



**MACROECONOMIC**  
Analysis & Policy Studies

**A Macroeconomic Study of the Russian Economy in the  
Context of the Ongoing Russia-Ukraine Conflict**

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# **A MACROECONOMIC STUDY OF THE RUSSIAN ECONOMY IN THE CONTEXT OF THE ONGOING RUSSIA-UKRAINE CONFLICT**

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## **ABSTRACT**

The paper focuses on the contrast in an economy regarding the macroeconomic variables at the surface level, along with the actual social and geopolitical conditions, to provide a holistic economic framework. We have taken the case of Russia to study the same, focusing on the years after the Russia-Ukraine conflict began. There are many academic works related to the resilience of Russia's economy after the conflict; we are analyzing those works along with the articles and works that have critically examined Russia's position. We try to create a space to approach the economic conditions of a country beyond the levels of statistics and variables, emphasizing the ecosystem surrounding an economy that is of much importance to our study.

## **BACKGROUND OF THE PAPER:**

The paper is set against the backdrop of the Russia-Ukraine war in 2023. The conflict traces its roots to a pivotal moment in 1991 when Ukraine, a significant part of the Russian Empire for centuries and then a Soviet Republic, finally gained independence with the dissolution of the USSR. This historic event marked an important shift in the geopolitical landscape, with Ukraine moving away from its Russian imperial heritage to form closer relations with the West. Understanding this historical significance is crucial to comprehending the current conflict.

The tide turned when pro-Kremlin Ukrainian President Viktor Yanukovich sparked widespread protests in a move to reject a deal with the European Union showing close ties with Russia. Fueled by public discontent, these protests ultimately led to his ousting from office in 2014.

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Moscow followed up by seizing Ukraine's Crimea Peninsula and backing a separatist rebellion that erupted in the industrial east of Ukraine. The conflict, which devastated Donbas-Ukraine's eastern industrial heartland, has taken a heavy toll on the region, underscoring the significant impact of the war on the local population. According to the Ukrainian government, more than 14,000 people have lost their lives in the battle, highlighting the human cost of the war.

Putin has said that Ukraine's aspirations to join NATO are a red line, and he has expressed concerns over the close link between NATO and Ukraine, which would give them a military foothold in the region should Ukraine not join NATO. Russia does not want Ukraine in NATO and has said that very plainly in a list of security demands drawn up and sent off to the US last December. Among the demands was a request for all NATO drills to be stopped near the border of Russia. It also wants NATO to withdraw from Eastern Europe. These are the political aspirations as part of this conflict.

It is essential to clarify that our paper does not delve into the political viability of the Russia-Ukraine conflict. Instead, our focus is squarely on the economic implications of the war, particularly on Russia's financial performance and the changes that have occurred in its economy post-war. This clear focus will provide our readers with a comprehensive understanding of the economic impact of the Russia-Ukraine war.

## **THE WAR AND THE RUSSIAN ECONOMY: AN INITIAL ANALYSIS**

Usually, a country's economy is expected to fluctuate heavily during conflicts. Similarly, everyone expected Russia to face a tough time during the Ukraine-Russia conflict. The European Bank for Reconstruction and Development projected, as of March 2022, that real GDP would decline by 10 per cent in 2022. On the other hand, the International Monetary Fund estimated that, in April 2022, there would be a contraction of 8.5 per cent. According to the IMF, Russia's inflation was supposed to hit 24 per cent in December 2022, and the unemployment rate was supposed to go as high as 9.3 per cent of its total workforce rate. For example, even at the end of April 2022, real GDP was expected to drop by 8–10 per cent in 2022, according to the Bank of Russia. All these projections were expected due to the turmoil; adding to this, the world economy had faced a massive backlash during COVID-19, and economies were trying to recover after those economic shocks. Thus, all factors combined, nobody expected Russia to have a good time, but contrary to all these predictions, Russia performed

more than what was expected; even though our paper does not deal with the policy measures of Russia after the chaotic waterfront opened, we need to discuss the initial measures taken so that we could expose the charades behind the ironic postulates of macroeconomic stability and progression by Russia.

