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WAR IN UKRAINE: CHALLENGES FOR THE GLOBAL ECONOMY

Introduction. As the attack on Ukraine intensified, the United States and other Western countries imposed unprecedented economic sanctions on Russia and declared their support for Ukraine.

Problem. Considering the far-reaching impact of the humanitarian crisis in Ukraine on international development in the long run, it is extremely important for the international community to implement comprehensive solutions focused on development priorities.

The aim of the article is to study the impact of the war in Ukraine on inflation risks and challenges for the world economy.

Methods. The information base of the study was the study of official information and periodicals. Methodological basis of the research: analysis, synthesis, systems approach, statistical methods and abstract-logical methods.

Results. The new sanctions regime and the cost of the war are likely to push the Russian economy into a recession worse than the 1998 recession and the Russian financial crisis, accompanied by significant increases in inflation and the cost of living of Russian households. According to our preliminary estimates, Russia's real GDP will fall by 4–9 % in 2022, while growth will range from –1 % to 2.5 % in 2023. Inflation may rise to 11–17 % in 2022, fall to 6–12.03 % in 2022. A key factor in

ВІЙНА В УКРАЇНІ: ВИКЛИКИ ДЛЯ СВІТОВОЇ ЕКОНОМІКИ

Вступ. У міру загострення нападу на Україну США та інші західні країни запровадили безпрецедентні економічні санкції проти Росії та заявили про підтримку України.

Проблема. З огляду на далекосяжний вплив гуманітарної кризи в Україні на міжнародний розвиток у довгостроковій перспективі, для міжнародної спільноти надзвичайно важливо впроваджувати комплексні рішення, орієнтовані на пріоритети розвитку.

Метою статті є дослідження впливу війни в Україні на інфляційні ризики та виклики для світової економіки.

Методи. Інформаційною базою дослідження стало вивчення офіційної інформації та періодичних видань. Методологічна основа дослідження: аналіз, синтез, системний підхід, статистичні методи та абстрактно-логічні методи.

Результати. Новий режим санкцій і витрати на війну ймовірно підштовхнуть російську економіку до рецесії, гіршої, ніж рецесія 1998 року та російська фінансова криза, що супроводжується значним збільшенням інфляції та вартості життя російських домогосподарств. За нашими попередніми оцінками, реальний ВВП Росії впаде на 4–9 % у 2022 р., при цьому зростання коливатиметься від –1 до 2.5 % у 2023 р. Інфляція може досягти 11–17 % у 2022 р., знизитися до

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these projections is that Russia's oil and gas exports, especially to Europe, are largely continuing, but this may change if sanctions are tightened. In 2021, Russia's exports of mineral fuels, oils and distillation products amounted to 199 USD billion. USA, which accounts for 40.5 % of Russia's total exports and 11.4 % of its GDP. Depending on the duration of sanctions and the possibility of their strengthening, the world economy may be significantly affected during 2022–2023.

Conclusions. It is expected that the war in Ukraine will have a significant impact on the economy and consumers in terms of such actions: expanding the supply chain, increasing inflationary pressures, deteriorating economic prospects.

Keywords: Ukraine, war, inflation risks, global economy, GDP.

JEL Classification: F51, H83.

6–12.03 % у 2022 р. Ключовим фактором цих прогнозів є те, що російський експорт нафти і газу, особливо до Європи, в основному продовжується, але це може змінитися, якщо санкції будуть посилені. У 2021 р. російський експорт мінерального палива, олії та продуктів перегонки становив 199 млрд дол. США, або 40.5 % загального експорту Росії та 11.4 % її ВВП. Залежно від тривалості санкцій і можливості їх посилення світова економіка може зазнати значного впливу протягом 2022–2023 рр.

Висновки. Очікується, що війна в Україні матиме значний вплив на економіку та споживачів з огляду на: розширення ланцюга поставок, посилення інфляційного тиску, погіршення економічних перспектив.

