



The Impact of the Russia-Ukraine War on the European Economy

Luoyan Chen^(✉)

University of Liverpool, Liverpool, UK
L.Chen78@liverpool.ac.uk

Abstract. War is detrimental to physical and human capital, but its effect on per capita GDP is uncertain. War has the potential to increase GDP per capita by reducing unemployment and redeploying persons from the home and other non-market activities into industrial activity. In regard to this paper, the following questions have been addressed; (1) How has the impact of the Russia-Ukraine war affected the European economy? (2) Have government's interventions played any part in reducing the impact associated with dwindling commodities? And (3) What possible interventional measures can help the Europe to absorb the economic impacts of regional conflicts? In order to better understand the effects of the war between Russia and Ukraine, a method of secondary research was utilized. Qualitative information is collected online in a number of different documents, and government websites. The quantitative data is collected through nonprofit organizations, and third-party corporations. This paper demonstrates that war reduces GDP per capita by restricting local and international trading benefits. There are three main components to consider when calculating the cost of war: the loss of life and damage to physical and human capital caused by the conflict, as well as the decline in per capita GDP as a direct result of the conflict.

Keywords: Russia-Ukraine · Europe · Geopolitics · Economy · Inflation

1 Introduction

Due to Europe's proximity to the conflicts and its tight economic ties with Ukraine and Russia, the adverse effects of the war are unquestionably significant within the EU itself. It has also brought an unprecedented number of refugees to the EU since World War. The European Commission has previously addressed these concerns and will continue to do so, particularly on the energy front, with the REPowerEU proposal, which will be detailed this week. Russia's attack on Ukraine has already shaken those states, Europe, and the world, highlighting the need for a global safety net and EU mechanisms to cushion economies. Under the strain of food, energy, and main commodity prices, the conflict in Ukraine has coincided with a rapid increase in inflation. Inflation was already on the rise in 2021 as a result of the economic recovery and the continuous disruption of numerous value chains, but the conflict has expedited the trend. As detailed in this essay, the Russia-Ukraine war has had varied effects on the European economy. This research is beneficial for understanding the impact of the Russia-Ukraine conflict on the European economy.

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2 Economic Implications

Already, the toll has been staggering in Ukraine. Mobilizing resources and commerce will be hampered, resulting in a severe economic collapse as a result of Russia's unprecedented sanctions. As a result of the depreciation of the ruble, inflation has increased, further lowering the living standards of the populace. The European Union relies heavily on Russian natural gas imports. As a result, energy is the principal channel for spillover. Larger-scale disruptions to the supply chain could also have an impact. Prices will rise, and the pandemic's recovery would be hampered. Financing costs in Eastern Europe are expected to climb along with an increase in the number of refugees moving there. Most of the 2.5 million people who recently fled Ukraine have been accommodated, according to UN estimates.

Increased expenditures on energy supplies and defense budgets could further strain European economies. As Russian assets collapse, foreign investors may go for safe havens, but this could put pressure on developing countries. Likewise, most European banks have manageable and limited direct exposures to Russia. The conflict in Ukraine and restrictions on Russia are affecting economies worldwide, with emerging markets in Europe poised to suffer the brunt of the impact. As a potential outcome of the war's economic changes and the persisting impacts of the COVID-19 outbreak, it is now expected that this year the economy of the region will decrease by 4.1 percent, compared to the pre-war prediction of 3 percent growth. This is in contrast to the pre-war prediction of 3 percent growth. That means it would be the second recession in just as many years, and it would be far worse than the one brought on by a pandemic in 2020. Economic experts predicted that Ukraine's economy would shrink by 45.1 percent in 2013 despite the duration and intensity of its conflict [2]. Russia's economy has undergone a severe recession as a result of extraordinary sanctions, with output estimated to decrease by 11.2% in 2022 as a result.

The war has generated a humanitarian disaster of unfathomable proportions. The Russian incursion delivered a severe blow to the Ukrainian economy and has caused extensive infrastructure damage. The battle has heightened fears of a rapid global economic recession, surging prices and debt, and growing poverty levels. The effect on the economy has had a negative effect on confidence, as well as on commodity and financial markets, trade, and migration [2]. The European economies are also feeling the effects of the war. The pandemic's residual effects have already put this continent on a path to a recession this year. Kazakhstan, Kyrgyzstan, Moldova, and Tajikistan are all expected to go into recession this year, in addition to Russia and Ukraine. Global growth estimates have been slashed as a result of the war's impact, poorer growth in the Eurozone, and productions, trade, and financing disruptions.