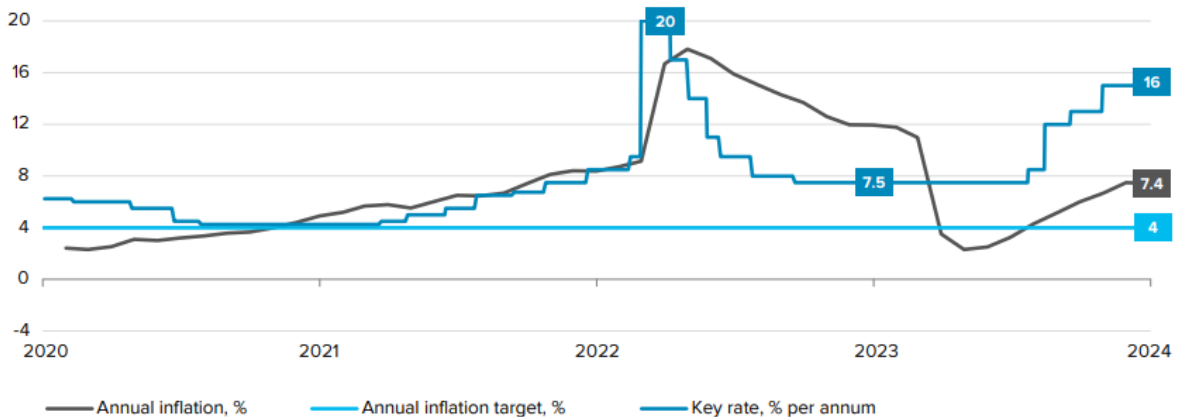
Item	2018	2019	2020	2021	2022	2023
GDP, constant prices, % change	2.80	2.20	-2.70	5.60	-2.10	0.70
Total investment, % of GDP	21.90	22.70	23.50	23.20	22.70	23.20
Gross national savings, % of GDP	28.90	26.50	25.80	29.90	33.00	26.90
Unemployment rate, % of total labour force	4.80	4.60	5.80	4.80	3.90	3.60
Inflation, end of period, CPI, %	4.30	3.00	4.90	8.40	12.40	6.30
GG revenue, % of GDP	35.50	35.70	35.20	35.60	34.30	31.20
GG total expenditure, % of GDP	32.60	33.80	39.20	34.80	36.60	37.40
GG net lending/borrowing, % of GDP	2.90	1.90	-4.00	0.80	-2.20	-6.20
GG gross debt, % of GDP	13.60	13.70	19.20	16.50	19.60	24.90
Volume of imports of goods and services, % change	2.70	2.80	-11.80	16.70	-15.00	8.30
Volume of exports of goods and services, % change	5.10	-3.30	-4.40	0.60	-8.70	0.20
Current account balance, USD billion	115.70	65.70	35.40	122.30	227.40	75.10
Current account balance, % of GDP	7.00	3.90	2.40	6.70	10.30	3.60

Source: IMF World Economic Outlook Database, April 2023

The graph above provides a detailed overview of various economic indicators for Russia, particularly in the war with Ukraine and the subsequent Western sanctions. These sanctions prompted Russia to implement specific measures to prevent a severe economic downturn.

## POLICY MEASURES FROM STATE

The first wave of financial sanctions and the aggression against Ukraine severely impacted Russia's international reserves, leading to a historic low for the Ruble. In response, the Russian government and the Bank of Russia implemented proactive policies, such as restrictions on capital and current account transactions, to quell panic. The Bank of Russia's decision to raise the key policy interest rate to 20 per cent was a bold move that reassured the market and demonstrated their commitment to stabilizing the economy.



Sources: Bank of Russia, Rosstat.

FIGURE 1 (SOURCE: BANK OF RUSSIA)

These policy measures, mainly stabilizing the forex market, prevented the potential inflationary impact of exchange rate depreciation. The official exchange rate of the Ruble recovered swiftly to 51RUB 1\$ by June 2022, and this quick stabilization prevented any adverse effects on inflation. The stabilization of the exchange rate also allowed for a gradual decrease in the interest rate by the Bank of Russia, further reassuring the market.

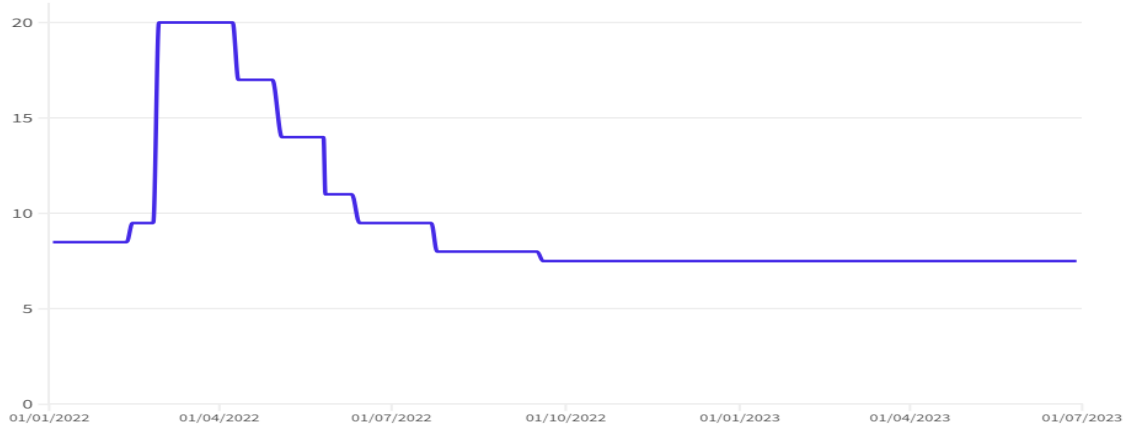


FIGURE 2 (SOURCE: BANK OF RUSSIA)

Another pertinent reason Russia could project an initial stabilization was due to oil prices; we know that in the post-pandemic global economy, oil prices were always moving faster; by June of 2021, they crossed around 60\$ for one barrel. Due to this overheating worldwide economy and the shocks imparted to international trade after the initial Russia-Ukraine crisis, the price escalated again in 2022 (Figure 3). Russia could provide cheaper oil to many countries, including India and China; thus, the steep surplus in the current account was due to this scenario. A drastic reduction in imports also helped this positive current account balance.



