



## Full Length Article

## Challenged global economics amid conflict in warring countries

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## ABSTRACT

This research delves into the multifaceted challenges posed to society and regional development in the wake of Russia's invasion of Ukraine, with a specific focus on the period spanning from February 2022 to February 2023 as a response to the social and entrepreneurial threats that have appeared due to the conflict. In addition, this research seeks not only to alleviate prevailing uncertainties but also to facilitate a comprehensive understanding of the economic landscape by identifying causal factors and providing a relevant contextual framework for the threats to society and regional development in the aftermath of Russia's invasion of Ukraine, which affects sustainability both economically and socially. These disruptions have given rise to unprecedented uncertainties that could potentially trigger an irreversible cascade of shortages, leading to escalating costs of critical or irreplaceable products that directly affect regional development. This paper scrutinizes this intricate process, aiming to discern underlying patterns and mitigate the prevailing uncertainty—a state that challenges rational decision-making. In this pursuit, established economic theories are deployed to provide comprehensive insights into the evolving reality. Through an in-depth analysis of the interplay between the Covid-19 pandemic, the ensuing economic crisis, and the ramifications of the Ukraine-Russia conflict, this research reveals a stark decline in economic growth. In addition, the present study explores potential solutions, emphasizing the importance of enhancing workforce skills through meticulously designed educational strategies and promoting gender diversity in science, technology, engineering and mathematics (STEM) programs.

## Introduction

In recent years, the world has experienced a number of social phenomena that directly affect the economy (Al-Qudah et al., 2022). The first of these was the Covid-19 pandemic, which brought the economic market to a standstill, generating financial uncertainty and social unrest (Stewart, 2021; Belitski et al., 2022). Secondly, the war between Russia and Ukraine has not only affected these countries but also many countries in the world, especially the members of the European Union (Genschel, 2022; Mbah & Wasum, 2022; Kumari et al., 2023) and provoked an economic crisis that had already been predicted (Chang et al., 2023). These events are causing price inflation in society, a reduction in investment, a rise in interest rates on loans and mortgages, difficulties in importing foodstuffs, as well as paralysis in production and difficulty in exchanging supplies (Aktar et al., 2021). Focusing on the impact on the Ukrainian economy, one might argue about certain political patterns

and perspectives of the ongoing Russian invasion of Ukraine; however, everybody clearly sees its devastating impact on the global economy with inflation and unprecedentedly raised costs. The fact that politics and economics cannot be separated from each other was once again proven by this event. Ukraine, which is the biggest country in Europe, is also extremely wealthy in terms of agricultural commodities and exporting products (Wilson, 2014; Palienko & Lyulyov, 2018; Sineviciene et al., 2018).

The timeframe of this article covers the period from February 2022 to February 2023. Therefore, this article mainly addresses the question of how much is paid for basic needs after the war, from the impact of Covid-19 to the growing economic crisis. What is the potential forecast in this respect in terms of free movement of goods, investment with the relevant payback and grain export challenges? Covid-19 has led to a health crisis, but the food insecurity caused by the war is forcing the country's economy to a standstill. As the conflict progresses and

The participants in this study are expressly aware of the purpose of the work and have given their consent. They came forward on a voluntary basis.

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escalates, property damage, increased disease, loss of life, rising prices for food and supplies are consequences of this ongoing situation (Nchasi et al., 2022).

Since the Russian invasion of Ukraine, inflation, weaker external demand on products, and elevated economic uncertainty has occurred. Furthermore, it is also causing energy price shocks and tighter financing with low external demand. In addition, the unemployment rate has remained at an all-time high (OECD, 2023). The Covid-19 crisis hurt global businesses, particularly smaller ones (Fairlie & Fossen, 2022). Their resilience to the loss of policy backing was already in question. It is probable that the following three factors make businesses more vulnerable as a result of the war and lead us to decreased exports, higher energy prices that reduce profit and not only. The industries most severely impacted include transportation, food and agriculture, chemicals and pharmaceuticals. Businesses in nations like Hungary, Poland, Latvia, and Lithuania, which are closer to Russia and Ukraine, are expected to feel more pressure (Stoner, 2022).

The war constituted a challenge for agricultural commodities, increasing wheat prices worldwide since Russia and Ukraine are responsible for up to 40 % of production. As wheat is included in many of our daily purchases, the issue has become increasingly severe as the military conflict continues. Therefore, this prompts the following question: How does the war affect the global market and are there any signs of forthcoming grain scarcity?

The importance of grain, more precisely wheat, is strongly related to the symbols of Ukraine. For instance, since 1918, Ukraine’s flag has stood for the following idea: “blue skies over golden wheat fields” (Smith, 2013). As the world’s seventh-largest wheat producer, Ukraine was expected to become the fifth-largest exporter for the 2021 and 2022 marketing year. Interestingly, agricultural production is concentrated in the southeastern region of the country and more than 55 % of its soil represents arable land, which makes its potential rigid. In this regard, the war changed the picture a lot and caused a market shift with growing inflation worldwide. Due to the extent of Ukraine’s productivity potential, the Russian invasion of Ukraine continues to impact hugely on the global market (World Bank Group, 2023).

