
Russian-Ukrainian War's Effects on the World Economy

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Abstract:

Purpose: *This study looks at how the Russian-Ukrainian War affected the world economy in the month that followed the conflict.*

Design/methodology/approach: *The study has used publications and other research evaluating the facts and the consequences of the war.*

Findings: *The invasion of Ukraine by Russia in February 2022 increased geopolitical tensions between the West and Russia, which decreased expectations for global growth because it was unclear how the conflict would affect the global supply chain in particular. Additionally, Western nations' sanctions against Russia have a ripple impact on the world economy. Conflicts have sparked shocks in the energy supply, the commodities and trade supply, and increased prices for commodities, food, and energy, which has resulted in worldwide inflation in many nations.*

Practical implications: *The conclusions can be used from both parties for further analysis and better policies to negotiate the end of the war.*

Keywords: *Global Economy, war, invasion, Russia, Ukraine, supply chain, energy, food.*

JEL codes: *O10.*

Paper type: *Research article.*

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1. Introduction

As 2022 got underway, the world saw a lot of hope for post-COVID economic growth as many states kept increasing prices under control and increased measures to spur growth. This has resulted in a favorable evaluation of the global GDP, which is anticipated to rise by 4.4 percent in 2022 (IMF, January 2022). In parallel, in February 2022, Russia invaded Ukraine. The battle increased geopolitical tensions between Russia and Western countries, dampening hopes for global growth and raising questions about how the crisis might affect the world supply chain. This article will discuss how the Russian-Ukrainian War has affected the global economy.

Finding justification for starting a war is how this article starts. According to academics, countries get involved in wars to defend their resources or to keep their regional sway (Averre, 2016), while other nations keep their rights. It claims that in order to do this, it struggles to manage more shared resources, colonial resources, heritage, values, or fairly (Malyarenko and Wolff, 2018). In the case of Russia and Ukraine, the goal of the conflict was to safeguard the Russian border and preserve local sway in Eastern Europe (Mankoff, 2014).

When Ukraine announced its intent to join the North Atlantic Treaty Organization (NATO) in early 2008, Russia rejected it, sparking the start of the conflict between the two countries. Shortly after, Russia invaded the Crimean Peninsula in 2014. As a result, there was unrest in Donbas and violent fighting at the Russian-Ukrainian border on February 24, 2022, which led to a Russian outright invasion of Ukrainian land.

The effects of the Russian-Ukraine war on the global economy may not be fully understood until the war is over, but early economic indicators point to some serious repercussions. This article aims to summarize the most important predictions made by specialized scholars and international economic organizations. Early economic indicators indicate that the Russian-Ukraine war has had a considerable influence on the global economy, although the full economic impact may not be understood until the crisis is over. The goal of this article is to provide a summary of the most important predictions made by experts and international economic organizations.

The essay is structured as follows: The research on the concerns discussed is outlined in the section that follows. After that, a summary of the research methodology and the methodologies and data used in this study are presented. The fourth section describes the empirical findings, and the concluding paragraph reviews the findings.

2. Literature Review

Armed conflict has considerable economic repercussions, according to earlier research on the subject. There are two schools of thought about the impacts of war, according to some experts. The "war renewal" school of thought, which is in line

with Keynesian economic theory, contends that war can have positive effects because it weakens the influence of powerful special interests, fosters innovation, and boosts economic efficiency by increasing human capital. In contrast, the "ruins of war" school of thought views war as a catastrophic event with no economic benefit (Kang and Meernik, 2005). Other scholars have pointed out that poor countries are more likely to suffer from a civil war, especially when poor countries are suffering from negative income shocks (Chassang and Miquel, 2009).

The economic impact of war has been objectively quantified in several research. Koubi (2005) looked at the impact of armed conflicts between countries on the expansion of the economies of big countries between 1960 and 1989. According to this study, war's features and incidence are causally connected to the differences in economic growth across nations. According to studies, postwar economic production is positively connected with the intensity and length of the conflict, and its growth-promoting influence fluctuates negatively depending on the nation's degree of economic development.

