The Impact of the Russo-Ukrainian War on Russia's Macroeconomy

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Abstract. On February 24, 2022, the largest war in Europe since World War II, the Russo-Ukrainian War broke out. The war on the Russian macroeconomy is one of the key issues in today's research. Researchers have found that sanctions have had a squeeze and impact on the Russian economy, however, there is a lack of a unified explanation and perception of the war in Ukraine on the Russian macroeconomy. Therefore, this paper explores various aspects of the Russian economy by collecting and organizing data on the Russian economy to investigate the impact of the war in Russia and Ukraine on the Russian macroeconomy. It is found that the Russian-Ukrainian war did not hit Russia's resulting sanctions as hard as expected, thanks to the efforts of the Russian government and central bank. However, in many areas such as exports have also contributed to the contraction and decline of the Russian macroeconomy. The war continues and shows no sign of stopping and needs to be watched.

Keywords: Russia’s Macroecnomy; Sanctions on Russia; Russo-Ukrainian War.

1. Introduction

On February 24, 2022, the biggest war in Europe since World War II erupted as Russian Federation troops crossed the Ukrainian border. The Russo-Ukrainian War was in full swing.This war is still ongoing, and no sign shows that either side will stop soon because both sides believe they will win the war ultimately.

Though the war is mainly in Ukraine and is still having a serious impact on Ukraine, but also the Russo-Ukrainian War is having a significant influence on Russia. Due to the wartime situation and the sanctions from all around the world, Russia has also been hit hard, especially as Europe and the United States have sanctioned Russia very severely [1]. The U.S. and Canada have banned imports of Russian oil, gas, coal, and other products. The European Union has banned the import of Russian oil from the sea. However, pipeline transportation is still necessary due to the EU's over-dependence on Russian oil, and the EU is also planning to gradually reduce its dependence on Russian energy [2]. The G7 has limited the price of Russian oil as a way to reduce Russia's ability to fund its war against Ukraine through energy exports. At the same time, Russia's imports have been restricted and Russia has been unable to purchase many products and services, which has hit the Russian aviation industry, as Russian airlines are unable to maintain their airplanes properly. Also, a large number of Russian assets in foreign countries were frozen. And many European and American companies pulled out of Russia under government and social pressure [3].Sanctions in Russia can elevate import expenses, decrease access to certain goods, and contribute to inflation. Additionally, these measures may disturb the supply chain and cause instability in the local currency [4].A year ago, the World Bank's April 2022 forecast predicted that Russia's GDP should shrink by 11.2% in 2022 [5].

2. The Impact of the Russo-Ukrainian War on Russia's Basic Macroeconomic data

2.1. The Impact of the Russo-Ukrainian War on Russia's Gross Domestic Production

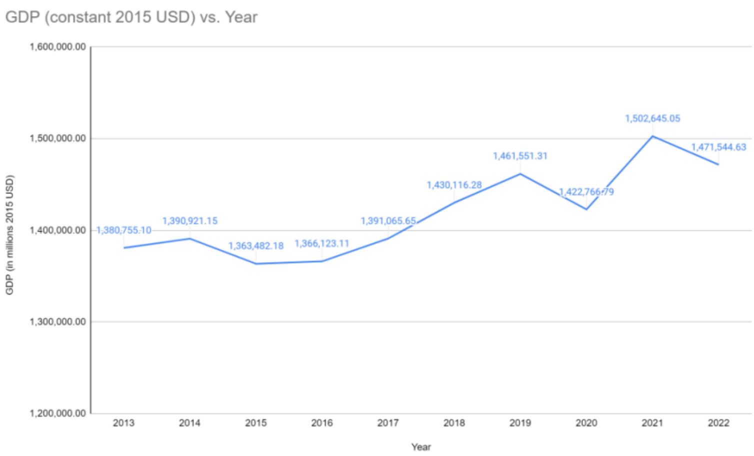

Fig. 1 Russia's GDP (Constant 2015 US Dollar), 2013 to 2022. (Data: World Bank)

In April 2022, at one point the World Bank expected Russia's GDP to fall by 11.2% in 2022. But the actually number is 2.1%. As shown in figure 1, the Russian economy is more resilient than many expected. Russia has large foreign exchange reserves. Russian government and the Bank of Russia has various policies in place to stabilize the ruble such as raising interest rates and limiting capital outflows, while Russia's natural resources such as natural gas and oil are still in demand in Western Europe [6]. Russia has found new buyers, such as China and India, which could somewhat offset the decline in export..