Ключові слова: Україна, війна, інфляційні ризики, глобальна економіка, ВВП.

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Introduction. As the attack on Ukraine intensified, the United States and other Western countries imposed unprecedented economic sanctions on Russia and declared their support for Ukraine. The main sanctions so far have included:

- freezing foreign assets of Russian banks and key leaders;
- exclusion of the seven largest Russian banks from the World Interbank Financial Telecommunication Company (SWIFT). Although Russia has developed its own domestic payment network to avoid internal disruptions, disconnecting from SWIFT significantly complicates international payments through Russian banks, severely restricting Russian imports and exports;
- sanctions against the Central Bank of Russia (CBR). These sanctions prevent the Central Bank of Russia from using most of its foreign reserves of USD 640 billion, which are held in euros and dollars and account for 60 % of the reserves, to stabilize the Russian economy. In early March, the Russian ruble fell by about 30% with a possible further decline, and there were signs of a raid on Russian financial institutions with increasing withdrawals from banks. In response, the CBR raised the key interest rate from 9.5 % to 20 %;
- more and more international companies, including in the energy and technology sectors, are closing down or leaving Russia due to its invasion of Ukraine.

In early 2022, a world of hope began to take cautious steps to recover from the *COVID-19* pandemic and economic recovery, but at this point, the world was shaken by the war in Ukraine. According to preliminary estimates by the United Nations Development Program, nine out of ten Ukrainians may face poverty and extreme economic vulnerability if the war escalates. This will push the country and the whole region back a few decades and leave deep socio-economic scars for future generations. In a broader context, the geopolitical and economic consequences of this war pose a serious threat not only to Ukraine but also to global peace and development. Effective responses to these challenges cannot be found by states alone. Planning for an effective response to the effects of hostilities on the most vulnerable, as well as global pandemics and the current climate emergency, requires strong and stable international cooperation.

Problem. Today, international development assistance is under threat. There are at least four main reasons why the war in Ukraine could lead to a crisis in multilateral and international development cooperation. First, the war in Ukraine could lead to a reduction in production worldwide, which in turn could lead to a reduction in available funds for development from public and private sources. Second, as most of the leading donor countries struggle to cope with the humanitarian crisis in Ukraine, major policy changes are taking place that could potentially have serious implications for international aid. Third, the chain reaction due to the humanitarian crisis in Ukraine, which has affected the prices of raw materials and energy, is spreading far beyond the territories where hostilities continue. Fourth, the direct and indirect consequences of the war in Ukraine worsen the state of the multilateral development system, which is already under excessive pressure.

Considering the far-reaching impact of the humanitarian crisis in Ukraine on international development in the long run, it is extremely important for the international community to implement comprehensive solutions that focus on development priorities. They should play a key, not secondary, role in the global response to the situation in Ukraine. It is equally important that the international community work with civil society and other partners to ensure that budget increases in response to hostilities, including military spending, are not funded by global development and humanitarian assistance to other regions; and solving other problems. It is time for the international community to reaffirm its commitment to global peace and development. These commitments must be based on a strong and effective multilateral system that can uphold universal values and contribute to global recovery and a sustainable future.

Analysis of recent research and publications. Theoretical and practical problems of inflation, its regulation and challenges to the global economy are revealed in the works of many researchers. A. Petryk and I. Deisan [1] considers anti-inflationary policies that are clearly based on certain rules and which constantly achieves the goals it proclaims or

explains the reasons for their rejection, is a policy based on the growth of confidence can reduce inflation and keep it low without significantly reducing production. R. Byvshev and A. Listopadov [2] studies inflationary processes in Ukraine and the EU and states that inflationary processes were caused by a number of factors and have different forms of manifestation. The critical situation in the country requires the introduction of effective measures to combat inflation, taking into account foreign experience, including: elimination of shadow activities in the country; control over money circulation; overcoming poverty; stabilization of the price level. D. Khokhych [3] focuses on inflation targeting. M. Arych, M. Korniienko, Y. Kripak, T. Didenko [4] analyze the impact of inflation on food security, represented by indicators of food exports and imports. S. Veretiuk, V. Pilinsky and M. Boguslav [5] investigates knowledge inflation, which qualitatively describes the dependence of knowledge inflation on time. Inflation of knowledge is exponential, which in turn raises the question of finding effective mechanisms for «modernization» of skills and knowledge.