In their research, Kang and Meernik (2005) examined how the civil war affected various economies between 1960 and 2002. They discovered that a civil war has a significant influence on economic growth and that conflict has a detrimental impact on basic economic principles. A methodology for evaluating the economic impacts of each civil war since the 1960s has been established by Collier (1999). According to Collier's (1999) research, the economy shrank following a brief civil war but quickly rebounded after it.

According to Nordhaus (2002), war is enormously costly. The projected cost of the Iraq War against the United States over a ten-year period ranged from \$100 billion to \$1.9 trillion. Glick *et al.* (2010) examined the effect of war on bilateral commerce using data accessible since 1870. In order to control the possible effects of unfavorable causation with other trade stimuli, they employed a gravity model to predict the impact of war on global commerce. They discovered that the effects of war on commerce, national income, and the health of the global economy were large and long-lasting.

According to research by Ganegodage *et al.* (2014), the conflict in Sri Lanka significantly reduced GDP. Additionally, they discovered that large returns on physical capital investments did not result in appreciable positive externalities.

In the meanwhile, a number of earlier research examined the impact of the 2014 war between Ukraine and Russia. The short-term causal impact of the Donbas War on Ukraine's GDP from 1995 to 2017 is evaluated by Bluszcz *et al.* (2019). In the years from 2013 to 2017, when the crisis began, Ukraine's GDP decreased by 15.1%. Hoffmann *et al.* (2017) examined how the Russian war affected stock returns in Russia and Ukraine from 21 November 2013 to 29 September 2014. According to their results, the conflict decreased stock returns in both markets.

Liefert *et al.* (2019) looked at the effects of the economic crisis in Russia and the embargo on imports of agricultural products from the West and the United States, which began in 2014.

They claimed that the import bans had an effect on Russian consumers by preventing the importation of Russian food and agricultural goods, sharply raising food costs, and lowering consumption. However, import restrictions had little effect on Russia's basic food supply. However, the import restrictions sped up agricultural production in Russia, securing food supplies throughout the embargo.

According to Dreger *et al.* (2016), the 2014 conflict between Russia and Ukraine caused the value of the Russian ruble to decline by 50% in relation to the dollar. According to Havlik (2014), heightened investment risk has caused the costs of confrontation with Russia from 2014 to 2016 to be calculated at around 1% of Russia's GDP.

While numerous studies on the impact of prior Ukraine-Russian conflicts have been published before the most recent crisis in 2022 (Korovkin, Vasily and Makarin, Alexey, 2021), examine the economic impact of the 2014 Russia-Ukraine conflict as trade exchange continued between both countries despite the start of the conflict. Given that the Russia-Ukraine situation in 2022 is a continuing issue with continually updated material streaming in across several news channels, very little academic study collection has been produced on it.

More specifically, the effects of the ongoing Russia-Ukraine issue on Russia and Ukraine are currently receiving a lot of attention. The goal of this study is to compile and evaluate the most recent data on the crisis's current effects on the world economy.

3. Research Methodology

Using credible media sources and remarks from the leaders of the opposing parties, we will examine the development of the military disagreement between Russia and Ukraine as well as the motivations for the Russian war on Ukraine. Then, we'll discuss the various responses of the international community to the conflict, particularly those of the adversarial western nations, with a focus on those that included sanctioning Russia economically.

Finally, we will examine how various elements (economic sanctions, the cost of war, etc.) have an influence on many aspects of the global economy, such as international commerce, supply chains, food prices, energy prices, economic growth, etc.

4. Results and Discussion

a. Evolution of the Russian-Ukrainian military conflict:

According to the Western interpretation of what led to the Russian invasion, Russia

felt threatened by Ukraine because it was a liberalized nation that was outside of its sphere of influence and sought to cooperate with the West in trade, security, and politics, including the possibility of access to NATO and the EU. This put Russia's national security at risk and drove her to launch this military operation with the goal of installing a new, obedient Ukrainian government.