FIGURE 3 (SOURCE: TRADING ECONOMICS)

Russia's strategic response to the sanctions, including the increased prevalence of the black economy, was a significant factor in maintaining the stability it sought during this period. The 'black economy' refers to economic activities not recorded in official statistics, such as unreported income and illegal activities. This strategic maneuvering, along with the boom in the hydrocarbon sector, allowed Russia to project an initial stabilization that was impressive given the circumstances.

## **WHAT OUR PAPER OFFERS**

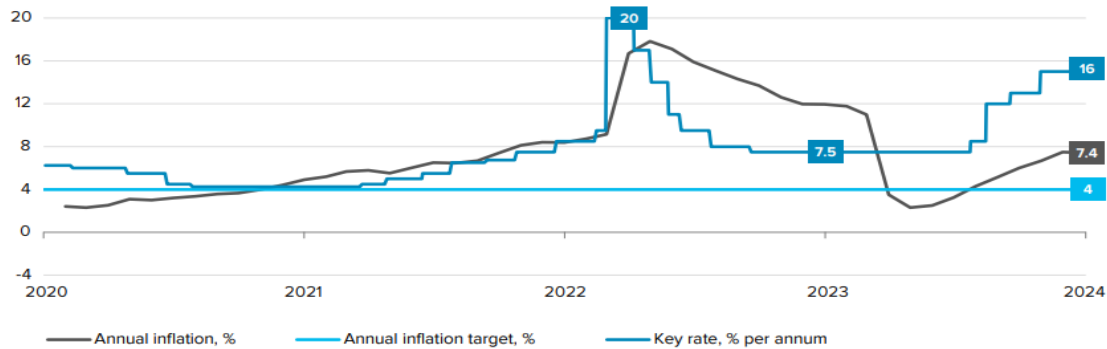
We have discussed what was the initial status of the Russian economy after the war; there are several articles across the web concerning the macroeconomic resilience that Russia has shown, and the majority of these arguments come up due to Russia's better performance than what was forecasted by IMF or other financial institutions. This paper is in no way trying to place an argument that the statistical data are not enough or anything like that, but to emphasize the importance of analyzing an economy beyond the statistical variables. Thus, in the following sections, we introduce different scenarios that could point to the disparities between the performance shown through economic variables and the actual status of the economy.

## **OVERHEATING ECONOMY**

In this section, I will delve into the concept of an overheating economy. When an economy overheats, it expands at an unsustainable pace. This phenomenon can be assessed through critical factors such as inflation and unemployment.

The scenario changed in 2023; in 2022, the Bank of Russia hiked the key interest rate up to 20% to ensure stability, but it was reduced soon after progress was made. In 2023, the latter half of the surge in demand began to outpace supply capabilities, accelerating price hikes. This heightened demand, driven by increased lending, government spending, and rising inflation expectations, was mainly for imports. As a result, the need for foreign currency to cover import payments grew, while export earnings decreased due to sanctions and lower prices for Russian exports. These factors collectively weakened the ruble. The resulting exchange rate decrease partly translated into higher prices, further impacting people's expectations of future inflation and increasing demand.

The following graph, published by the Bank of Russia, tells us about the inflation rate in Russia.



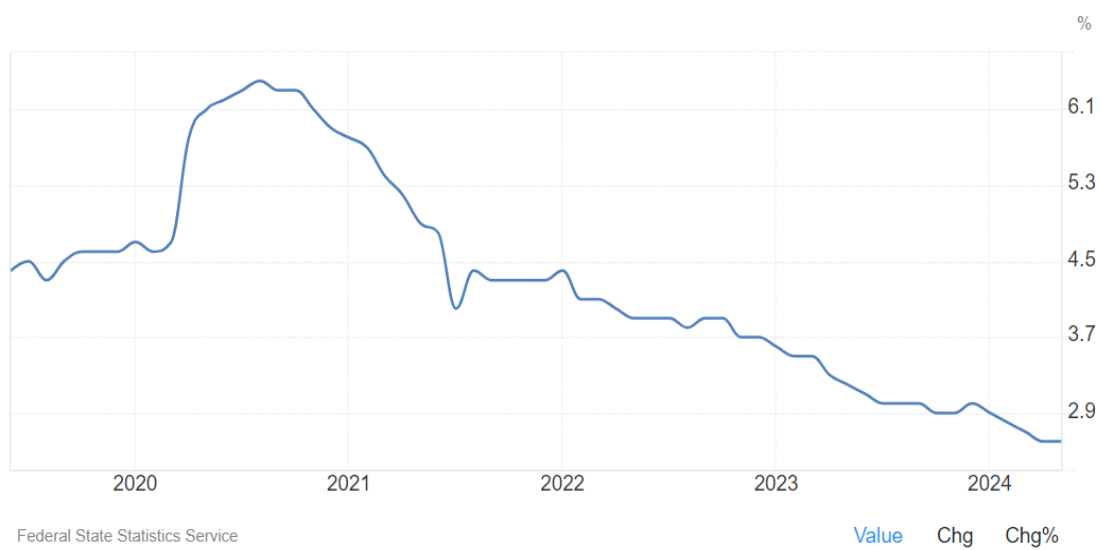
Sources: Bank of Russia, Rosstat.