Potential grain scarcity

According to data on global agricultural production from the United States Department of Agriculture (USDA) forecast regarding wheat national average price received by farmers was as follows (Fig. 1):

As Ukraine and Russia are considered to be very productive in terms of agricultural commodities (Dankevych et al., 2017; Kyrylov et al., 2022), the crisis might cause solid export-related issues (Lin et al., 2023). Furthermore, the regions that are controlled by Russian forces

create a risk that certain product prices could easily double (Sokhanvar et al., 2023). In addition, Russian exports could be sanctioned which is expected to push prices higher. Ukraine lost territories and ports when Russia annexed Crimea in 2014 and today the number of destroyed factories and damaged facilities has risen drastically.

Therefore, the ongoing war potentially causes global food shortages for tens of millions of people. The UN Secretary General, Antonio Guterres, has said that due to the fact that most of its ports remain closed, over 3000 tons of grain could not be shipped from the warehouses due to the blockade and other logistics-related issues. Another problem is the confusion among farmers who have nowhere to store their harvest or export it. Obviously, some goods can be taken out by road or rail, but clearly the volume that used to be transported by shipping will not be achieved (Poursina et al., 2023).

In addition, many ships in Ukraine cannot function as they need clearance from insurance companies. Given that Russia and Ukraine produce up to 40 % of the world’s wheat, the UN has warned that this situation might lead to a global food crisis (Deininger et al., 2023). The Joint Coordination Center manages, which manages a global agreement aimed at getting almost 20 million tons of grain out of Ukraine to feed millions starving in Africa, and has tried to ensure that the Middle East, and parts of Asia, ensured the laden vessels to leave Chornomorsk and Odessa.

A third-generation farmer named Yurri Yalovchuk told CBS News that he has 1000 tons of barley that were supposed to be shipped out in spring 2022, but due to the delay it became unfit for human consumption. Agreement among Ukraine, Russia, Turkey, and the United Nations to build a 111-nautical-mile sea corridor would permit cargo ships to safely leave ports that the Russian military forces have blockaded. Since the first ship sailed on August 1, 2022, implementation of the agreement, which is in effect for four months, has moved slowly. Furthermore, over 219,000 tons of grain were transported by four of the carriers that were permitted to depart. According to the Joint Coordination Center, more than 6600 tons of sunflower oil and 11,000 tons of soy was transported effectively, however, it was the fifth and the sixth part of the total amount that should have been exported (CBS, 2022).

Entrepreneurship and sustainability effects

Economic growth and the welfare of the economy has been shaken by the war between Russia and Ukraine. Volatility of natural resources and restrictions imposed on the Russian economy have increased uncertainty (Korkmaz, 2022). In addition, the Covid-19 has also affected the food supply and has led to higher prices, and as a consequence higher prices. But sustainability has also been affected. The conflict has exposed the global political and economic order, which has been

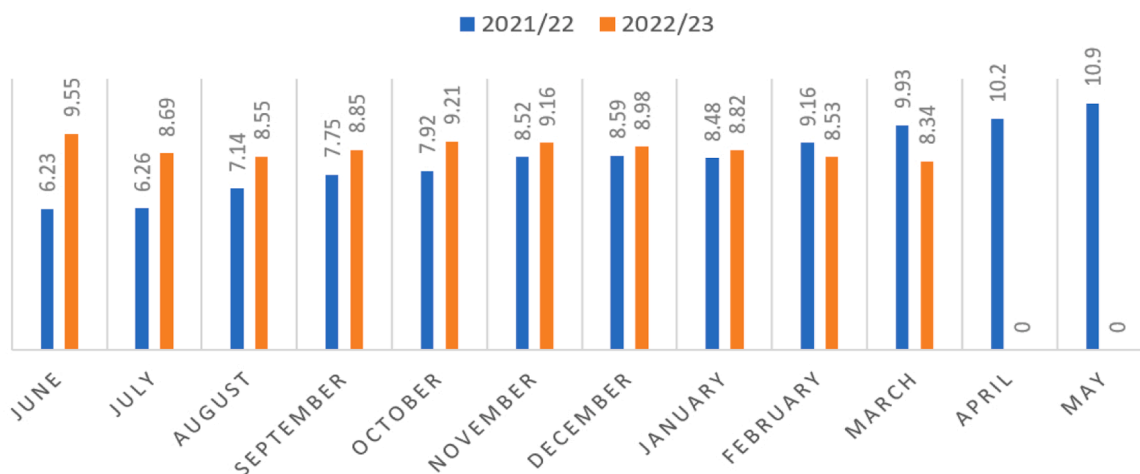


Fig. 1. Wheat: National average price received by farmers.

characterised by stability and sustainability in recent years. The effect of the conflict has triggered sanctions, thus producing an imbalance in the economy, security and sustainability (Zhao et al., 2023). Predictions and assessment of the impact of geopolitical relations have also been identified. In addition, to study the change of sustainable economic development under the Russia-Ukraine conflict.

