ongoing war as the biggest risk for already fragile supply chain (Egan, 2022). Shipping companies, such as A. P. Moller-Maersk (world's biggest ocean-based shipping company), has denied shipping to and from Russia, causing cargo to further pile up and increase pressure at European terminals (Lynch, 2022; Aleksashenko, 2022). Companies will specifically have delayed delivery to and from European manufacturers. Moreover, Russian products are being sanctioned, causing extra custom inspection and further delay for them (Karunakar, 2022). It is to be noted that shortage and delays of deliveries means further price pressure on transportation, which can be felt by producers as well as buyers of the product (*ibid.*).

Shipment of products using air and rail is also facing problems. Dozens of countries have banned Russian airlines from using their airspace. In response to that, Russia has banned flights from 38 countries to enter into their airspace (MacDonald and Stiff, 2022). This restriction from Russia is a major shock for the airlines as they are not able to fly over the biggest country in the world, Russia, which they usually pass through while going from Europe to Asia (Kamath, 2022). This means airlines have to divert from usual routes, forcing them to spend more and probably carrying less (Kamath, 2022; Cohen, 2022).

A number of companies manufactures semi-finished and finished good in China and get it delivered to Eastern and Western Europe using Russian railway (Simchi-Levi and Haren, 2022). But a ban on usage of Russian transportation has created a difficult situation for transportation industry, as airlines and ocean are significantly expensive due to their own constraints amid war.

Automobile and electronics industry

Due to pandemic, automobile industry was already seeing scarcity of semiconductors and was further hit by Russian invasion of Ukraine, since both conflicting nations are responsible for significant supplies of two vital raw materials- neon and palladium, used in

making semiconductors. Russia, followed by South Africa is the biggest producer and supplier of palladium in the world (Statista Research Department, May 6 2022; The Hindu, March 4 2022). Almost 44 % of world's palladium comes from Russia and 70 percent of neon gas is supplied by Ukraine to the world (The Hindu, March 4 2022). Both the countries being involved in a conflict has disrupted the supply chain of semiconductor, which has put semiconductor market on tough spot again, ultimately enhancing the trouble of automakers.

Besides semiconductors are known as “the brains of modern electronics”, as they are crucial element for consumer electronics (*ibid.*), hence semiconductors shortage will also affect electronics industry. Rich in natural resources, Russia is major exporter of various other rare earth metals, such as nickel, aluminium, steel, platinum, scandium which are used in automobile sector. Producing 10 percent of world's nickel (Business Standard, April 3 2022c), Russia is world's third largest producer and significant exporter of nickel, that are key component for electric vehicle batteries (S & P Global, March 8 2022; Statista Research Department, May 6 2022). In fact, Norilsk Nickel, a Russian metal giant is world's largest nickel producer and is responsible for 5 percent of world's nickel production (MacDonlad, 2022). Russia is world's fourth largest supplier of aluminium, whereas Russia and Ukraine are decent exporter of steel (MacDonald, 2022; Jagga, 2022). As per SteelMint, Russia produced 3.9 metric tons of aluminium in 2021, which is 6 percent of total world supply and about 10 percent of world's total steel exports was given by Russia and Ukraine (Mirchandani, 2022). Aluminium market was already compromised due to limited supply from China and Europe, even before the war started, war is increasing the tension in market for aluminium. Interestingly, Russia is also a top exporter of coal (Denina and Menon, 2022), which is key element in production of metals such as steel, indirectly affecting the availability of metals.

Ukraine and Russia are also key exporter of platinum, which is used in catalytic converter. (Bhargava, 2022). Russia is crucial for supply of scandium as well, as the said metal is used in making of computer chips (Pant, 2022). Scarcity of these rare metals will hamper electronic companies too, as many of these rare metals are utilized in creating gadgets like mobile phone, camera and such (Vishnuaravi, 2022).