T. Bohdan [6] considers global debt as an indicator of the problems of the world economy and challenges for Ukraine's financial policy. S. Ishchuk [7] investigates the influence of external factors on the indicators of socio-economic development of Ukraine. H. Kotina, M. Stepura and A. Hryhorenko [8] argue that the efficient functioning of the economy of any country is impossible without the development of fuel and energy complex, which is essential for the stable operation of industrial enterprises, the commercial sector and households. S. Rassadnykova and I. Prymachenko [9] study the modernization of the economy through the intensification of investment processes in the context of modern challenges and globalization. I. Artemieva [10] examines the main challenges and opportunities that arise in various sectors of the economy under the influence of the global spread of digital technologies. However, a number of issues remain that have become relevant in connection with the war in Ukraine.

The aim is to study the impact of the war in Ukraine on inflation risks and challenges for the global economy.

Methods. The information basis of the study included the study of official information and periodicals. The methodological basis of the study: analysis, synthesis, systematic approach, statistical methods and abstract-logical methods.

Results. The new mode of approval and war expense, probably, will urge the Russian economy into a recession, worse, than the recession of 1998 and the Russian financial crisis that is accompanied by the considerable increase in inflation and cost of living for Russians. On our preliminary expectation, the real GDP of Russia will go down to 4.0–9.0 in 2022.

The key factor of these prognoses is that the Russian export of oil and gas, especially considering export to Europe, proceeds mainly, but it can change if approvals will increase. In 2021 the Russian export of mineral

fuel, oil, and foods of distillation made 199 USD billions, which presents 40.5 % of the total export of Russia and it is 11.4 % of its GDP.

Depending on sanctions duration and the possibility of further sanctions a world economy can test the considerable consequences of conflict during 2022–2023. Our expert estimations provide for, that:

- in a world economy and key economies, probably, the annual rates of increase of the real GDP in 2022–2023 will diminish by 0.2–1.5 percent point comparatively with prognoses to encroachment;
- economies with a greater propensity to trade with Russia, including in the eurozone and China, are more attractive to side influences of war [11].

Russian’s Top 10 Export Destinations 2016 vs 2021 shown in *Figure 1*.