Aktar et al. (2021) stated that despite uncertainty about the full implications of Covid-19 and its effect on the pattern of energy consumption and associated levels of CO2 emissions, it provides a set of advice that countries should follow for the recovery process, such as encouraging the drive towards investment and behavioral improvements that will force economies to move in a low-carbon direction (Aktar et al., 2021). Following the global renewable energy guidelines for 2050, rising energy prices have also made it more difficult to keep up with the growth of sustainable energy needed to power countries' economic growth and development (Han et al., 2022). Pereira et al. (2022) state that the SDGs (Sustainable Development Goals) on biodiversity are mainly affected at the regional level, locally and globally in terms of the societal SDGs, globally on the economic SDGs, although they define that the impact and magnitude of armed conflict is still uncertain. For this reason, the present study attempts to go a step further, and to update and contrast this last conclusion.

This global economic crisis is wider than the above-mentioned food sector insecurities. For example, the coal exporting process from Siberia through Ukraine and then to the final consumers in Western Europe faces many challenges. Ukraine in the mid-2000s was among the top-five net exporters of coal (FAO, 2022). Hence, the contribution of this article is to provide crucial economic-related information that will potentially lessen the existing uncertainty. Therefore, complex ocean, air, and road transportation impacts largely affect the global market from a macro perspective and every individual from a micro point of view has already felt that impact. Therefore, it can be argued that being aware of the crucial aspects is the first step, while using it effectively is another necessity. Hence, awareness decreases uncertainty and works as an incentive to prepare for potential scenarios; arguably, the more you are familiar with all possibilities, the more accurate your issue-related calculations.

Therefore, this research first focuses on an introduction to the topic, highlighting the current situation in the global economy, focusing on the European Union and Ukraine. In the second section, a review of the literature is carried out, exposing primarily the current limitations that have been produced by Covid-19, the war between Ukraine and Russia, and the current economic crisis. This is followed by an in-depth analysis of the QCA method used. The following section analyzes the results, and provides a discussion and conclusions, which contrast to previous studies. The last section provides suggestions and outlines the assumptions we made.

## Literature review

### *History of the conflict and economic effects of the invasion*

The 2022 International Monetary Fund (IMF) statement claimed that, in Europe, economic growth after the Covid-19 instability was expected to be slow, however, much better than was anticipated. The major reasons for the latter assumption was that general consumption and investment remained relatively stable after the economic slump caused by the pandemic. Having said that, the military conflict in Ukraine brought no end of trouble in terms of supply and energy dependence (Deng et al., 2022; Siddi, 2022).

On the other hand, the IMF highlights that western sanctions are not yet fully felt in the Russian economy, which is expected to reach its

lowest point in 2027, with, for instance, geopolitical tensions together with growing expenses for consumers and businesses along with decreasing purchasing power. As the European commissioner for economy, Paolo Gentiloni says that there are still risks as a result of the Russian invasion of Ukraine. The latter has also triggered high inflation worldwide (Maurya et al., 2023). However, he remains positive towards the potential outlook for the economy (Euronews, 2023).

The global market struggles as far as the major suppliers of agricultural and energy goods Russia and Ukraine are in the state of war. Moreover, the cost of many essential, hard to replace products has been increasing due to scarcity. Although the effects will differ among nations, inflation brought on by the war might lower real private consumption in the European Union with the population in danger of poverty (Tank & Ospanova, 2022). The impact is typically greater in Central and South-Eastern European nations (Stoner, 2022).

With the effects of the war, inflation increased in 2022 compared to the previous year. Limits imposed on Russian energy exports in October 2021 drove up energy prices, which worsened the situation. In addition, the process significantly raised food and energy prices, with a forecast of worse to come (Ben Hassen & El Bilali, 2022; Stoner, 2022).

The global economy was already significantly devastated by Covid-19 in February 2022 when the Russian invasion of Ukraine worsened the global economic conditions. As a result, there were production shutdowns, port congestion and supply shortages, especially of semi-conductors. Before the military conflict, many people hoped that the devastation caused by the pandemic would be replaced by complex improvements or recovery (Buheji, 2020; Mazzucato, 2020). Analyses by Interos in March 2022 clearly showed more than 2100 US-based firms and 1200 EU-based firms had at least one direct tier-1 supplier in Russia, while more than 15,000 firms in the US and 8200 European firms had tier-2 suppliers based in Ukraine. In addition, more than 190,000 firms in the US and 109,000 firms in Europe had Russian or Ukrainian suppliers at tier-3.

### *Threats for society and regional development*

The deadly Covid-19 pandemic and Russia-Ukraine war have imposed a lot of complexities and challenges across global business (Marzo & Pepicelli, 2022; Karmaker et al., 2023). The conflict has precipitated one of the most significant humanitarian crises in Europe since World War II, with millions of people internally displaced or forced to seek refuge in neighboring countries. This has strained services, including healthcare and education, and created long-term challenges for societal well-being. Moreover, the conflict has heightened geopolitical tensions between Russia and Western nations, leading to a polarized global environment which has the potential to exacerbate international conflicts threatening not only Ukraine but also global stability. Regional development is directly affected by gross domestic product (GDP) declined sharply within a short period of time, and inflation expectations soared despite the inflation-targeting mandate of central banks (Tong et al., 2023).

