

The Impact of the Ukrainian War on the World Economy

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Abstract

This paper constitutes a study on the consequences of the Ukrainian war on the global economy. The aim of this article is to elucidate the impacts of the Ukrainian war on the world economy and identify the country's most dependent on Russian and Ukrainian wheat. The results of this article indicate that the war has several effects on international markets and global growth. In this regard, we propose the continued diversification of supply sources and, whenever feasible, the preservation of national sovereignty in sensitive domains like food production.

Keywords: Russian and Ukrainian war, economy global.

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Introduction

In the wake of the global economy's gradual recovery from the disruptive aftermath of the COVID-19 pandemic, the spectre of the ongoing conflict in Ukraine looms ominously, casting a long shadow of uncertainty and posing a substantial threat to the short- and medium-term economic outlook. The complex and unpredictable nature of this conflict makes it a formidable challenge to quantify its far-reaching economic consequences. Nevertheless, the adverse impacts of this war have already materialized and are causing mounting concern. Notably, energy prices and essential commodity rates have surged to unprecedented historical levels, intensifying post-COVID-19 inflationary pressures. This alarming surge in prices not only threatens to exacerbate the economic hardships faced by vulnerable households but also raises the prospect of erasing decades of progress in poverty alleviation, especially within the context of developing nations. Moreover, the implementation of historic sanctions against Russia has sent shockwaves across global financial markets, significantly affecting both Russia and the world at large.

Despite Russia and Ukraine having relatively modest shares in global production capacities, they are pivotal players in the production and export of fundamental foodstuffs, minerals, and essential energy resources. This ongoing war has already unleashed substantial economic and financial shocks, particularly within commodity markets, where the prices of critical commodities such as oil, gas, and wheat have seen sharp surges.

The price fluctuations in commodities and the turbulence in financial markets observed since the commencement of the conflict may culminate in a reduction of over one percentage point in

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global GDP growth during the first year if they persist. Furthermore, a severe economic downturn in Russia and an estimated 2.5 percentage point surge in global inflation, as measured by consumer prices, could be anticipated.

In response to this newfound and unpredictable adverse shock, the paramount objective of monetary authorities must remain the preservation of securely anchored inflation expectations. Most central banks are expected to adhere to their pre-war policies, with potential exceptions in the case of the most severely impacted economies, where a temporary hiatus may be deemed necessary for a thorough evaluation of the crisis's ramifications.

Over the short term, many governments are confronted with the urgent need to counteract the repercussions of escalating energy costs. This will necessitate a multifaceted approach, involving the diversification of energy sources and the optimization of energy efficiency wherever practical. Simultaneously, addressing disruptions in the supply of food products induced by the Ukrainian conflict is of paramount importance. Solutions may lie in bolstering production in OECD countries, a commitment to refraining from protectionist measures, and the implementation of multilateral logistical support.

The conflict in Ukraine has underscored the critical imperative of reducing reliance on Russia for certain essential imports. Policymakers now confront the challenge of reevaluating market structures to fortify energy security and institute incentives conducive to the transition to a green economy, with the indispensable support of the public.

In light of these pressing issues, the principal objective of this article is to investigate the following overarching question: What is the impact of the Ukrainian war on the global economy?

To address this central inquiry, we have formulated a set of pivotal sub-questions:

- What is the extent of the Ukrainian war's impact on global trade?
- How does the Ukrainian war influence the trajectory of global economic growth?
- What are the consequences of the Ukrainian war on international inflation and trade?

The Significance of the Study:

This research tackles a timely and critical subject that directly impacts one of the foremost issues in current global affairs, namely, the consequences of the Ukrainian war on the worldwide economy, encompassing global growth, inflation dynamics, and international trade.

The Study's Objective:

The fundamental objective of this research is to gain a comprehensive understanding of how the Ukrainian war is influencing the global economy.

Literature

review:

Part I: Economic Situation Before the Ukrainian War

This first section encompasses an introduction that outlines the topics presented within it, divided into chapters.