Russia and Ukraine account for up to 75 percent of wheat imports in Central Asia and the South Caucasus, respectively. The war in Ukraine and the Ebola virus have shown that crises have the potential to wreak havoc on the economy and overturn years of progress. Countries in the region should strengthen their macroeconomic buffers and legitimacy in order to limit risks; increase social safety nets to help the most vulnerable, including refugees; maintain their focus on improving fuel efficiency for a sustainable future; and address the potential fragmentation of economic and trade channels. The war's devastating impact on civilians was the first thing people noticed when it hit, and

it's likely to have long-term ramifications. According to the projections of the United Nations Refugee Agency, this refugee crisis will dwarf the previous ones. Because of this, aid to other countries and refugee populations will be essential. With the rise in refugee populations, the World Bank is introducing operational support programs for neighboring countries to handle the rising budget requirements. While stressing the necessity for energy security, the rise in global oil prices caused by war also underscores the urgency of boosting energy supply from renewable sources and speeding up the development and building of large-scale energy efficient technology.

3 Inflation in European Economy

As a result of this inflation, people's savings are wiped out and their confidence in the financial system is shaken. It was difficult for the Confederacy to raise money for the American Civil War. In order to pay the troops' wages, they started printing money. However, as they continued to produce money, the currency's value quickly diminished. As a result of high inflation, savers with a moderate income lose the most value from their savings. According to one theory, inflationary pressures develop when economic expenditure exceeds economic output. Monetary policy can maintain expenditure in line with economic output, albeit imperfectly and with delays in implementation and outcomes. Thus, a faster rate of money growth actively contributes to inflation and derives either from the Central Bank Reserve's erroneous policies or from the Central Bank Reserve's subordination to the Central Bank government's fiscal needs. The Inflation-inducing Central Bank Reserve policies include fixing interest rates excessively low and those that support dollar foreign exchange values that are unrealistic. According to this theory, the Central Bank Reserve's willingness to limit the expansion of the money supply determines its ability to control inflation.

The link between changes in money supply and inflation, on the other hand, is not constant. That is why economists disagree on the best way to forecast inflationary trends. They may look at how spending and production are linked, such as the output gap; or they may look at monetary policy indicators, such as changes in the money supply. According to many who support the current "quantitative easing" tactics employed by the Federal Reserve, there is a larger risk of deflation than strong inflation. Economic experts concerned about the possibility of excessive inflation due to quantitative easing frequently cite an increasing share of the money supply under central bank control. Inflation has remained low, even though the money supply has expanded more rapidly than in previous decades, although not at a rate commensurate with the expansion of the monetary base. Even when the output gap narrows, an expansion of the monetary base could lead to inflation in the future.

For many reasons, inflation rose during World War II, including the country's entire economic output due to high levels of government expenditure and a labour shortage. Cost-push inflation may occur during a period of war due to a lack of available goods and services and rising prices for basic commodities like oil. Hyperinflation can result if a country's manufacturing capacity is substantially reduced as a result of war, leading governments to print money in an attempt to make up for the shortage of commodities. For instance, in 1946, Hungary and Austria had the greatest hyperinflation rates on record due to their destroyed economies.

It is forcing large interest rate rises and monetary conditions to be restricted by central banks because of this inflation spike. Because of Russia's invasion of Ukraine, not only will the European economy suffer, but there will also be an increase in inflation. Each of these will have a significant effect. Consumers' purchasing power will be reduced as a result of rising food and energy prices, which will decrease demand [3]. A record-breaking surge of refugees and interruptions to trade, supply chains, and remittances will have a significant impact on the economies of countries in the region. A tightening of the economy and the potential for capital outflows from overseas economies are two further effects of lower corporate confidence and rising investor concern. Russia and Ukraine are major producers of commodities, and disruptions have created an explosion in the price of oil and gas. Wheat exports from Ukraine and Russia account for 30% of world exports, pushing prices to record highs.

4 Effect of Higher Oil Prices

Along with its reliance on Russian oil and natural gas, Europe appears to be the region that is most at risk as a result of the ramifications of the conflict. Because Russia's natural gas exports are unable to be replaced by any other source in the short to medium term, severe inflationary pressure is being caused as a result. The price of a gallon of Brent crude oil was over \$125 at the time of this writing, and natural gas futures prices indicated that they would remain above \$150 per million BTUs (MWh). As a direct consequence of this, inflation will increase by at least 1.5 percentage points in 2022. As a direct consequence of this, household consumption and GDP growth will each fall by around one percentage point [4]. There will be a general slowing of commerce in the Eurozone even though countries like Germany and Italy, and parts of Central and Eastern Europe are more dependent on Russian natural gas. Russia's natural gas shipments to Europe are expected to be completely halted by 2022, resulting in an annual GDP growth rate near to zero or even negative, depending on how well demand destruction is managed.