Another threat for society is that the education systems have been severely disrupted in areas affected by conflict (Josiassen et al., 2023). Schools and universities have often been damaged or repurposed for military use, hindering access to education for many children and young people; the long-term implications for human capital development and societal progress are matter of a concern.

### *Patterns and perspectives of global logistics*

As Bloomberg highlighted in a December 2021 article, transportation costs had increased up to 26 % compared to 2020. Furthermore, it was

stated that the cost of shipments by air and rail had gone up significantly. Therefore, freight costs remained high through the first two months of 2022 and as analysts claimed back then it remained high as a matter of fact. For instance, transport performance was 121.04 in January 2022, which was a 20 % increase compared to January 2021. European lanes were 110.69 in January 2022, which was a 13 % increase from January 2021. Therefore, many more lanes experienced an increase in rates rather than a decrease over the past year (Bloomberg 2021). In fact, Russia is the world's second-largest oil producer and according to *Oil-Price.com* the price of Brent Crude Oil has increased almost 65 % from 2021, to \$110 in 2022, as reported by *Bloomberg* on 11 February. The latter article claimed that Europe's diesel market was already struggling before the Russian invasion of Ukraine and obviously the war only worsened it.

With the recent mobility and transport regulations, truck drivers need to take longer breaks and trucks need to return to their home country every eight weeks. In an interview with *Bloomberg News*, Simonas Bartkus, the marketing chief at 'Girteka Logistics', shared a forecast and claimed that the changes are going to complicate everything. She maintained that they will boost fuel consumption and the number of empty kilometers driven that is destined to lack capacity and require larger fleets and further spurring demand. Therefore, higher diesel fuel prices and wages bring increased transportation costs (Bloomberg 2022).

Furthermore, as CNBC reported, the International Monetary Fund predicted global growth to slow to 2.7 % in 2023, a decrease of 0.2 percentage points compared to its July forecast. As Reuters highlighted, the IMF managing director Kristalina Georgieva stated in October 2022 that the state of flux in the global economy brought high uncertainty with increased volatility, geopolitical confrontations and devastating natural disasters (Fabrichnaya, 2023). A group of leading economic institutes has lowered their growth forecast for 2023. In September 2022, a group of leading German economic institutes stated that in 2023 they expect a contraction of 0.4 % with a 1.9 % increase in 2024. The main reasons for the crisis include increasing energy prices and rising inflation. Furthermore, the average inflation rate for 2023 is forecast to climb 0.4 % to 8.8 %

This slowdown in global trade is felt in ocean shipping in which a growing number of scheduled sailings from Asia to the United States as well as from Asia to Europe were canceled. Moreover, as the CNBC article emphasized, the largest port in the UK conducted an eight-day

strike in September 2022. The key complaints were related to workers' wages and inflation, which quickly provoked another strike at the port of Liverpool. Obviously, the strikes threatened shipments and imports/exports across industries. The head of Europe, Middle East and Africa Ocean product director at Crane Worldwide Logistics, Andreas Braun, claimed that the first strike in August 2022 was not as damaging as the following one. According to Braun, the latter was caused by the fact that in summer there was sufficient preparation and possibility to reach alternative ports, while ocean liners and shippers were heading to Hamburg or to Rotterdam and using this route increased their delivery time by 12 to 14 days. In addition, it required extra time and finance allocation for rail or road transport (CNBC, 2022).

*Impact on business entrepreneurship in times of crisis*

For all these reasons, this paper seeks to explain the current situation that the world is experiencing, and the effects that the Covid-19 pandemic, the war between Ukraine and Russia, and the economic crisis are triggering in terms of rising prices, limited supplies, constant health crises, and the slowdown in creation of businesses. Cornwell et al. (2023) argue in their latest study that accessibility to information, conditioned by companies' in-country experiences, is paramount. Employees are the real determinants of strategy, and can enhance the benefits of operational flexibility over countries in conflict (Fig. 2).

One unifying goal in recovering trend growth in Organisation for Economic Co-operation and Development (OECD) economies is hence the need to sustainably increase investment and improve production efficiency. Reviving corporate dynamism by removing barriers to admission for young creative enterprises and removing hurdles to departure for faltering firms will increase competition, spur investment, and help assure the necessary reallocation of resources across activities, keeping international trade and investment borders open, as well as lowering barriers to cross-border trade in services. The economic migration might assist governments in alleviating near-term supply-side constraints and improving future growth prospects. Furthermore, strengthening workforce skills through well-designed adult learning strategies and increasing the number and gender mix of students studying science, technology, engineering and mathematics (STEM) will help boost the adoption and integration of digital technologies into the labor market. Technology enables the application of solutions that predict and promote sustainable consumption habits and behaviors,