Ukraine is vital supplier of car component supply chain (Shehadi and Whiteaker, 2022), therefore, Ukraine being war struck will affect the supply of those car components for automakers. For example, wiring harnesses, 10 to 15 percent of total EU supply of which is estimated to be produced and exported from Ukraine. The supply is disturbed due to

ongoing war and has affected regular functioning of automakers in Germany, Poland and elsewhere (Business Standard, April 3 2022c). Overall, constant rising oil prices, increase in semiconductor shortage, interrupted supply of rare earth metals and car components from Russia and Ukraine is influencing electronics and automobile sector of the world.

Food industry

Ukraine and Russia hold second and third ranking, respectively, in world export for cereals (International Trade Centre, 2020d and 2020e). The two countries together account for 29 percent of global wheat export (Kamath, 2022; Pandey, Kondalamahanty, and Nandy, 2022), 19 percent of corn export (Financial Post, February 28 2022; Pandey *et al.*, 2022) and 80 percent of sunflower oil export (Business Today. In March 2 2022a; Kamath, 2022). Mark Manger, professor of political science at the University of Toronto stated that Russia, Ukraine and Canada are three breadbaskets of our world (Financial Post, February 28 2022). In an exclusive manner, Ukraine used to be called as breadbasket of Soviet Union, is now known as breadbasket of European Union (Leiva, February 25 2022). Agricultural robustness of Ukraine is due to its highly fertile black soil, which is said to have 25 percent of world's reserves in it (*ibid.*).

However, due to ongoing conflict between Russia and Ukraine, production in Ukraine is affected, Ukraine ports are closed and Russia is facing financial and shipment issues, hindering exports of food commodities from world's biggest grain-growing areas, resulting in surging prices of food commodities and food (Financial Post, February 28, 2022).

According to UN's Food and Agriculture Organization report published in April 2022, restricted supply of grains recently has raised global food prices at a significant level. It is said to be highest since opening of World food price index (Pandey *et al.*, 2022). Wheat markets which have already been on edge due to harvest issues, is struggling further as Russia-Ukraine war is causing supply disruption, and higher energy and transport cost (Leiva, 2022) Disrupted supply of corn from Ukraine, a major exporter of corn, has led to sweeping world corn price (Pandey *et al.*, 2022). Rising grain prices will be a challenge for food manufacturing companies, which depends on wheat and corn as their raw material.

Sunflower oil, which is almost used in every kitchen product like mayonnaise, bread, margarine, said to be world's fourth most consumed cooking oil (Leiva, 2022). Ukraine alone accounts for almost half (47 percent) of the world's export of sunflower oil and Russia is the second largest exporter (Chaudhuri *et al.*, 2022), both the countries are

involved in war, which has led to global shortage and ascending prices of sunflower oil. This has triggered a domino effect in the form of high prices of other alternatives of oil in the market, such as rapeseed oil, soybean oil, palm oil and has resulted in record high prices of cooking oil globally (Holiday, 2022). Food companies are struggling to find a proper alternative to sunflower oil, but it is certainly not easy, not just because of shortage of cooking oil, but there are a number of milestones to achieve before deciding to change the content of their product. Manufacturers are required to test the suitability of alternatives of sunflower oil, make any other internal alterations and take care of regulatory requirements of the country (Chaudhuri *et al.*, 2022). In addition to the rest, glass jars, produced abundantly in Ukraine and used by food companies, are priced heavily amid the war (*ibid.*).

Ukraine and Russia are also major producer of fertilisers (Sullivan and Granitz, 2022), where Russia has highest share in world export of fertiliser (International Trade Centre, 2020d). Any interference in regular supply of fertilizers from Russia and Ukraine would take some time to show its effect in food prices (Financial Post, February 28 2022), but there would be a dramatic impact on food companies through increasing food (or food commodities) prices in future.

Surge in global food prices will have a parallel effect on packaged food companies, food processing companies and hotels/restaurants (Barry, 2022). Restaurants, which are already struggling to maintain genuine prices for the food they serve, with constant increase in Liquefied Petroleum Gas (LPG) prices everywhere, will have to pass the cost on consumers with increase in food prices.