On the other side, Russia's invasion is motivated by the fact that Western powers are exploiting Ukraine to further their influence, and that Russia has been using its troops to repress Russian-loyal civilians in separatist regions while committing genocide against its own people. The Russian government has also asserted that Ukraine's desire to join the NATO military alliance poses a serious risk to Russia's national security since it would put NATO closer to its borders and allow it to expand to the east, endangering Russia's very existence. When Ukraine refused to engage in negotiations before to the invasion, Russia says that these two concerns provided it the justification to use force against Ukraine (Reuters, 2022).

b. The western economic sanctions imposed on Russia:

In reaction to Russia's invasion of Ukraine, the majority of western nations have put economic sanctions on her in an effort to undermine her economy and persuade her to cease the attack. These sanctions target the four key economic sectors the banking and financial sector, the energy sector, the military sector, and the commerce sector which are the most important to any country.

□ **Banking and financial sector:**

This group includes the restriction on some Russian banks from utilizing the highly securitized SWIFT network, which allows international transfers between 11,000 financial institutions in 200 nations (BBC, 2022). In addition, the United States barred banks and the Russian Central Bank from accessing their dollar holdings there (Fortune, 2022), preventing them from transacting in dollars. Additionally, the EU placed financial penalties on Russia that targeted the largest state-owned companies and 70% of the country's banking industry.

Russian state-owned companies were prohibited from listing their shares on EU trading markets, and deposits worth more than €100,000 were also prohibited in EU banks, on Russian accounts held by central depository securities in the EU, and during the sale of Euro-denominated securities to Russian clients. EC, European Commission, 2022. However, Switzerland and Japan have blocked certain Russians' assets that were placed in their respective banks (New York Times, 2022).

Additionally, Japan forbade the sale of new Russian government debt on the primary and secondary markets (MOFA, 2022). Additionally, the UK levied financial restrictions. the assets of Russian billionaires placed in UK banks, putting pressure on Russian institutions. Additionally, it stopped Sberbank, the biggest bank in Russia, from stopping payments in sterling (UK Gov., 2022).

□ **Energy Sector:**

Germany put a hold on approving the Russian "Nord Stream II" gas pipeline project that would have distributed energy to Europe (CNBC, 2022). Additionally, the US has prohibited the import of any oil or gas from Russia (The White House, 2022). Russia is not allowed to purchase, provide, transfer, or export any oil refining technology, according to the European Union (The European Commission, 2022). By the end of 2022, the UK plans to phase out the use of Russian oil (The Guardian, 2022).

□ **Military Sector:**

Some of the sanctions in this category were aimed at undermining the Russian military. For instance, in response to Russia's invasion of Ukraine, New Zealand prohibited the supply of supplies to Russian military troops (MFAT, 2022). To prevent Russia from advancing the military and aerospace industries, the United States forbade the sale of combat technology to that country. The export of semiconductors, security, encryption, lasers, sensors, telephony, avionics, navigation, and marine technology from the United States to Russia will be restricted by this embargo (The White House, 2022).

□ **Trade Sector:**

The European Union put an export ban on all aircraft, as well as their demands for replacement parts and equipment to the Russian airlines, as well as the Russian space sector, with regard to economic exchange between the West and Russia (AERO TIME, 2022). While Canada has revoked all currently valid export licenses related to Russia (Reuters, 2022).

Along with all of these economic penalties, further measures include restricting visa issuance for some Russian nationals, excluding them from participating in certain cultural and sporting events, and ultimately forbidding Russian aircraft from entering certain hostile nations' airspace.

c. The crisis' effects on the world economy:

The economic sanctions indicated before, along with the repercussions that will undoubtedly worsen in reaction to this invasion, will have a significant impact on the world economy. The economy in many sectors, including the global supply chain, oil and gas prices, the global financial system, economic overall output and growth, global stock markets, global inflation in addition to the cost of living, and other economic repercussions.

□ **The effects of the economy on output, consumption, and growth rate:**

Russia may implement an oil export embargo in response for Western sanctions if Western nations interfere in its war for territorial sovereignty. Despite the fact that there is a positive correlation between energy usage and GDP, this might increase oil prices and have an adverse impact on economic growth (Stern, 2018).

Due to this, businesses will spend more on raw materials, which will raise their manufacturing costs and, as a result, the pricing of their finished goods (Boris and Aleksandar, 2018). Because there are less incentives for suppliers to manufacture more goods, both aggregate demand and supply will decline as a result of the decline in consumer purchasing power, which also results in a decline in economic production and growth rates (Rafiy *et al.*, 2018; Topolewski, 2021).