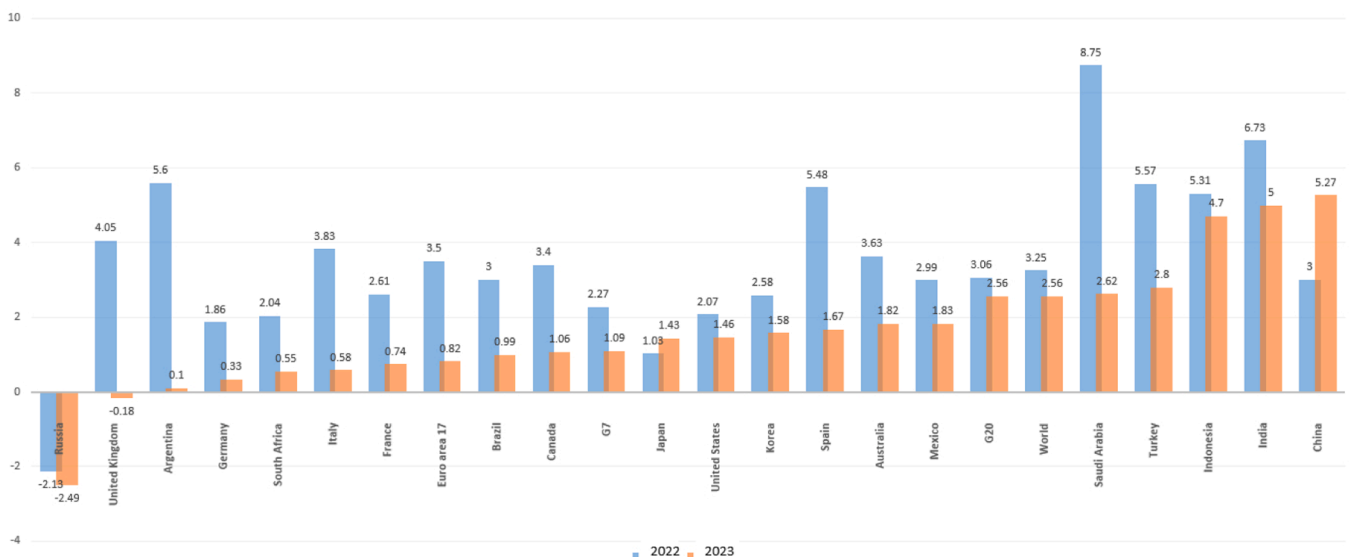


Fig. 2. Real GDP growth projections for 2022–2023.

generating value across countries (Prados-Castillo et al., 2023). In overall, improved skills, increased investment in high-speed broadband, and increased competition greatly increase the potential for digital technology to have a positive impact on productivity (OECD, 2023).

Having said that, there are some fixed characteristics that are needed for economic stability and growth, for example any investment has to have a payback, products should be exported effectively as it has a superior meaning for the world economy.

**Methodology**

Following the literature review and the initial objectives mentioned in the introduction. In order to formulate a main hypothesis, the first question to be asked is: What are the consequences of the port blockade in Ukraine and how does the war affect the free movement of goods in the territory? Therefore, the first hypothesis is that: A protracted war will make a severe economic crisis in the world inevitable. As has been observed in previous studies, the effects of the pandemic, but above all the war between Ukraine and Russia, are affecting the economic growth of all countries, not only those of the European Union.

The method that used in this paper is qualitative comparative analysis (QCA) (Ragin, 1998), primarily developed in the 1980s as a macro-comparative approach for both macro and micro scenarios (Berg-Schlosser et al., 2009). Ragin (2006) claims that this method is capable of making sense of difficult causations. Therefore, this article uses the technique of QCA as it is expected to predict or achieve an outcome by the relevant independent variables (Ragin, 2006).

In order to make this discussion more precise, we identify the topic related variables as:

X=Investment; W=Low risks; Z=payback; Y=economic growth.

Case 1: If there is an investment (X) and a country provides low political and economic risks (W), economic growth will take place (Y) (Tables 1 and 2).

If we slightly modify the variables, we might end up with the following:

**Table 1**

Fuzzy set QCA: Case 1. investment (X) and a country provides low political and economic risks (W) and economic growth (Y).

X	W	Y	X*W -> Y
F	F	F	T
F	F	T	T
F	T	F	T
F	T	T	T
T	F	F	T
T	F	T	T
T	T	F	T
T	T	T	F

Source: own elaboration.

**Table 2**

Identification of variables Case 1: investment, country's risks, payback, economic growth.

Ukraine February 2022	Investment (X)	Country's risks (W)	Payback (Z)	Economic growth (Y)	Sufficient condition
1	1	1	1	1	X*W*Z
2	1	1	0	1	X*W
3	0	1	1	1	W*Z
4	1	1	0	1	X*W
5	0	1	0	1	W
6	1	0	1	0	
7	0	1	1	1	W*Z
8	1	1	0	1	X*W
9	0	1	1	1	W*Z
10	0	0	0	0	

Source: own elaboration.

X=export; W=free movement of goods; Z=effective logistics; Y=economic stability.

Case 2: If in the process of exporting goods (X) its free movement is ensured (W), the economy remains stable (Y) (Tables 3 and 4).

Therefore, if X and W or X and Z occur simultaneously, the likelihood of Y occurring becomes higher. These sufficient conditions are called causal recipes or configurations leading to a specific result (Olya & Gavilyan, 2017). Furthermore, if X is present in all combinations that lead to outcome Y, then X is seen as a necessary condition for the outcome Y (Berg-Schlosser et al., 2009; Dul, 2016).