See through the graph and data, Russian Federation's Gross Domestic Product was increasing in the past ten years. But there are three major declines. According to the World Bank, Russia's GDP in 2014 was 1,390,921.15 million, and in 2015 it dropped to 1,363,482.18 million. The drop of about 2% was due to the fact that after Russia's occupation of Crimea in 2014, the West began to impose sanctions on Russia, which led to a rapid shrinkage of the Russian economy in 2015. In numerical terms, the Russian's GDP in 2022 is $147,544.63 million (at constant 2015 prices). This is a decline from the 2021 GDP of $150,264.505 million.The decline in GDP from 2021 to 2022, while is significantly less severe than the World Bank's initial projections.

2.2. The Impact of the Russo-Ukrainian War on Russia's Consumer Price Index

As shown in figure 2, the CPI in the first quarter of 2022 is significantly higher than that of the first quarter of 2021. This indicates a notable increase in prices of the goods and services included in the CPI basket in the first quarter of 2022 compared to the same period in 2021. This increase in CPI suggests that there was inflation during this period, meaning that the general level of prices for goods and services rose. Western sanctions have had a particularly significant impact on Russia's CPI. Sanctions have made it more difficult for Russian firms to import goods and services, which has led to higher prices for the goods and services that are still available. In addition, sanctions have made it more difficult for Russian firms to export goods, thereby reducing the supply of goods to the Russian market and putting upward pressure on prices. Also, the Real disposable incomes of Russian households decreased by 1%.

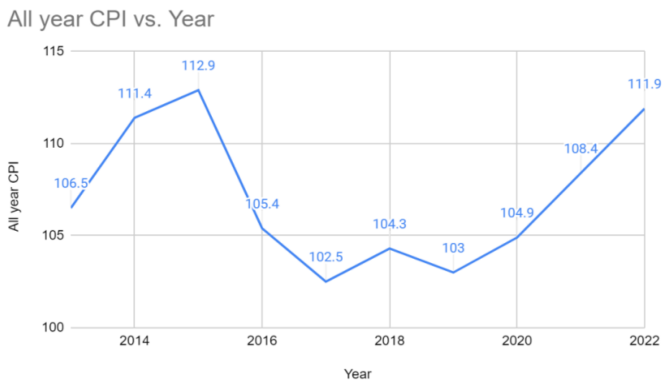

Fig. 2 Russia's CPI, 2013 to 2022. (Data: Federal State Statistics Service)

2.3. Impact of the Russo-Ukrainian War on Employment in Russia

In figure 3, it shows the unemployment rate in Russia has continued to decline,Since the beginning of the war in February 2022. In fact, the traditional macroeconomic regulation tools are not the main reason for the continuous decrease of unemployment in Russia, but the main reason is the significant increase in the number of employees in the military organization [7]. Meanwhile, at the same time, Russians also were fleeing the country [8]. Since the beginning of the war, the number of employees in the Russian military organization has increased significantly. The number of vacancies in Russian military institutions is gradually decreasing, especially after the official mobilization was announced in September.