Europe's "primary spillover conduit" is energy, with Russia being a major natural gas supplier. Because of Europe's low spare capacity, the World Bank stated that the price rise for European natural gas has been unusually sharp. This is because natural gas must be delivered as liquified natural gas. According to the IMF, economies dependent on oil imports would experience a rise in fiscal and trade deficits and an increase in inflationary pressure. Nonetheless, exporters in the Middle East and Africa may benefit from price increases. A long-term disruption of global economic and geopolitical order might result if supply routes are altered, payment networks splintered, energy commerce shifted, and countries reconsidered reserve their currency holdings.

During the continued tensions, unwillingness to purchase Russian oil caused the Urals to trade at a more than \$20/bbl discount to Brent. As of the end of March, Brent crude oil's price was above \$100 per barrel after the United States announced intentions to release around 1 million barrels of oil per day from its reserves over six months [8]. On Monday, the price of a barrel of Brent crude plummeted 3 percent to fall below \$100. Pre-war, oil prices were already rising due to a resurgence in global demand and supply concerns re-emerged when OPEC + output fell short of projections due to low spare capacity.

5 Commodity Trade

In addition to rising fuel prices, the IMF notes that broader supply-chain disruptions may potentially have negative effects as well. Additionally, disruptions, sanctions, and rising commodity prices can disrupt global value chains. According to an estimate by the World Bank, businesses all across the world may see an increase in late deliveries and production costs as a result. Fuel prices and insurance premiums have also pushed up transportation costs. The Europe-Asia trade corridor was particularly hard hit by disruptions in the distribution of high-value items and critical components, such as automobiles and electronics [4]. The conflict in Ukraine has stopped European automakers from accessing critical components like wire systems manufactured in Ukraine, according to the World Bank. Several production lines have been suspended as a result. The food, manufacturing, petrochemical, and automotive sectors are also affected by bottlenecks.

6 Changes in Labor Costs

Some economists argue that labour expenses play a significant role in determining the inflation rate because they account for approximately two-thirds of the value of the final product. Changes in the labour cost growth rate must be interpreted with caution. Increases in productivity, tight labour markets, inflation, or inflation worries may cause wage increases. Examining the evolution of unit labour expenses is one method for identifying the source or forces driving wage rises. Two primary pay and benefit costs metrics will be available: the employment cost index and the nonfarm business sector per-unit labour costs [7]. As labour markets tightened during the economic booms of the 1980s and 1990s, the growth rate of both labour cost measures tended to accelerate. Subsequent recessions and rising unemployment had a lowering influence on the growth of both indicators. Even though the unemployment rate declined during the upswing that began in 2002, the growth rates of both indicators were comparable to the inflation rate.

7 Analysis

Corporate social and environmental responsibility is becoming increasingly vital. This has resulted in an abundance of new financial trends and instruments. When making investment decisions, investors are increasingly factoring in both economic and non-economic considerations. Today, the banking industry is crucial to combating climate change because it must fund the investments required to make our society more sustainable. There has been a lack of consistency in the results of studies on the impact of war on GDP. Clashes and assassinations, according to the diminishing GDP per capita growth. There is no doubt that political instability has a negative impact on economic growth. It has been found that political instability affects growth, but conflict does not. Nevertheless, the conclusion was drawn that civil wars have a detrimental impact on GDP per capita growth. Another line of inquiry suggests that conflict harms the economy. An early study of currency prices in response to the American Civil War led to a new field of study on war's effect on financial markets. Use this technique to study the

impact of war on a rising number of financial instruments in a growing number of conflicts. However, currency and debt values can be affected by conflict because of inflation and repudiation risks. Due to the war's effect on real economic activity, the effects of war-related events on stock market indices are more evident. The examination of stock market indices throughout three recent conflicts reveals similar effects. Having access to a measurement of the scale of conflicts permits more exact analysis.

A few notable economists have departed from the conventional idea that inflation should be minimally managed. They have maintained that moderate inflation rates, in the range of 3 percent to 5 percent as opposed to 1 percent to 3 percent, might be advantageous for economic adjustment. In a recession, economic production declines due to "price stickiness"; prices and wages cannot adapt rapidly enough to sustain full employment. Hence total expenditure falls below the economy's productive potential [8]. These economists claim that the adjustment would occur more rapidly with a greater average inflation rate since real wage or price reductions would be achievable. However, nominal wage reductions would be avoided [9]. A worker may oppose a 2 percent nominal wage decrease while inflation is zero yet support a 3 percent nominal salary raise when inflation is 5 percent. In both situations, real wages would have decreased by 2 percent, but the second scenario may have occurred more rapidly. According to this perspective, individuals are suffering from "money illusion" at moderate inflation rates. The presence of "money illusion" is inconsistent with predicted inflation and is only feasible if inflation is negligible; there is substantial evidence that individuals in countries with high inflation rates are very sensitive to the inflation rate.