Table 1. Indicators of economic activity during the oil supply shock Indicator

Germany (real)	Japan	UK	US	Italy	GNP
1960-73	4.5	10.4	3.1		4.2
0.8	5.3 1973-75	-0.7	0.6		-
79	-0.8	-0.3		1975-	4.7
2	4.0 1979-81	0.7	3.4		-
	0.9	1.2 Inflation			
1960-73	4.2	5.5	5.2		3.4
75	4.9	14	20.8	1973-	9
79	6.8	4.7	3.6	1975-	6.7
	16.2			1979-	
81	3.6	3.1	15.2		9.1
	11.1				
	4.6				
	18.5 Unemployment				
1960-73	0.8	1.2	3.2		4.5
75	5.7	1.7	3.4	1973-	7.1
79	2.7	2.1	5.9	1975-	6.7
	8.2			1979-	
81	3.5	2.1	9.4		7.4
	6.1				
	3.7				
	8.4 Source: Bohi (1989)				

Source: Own study.

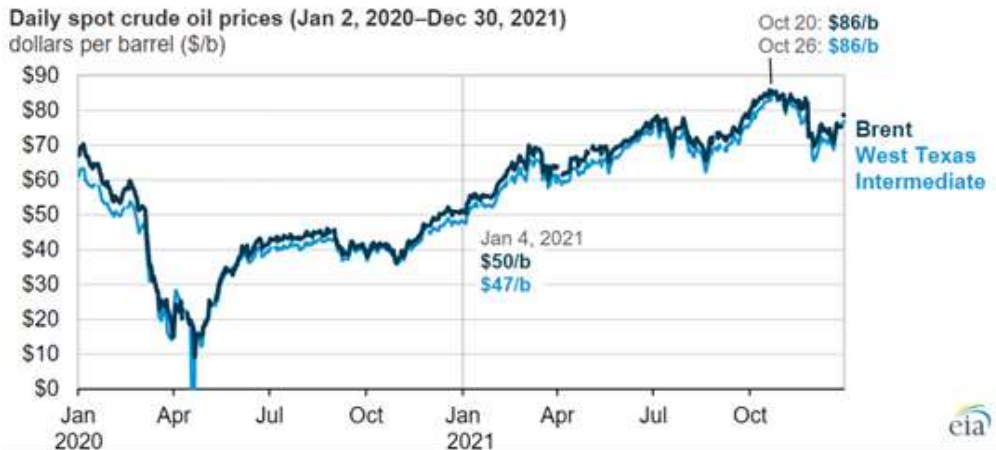
As households pay more on oil and gas to cook and heat their homes, consumer spending will also be impacted. After taxes, this will leave people with less disposable income, which will lower expenditure on goods and services. This will have an effect on consumer spending, which makes up a significant portion of GDP (Koengkan *et al.*, 2019, resulting in a slower pace of global growth).

□ Global Supply Shock as a result to rise on Oil and Gas Prices:

Before the Russian invasion of Ukraine, energy prices were increasing because of multiple factors such as the COVID pandemic, lack of energy supplies and the rising tensions between Russia and Ukraine. During this period, oil prices has been stable within the price range of US\$80 to US\$95 prior to the invasion (Sikorsky, 2022).

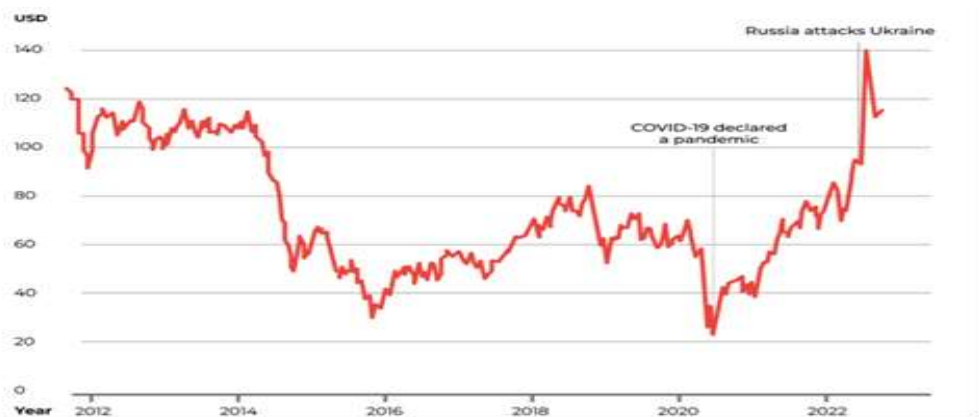
After the conflict, oil prices exceeded USD\$100 a barrel, the highest level for almost 14 years (BBC, 2022).