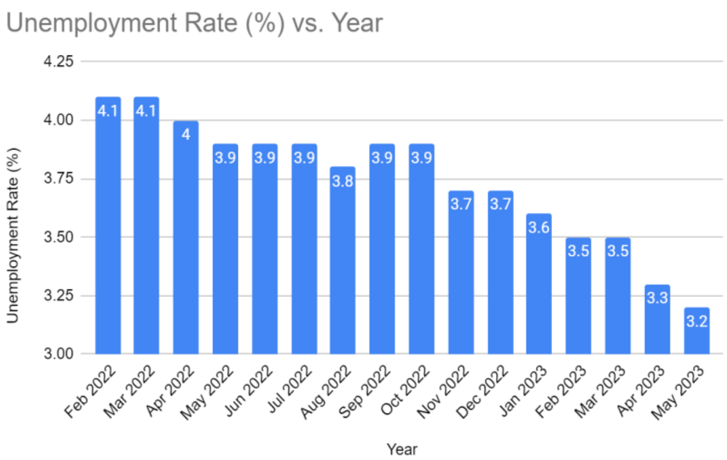

Fig 3 Russia's Unemployment Rate (%), 2013 to 2022. (Data: Federal State Statistics Service)

Another main reason is the departure of Russians from Russia. Since the beginning of the war, Russians have been fleeing the country to avoid potential conscription. Especially after Russia's official mobilization on Sep 20, a large number of Russians fled. On the evening of September 20, Google searches on the question of how to leave Russia increased dramatically. It is very difficult for Russian citizens to obtain visas because of the restrictions on the entry of Russians into the country by the West. So many Russians fled to Russia's neighboring countries such as Azerbaijan, Kazakhstan, and Mongolia. Or to places that do not require visas, such as Armenia, Turkey, and Israel.

3. The Impact of the Russo-Ukrainian War on Russia's Monetary Policy

When the ruble is repatriated to Russia, it effectively increases the demand for the currency [9]. This helps stabilize the value of the ruble, which is important because a weak ruble makes it more difficult to import goods and services into Russia. At the same time this helps stimulate the economy by creating jobs and increasing economic activity.

Bank of Russia set the interest rate to 20% on Feb.28 2022 when the war first to start. This aimed at stabilizing the ruble, attracting foreign investment and controlling inflation. This led to higher borrowing costs, which could reduce consumer spending and business investment. Banks, in search of higher returns, considered increasing their deposits with the central bank. In response to these effects, the Central Bank has simultaneously lowered its legal reserves, aiming to stabilize the Russian economy by encouraging lending and sustaining growth despite higher costs

As the figure 4 shows,the required reserves also decreased significantly from 843.3 billion Rubles in Feb.2022 to 150 millions Rubles in Mar. 2022. This indicates that the central bank allows commercial banks to hold a smaller percentage of their deposits as reserves. This action can encourage commercial banks made more loans to businesses and consumers, which helped sustain economic activity during the war.

The correspondent account balances of credit institutions with the Bank of Russia drop from in Feb. 2022 of 2847.1 billion Rubles to mar. 2022 of 1086.4 billion rubles, also the required reserves drop from Feb. of 843.3 billion rubles to Mar. of 150 billion rubles. The correspondent account balances drop significantly suggesting a reduction in the liquidity maintained by credit institutions with the Bank of Russia. It indicates capital flight, that Financial institutions withdraw funds to mitigate the risks posed by conflict and sanctions.

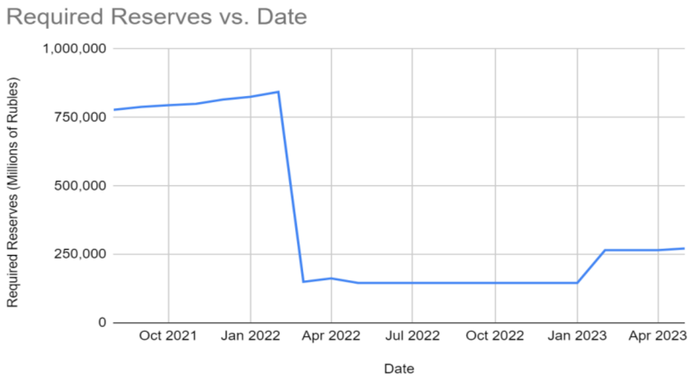

Fig. 4 Russia’s Required Reserves (Millions of Rubles), October 2021 to April 2023. (Bank of Russia)

As the figure 5 shows, beginning in February 2022, net foreign assets began to decline with the onset of the war, suggesting that the economic challenges and uncertainty associated with the war and potentially related sanctions had an impact on Russia's foreign financial position. However, some recovery began in April 2023, suggesting to some extent that Russia's efforts to stabilize its economic situation are making progress.The Russia-Ukraine war and accompanying sanctions have had a serious impact on Russia's imports and exports.