Chapter 01: Economic Situation at the Beginning of the Conflict

A conflict between Russia and Ukraine, ranked 13th and 61st, respectively, in terms of the world's largest economies by GDP, and known as the "breadbasket of the world," never arrives at an opportune moment. However, the current context is notably challenging. The global economy is still navigating its way through the fourth wave of the pandemic, and merely 11% of Africans have completed their vaccination regimens. While the world economy is in its second year of recovery, and the World Bank's Global Economic Prospects anticipate a 4.4% growth in 2022, uncertainty remains substantial due to the ongoing pandemic, surging prices (median inflation has increased from 2.2% before the pandemic to 3%), and the prospect of rising interest rates. In the United States, the world's primary financial hub, prices increased by 7.5% in January 2022 on a year-on-year basis, and the Federal Reserve anticipates multiple interest rate hikes in 2022 and 2023.

The economic outlook for Africa was already unfavorable before the invasion. Africa remains highly vulnerable to the pandemic, and according to the World Bank (2022), per capita income in most African countries will remain below pre-pandemic levels, at least until 2023. Median inflation was reported at 5.1% year-on-year at the end of 2021. Africa, particularly North Africa, is significantly impacted by high food prices, which represent nearly 40% of household budgets in many countries. Poverty levels, measured at \$1.90 per day, increased from 34% before the pandemic to 39% (African Economic Outlook 2021).

According to the African Development Bank's (AfDB) classification, the 43 African energy-importing countries also indirectly suffer from high coal, gas, and oil prices, as they raise production costs for fertilizers and energy-intensive food items.

Chapter 02: Countries Most Dependent on Russian and Ukrainian Wheat in 2021

A study by the Food and Agriculture Organization (FAO), published before the Russian invasion of Ukraine, identifies the 26 countries most dependent on Russian and Ukrainian wheat. Analyzing this data helps to identify these countries and understand which African nations are most reliant on these imports.

Firstly, twenty-six countries, spanning continents, depend on Russia and Ukraine for over 55% of their wheat supplies.

Table 01 compiles these countries, specifying their respective populations and the degree of their dependence on Russia and Ukraine for wheat imports.

Table 01: Countries Most Dependent, in %, on Russian and Ukrainian Wheat Imports.

Table 02: Role of Russia and Ukraine in Global Raw Material Supply (2016-2020)

Exported Products Worldwide	Global Ranking	Russia's Share (%)	Global Ranking	Ukraine's Share (%)
Fuels	1	9,95	91	0,04
Petroleum and Petroleum Products	1	10,90	91	0,02
Natural Gas and Manufactured Gas	11	2,86	92	0,01
Coals, Cokes, and Briquettes	3	13,10	38	0,05
Electricity	13	2,31	28	0,87
Cereals and Cereal Preparations	4	5,23	7	4,70
Wheat: Unmilled Durum Wheat and Meslin	1	16,25	6	7,72
Unhulled Barley	3	11,06	4	10,37
Unmilled Maize	8	2,46	4	11,47
Non-Ferrous Metals	4	4,99	71	0,07
Silver, Platinum, and Platinum Group Metals	5	8,29	54	0,02
Copper	7	3,90	56	0,08
Nickel	2	11,21	42	0,03
Aluminium	6	4,69	68	0,05
Lead	9	3,17	36	0,46
Iron and Steel	5	5,16	15	2,23
Raw Fertilizers	8	3,39	29	0,99
Fertilizers (Unroasted Sulfur	3	7,55	67	0,01

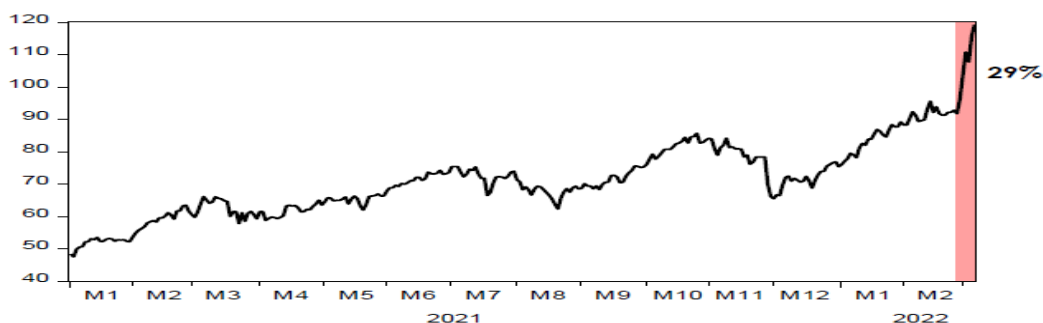
and Iron Pyrite)