Figure 1. Daily spot oil prices



Source: Refinitiv, March 2022.

Figure 2. Brent crude oil prices (2012-2022).

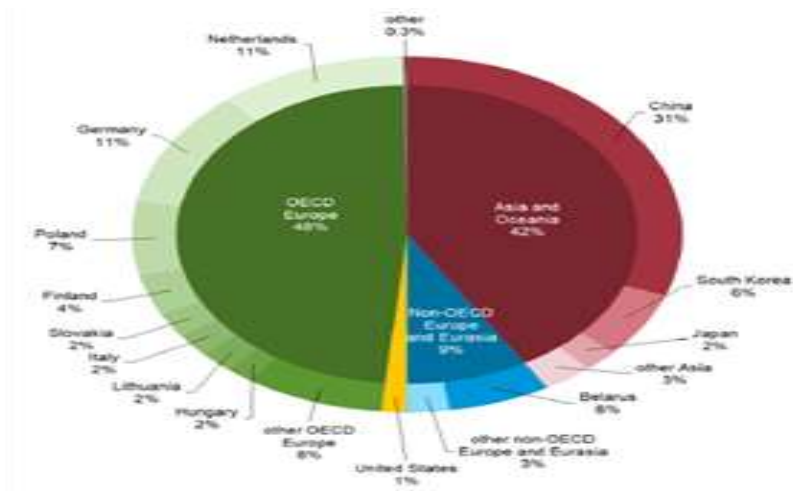


Source: Own study.

One possible outcome of the invasion is that the European oil marketers and oil corporations will have difficulty in receiving energy supplies from Russia, since Russia is the world's second largest oil producer and sells most of its crude oil to European refineries. Russia is also the largest supplier of natural gas to Europe, providing about two-fifths of its supplies (EIA, 2021).

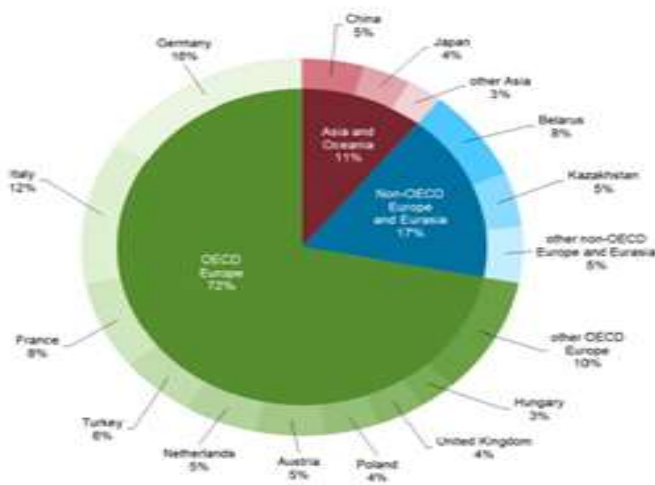
Because of Russia's large share of oil export, the Russian invasion of Ukraine is likely to lead to energy supply shocks and a steady rise in energy prices. This effect may exacerbated if Russia imposes a retaliatory export embargo on energy supplies to Europe and the rest of the world.

Figure 3. Russia's condensate exports 2020 crude oil and by destination



Source: U.S. Energy Information Administration.

Figure 4. Russia's natural gas exports by destination, 2020



Source: U.S. Energy Information Administration.

Russia's retaliatory embargo on energy exports will lead to a significant disruption in the international energy supply, and thus increase the energy prices. The Russia-Ukraine conflict could make the price of oil exceeds \$140 per barrel and could significantly lower the outlook for global economic growth, plunging some European and non-European countries into a recession (Hamilton, 2003).