Tourism industry

In the effect of Russia-Ukraine conflict, tourism industry has realized sudden drop of Russian and Ukrainian tourists in the world (Proctor, 2022). Available data from UN World Tourism Organization (UNWTO) reports that these two countries together accounted for 5 percent of global tourist departures in 2019, but the fact that they are bigger spenders than others as tourists, especially Russians, makes them more crucial (8 percent of global tourism expenditure) (Globetrender, April 28 2022; The Kashmir Monitor, May 2 2022). In March 2022, UNWTO mentioned that altogether the two European countries at war makes 3 percent of global spending in 2020, accounting for around \$14 billion (Proctor, 2022). Hence, escalating tensions between Russia and Ukraine is costing to the ailing tourism industry through decline in number of Russian and Ukrainian tourist and the setback will

be mostly felt by Turkey, Thailand, Poland, Italy and China, being top tourist destinations of Russia and Ukraine in UNWTO (2018) records (Globetrender, April 28 2022).

Restriction on Russian and Ukrainian airspace and boycott of Russian airlines by many countries worldwide is making international airlines to suspend the flights or take diversion to ignore using Russian airspace while intra-European travel or travel from east to west of the world (Karadima, 2022; Globetrender, April 28 2022; Proctor, 2022). Jet fuel or Aviation turbine fuel (ATF), constitutes for 20-30 percent of airline's operation costs and has been reported by International Air Transport Association (IATA) to surge by 80 percent than last year (Globetrender, April 28 2022). Spike in fuel and food prices and in distance to be travelled due to re-routing means sky-scraping flight fares, will have a ripple impact on airline and tourism sector through decline in demand (Times Now, March 3 2022). The ongoing war is charging heavily on tourism sector of Central, Sothern and Eastern Europe (Diamond, 2022), specifically for the neighbouring countries to Ukraine as it is difficult to reach there because of airspace restriction in Russia and Ukraine. In addition to that, war has huge hit on travel confidence and disposable income for worldwide consumers (Globetrender, April 28 2022).

IT industry

There is abundance of discussion on the cost energy and commodities market is paying due to current war, but the issues faced by IT industry had not been highlighted enough. Ukraine before being invaded was crucial and expanding source for tech talent, with over 4,000 tech companies in Ukraine (Kannan, 2022). One in every five Fortune 500 companies in the world were availing IT services from Ukraine (Chakravorti, 2022). Such expansion in Ukrainian market was happening because of availability of English-speaking IT developers in a market closer to the client time zones from Europe, America and such (Chakravorti, 2022; Moorthy, 2022). Disturbance in Ukraine has an impact on all those companies taking third-party services from the region (Kannan, 2022).

Besides, non-Ukrainian tech companies has been approaching the region to utilise the IT talent of Ukraine. As per ISG, a US based research and advisory firm, about 50,000 tech workers and 2,00,000 odd technology freelancers were working in Ukraine. Being affected by militant actions in the country, unavailability of these workers will hamper the functioning of tech companies globally, while they were already facing worldwide tech talent shortage (Chakravorti, 2022; Majumdar and Sangani, 2022). International Data Corporation (IDC) reports that over 1.3 million people were employed in Russian IT sector in 2019

(Kannan, 2022). The attractive numbers of employees in IT sector of both countries gives significance of level of disruption caused by ongoing war in Ukraine and imposed sanctions on Russia.

Ukraine crisis will certainly not be limited to above industries, but it will have some common effect on industries from any background. Industries with no direct links to the situation will feel the effect as well, because of sweeping freight rates after oil prices has shown a significant increase (Mirdha, *et al.* 2022). Companies are assuming the war and high inflation in the market to impact on consumer demand as well. For instance, clothing retailer such as American Eagle is considering the war while forecasting its outlook for coming year (Thomas, 2022). However, it is to be noted that the impact on consumer demand will depend on the nature of the product. For instance, products like clothes, handbags, which are not essentials for survival of customers will see more effect of inflation on their demand.