Oils, Fats, and Waxes (Animal or Vegetable)	10	2.8	5	4.73
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Source: CNUCED, 2022

The Russo-Ukrainian war thus causes disruptions in the hydrocarbon supply chains with immediate consequences on prices. Indeed, in just thirteen (13) days after the start of the Russian invasion of Ukraine on February 24, 2022, the price of a barrel of oil had already surged by 29%, rising from 92.8 dollars to 119.3 dollars, as shown in the graph. The embargo on Russian oil imports ordered by President Joe Biden on Tuesday, March 8, 2022, could further exacerbate the upward pressure on the global oil price, even if European countries are hesitant to implement such a sanction. With this development, the specter of a barrel price of 150 dollars or more no longer seems a distant horizon, according to several analysts.

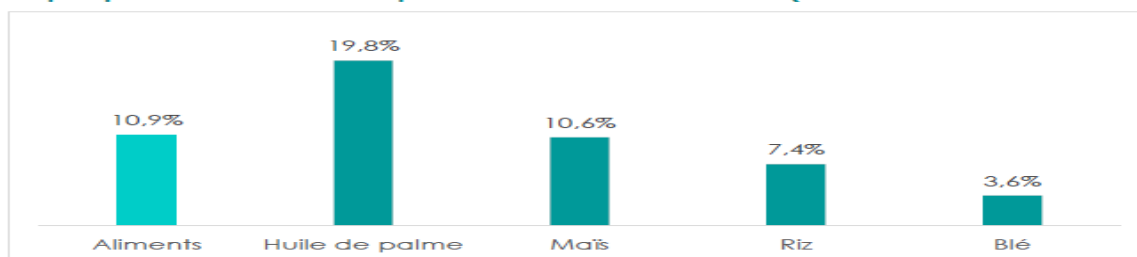
Graph 01: Evolution of Oil Price (in \$) and the Impact of the War in Ukraine



Source: U.S. Energy Information Administration

The surge in prices is also impacting agricultural commodities and, consequently, food items, which were already experiencing price increases. Indeed, the Russo-Ukrainian crisis is unfolding against a backdrop of inflationary pressure caused by the global post-COVID-19 recovery and insufficient global supply. In 2021, energy prices rose by 82% compared to 2020, fertilizer prices increased by 80.5%, while agricultural product prices surged by 24.2%, including a 31% increase in food products. Metals and minerals saw their prices increase by 47% compared to 2020. This trend has continued since the beginning of 2022, as illustrated in Graph 2. Global food product prices rose by 11% between December 2021 and February 2022. This increase reached 20% for palm oil, 10.6% for corn, 7.4% for rice, and 3.6% for wheat.

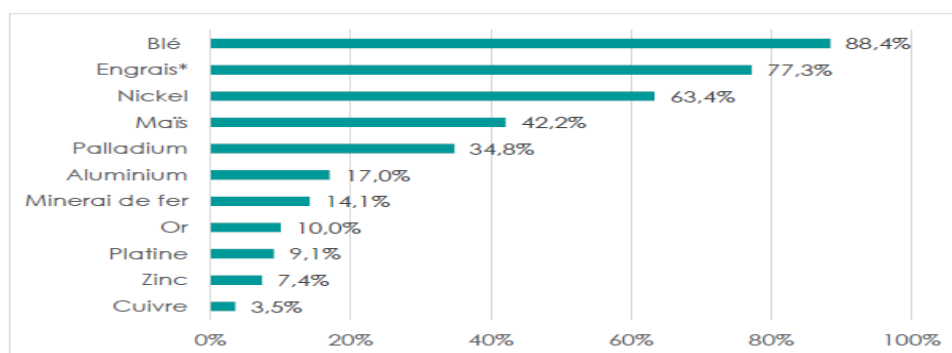
Graph 02: Variation in Food Commodity Prices (End of December - End of February)