Table 2. Exogenous disruptions in world petroleum supply 1950 - 1990

Date	Event	Drop in world production (%)
November 1965	Suez Crisis	10.1
November 1973	Arab-Israel War	7.8
November 1978	Iranian Revolution	8.9
1980	Iran-Iraq War	7.2
1990	Persian-Gulf War	8.8

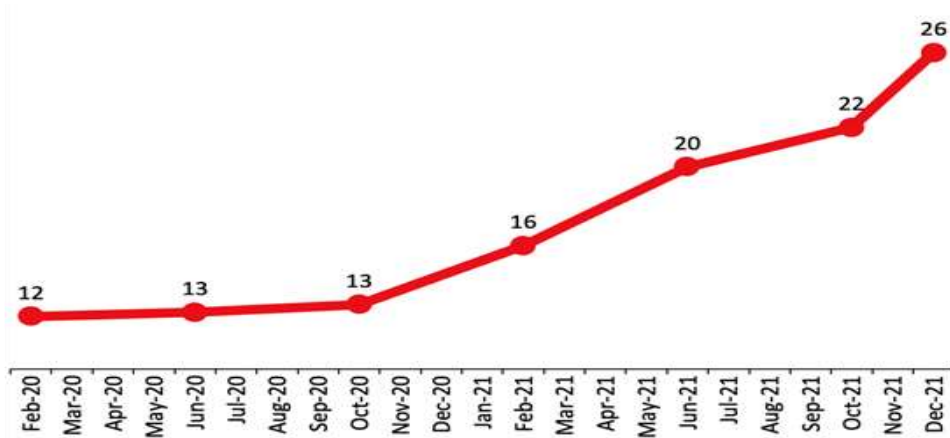
Sources: Hamilton (2003)

□ Global Supply Chain Disruption:

By interrupting the global supply chain, military activities during the Russian invasion of Ukraine will have an impact on operations in many industries. The global supply chain could be disrupted by an embargo on Russian exports and Russian retaliation against foreign imports, including Russian refusal to permit foreign shipments through its airspace and waterways during the conflict (Hiroyasu, 2021). This would result in scarcity and a rise in the price of imported goods.

Firms expected disruption from cross-border blockades and bans on transit trade to hoard supplies leading to higher prices, and the same results have occurred after the COVID-19 lockdown (ZHITAO XU *et al.*, 2020).

Figure 5. Gap between ordering a chip and delivery (in weeks).



Source: Susquehanna Financial Group, 2022.

Additionally, there will be a disruption in the flow of cargo and border operations due to the restrictions on commercial flights near the Ukraine-Russian border and the increased security checks at refugee camps in neighboring states. This is because border officials may stop or delay cross-border supplies and goods because they are handling refugees first (ZhangYu, 2021). This will make the global supply chain disruption worse and drive up the cost of imports.

□ **Impacts on the global banking system:**

In 2014, Russia's GDP increased by 0.7 percent, and in 2015, after the western sanctions, it declined by 2.3 percent. The International Monetary Fund (2019) looks at the Russian growth slowdown during the period between 2014 and 2018 with the assistance of international macroeconomic models, and finds that the sanctions reduced Russia's growth rate by 0.2 percentage points every year during that period (Iikka Korhonen, 2019).

The direct impact of the Russian invasion of Ukraine on the global banking system is minimal. The only banking sectors that were severely impacted by the invasion are foreign banks with large operations in Russia (Irina Naumova, 2019).

These foreign banks were impacted after many countries imposed financial sanctions on Russian banks and Russian wealthy individuals, evidence from the case of Iran 2006-2013 (Morteza EZZATI, 2017).

The historical data shows the significance of the financial sector for the U.S. when deciding to impose economic sanctions and how it is clearly stands out from other industries with respect to the number of sanctions imposed, accounting for 54 of 215 cases over the period from 2009 to 2020.