In the above mentioned two scenarios, X is a sufficient and necessary variable while W and Z are neither sufficient nor insufficient. Thus, it can be argued that in the fourth quarter of 2022, the relatively stable economic conditions suddenly dropped due to the Russian invasion of Ukraine (*The Long-lasting Economic Shock of War*, 2022) (Fig. 3).

Fuzzy-set qualitative comparative analysis (fsQCA) is an approach that provides researchers with tools to conceptualize research questions and analyze data in synthetic terms. Some creative studies are currently using it effectively. These studies allow existing theories to be revisited or make more practical sense with the help of the appropriate analytical tools.

QCA includes two forms: crisp and fuzzy sets. In Crisp-Set QCA (csQCA), causal conditions and consequences are coded as absent ("0") or present ("1"), with no ambiguity between or within the game. fsQCA follows the same basic logic as csQCA, but usually assumes a range of possible values. A common heuristic is that "0" means that the condition is completely absent while "0.5" either absent or present.

Therefore, since February 2022, Russia and Ukraine represent the two main involved parties in the military conflict. Those parties that are fully absent from the picture can be categorized as "0" and those that are neither present nor absent can be classified as "0.5". Hence, the above-mentioned food-, grain-, logistics-, and business-related challenges might highlight the states that are struggling the most; having said that, if the impact is not direct it will definitely be indirect as far as we observe the world economy, which is strongly connected and interdependent (Fig. 4).

**Table 3**

Fuzzy set QCA: Case 2. Exporting goods (X), free movement is ensured (W) and economy stays stable (Y).

X	W	Y	X*W -> Y
F	F	F	T
F	F	T	T
F	T	F	T
F	T	T	T
T	F	F	T
T	F	T	T
T	T	F	T
T	T	T	F

Source: own elaboration.

**Table 4**

Identification of variables Case 2: investment, country's risks, payback, economic growth.

Ukraine February 2023	Trade (X)	Free movement of goods (W)	Effective logistics (Z)	Economic stability (Y)	Sufficient condition
1	1	1	1	1	X*W*Z
2	1	1	0	1	X*W
3	0	1	1	1	W*Z
4	1	1	0	1	X*W
5	0	1	0	1	W
6	1	0	1	0	
7	0	1	1	1	W*Z
8	1	1	0	1	X*W
9	0	1	1	1	W*Z
10	0	0	0	0	

Source: own elaboration.

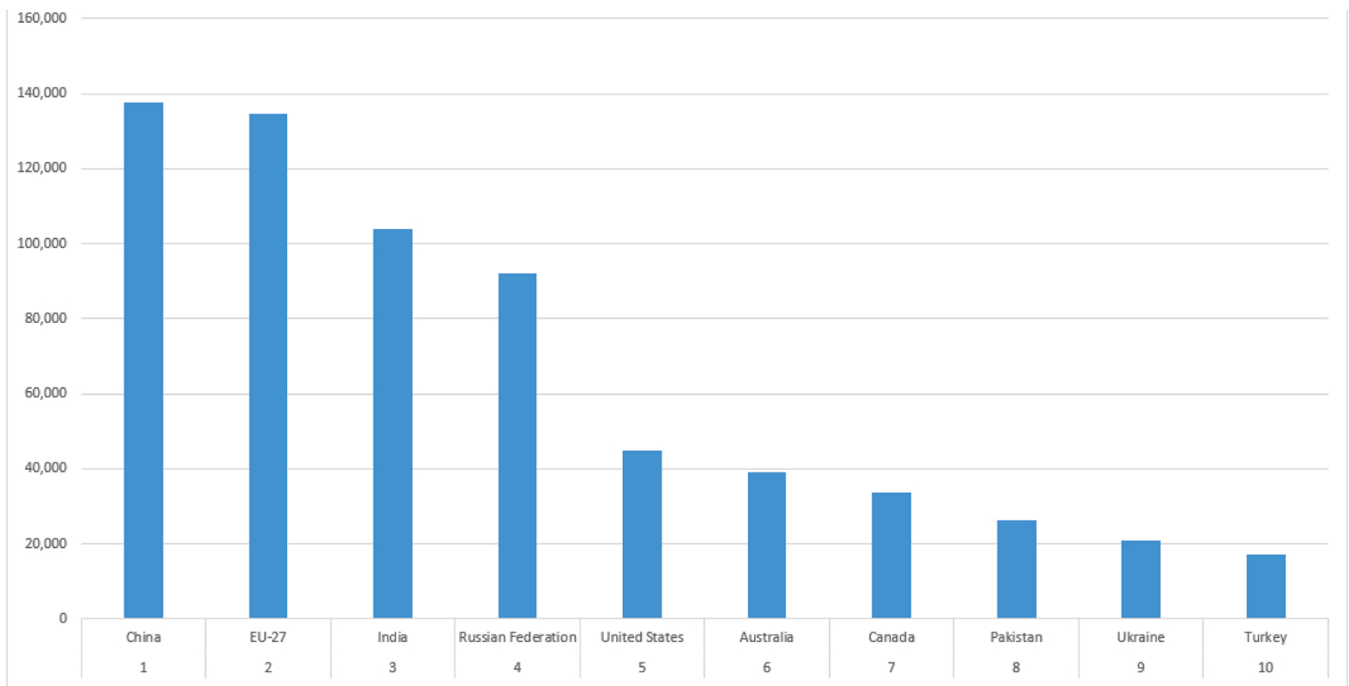


Fig. 3. Wheat production by country.