Source: World Bank Data, 2022

The war in Ukraine has exacerbated this trend and could turn 2022 into a year of record-high price increases and social vulnerability. Since the beginning of the war, commodity prices have significantly surged on global markets, as depicted in Graph 02. This price surge affects various commodities, especially those exported by the countries directly involved in the conflict. For instance, compared to the average price in January 2022, wheat prices have, on average, risen by 88% from February 24 (the war's commencement) to March 9. There has been a 77% price hike for fertilizers, 63% for nickel, 42% for corn, and 35% for palladium. The consequences of this global price surge, in an already inflationary environment, could have dire effects in developing countries, increasing the risk of food insecurity. Several decades of tireless efforts to combat poverty and extreme poverty in these nations could thus be jeopardized by this new global crisis, which is not unfolding on their doorstep.

Graph 03: Increase in Commodity Prices Due to the War



Source: OECD, Economic Outlook, Interim Report, March 2022. Fertilizers referring to potash.

Secondly: Panic in International Financial Markets

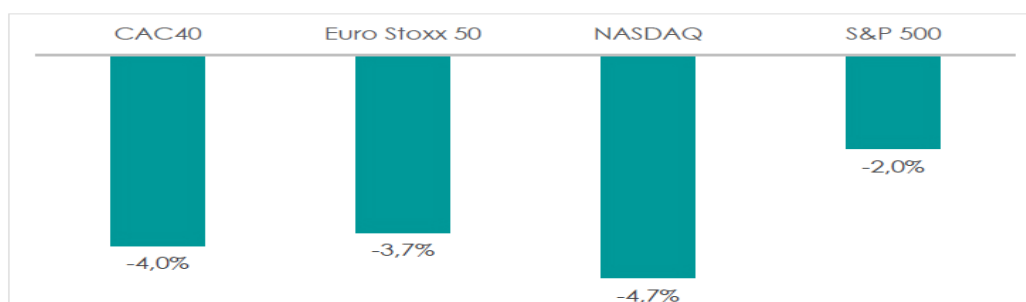
The crisis in Ukraine and its political consequences have created uncertainty in financial markets, resulting in significant asset price volatility in Russia. The sanctions imposed by the United States and European countries on Russia to compel it to step back have targeted the Russian banking system, including the Central Bank of the Russian Federation. These sanctions immediately led to a sharp depreciation of the ruble and a decline in the prices of various Russian and Ukrainian assets. Russia's benchmark index, the MOEX, plummeted by 25% in a week and

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experienced a 40% drop on February 25, as reported by Global Sovereign Advisory (2022). In the bond market, Ukrainian and Russian eurobonds in 2029 lost 30 to 40 percentage points of their value compared to the beginning of the year.

The volatility in asset prices also affected global financial markets in response to the conflict and announced sanctions. Central and Eastern European stocks incurred substantial losses, with Polish and Hungarian indices dropping by about 8% in a week, according to Global Sovereign Advisory. As shown in Graph 4, the American NASDAQ and S&P 500 indices recorded declines of 4.7% and 2%, respectively, between the start of the war on February 24 and March 11, 2022. Regarding European indices, the CAC40 lost 4% of its value, while the Euro Stoxx 50 fell by 3.7% during the same period.