The banks most affected are Austria's Raiffeisen bank, France's Société Générale and Italy's Unicredit (Bloomberg, 2022). However, the international banking system may suffer the indirect consequence of the war if the pro-Russian countries retaliate against Western financial sanctions by launching a significant cyber-attack on the international payment system (Evsey Gurvich *et al.*, 2015). The potential global losses that could arise from an attack on the international payment system could amount to a daily loss of US\$1.8bn per day (Reuters, 2022).

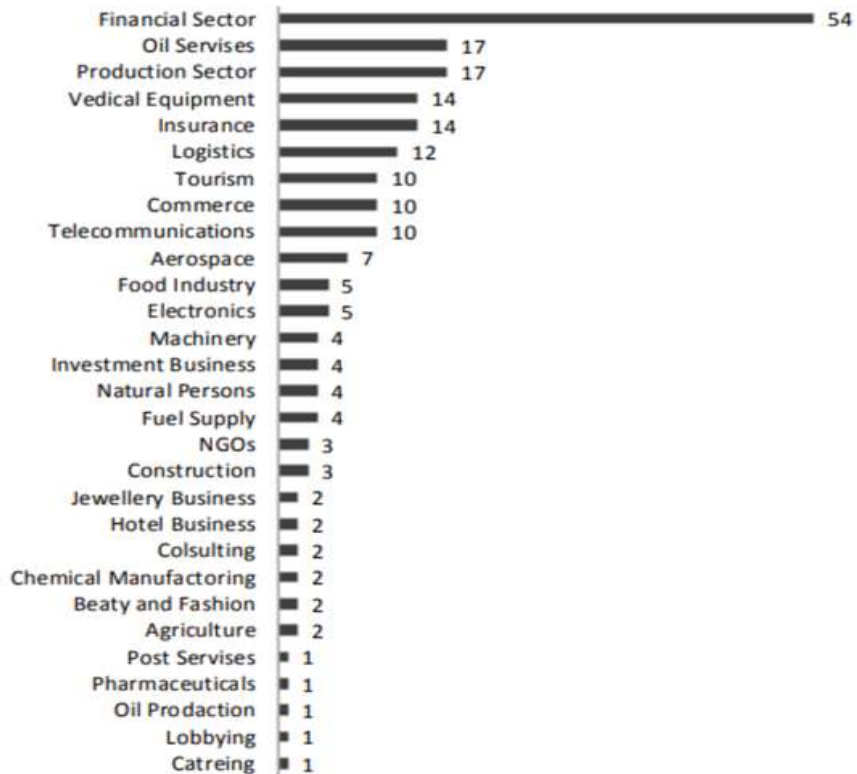
□ **The Impact on the international stock markets:**

Following the early March 2020 pandemic collapse, the stock market increased for a whole year as a result of several tech businesses profiting from the epidemic, quicker than anticipated vaccine deployments, and unheard-of fiscal stimulus. With the exception of a brief decline in all three U.S. indexes in September and October of 2021, this pattern persisted throughout the year.

Year 2022, on the other hand, has not been able to maintain its increasing trend from the previous year. The spike in Omicron, fears about inflation, and the situation in

Ukraine all contributed significantly to the dramatic loss in the Dow Jones, S&P 500, and Nasdaq even before tensions between Ukraine and Russia grew. It fell by nearly 15% on December 31, 2021 till the end of January.

Figure 6. Number of Financial Penalties: Distribution by Industry (2009-2020).



Source: I.N. Timofeev, 2020.

Figure 7. This chart shows the year-to-date development of biggest U.S. stock market indices.



Source: Statista, 2022

As of February 23, the day before Russian troops began operations on Ukrainian territory, Nasdaq fell 16.7% this year, while the S&P 500 and the Dow Jones Industrial Average fell 11.3% and 8%, respectively. Compared to the end of 2021 (CNBC, 2022).

Stock prices on the international stock market crashed after Russia invaded Ukraine. When it was announced that Russia had invaded Ukraine, the investors safely escaped. The lowest prices at which equities were traded on significant exchanges throughout the intervention period are shown in Table 3.

This demonstrates that the five-day (February 18–February 25) decrease in stock prices peaked on February 24, 2022, the day of the invasion. In terms of points, the Dow Jones Industrial Average dropped more than 100. More than 250 points have been lost on the S & P 500 index (CNBC, 2022).