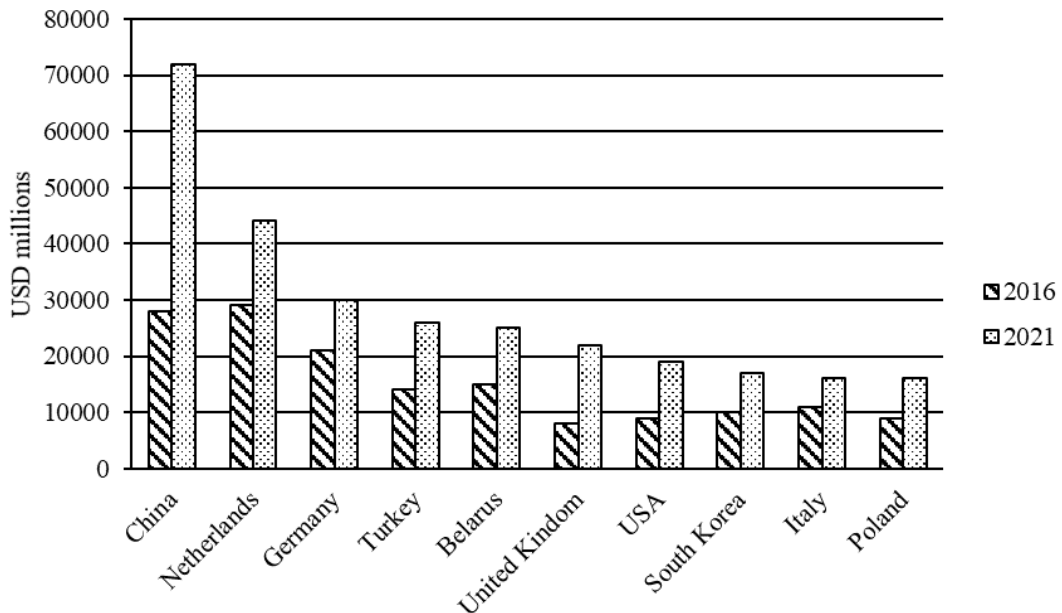


Figure 1. Russian’s Top 10 Export Destinations 2016 vs 2021, millions USD [11]

Energy and goods are the basic channels of influence, that strengthen inflationary pressure. It is possible to expect that the global economic consequences of war in Ukraine will arise through a price increase on power mediums and raw material commodities, a decline of trust private to the sector, and an increase in the effect of bonuses for the risk of financial market through high geopolitical tension and risks. Higher prices on the power mediums and raw material, war-induced and by approvals, will add and without that high inflationary pressure into that many countries run from 2021, on a background the bottlenecks of a chain of deliveries, change of consumer demand and proceeding in a global economy after a pandemic.

Russia is the world’s source of raw materials. In 2021 the export of mineral fuel laid down 8.3 % of general world volume does him one of

most exporters of oil and gas in the world. Russia is also the key supplier of different metals, including copper, nickel, palladium, and aluminum. In addition, Russia and Ukraine are the basic exporters of wheat. Two countries provided 14.7 % of the world production of wheat in 2021 (Figure 2) [11].

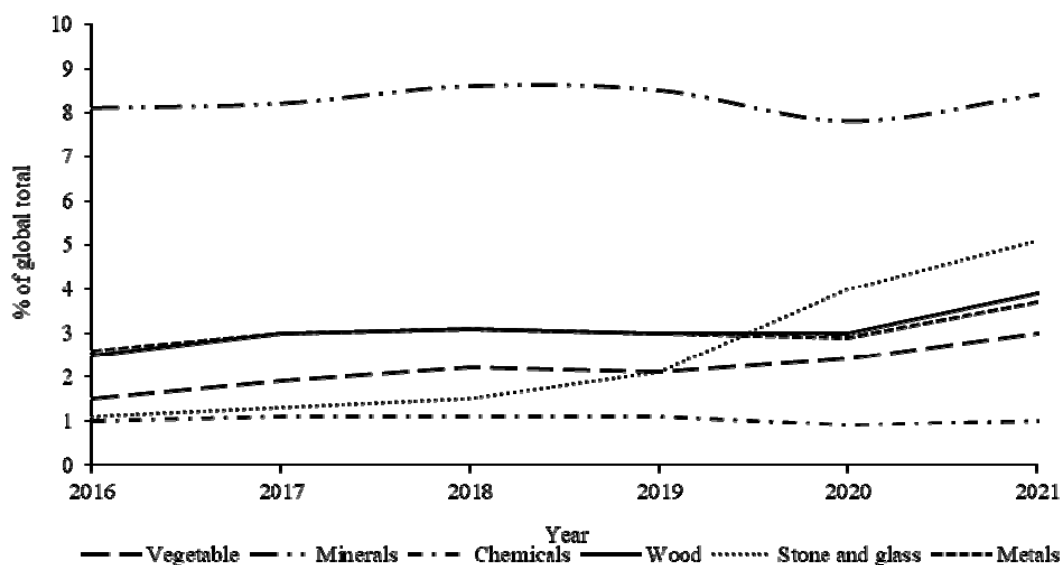


Figure 2. Russian’s share of global export by selected commodities: 2016 vs 2021 [11]