Graph 04: Market Response to the Russian Invasion in Ukraine

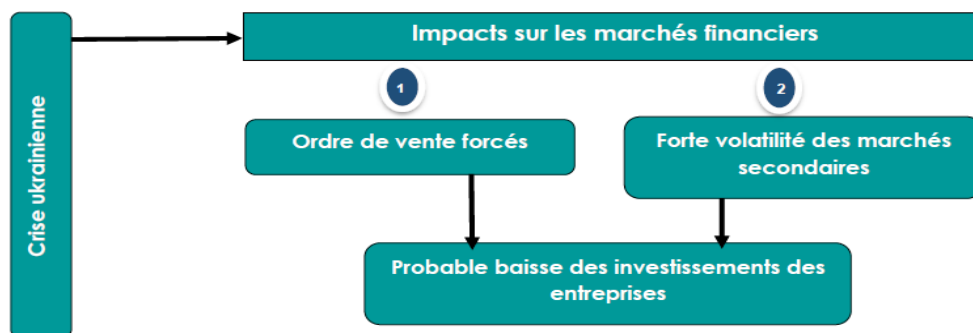


Source: Yahoo Finance

Strong volatility is also expected in secondary markets. The increasing financial sanctions against Russia could drive investors to execute forced sell orders, thereby amplifying volatility in secondary markets. According to Global Sovereign Advisory, the evolution of global indices shows that American and European companies and banks most exposed to Russia have experienced significant sell-offs. Furthermore, sanctions in Russia and the general instability in the region have led investors to reduce their exposure to Central and Eastern European (CEE) countries' credits, prompting them to seek alternative assets.

In general, the uncertainty caused by this crisis will negatively impact investment decisions worldwide. The lack of visibility for investors is a hindrance. In a situation where the war's progression is unclear, security holders prefer to divest themselves of securities to avoid significant losses in value. In this context, interest rates in financial markets will increase, hampering the financing of economies in developing countries. This is even more likely given that central banks globally will not resist for long before raising their key interest rates to attempt to contain inflationary pressures. Faced with rising production costs, including interest rates, businesses may need to reduce their investments (see Figure 1). Global foreign direct investments (FDI) are likely to decline, as was the case in 2020 during the COVID-19 pandemic.

Figure 1: Ukrainian Crisis, Financial Market Panic, and Investment

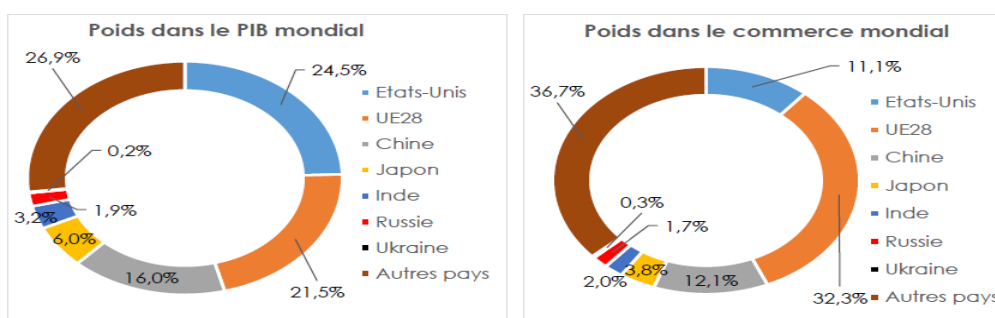


Source: DRES

Thirdly: Effects on Global Growth

On a macroeconomic scale, Russia and Ukraine have relatively low weights in the global economy and international trade. As indicated in Graph 5, Russia and Ukraine accounted for 1.9% and 0.2% of the global GDP on average during the period 2016-2020, and 1.7% and 0.3% of global trade (imports and exports) during the same period, respectively. The United States overwhelmingly dominates the global GDP (24.5%), followed by the European Union (21.5%), China (16%), and Japan (6%). Concerning global trade, the European Union takes the lead (32.3%), followed by China (12.1%), and the United States (11.1%). The breakdown of trade between exports and imports does not reveal a significantly higher overall weight for Russia and Ukraine. These two countries account for 1.3% and 0.3% of global imports and 2.1% and 0.3% of global exports, respectively.