RUSSIA-UKRAINE CRISIS: AN OPPORTUNITY FOR SELECTED INDUSTRIES/COUNTRIES

If we see the other side of the picture, conflict has directly boosted war related industries, and there are other sectors/countries can be benefitted, if they can offer alternative suppliers or alternative commodities for blocked supplies from Russia and Ukraine.

War related Industries

Armaments Industry

The ongoing war has taken a toll on global unrest, keeping every country on high alert. Therefore, countries are willing to make more investment in armament and defence equipment, resulted in improving profit of arms industry (Kumar, 2022). In addition to that, Russia had been second largest exporter of major weapons between 2017 to 2021, preceded by USA (Statista, 2022). Involvement of Russia in the war will impact their ability to supply weapons and the implemented sanctions on the country will give an opportunity for arms industry outside Russia to reap profit from the situation. Earlier signs of it could be seen by climbing shares of defence giants, such as Raytheon Technologies, Lockheed Martin, since February of this year (Helmore, 2022).

Cyber security companies

Cyber warfare is sine-qua-non to any military attack these days, and Russia is a leader in cyber-attacks (Chakravorti, 2022). Russia has a tendency of weaponizing digital platform and the ongoing conflict has been characterised by intense cyber warfare, which has created a panic among companies about cybersecurity risks. Organizations are focusing on strengthening their security against such cyber events. As per Goldman Sachs survey, security is the top most priority of companies for investment in 2022 (Krause, 2022), which gives an opportunity for cyber security companies.

Alternative suppliers

Ukraine crisis has given a chance to companies/countries to offer substitute for commodities previously exported by Russia and Ukraine.

Oil Industry

The uncertainty of global energy market is turning out to be a boon for oil, hydrocarbon and Liquefied natural gas producing companies outside Russia, such as the one from Middle East (or more specifically GCC countries), North Africa/Latin America (Alami, 2022; Al Jazeera March 25 2022b; J P Morgan Global Research, 2022). Rising energy prices due to fear of prolonged war is reinforcing their revenues. Companies like BP and Shell, who has suffered most in the war will proportionately gain than their losses from the high-priced oil (Alami, 2022).

Tech Industry

Due to intrusion of Russia, 4,000 tech companies in Ukraine will face difficulties with day-to-day activities and getting any new project in future, as ongoing tensions make their clients worry about the security of their data in Eastern Europe. (Kannan, 2022). In this case, the investment of IT providers will get shifted from Ukraine/Eastern Europe to other IT hubs such as India.

Neon gas Industry

Ukraine being biggest source of neon in global market has caused current scarcity of neon, however, experts had been reporting that neon production not being a tricky job can become a source of business for some (Bhargava, 2022).

Food Industry

Present circumstances of food industry, where market is facing scarcity of food commodities, can be an opportunity for farmer equipment makers, grocery chains and for countries like India to offer alternative food commodities to the world (Barry, 2022 and Mukherjee, March 7 2022). Farmer equipment makers can put forward certain technologies which can help farmers to grow faster, as the war and its after effect tend to stay for some time now. The comfort for grocery chains is that inflation means grocery budgets will be tight for consumers, hence they might trade down for the cheaper option of high margin private label products.

Alternative commodities

The ongoing war and obstructed supplies for and from Ukraine and Russia can benefit certain industries by offering alternative products or services for those obstructed supplies. Even 'not so suitable' alternatives of those commodities are already gone from the market at an exorbitant rate.

Coal Industry

Considering the global energy crisis, a number of countries are turning back to coal after recently pledging to shift away from it. For instance, France has provisionally allowed companies to use more coals, China has permitted opening of new coal mines and has increased coal production by 10 percent, India is importing in huge quantity and also enhancing their domestic production of coal (Business Today, April 21 2022b; Casey, 2022; The New Indian Express, March 22 2022). Sudden short-lived demand for coal is already making it record high expensive and major coal miners are taking in the profit (Casey, 2022).