*FIGURE 4 (SOURCE: BANK OF RUSSIA)*

The surge in inflation has forced the Bank of Russia to closely monitor interest rates, which has been a significant downside for investment activity in the country. The Bank of Russia has struggled to meet their expectations of a targeted inflation rate due to the tumultuous economic situation. Sustainable economic growth hinges on maintaining consistently low inflation. Unpredictable spikes in inflation, which refer to sudden and significant increases in the general price level of goods and services, diminish the appeal of Russian ventures and enterprises to potential investors, leading to a decrease in the actual value of people's incomes. Even when the key interest rate is low, inflation's uncertainty results in banks factoring in future inflation when setting their loan rates, reducing the accessibility of loans. Consequently, long-term loans become less affordable, and there needs to be an uptick in the presence of foreign currency in the economy. The country's economy must meet its inflation target to address these challenges.

Also, the unemployment rate is another factor that suggests the issue of overheating with the Russian economy. The labour shortage is at its lowest rate from time to time whenever new data are published; it stood at an all-time low of 2.6% in May 2024 (as shown in the graph below).





**FIGURE 5**

Russian companies face the formidable challenge of finding people to get their work done; even the interior ministry has admitted to a labour shortage and the situation in which they could not find staff for the Moscow metro. What could be the possible reasons for such a situation? We might not need to delve into any complicated statistics to know it; this situation has emerged mainly because of the uncertainties of the war. People always want to feel safe when doing a job, but this safety net has been burnt down due to this conflict, causing a big dent in the labour market. For an economy that undergoes artificial stimulation through excess military spending (which we will discuss in detail in the following section), this labour shortage problem results in a rise in wage rate; this rise could cause a soaring inflation rate and a plummeting ruble. Rising wages are outstripping the country's demand, and there is no opportunity to expand the supply of goods and services at a pace sufficient to meet demand. This adds to the inflationary pressures and leads to weaker rubles via greater demand for imports.

This particular analysis of overheating in an economy itself shows how macroeconomic variables at the surface could also mislead us; seeing the unemployment rate at a lower level in a post-war economy might appear to us an outstanding achievement if we are ignorant of the internal turmoil like what is happening with Russia.

## MORTGAGE BUBBLE AND THE NEW MIDDLE-CLASS

This significant discussion aims to uncover the realities behind macroeconomic prudence, particularly the mortgage bubbles and their role in fostering a new middle class.

First of all, we should understand the importance of subsidized mortgages. The definition of mortgage is as follows: "A mortgage is a loan used to purchase or maintain a home, plot of land, or other real estate. The borrower agrees to pay the lender over time, typically in regular payments divided into principal and interest. The property then serves as collateral to secure the loan. A borrower must apply for a mortgage through their preferred lender and meet several requirements, including minimum credit scores and down payments. Mortgage applications undergo a rigorous underwriting process before they reach the closing phase. Mortgage types, such as conventional or fixed-rate loans, vary based on the borrower's needs." (Definition by Kagan, J. (2024, June 12). *What is a mortgage? Types, how they work, and examples*. Investopedia <https://www.investopedia.com/terms/m/mortgage.asp>)

After the COVID crisis, when it was difficult for people in the economy to accumulate resources, a helping hand was needed from the government. The government stepped in and provided mortgages at around 8%, significantly lower than the bank's key policy interest rate. However, during the Russia-Ukraine war, the interest rate was hiked around 16% to curb inflationary pressures, making this preferential mortgage scheme a burden for the government. Russia's government has spent around half a trillion rubles since 2020 to fund this program. This program has ushered a wave of Russians into the national real estate market, which has sent property prices soaring. It threatens the Russian economy, which has overheated due to the Russia-Ukraine crisis. Thus, it is evident that the preferential lending ability of the state is curbed due to the mayhem caused by war.

Moreover, we need to discuss the societal aspects of this mortgage scheme and understand that this preferential mortgage scheme has promoted inequality. Even though the scheme may appear open to all, it has a hidden barrier. Those who wanted to avail of this subsidized mortgage scheme had to pay a 15% down payment, effectively excluding those in the lower-income category who could only save a little. Even the Central Bank head, Elvira Nabiullina, has criticized this system as unfair. She argues that it does not truly benefit the intended target group. Everyone, including the poorest section, pays taxes like VAT, but only a specific

section can access these subsidized loans. Thus, lower-income earners are subsidizing homeownership for the middle class.