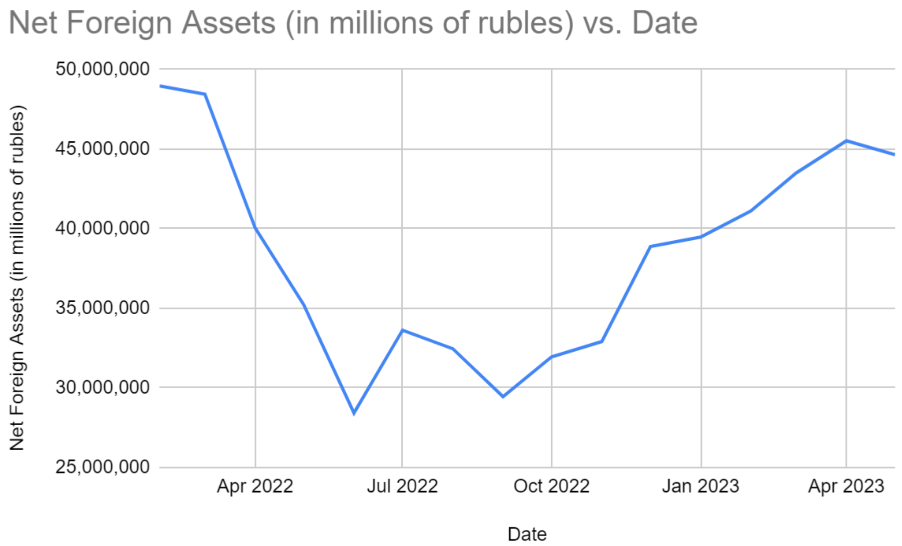

Fig. 5 Bank of Russia's Net Foreign Assets (Millions of Rubles), February 2022 to April 2023 (Data: Bank of Russia)

4. The Impact of the Russo-Ukrainian War on Russia's Monetary Policy

The Russian economy has actually been moving toward self-sufficiency and independence since the annexation of Crimea in 2014 as a way to combat import and export sanctions [10]. Russia's exports were also affected because of the war in Ukraine, Russia's exports did not decline at the beginning of the war, however as the war progressed and sanctions were imposed exports began to decline while imports did not. Russia's net exports began to decline which led to a decline in Russia's GDP.

In figures 6 and 7, Russia commenced the year with a strong economic performance, witnessing exports peak at 154.5 billion USD in Q1 in 2022. This, combined with a muted import figure of 71.5 billion USD, ensured a robust trade surplus, culminating in a healthy current account balance of 69.8 billion USD. Moving into Q2, despite exports slightly retracting to 151.8 billion USD, Russia maintained a commendable trade surplus of 94.1 billion USD, reflecting a current account balance of 77.2 billion USD. However, the subsequent quarters marked a shift: Q3 saw the trade surplus narrow down to 72.6 billion USD due to rising imports and diminishing exports, causing the current account to drop by 37.18% to 48.5 billion USD. This trend deepened in Q4 with the current account further receding by 22.68% to 37.5 billion USD, driven by a spike in imports to 82.3 billion USD. The onset of 2023 amplified these challenges; Q1 exports plummeted to 100.8 billion USD, leading to a modest trade surplus of 29 billion USD and a sharp 50.4% contraction in the current account, landing at 18.6 billion USD.The export of Q1 2023 slumped to 100.8 billion, it's significantly lower than Q1 2022. It might interrupt the reduced global demand for Russian goods, and trade sanctions.