Edible oil Industry

With the scarcity of sunflower oil (Ukraine being one of the biggest exporters), customers are going back to other alternatives, even though recently they decided to turn away from those high-priced alternatives. Thus, high demand of the substitutes has raised their price, palm oil has increased by 61 percent, soybean oil by 41 percent, and olive oil by 15 percent (Chaudhuri, 2022).

Tourism Industry

Travel sanctions on Russians by several countries is being used as an opportunity by countries still reluctant to sanction Russia. Taking case of Turkey, which eased payment system (Daily Sabah, April 26 2022) and dedicated flights for Russian travellers, to encourage travelling between the two countries is one of the finest examples (Charpentreau, 2022). Russian oligarchs and travellers are also inclined towards UAE, Egypt, Thailand and any other country did not implied ban on Russian outbound travel (Geerts, 2022). Travel agents from these neutral countries can propound tour packages or special offers to attract Russian travellers, as Russian travel sanction from Western and European part of the world may remain in near or far future.

GLOBALIZATION AFTER UKRAINE CRISIS

First wave of globalization occurred in 19th century but had to see a rough phase with World War I and II, however, in 1990s, with end of World War II, globalization saw a new beginning in its most celebrated form (Vanham, 2019) but financial crisis of 2008 interrupted flow of globalization (Lynch, 2022). The new pattern of world commerce where international economic relations is believed to be slowing down was termed as 'slowbalization' (The Economist, 2019). There was a remarkable increase in energy prices in 2008 and a number of natural disasters in a row, since then (Simchi-Levi and Haren, 2022). Starting from tsunami of 2011 in Japan, floods of Thailand, ongoing pandemic from 2020, it all made global companies realise that our hyper-connected economies are making us highly vulnerable to even a minor shock in the global value chain (World Trade Report, 2021). At the same time, world saw two of its superpowers, US and China, failing trade talks, worsening trade relations, and inflating negative consequences of globalization (Lynch, 2022).

Current war of Ukraine and Russia has once again exposed the risks comes with interconnected nature of global trade (Ruta, May 5 2022). The war and sanctions against Russia are disrupting global value and production chains, which was still recovering from aftermath of pandemic. This is becoming a motivation for many companies to build resilience in their value chain by reducing their dependence on foreign suppliers or transporters (build on just-intime logic) and instead moving towards localization/domestication or regionalization (build on just-in-case logic) of supply and production activities (Consultancy, July 13 2022; Ruta May 2 2022; Posen, 2022). Encouraged by China and US trade war, in January 2020 a survey of 3,000 companies from

different sectors was conducted, in which it was found that about half of the company's intent to reshore back to US (Simchi-Levi and Haren, March 17 2022). Even prominent world economies are introducing policies to promote re-shoring, localization and regionalisation of supply chains. In 2014, UK notified about a national policy named as Reshore UK to encourage offshore manufacturers in vital sectors, such as healthcare, marine to move back manufacturing to their country (Pegoraro *et al.*, 2021). United States is dedicated to spend billions of dollars to strengthen the resilience of country supply chain (Gong, Hassink, Foster, Hess and Garretsen, 2022) and introduced "Made in America" concept, under which local manufacturing will be promoted (*ibid.*). A similar programme is run by Chinese and Indian government known as "Make in India" and "Made in China 2025", whereas Saudi Arabia is creating manufacturing hubs to produce items being imported so far (Alami, 2022).

Localization of supply value chain has two possibilities, one is to manufacture, maintain a supply chain and get consumed in your own country rather than relying on companies from outside and second is to adopt local supply chain strategies from the region customers of the company belongs to. As an illustration, let us consider New Balance, an American sports footwear company, who has recently opened a footwear factory in Metheun. The move is taken to serve "Made in America" initiative, to reinforce their reliance on North America for production and consumption, as a small portion only will be sent outside for sale (Farooq, 2022). Schneider Electric, French based multinational company in the digital transformation of energy management and automation, has decided to construct three manufacturing plants in North America. The company decision to start these plants is to build a sustainable supply chain by manufacturing their products in their customers country (Simchi-Levi and Haren, 2022).