According to recent reports, the Russian government plans to stop this subsidized mortgage scheme due to the economic overheating. Besides, in Russia, there has been a new middle class comprised mainly of security officials and members of intelligence services, so stopping this scheme inherently affects this group of people, which Russia wants no matter what. Thus, spending to the new middle should be continued in all situations given the circumstances, which could effectively overheat and cause a debt burden to the Russian economy.

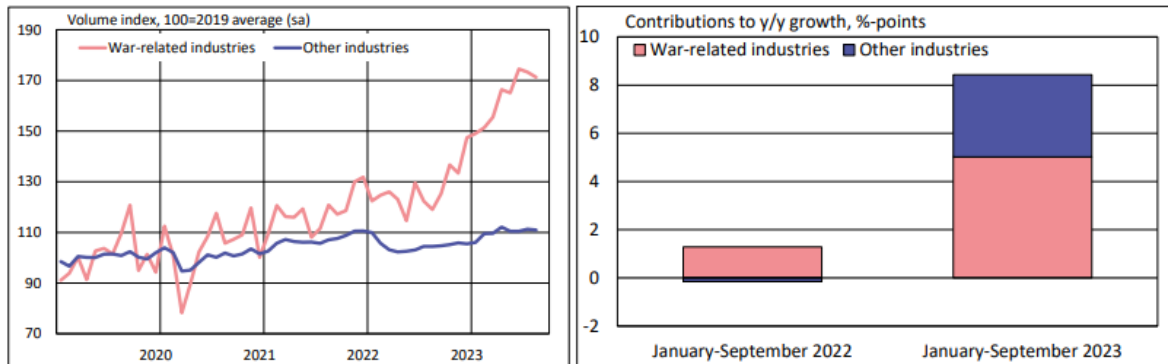
## **THE MILITARY AND THE GROWTH: THE DOUBLE-EDGED SWORD**

The war now has become existential for Putin's regime. The country's economic structure is being formed around it; after the war, Russia has faced severe sanctions, which we have already discussed. Due to this warlike situation, military spending has constantly been increasing post-2022. For the first time in its modern history, Russia spends around 6 per cent of the Gross Domestic Product (GDP) on military and defence. This will also exceed social spending. The war is not only a big priority for Russia; it has been the primary driver of economic growth.

This humungous spending not only indicates the structure of the Russian economy but also implies the fact that the Kremlin is not planning to end the war anytime soon; even if the actual fighting becomes less intense, this defence expenditure could be used to replenish the military arsenal of the country. Most of Russia's spending will go to the basket of military equipment production. Also, the payments are to be provided for those people who were wounded in the war and compensation payments have to be provided for those who have lost their lives in the conflict. Besides these factors, many companies in the defence sector also use a significant chunk of military expenditure, which has been running in the stream of unprofitability for a long time. The state-owned defence conglomerate Rostec made less profit by selling weapons in 2022 than in 2020. This loss pattern has also been the case with Roscosmos and the United Shipbuilding Corporation. Thus, military spending could be seen as an attempt to keep up with rising costs. However, we should not ignore the economic benefits Russia has drawn from the war. Industries related to war have seen spectacular economic growth during the period. The most significant growth contribution within the war-related manufacturing industries originated from manufacturing fabricated metals. Russia is less dependent on imports in this relatively low-technology industry and has

succeeded in increasing production despite sanctions. Restrictions on technology exports to Russia mainly affect the production of more sophisticated goods. Such production suffers from the lack of access to high-tech components and the poor quality of substitutes available from non-sanctioning countries (Bergmann et al. 2023; Luzin 2023). At a more disaggregate level, the output of goods potentially related to the military industry also dominated among the fastest-growing branches. This economic growth, however, comes at the cost of a shift in the manufacturing structure towards war-related industries, potentially leading to over-reliance and lack of diversification. (This is shown in graphs 1a,1b)

**Figure 2.** A) Output volume in Russia's war-related and other industries in 2019-2023; B) Contributions of war-related and other industries to annual growth of Russia's manufacturing in January-September 2022 and 2023.