Graph 05: Russia and Ukraine's Weight in the Global Economy

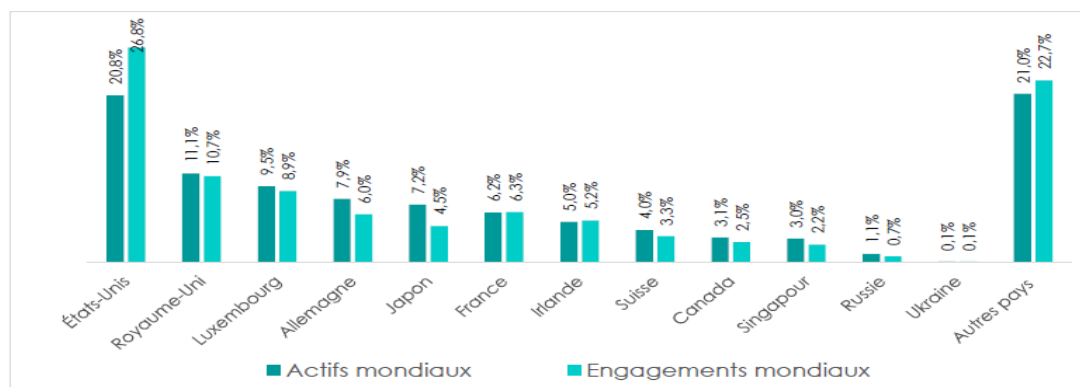


Source: UNCTAD, 2022

Similarly, Russia and Ukraine play a minor role in the global finance arena due to the scale of their assets and global commitments. Assets and global commitments are overwhelmingly dominated by the United States, followed by the United Kingdom, Luxembourg, Germany, and Japan in the top 5 for global assets. Russia and Ukraine lag far behind, accounting for 1.1% and 0.1% of global assets and 0.7% and 0.1% of global commitments (Graph 5). These countries also have limited weight in international reserves (including gold), at 3.8% and 0.2%,

respectively. As a result, the conflict between Ukraine and Russia does not pose a significant threat to the stability of the global financial system.

Graph 06: Share in Global Assets and Commitments



Source: IMF, 2022

However, they are significant suppliers of energy and basic commodities upon which the global economy heavily depends, as highlighted in section 2.1. The current crisis is causing supply difficulties for these products on a global scale. The resulting inflationary pressures are detrimental to the global economy, especially in an already tense context where supply disruptions caused by the COVID-19 pandemic were not fully resolved. By eroding the purchasing power of households, already strained by price increases in 2021, the rise in inflation could lead to a negative confidence shock and a significant decrease in demand. Furthermore, commodity-intensive businesses in their production processes would be more severely affected by this crisis.

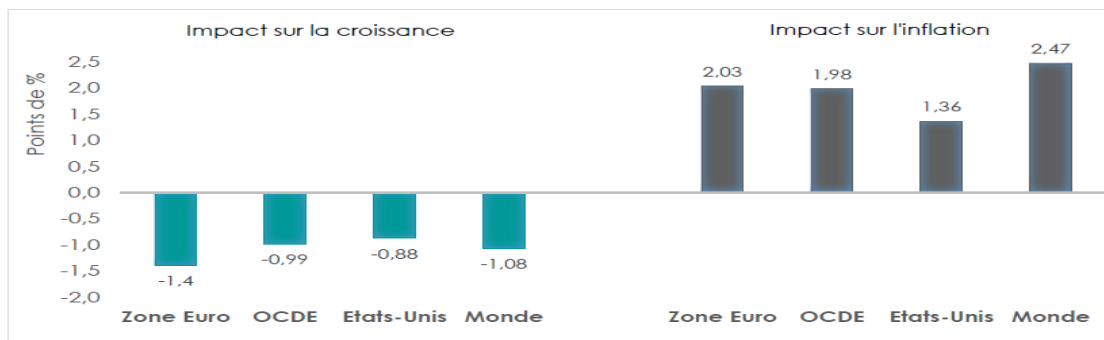
To determine which countries are more affected by the Russo-Ukrainian conflict, Global Sovereign Advisory proposes an indicator of commercial dependence on key at-risk supplies (Russian oil and gas, Ukrainian wheat, corn, and sunflower oil) for 153 countries. According to this index, it appears that Armenia, Lithuania, Mongolia, Kyrgyzstan, Lebanon, Bulgaria, Greece, Tunisia, Finland, and Serbia are the countries most vulnerable to a halt in key exports from Russia and Ukraine. Geographic and/or cultural proximity, as well as the need for agricultural goods and energy, are factors that can explain this result. In the same vein, the determination of the share of exports of 5 products (corn, wheat, sunflower oil, and oil and gas) in total global exports clearly reveals that energy exporters such as Angola, Kuwait, Azerbaijan, Nigeria, and Qatar are by far the biggest beneficiaries of rising global prices.