Even if trading in oil and gas will last, punitive lessening of supplies from Russia in reply to approvals, and also preventive accumulation, probably, will result in oil and gas traders in a considerable price advance on power mediums on 30–50 2022–2023. Prices on wheat can be doubled, if an export from Russia and Ukraine absolutely cease. From data of the International power agency, Europe is especially vulnerable through the dependence on Russia in the consumption of gas on 40a by data of International power agency, with a limited possibility to replace other sources of import in the short-term prospect. Coming from today’s situation, we forecast, that world inflation will be 2–3 percent points higher annually in 2022–2023, comparatively with our previous prognoses, done in January 2022. The higher estimations of influence on inflation, probably, will feel the economies of the eurozone and some growing markets.

The expected increase in energy and commodity prices would worsen tight pre-war global supply constraints and add further inflationary pressure on the global economy.

Rising energy price were already a key contributor to above-trend inflation in 2021–2022, driven by the recovery in global demand and a decumulation of oil and gas inventories during the pandemic.

The pandemic caused substantial investment cuts and perturbations in global supply chain infrastructure. COVID-19-related restrictions on

shipping and transportation facilities (especially in China and the US), and shortages of workers in the supply chain have continued to cause supply bottlenecks. Main Factors Impacting Global Inflation Outlook 2022–2023 shown in *Table*.

Table

Main Factors Impacting Global Inflation Outlook 2022–2023

Increasing factor	Decreasing factor
Higher energy and commodity prices	Shift back towards more services consumption in 2022–2023
Pandemic-driven shift from services to goods consumption	Reduction of pandemic restrictions on transport and supply chains
Lower business investment in supply infrastructure and ongoing supply chain restrictions during the pandemic	Decline in private sector confidence and demand due to war in Ukraine

Source: developed by the authors.

The pandemic has also caused a major shift from services to goods consumption, aggravating shortages for key production inputs. The combination of major shifts in consumption spending patterns, delayed supply chain investments and *COVID-19*-related disruptions to supply chain operations has resulted in large supply-demand mismatches and rising inflation rate already before the war, which are expected to continue in 2022–2023.

The war in Ukraine and sanctions on Russia are expected to dampen some of the inflationary effects of the global demand recovery, by reducing private sector confidence and spending. However, the positive impact of higher energy prices on inflation is expected to increase relative to previous forecasts.

The current baseline forecast assumes a partial continuation of flows of Russian energy supplies to advanced economies for most of 2022, and a successful switch in energy imports to other suppliers. A sharper cut in energy exports from Russia could lead to much higher energy price increases and shortages, pushing up global inflation forecasts by another 1.0–4.0 percentage points relative to the current baseline forecast.

There are also significant risks of a more prolonged war in Ukraine leading to more persistent or severe sanctions, and a risk of escalation into a Russia-NATO conflict. These risks are hard to quantify, but they could severely cut private sector confidence and raise financial market risk premia, pushing the global economy into a recession.

The global economy remains vulnerable to other pre-war risks. These include new vaccine-resistant and highly contagious *COVID-19* variants, negative effects of rising global interest rates on developing economies with high foreign debt levels, and worsening problems in China's real estate and financial markets. These factors could lead to a more pessimistic pandemic scenario, slowdowns in emerging markets or a Chinese hard landing scenario.

The global economic outlook has worsened since the start of the war in Ukraine and the imposition of major economic sanctions on Russia at the end of February 2022. In our interim economic forecasts mid-March 2022, we have downgraded global real GDP annual growth forecasts for 2022–2023 by 0.7–0.8 percentage points relative to the pre-war forecast, while global annual inflation forecasts have been raised by 2.6–2.7 percentage points. In the baseline scenario, global real GDP is predicted to increase by 3.6 % in 2022 (with a range of 2.3–4.6 %) and by 2.8 % in 2023 (with a range of 1.3–4 %), after a strong 6.0 % economic recovery in 2021 (Figure 3).