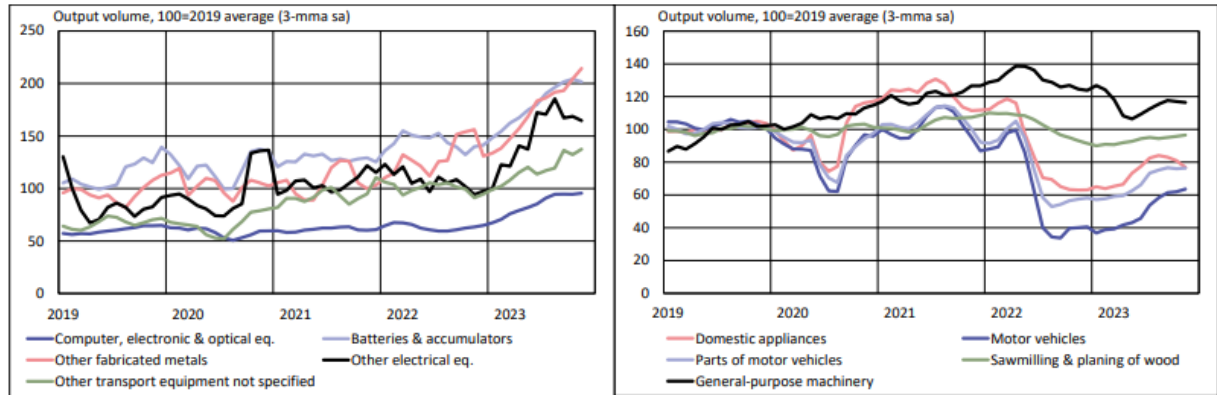


Note: The annual growth rates in panel B are not identical to the figures reported by Rosstat due to such factors as seasonal adjustment.

*FIGURE 6: SOURCES: CEIC/ROSSTAT DATA.*

The high growth in war-related industries and the decline in many civilian industries have altered the structure of Russian manufacturing. The share of war-related industries has increased, while the share of civilian production – and consumer-related industries in particular – has declined. Rosstat reports that the combined share of war-related industries (i.e., fabricated metals, computers, electronic and optical equipment and other transport equipment than motor vehicles) in Russian manufacturing (this is shown in graph 2a,2b)

**Figure 3.** Output trends in select Russian manufacturing industries: A) best-performing industries, B) worst-performing industries.



*FIGURE 7 (SOURCE: CEIC/ROSSTAT DATA)*

Thus, GDP growth in 2023 has been mainly linked to the manufacturing and construction sectors affected by the war. However, this growth may not be sustainable in the long run. The growing militarization in the Russian economy and the lack of diversification could pose significant challenges for the country's economic future. When we celebrate Russia's recovery after the war, it is essential to consider the reasons for this recovery and the potential long-term implications, such as the risk of over-reliance on war-related industries and the need for diversification.

Recently, analyzing the budget discussion of the Russian government, it can be seen that it envisages reducing its military spending. Still, it would be challenging to implement it. The rising expenditure, higher inflation and the unavailability of imports due to sanctions might put Russia in a place where its economy could not sustain itself without this war. As we have already discussed, unemployment levels are at a record low, which also causes a higher wage rate, which again deepens the problematic situation. However, to sustain production, companies need workers. Often, they are tempted by great offers and other benefits of joining the defence sector. Summing up these scenarios, it is evident that the Russian economy is under withering economic and social situations.

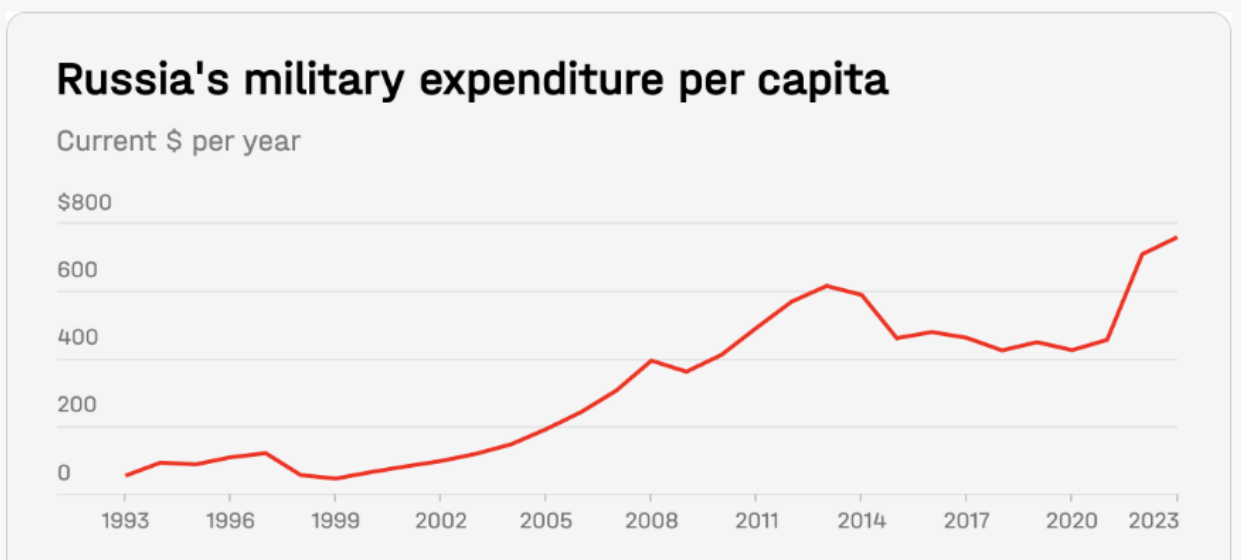


FIGURE 8 (SOURCE: STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE)