Regarding the world's exposure to Russian financial flows, Global Sovereign Advisory reveals that Armenia, where the stock of FDI from Russia accounts for 8%, would be more exposed to a withdrawal of Russian investors. Austria, Tajikistan, Latvia, Bulgaria, and Serbia are not exempt from risk. Italy, France, and Austria, on the other hand, are by far the most exposed to the risk of non-payment of Russian claims.

For its part, the IMF has already announced that it would lower its growth projections for 2022 due to the war. While no figures have been provided yet, the IMF believes that the consequences of the crisis are already serious enough for it to further revise down its global growth forecasts, which it had just done in January 2022. Indeed, the persisting effects of COVID had prompted the IMF to reduce its projections for global growth from 4.9% to 4.4%. In some countries like France, an economic growth loss of 1% is expected. Germany, the leading European power, could lose more due to its higher dependence on Russian gas.

The Organisation for Economic Co-operation and Development (OECD) expects, based on its simulations, a 1-point drop in global growth. Relying on the rise in prices of key commodities exported by Russia and Ukraine, financial market disruptions due to high uncertainty, and the depreciation of the ruble, the OECD estimates, using its global macroeconomic model NiGEM, that global growth would decrease by 1.08 percentage points in 2022 due to the Russo-Ukrainian conflict (see Graph 7). The Eurozone would lose 1.4 percentage points of growth, while U.S. growth would decline by 0.9 percentage points.

Graph 07: Impact of the Crisis on Global Growth and Inflation



Source: OECD, Economic Outlook, Interim Report, March 2022

As for inflation, it would increase by 2.5 percentage points globally due to the crisis in Ukraine. While a more significant price increase is expected in developing countries, it is not negligible in developed countries (2% in the eurozone and the OECD, compared to 1.4% in the United States). The OECD also estimates that expansionary fiscal policies in response to the crisis will help limit the negative impact on growth. However, they might slightly increase inflation.

On the other hand, the crisis could accelerate a transition to renewable energy sources. Countries heavily dependent on fossil fuels were already engaged in a slow transition process. The war in Ukraine reveals the vulnerability of certain European countries, especially Germany, which has already expressed its intention to expedite its energy transition to reduce its dependence on Russia.

Inflation is expected to be stronger, at least in the short term, due to rising gasoline prices and several business inputs. Prolonged disruptions in supply chains could also delay the return to lower inflation.

Conclusion:

The primary effects of the war are already apparent in the volatility of financial markets and commodities. In the coming weeks and months, they will manifest in inflation-related metrics, further complicating the calculations for central banks already committed to tightening their monetary policies. As the perceived risk of invasion increased and was subsequently confirmed, oil prices surged from \$88 per barrel to \$98 per barrel, while wheat prices climbed from 759 US cents to 878 US cents per bushel. Concurrently, stock markets in Europe and the United States experienced respective declines of 8% and 5.7%. The yield on 10-year U.S. Treasury bonds also rose by 18 basis points, and the prices of major high-yield bond exchange-traded funds (ETFs), such as HYG2, decreased by 2.1% since February 1. Nevertheless, stock indices have shown signs of recovery in recent sessions, partially due to sanctions against Russia proving less severe than anticipated.

Recommendations:

This conflict underscores the imperative to diversify supply sources and, whenever feasible, maintain national sovereignty in critical domains, particularly food.

- Diversifying supply sources, as successfully executed by countries like Morocco and Nigeria, is paramount. Regrettably, Egypt's failure to do so serves as a stark reminder that alliances, regardless of their initial quality, can evolve and deteriorate over time when entrusting food sovereignty to other nations.
- Upholding food sovereignty necessitates the prioritization of staple crops, with wheat being a notable example. Neglecting this, as seen in the case of Algeria, disregards the opportunity to secure a valuable position as the breadbasket of Europe during its historical period.

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The Margins

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