Global economic spillovers from the war in Ukraine are mainly expected energy and goods prices growth, private sector confidence decline and higher financial market risk referred to higher geopolitical tensions. The biggest short-term economic impact is likely to come from global energy and commodity prices, due to Russia’s role as one of the leading producers of energy and commodities.

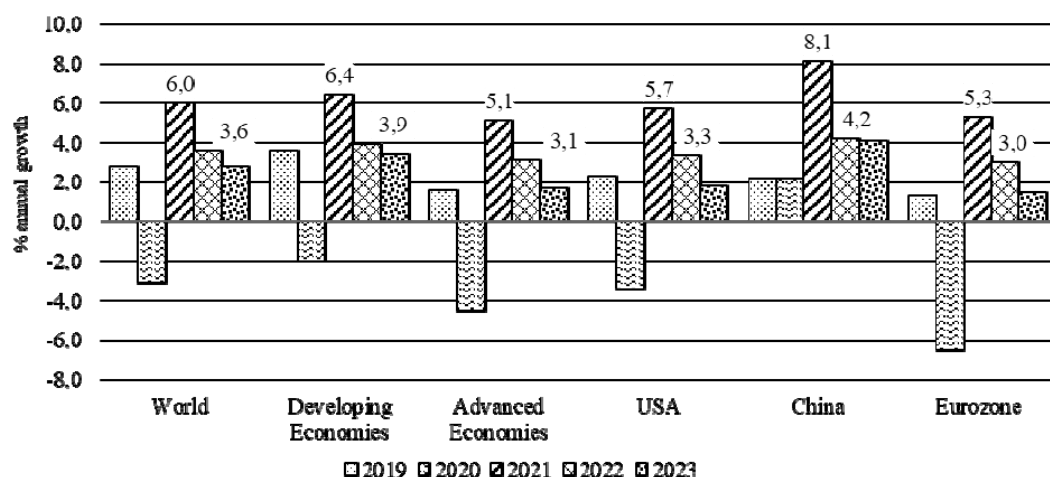


Figure 3. Global Real GDP Growth Baseline Forecast 2019–2023

Source: developed by the authors on the basis of [12].

The baseline scenario assumes that the war could last for around one to two years, or it moderates in intensity after 2023 while the global economy adapts to a partial economic decoupling from Russian energy and commodity imports. However, uncertainty around these assumptions is high and tilted towards a longer war, lower economic growth and higher inflation scenarios.

Conclusion. The war in Ukraine is set to have significant impacts on economies and consumers in terms of such detections. Extended supply chain disruptions. Global supply chains face a new round of challenges, as war and sanctions cause further disruptions to trade, commodities supply and transportation network. A wide range of industries, from food to automotive and hi-tech, will feel the negative impacts of the war and economic sanctions. Disruptions will cause further delay of a normalisation of global supply chains.

Heightened inflationary pressures. Russia's invasion of Ukraine has added volatility and upward pressures to energy and commodity prices. Even as oil and gas trade continues, the destruction of physical infrastructure and precautionary hoarding by oil and gas traders would likely lead to major energy price increases. Food prices also see upward pressure, as supply of wheat and cereal from Russia and Ukraine is disrupted. Higher energy and commodity prices will fuel global inflation in 2022 and beyond. Consumers in both developed and developing markets will increasingly feel the squeeze of rising prices. The increase of inflation compensates positive influence of higher prices on raw material for some countries that develop, guided by resources.

Worsened economic outlook. Russia's invasion of Ukraine has worsened the global economic outlook. The negative impacts mainly come from higher energy and commodity price pressure, private sector confidence decline and higher financial market risk referred to higher geopolitical tensions. European economies are likely to suffer most from energy and commodity supply shocks, while food security in some developing countries in the Middle East and Africa could be threatened. A deteriorating economic outlook will affect consumer and business confidence, weighing on private investment and consumption in the short and medium term.

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