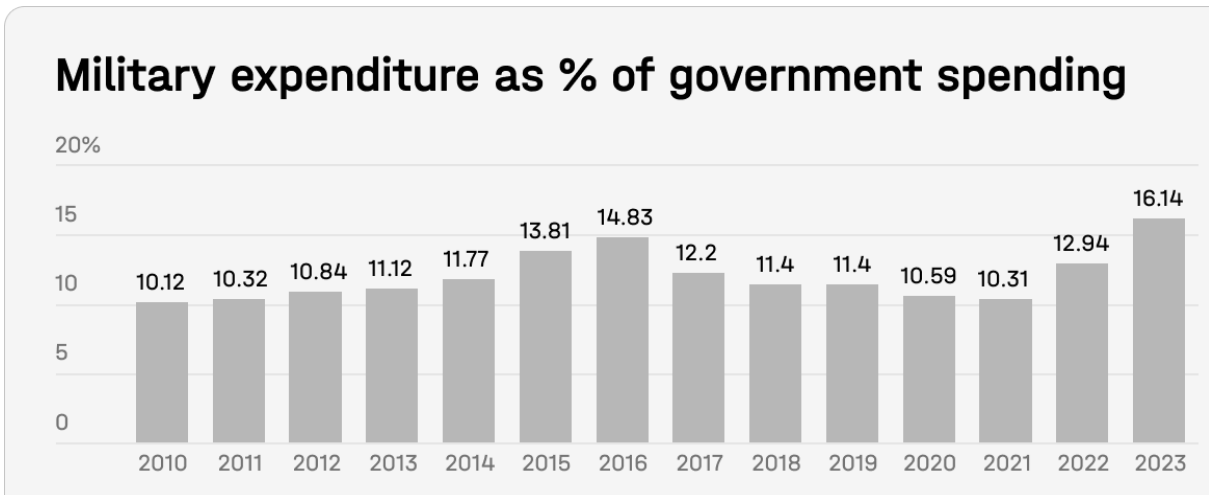


FIGURE 9 (SOURCE: STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE)

Tilting the mirror of military spending globally, it is evident that there is a heightened military expenditure. As per the data of the Stockholm International Peace Research Institute, global military spending increased by 6.8% last year, reaching a record \$2.4 trillion. Russia's military spending surged by 24% to \$109 billion, exceeding the global average. In the same year, NATO countries collectively spent \$1.3 trillion, representing 55% of the world's total military expenditure. Twenty-

three out of NATO's 32 members, including new additions Finland and Sweden, fulfilled the requirement to allocate at least 2% of their GDP to defence. This marks the highest number of NATO states meeting this requirement since its introduction in 2014. Putin interprets this as a sign of heightened arming by his adversaries, potentially leading to hesitation in reducing Russia's military spending.

Economies being driven by wars and overdependent on arms or weapon deals is in no way a sign of macroeconomic prudence. Throughout the paper, the central argument of exposing the macroeconomic stability arguments of Russia is not limited to a single country. The main idea that we should convey is that stability and growth should not be mixed with blood and violence. Instead, it should be holistic development on all fronts.

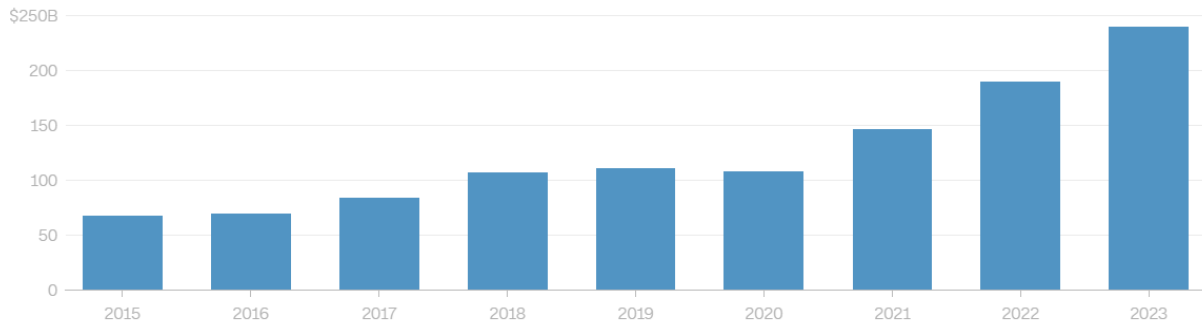
## **GROWING DEPENDENCE ON CHINA**

For that section that upholds the conservative principle in Russia, the war with Ukraine was a more significant opportunity to raise their support for self-reliance. The Western sanctions have isolated Russia globally from being part of a substantial chunk of trade-related activities. Thus, this time was effectively used to propagate the pro-state principle with a reflection back on the USSR, but in reality, modern-day economics is not driven by self-reliance.