Following the recent history, multinational firms in future will re-evaluate geopolitical risks before deciding on value chain partners and will move away from countries that are riskier (Ruta, May 3 2022). Even this type restructuring of supply chain will differ based on regions, nations, products and sectors (Ruta, May 5 2022; Gong, et al., 2022). For instance, those sectors which have high fixed cost or is based on some sophisticated intermediate product is not likely to reshape supply chain even when there are higher geopolitical risks, unless government policies intervene their decision (Ruta, May 3 2022). Moreover, in instances where supply chains cannot be re-shored, as there might be some sophisticated resources involved which is available only in selective places, US Treasury

Secretary Janet Yellen recommended “friend-shoring” (or Ally-shoring) by moving value chain to some friendly countries with similar values and interests (Ginther, 2022).

The intention of reshoring/backshoring, nearshoring, localization has initiated a heated argument among academicians and otherwise that if this is the end of globalization, also named as ‘anti-globalization’, ‘reverse globalization’ or ‘de-globalization’ (Ruta, May 5 2022; Gong, et al., 2022). Some thinkers believe that deglobalization is bound to happen (e.g., O’Sullivan, 2019), whereas others believe that predictions of deglobalization is only exaggerating the limit to which reshaping or diversification of supply chain will happen (Williamson 2021). It is argued that this crisis will not reverse the globalization, globalization will indeed continue but a new world order will be introduced (Gong, et al., 2022), where re-shoring, near-shoring and friend shoring will be a trend. World will not exist as a unipolar system (as one), whereas multipolar system (countries with similar values and interest will stick together) will arise where trade will be executed among their own respective systems.

CONCLUDING REMARKS

The article theoretically focused on how Russian-Ukrainian 2022 war affects Russian and Ukrainian business and those trading with these countries. The review has also analysed the negative and positive consequences of war on global industries and possible role of war in shaping globalization.

Data and viewpoints given in the reviewed literature, affirm the fact that domestic as well as MNCs in Russia and Ukraine is facing the consequences of war. In Russia, MNCs deciding to stay have to face repercussion from market, those shifting business to some other country have to face shifting cost and those who are selling everything off and moving out is facing heavy write-downs. Among all the industries, the one who suffered most by being a part or partner of Russia is energy companies. Those actors not even involved in business at international level are feeling the heat of the conflict through inflation, decreasing consumer demand with increasing cost of essentials like gas, edible and non-edible oil, wheat and reduction in investment. Whereas, in case of Ukraine, being a war hit country, local as well as MNCs there are facing numerous challenges to function.

It is reported that Russia and Ukraine are responsible for only 3 percent of global export but most of their economic activity is of international nature and their export items are sophisticated industrial commodities. This review has shown that Russia’s invasion in Ukraine has affected almost every domestic and global industry by disrupting supply chain and increase in oil prices which further enhances transportation cost, but the most

significant effect is on energy, transportation, automobile and electronics, food, IT and tourism industry. Effect of war has even reached a common man through inflation in products, which is happening due to disrupted supply chain. But the current war between Russia and Ukraine also brings business opportunities to the war industry and for those countries or industries which can offer alternative commodities or suppliers to the blocked supplies.

The article intends to give a conceptual foundation for researchers and practitioners to understand the consequences of Russia Ukraine war 2022 on international business and can use the findings in similar investigation area. Moreover, this can be used to compare with implications of any future crisis. Evident in this review shows that companies should consider before deciding about their trade partners or else in similar situation like Russia Ukraine war either through sanction, self-sanction or otherwise they will be the one bearing loss. To protect themselves from being consumed in the conflict, companies should study assiduously possible second and third order consequences on their business (for example, increasing energy prices is escalating transportation cost, which is affecting prices of domestic consumer goods). The findings will contribute to the literature by extending the growing body of literature on geopolitical risks and international business. Unlike previous studies (Shida, 2019; Singh, 2020), our review does not only consider direct participants in the war but it includes industries at global level as well.

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