A shrinking current account could put pressure on Russia's foreign exchange reserves, limiting its ability to finance important imports such as advanced weapons, fuel, and other wartime necessities. In addition, weakening trade conditions could exacerbate domestic inflationary pressures as the cost of imported goods rises. From a macroeconomic perspective, persistent trade and current account deficits could lead to a depreciation of the Russian ruble, making imports more costly. Such a depreciation could further exacerbate inflation, erode purchasing power, and weaken public confidence. In addition, if the decline in these balances reflects a reduction in global demand for Russian goods or sanctions, it could signal increased economic isolation of a more serious nature.

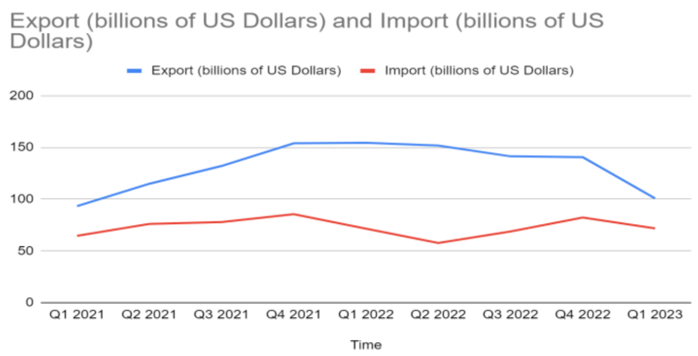

Fig. 6 Russia's Value of Export and Import (billions of USD), Q1 2021 to Q1 2023 (Data: Bank of Russia)

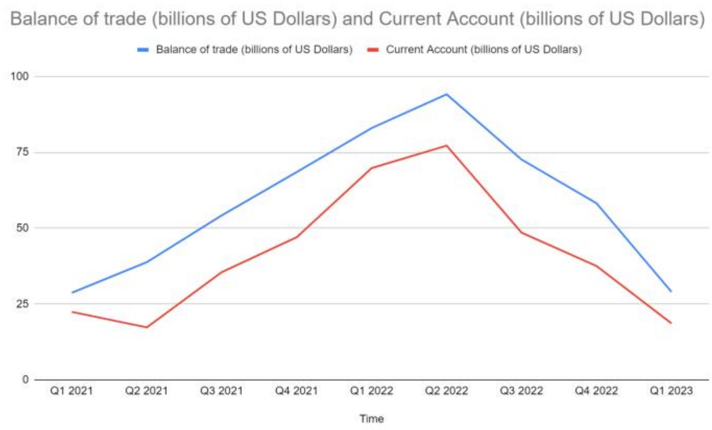

Fig. 7 Russia's Value of Balance of trade and Current Account (billions of USD), Q1 2021 to Q1 2023 (Data: Bank of Russia)

5. Conclusion

Through the research, this paper has found that due to the direct or indirect causes of the war in Ukraine, the Russian economy has been hit quite hard. Due to the strength of the sanctions and the scope of their impact, the Russian economy is likely to shrink further in the upcoming time. Russian's government and the central bank will be taking more measures to counteract it. Yet at the same time, the Russian economy has shown a degree of resilience, with Russian economic figures for 2022 well above what was expected at the start of the war. The negative impact of the West's sanctions on Russia has not been as great as imagined. The potential point is that the Russian economy is relatively less dependent on the world and relatively more independent and that energy. A major pillar of the Russian economy, has found other buyers to make up for the lost ground.

But it is also important to emphasize that numbers alone cannot parse out the entire economy. Because the macroeconomy is so large and the data opaque due to the ongoing war. This study does not cover every aspect of it, and more data will be needed for subsequent studies (which may need to wait until the war is over) to do so. Another reason is that some of the economic data itself has some shortcomings, such as the GDP and the CPI. GDP does not account for non-market transactions and environmental costs and is not representative of non-economic well-being. CPI does not account for new products and changes in quality. Meanwhile, a million Russians have fled Russia.

Finally, the war in Ukraine has been going on for more than a year now and is still going on, with many people dying every day on the battlefield and people fleeing the fighting. The war and the sanctions are actually having a big impact on Europe and even on the whole world. As long as this war doesn't stop, there will be harm to Russia and Ukraine. Best wishes for the end of the war and peace.

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