The graph shows a clear interdependence among the three variables: A, M and Y. Therefore, despite the fact that there are more wheat producers in the world than Russia and Ukraine, the two are still included in the top 10 and have enough means to impact on inflation or grain-related scarcity worldwide.

**Analysis of results**

Therefore, the above-mentioned brief analysis shows that ongoing inflation, which even before the war was at a record high, has worsened after the invasion. Moreover, in February 2022, consumer prices rose by 5.8 % in February). . According to an IMF working paper published in February 2022, flexible restrictions hindered the revival of the global economy and increased prices in 2021. If there had been no supply constraints, manufacturing output and GDP would have increased by around 6 and 2 percentage points, respectively, and producer price inflation would not have increased by half as much. Shutdowns can account for up to 40 % of supply shocks globally, but other factors that contribute to supply restrictions, such as labor shortages and outdated logistical infrastructure, may have a longer-lasting impact on supply and inflation.

Hence, the global economy remains volatile amid the Russian invasion of Ukraine. This is accompanied with slow economic growth and high inflation. A World Trade Organization report, published in October 2022, stated that it is expected the situation to become subdued in 2023. Therefore, global commerce was predicted to decline in the second half of 2022, and to continue this decline in 2023 as various shocks weigh on the world economy. Improving a little above the 3.0 % prediction made in April, WTO economists now expect that the amount of global merchandise trade will increase by 3.5 % in 2022. However, they predict a 1.0 % growth for 2023, which is far less than the previous projection of 3.4 % (Fig. 5).

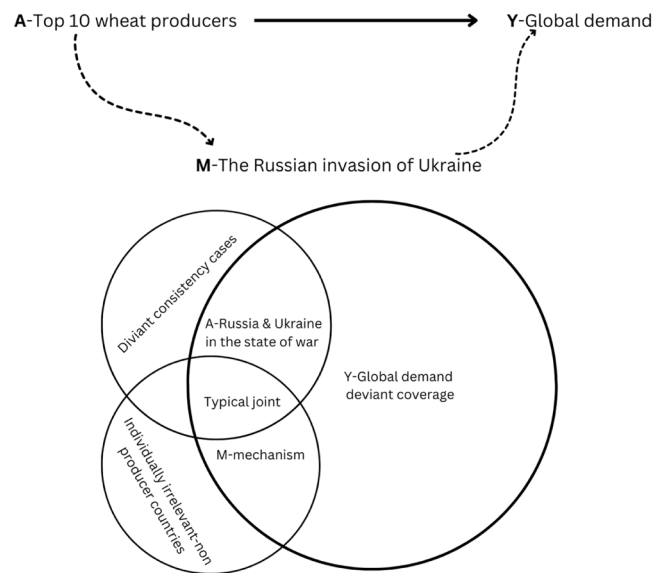


Fig. 4. Set theoretic multi-method research (SMMR).

**Discussion**

One might argue that global economic conditions are never stable but rather are in a constant state of flux; however, oversimplification makes every matter worthless. Since the start of the conflict, financial markets have been extremely volatile and commodity markets are in disarray. Consequently, the FED note stressed that “the war was reducing the level of global GDP by about 1.5 percent and leading to a rise in global inflation of about 1.3 % points. The negative effects of geopolitical concerns manifest as decreased consumer confidence, rising commodity prices, and tighter financial conditions.

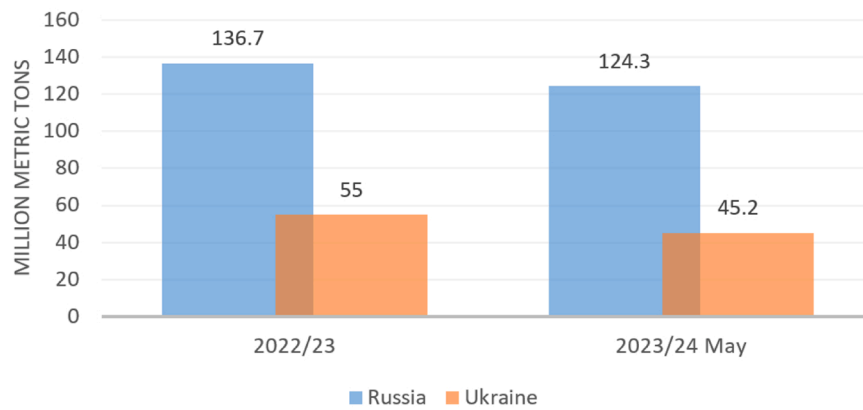


Fig. 5. Total crop production.

Since the start of the Russian invasion of Ukraine in February 2022, Ukrainian grain exports have been significantly affected as for more than four months Russian military ships blocked Ukrainian ports in the Black Sea. On 22 July 2022, an agreement was negotiated between the United Nations and Turkey to open a secure maritime humanitarian corridor in the Black Sea (the Black Sea Grain Initiative). During the implementation of the initiative, over 1000 ships full of grain and other food products left from three Ukrainian ports (Chernomorsk, Odessa & Yuzhny/Pivdennyi). In July 2023, Russia announced its decision to end the Black Sea Grain Initiative (EU Council, 2023).