More than 400 points have been lost on the EuropeNext100 index (EuroNext, 2022). The Shanghai Composite Index has decreased by more than 150 points, as seen in Table 3 below (The Economic Time, 2022). The day following the invasion, however, equities recovered as a result of multiple nations announcing severe penalties against Russia.

Table 3. Global stock markets (the lowest price at which stocks were traded during the time period)

	United States Jones Industrial Average	United States S&P 500 Index	Australia S&P/ASX 200 Index	Europe Europe Next 100 Index	United Kingdom FTSE 100 Index	South Africa JSE	China SSE Composite Index
Year	Lowest price	Lowest price	Lowest price	Lowest price	Lowest price	Lowest price	Lowest price
change	% 2022 (Basis points)	% change (Basis points)	% change (Basis points)	% change (Basis points)	% change (Basis points)	% change (Basis points)	% change (Basis points)
Feb	3.11 25 (311)	4.18 (418)		1.12 (112)	1.12 (112)		
Feb	-1.08 24 (108)	-2.53 (-253)	2.242 (224.2)	-4.27 (-427)	-4.45 (-445)	1.27 (127)	1.20 (120)
Feb	-0.84 23 (-84)	1.07 (107)	2.604 (260.4)	1.93 (193)	2.42 (242)	-1.69 (-169)	1.68 (168)
Feb	-1.80 22 (-180)	1.38 (138)	0.515 (51.5)	1.55 (155)	1.73 (173)	1.74 (174)	0.597 (59.7)
Feb 21	-	-	-0.664 (-66.4)	2.19 (219)	2.15 (215)	0.403 (40.3)	0.979 (97.9)
Feb	-0.79 18 (-79)	-1.07 (-107)	0.633 (63.3)	0.63 (63)	1.70 (170)	1.63 (163)	-0.979 (-97.9)
			1.104 (110.4)			0.817 (81.7)	0.715 (71.5)
						0.209 (20.9)	

Source: Own study.

This surprise attack not only heralds the start of a humanitarian disaster, but it also has a significant effect on investor choices. If peace discussions are not established between the two nations, the race to the bottom is likely to continue. The biggest exporters of commodities including oil, gas, wheat, copper, and nickel are Russia and Ukraine, therefore continued hostilities are expected to increase prices, aggravating supply chain problems.

□ **Rising cost of living and Global inflation:**

Fiscal deficits, high debt-to-GDP ratios, and high inflation rates raise the possibility that hyperinflation developed following war in a number of nations (Lopez, 2018). The majority of European states, including Germany and the U.K., will see higher living expenses as the aggression continues. For instance, inflation in the United Kingdom is actually as high as 7% (ONS, 2022). It implies that customers are already buying fewer things for more money. Oil, gas, and food costs continue to rise as a result of conflicts. It will raise living expenses because the price of lighting, autos, and mortgage deductions may rise dramatically.

Additionally, it affects emerging nations that rely on energy imports. Although income levels stay similar, developing nations will pay greater prices for energy imports, which may result in higher local fuel prices, higher food prices, and an overall rise in commodity imports. In emerging nations, this results in higher inflation and rising living expenses. Higher global inflation may result from both developed and emerging nations' combined effects.

5. Conclusion

The essay looked at how the war between Russia and Ukraine affected the world economy economically. The disruption of the worldwide supply chain was one of the repercussions of the invasion on the economy, according to the report. This highlights energy supply shocks as trade shocks that resulted in rising energy costs, rising commodity prices, and rising food prices, which increased worldwide inflation in a number of nations.

This suggests that geopolitical confrontations mostly affect the sanctioned country and seldom have an isolated economic impact on other nations. The Russian-Ukrainian conflict has demonstrated that imposing sanctions on a belligerent nation is not the best course of action since it adversely affects other nations that are not parties to the dispute, particularly if those other nations are economic partners with the belligerent nation.

Therefore, political leaders should work to prevent crises like the one between Ukraine and Russia and should also employ dialogue as a method of settling disputes. The future researches can study and evaluate whether the resolution of conflict by peaceful means is effective in calming countries going to war for protecting the influence of the region.

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