Another argument for a higher inflation rate is that deflation is a more significant problem than inflation, citing Japan as a country mired in a prolonged period of deflation and poor economic development. A greater average inflation rate reduces the likelihood that a nation may experience deflation during a recession. The "zero bound" of monetary policy contributes to the difficulty of avoiding deflation. As was the case in 2008, the Fed can only decrease short-term lending rates to zero when supporting the economy. However, occasionally further stimulus is required to end a recession. With an increase in the average inflation rate, average interest rates should also increase [10]. Higher average interest rates would place them further from the zero lower limits, allowing the Central Bank to provide more stimulus before reaching the zero lower bound. This argument ignores the reality that the Central Bank may further employ unconventional monetary policy and contractionary monetary policy to spur the economy near the zero lower limits.

8 Conclusion

In the context of a huge data set, careful war measurement suggests that it is detrimental to business. War typically results in a decrease in GDP per capita when measured using national income accounting because it results in the destruction of physical capital and the false depiction of the expenses of war as having a positive value. Both in terms of production and consumption, nations that are currently experiencing conflict perform quite poorly. A decline in GDP per capita is caused by several factors, including a decrease in labour productivity as well as total factor factors, which include both physical

and human capital, a lack of investment in new infrastructure and human capital, and significantly reduced returns from both internal and external trade. For example, inflation substantially impacts society's ability to interchange goods and services since it alters people's incentives to save money or invest money or labour and sends out the wrong signals that cause people to overwork or underwork. Therefore, policymakers should be concerned about the current inflation rate and any propensity for it to rise. Efforts to limit the inflation rate have frequently been correlated with economic downturns, which is an additional cause for concern.

There aren't much study on the subject can draw from, which is considered as a limitation of this paper. Besides, cultural backgrounds and other personal concerns might lead to conflict of interest. This paper may be biased toward data and conclusions that support author's preconceived notions and hypotheses. When conducting a study, it's critical to have an adequate data collection in order to draw reliable conclusions about the data. In future studies, statistical capacity needs to be enhanced. In that, research may be followed over time and can be measured repeatedly.

References

1. Ruiz Estrada, M. A., Who can damage severely to the world economy? COVID-19 vs Russian-Ukrainian war. SSRN Electronic Journal, 2022. <https://doi.org/10.2139/ssrn.4063845>
2. Seng, A., Linking regional economic integration and the emergence of military conflict. GRIN Verlag, 2021.
3. Sasse, G., Russia's war against Ukraine: A trio of virtual special issues. Europe-Asia Studies, 2022, pp. 1–3. <https://doi.org/10.1080/09668136.2022.2072142>
4. Poiarkova, T., "Others" in the Ukrainian society due to the modern Russian-Ukrainian war. European Journal of Sustainable Development, vol. 11(1), 2022, p. 20. <https://doi.org/10.14207/ejsd.2022.v11n1p20>
5. Lorenzoni, G., & Werning, I., A minimalist model for the ruble during the Russian invasion of Ukraine, 2022. <https://doi.org/10.3386/w29929>
6. Wise, J., Ukraine conflict: Global research community reviews links with Russia. BMJ, 0637, 2022. <https://doi.org/10.1136/bmj.o637>
7. Kuzio, T., Russian nationalism and the Russian-Ukrainian war, 2022. <https://doi.org/10.4324/9781003191438>
8. Anonymous, Economic Governance Support Unit, Economic repercussions of Russia's war on Ukraine – Weekly Digest, 2022, pp.1–14. Online: [https://www.europarl.europa.eu/RegData/etudes/IDAN/2022/699537/IPOL_IDA\(2022\)699537_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2022/699537/IPOL_IDA(2022)699537_EN.pdf)
9. Witze, A., Russia's invasion of Ukraine is redrawing the geopolitics of space. Nature, 2022. <https://doi.org/10.1038/d41586-022-00727-x>
10. Coface, Economic consequences of the Russia-Ukraine conflict: Stagflation ahead, 2022. Online: <https://www.coface.com/News-Publications/News/Economic-consequences-of-the-Russia-Ukraine-conflict-Stagflation-ahead>

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