Some scholars argue that multipolarity is what makes everything more complicated nowadays. For instance, after the Yalta meeting, the world was divided into two parts where the parties stated that none would use military power and did so until 1989. Economic hegemony can be self-destructive as others always try to be part of it till, they destroy the latter. Competition according to the Wallerstein when the monopoly disappeared prices became lower however, obviously competition is not good for profits but for stabilizing or balancing a price as such. Throughout history, or 1945–1970 was in the strongest shape under hegemony power, however its decline was equally significant (Wallerstein & Cubides, 1996).

When the US declined significantly as a hegemon, it created space for other actors to produce and expand their industrial base. Nowadays, the world's surplus value is shared by too many parties. That itself causes uncertainty and growing confusion in terms of security, political and economic stability (Islam et al., 2022). For example, when there were only two superpowers the parties feared and negotiated with each other. By doing so, they lessened the degree of uncertainty as issues were common or shared and clearly visible on the surface. Now there are many players in an anarchical international system and each party strives for its own interests or needs that they turn into a strategy. Thus, with that in mind, it is impossible to control or calculate any macro political or economic processes. Scarce resources push players to strive to get a product earlier than another. Hence, states play individual games in order to pursue political interests.

### Conclusions, limitations and future lines of research

To sum up the discussion, despite the above-mentioned arguments, it is still difficult to anticipate economic events with high probability. As Alonso-Alvarez and Molina (2023) point out, only short-term predictions are the few variables that predict the different types of crises, because they identify complex variables and sovereign tensions that have been imposed on currencies, and that governments use to defend themselves against any threat. However, the provided information gives a clear idea about the background of the ongoing inflation, certain scarcity and increased costs. Perevyshin and Trunin (2023) have already predicted inflation risks and measures were tightened.

Specifically, at the Bank of Russia, the range of the expected average value of the regulator's reference rate for 2023–2024 was also raised by 0.5 percentage point. This decision was conditioned by the intensification of inflationary pressure, the growth of budget spending and the deterioration of the external terms of trade. In addition, the average rate range for 2024, according to the bank of Russia's baseline prediction, is 11.5–12.5 % (Fabrichnaya, 2023). As for the fact that the military conflict is still ongoing, the global economy remains open and fragile. Authors such as Aliu et al. (2023) argue for diversification as a valid concept, not only in portfolio construction, but also for the preservation of the national economy. Since the situation is complex and conflicts are still raging for the time being. In addition, it has been identified that economic growth, investment in new businesses and business sustainability has stalled and is growing very slowly. This is why it is also concluded that the objectives of investment policy and innovation strategy are closely interrelated (Kurpayanidi, 2022). Kurpayanidi (2022) affirms that under conditions of instability in business and investment activity in the world, and to maintain high rates of economic development in a country, greater attention needs to be paid to domestic growth reserves. Therefore, the factors of economic crises, Covid-19 pandemic and the conflict between Russia and Ukraine have happened within a short period of time, which has not allowed the countries to recover, and the world is already seeing the effect on rising oil prices, food, as well as social welfare.

As regards theoretical implications, this study helps to contribute mainly in the framework of updating the state of the art. It has been identified that the conflict between Russia and Ukraine presents a continuously changing situation between these two countries, allied regions and has effects on economic growth and sustainability. Also, the literature review identifies several studies related to the topic, but in many cases, they are outdated by the changes. In addition, after the recent end of the Covid-19 pandemic, China lifted restrictions in March 2023 to receive tourists, it has also caused an effect of incessant change. Regarding the practical implications, the present research shows an analysis of the effect of the Covid-19 pandemic, the conflict and the economic crisis and its evolution, as well as predictions for the near future.

Some limitations encountered throughout the research, the prolonged process of the war showed that 'L'union fait la force' or 'unity makes strength' as far as Ukraine has bravely defended its democracy and sovereignty thanks to its allies. The preconditions for operational cooperation in times of crisis and war are necessary (Saxi, 2022). Having said that, the process remains costly and dangerous in terms of the victims and the economic risks. Despite the challenges, the unanimity demonstrated by western countries towards Ukraine and effective economic strategy works as the only hope in this time of great political and economic struggle. As future proposals for improvement, as well as interesting studies to be carried out and put into practice, it is proposed

that strengthened workforce skills through well-designed learning strategies and gender mix of students studying science, technology, engineering and mathematics (STEM) might boost the labor market significantly. The study by Jin et al. (2022) provides empirical evidence confirming that firms under a long period of crisis tend to adopt both exit and innovation strategies, i.e. the resource reallocation strategy. This is why investing in young and well-educated talent can build strength in decision-making. Furthermore, overall, improved skills, increased investment in high-speed broadband, and healthy competition will greatly strengthen the potential for digital technology in order to have a positive impact on productivity. Goldmann and Knörzer (2023) extend the focus on existing models for the determination of efficiency potential in the field of marketing and sales. Where today, the constant evolution of the labor market presents an evaluation at the level of the job task, in order to assess the susceptibility to job automation.

## Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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