In the era of globalisation and global chains of trade linked everywhere, it is never possible to build an economic powerhouse without any support. This war marked a steeper fallout between Russia and the US administration. Thus, it opened the door for a warmer Russia-China relationship. From Rouble-Dollar to Rouble -yuan was the economic distance travelled after the war. As per the Bank of Russia reports, there was an evident reorientation from dollar to yuan by 2023. The yuan's share in the exchange foreign exchange market increased to 39%, while the share of the USD/ RUB currency pair decreased to 34%. In March, individuals purchased the maximum monthly volume of yuan in 2023 - 41.9 billion rubles. (in February - 11.6 billion rubles), they also purchased US dollars and euros for a total amount of 79.9 billion rubles. Chinese leader Xi Jinping provided unwavering support to Russia during the sanctions. Xi had maintained a neutral position about the war in the global economy, but it was evident that Russia was fostering growing trade relations with China (The graph below shows the increase in trade between Russia and China)



China-Russia trade value



Source: General Administration of Customs of the People's Republic of China  
Graphic: Rosa de Acosta, CNN

*FIGURE 10*

Before the war, there was a significant trade partnership between the EU and Russia, with Europe being the leading supplier of Russia's oil. Russia also imported a wide range of machinery, contributing to its Research and Development programs. However, after the war, the EU severed all trade ties. In this crisis period, China provided a substantial market for Russia's oil exports. Russia also received a large volume of high-tech goods and machinery imports, including semiconductor chips, from China. This growing relationship has led to the US raising concerns about China's potential support for Russia's war efforts.

Thus, any discussion on Russia's so-called macroprudential recovery policies always has China's support. At the same time, we cannot term this relationship as a long-lasting one until now; this relationship was born out of the fissures in the post-war global economy. China is projecting the influential leadership of a powerful individual star element, Putin, against the USA, which has been their most significant motive for a more cordial relationship. Still, if Russia gets humiliated in the war front against Ukraine, China might distance itself from Russia. Thus, it has become pertinent for Russia to project a sense of political victory. Also, China's economic system is much more focused on stability and prudent policies that they have upheld, but at the same time, Russia now overheats itself and causes a plethora of economic crises, which we have already discussed; thus, for Russia to maintain their strength in the partnership with China is very important, because they never want to be a submissive partner. For this, they need to stabilize the economy and arrange it from a long-term perspective, which might be hard for them given the circumstances.



## CULTURAL AND ACADEMIC LEAKAGE

Russia and its diverse economic constraints and troubles are widely discussed throughout the paper; now, shifting our focus to the cultural and academic changes within Russia after the war is essential. First, we can look into the brain drain across the scientific community in Russia. The exact data to assess the migration of scientists is not readily available, but using particular means.

Publication activity is one of the indicators of the quality and quantity of scientific activity carried out by scientists in the country. In many universities participating in the 5-100 program, it was an essential indicator for evaluation, while the number of prominent international and Russian publishing houses requiring authors to have an account in the ORCID database was constantly growing.

ORCID is an international database created in 2012 to identify scientists uniquely. Today, it unites information on more than 20 million scientists worldwide. Registration in it became mandatory for publishing employees of large Russian universities (universities often created accounts for their employees centrally). While not all authors listed their affiliations in the database, ORCID's overall penetration into Russian academia has been relatively high.

The accounts of Russian scientists in the ORCID database today help to establish the number of those who left after February 24. Although changes to the “place of work” column are usually made by authors with some delay (usually six months to a year after the actual change), the data already allows us to estimate how scientists have migrated over the past ten years. Thus, from 2012 to 2021, the share of researchers changing their affiliation from Russian to foreign remained virtually unchanged — at 10%. However, in 2022, there was a jump — 30% of scientists registered in ORCID moved abroad from Russia. More than 600 researchers have left Russia since 2022, and the share of those choosing their next job abroad has tripled. Suppose we use in the analysis not only the criterion of changing a job from Russian to foreign but also dismissal from a Russian organization, adding a new country to the profile without specifying the place of work or deleting records of employment in Russia. In that case, the number of scientists who left the government is even higher. Thus, in 2022-2023, approximately 900 people fell into this category. That is, in total, according to conservative estimates, we get 2,500 scientists who have left. In addition, one can also estimate how much less often foreign scientists have chosen the opportunity to work in Russia. If in 2021, the share of cases when the place of work changed from foreign to Russian was 7%, then in 2023, it decreased to 2%.

The exodus of scientists from Russia post-war is not just a matter of fear or civic stance but also a stark reflection of their practical challenges. Under sanctions, conducting research, engaging in international collaborations, publishing in scientific journals, and accessing equipment have all become significantly more complicated. After the full-scale invasion, Russia was excluded from many international joint projects, including the Horizon 2020 project, a program of the European Space Agency. The names of Russian scientists were removed from the articles of the teams of the Large Hadron Collider; foreign organizations were prohibited from collaborating with scientists from Russian state institutes. Affiliation with a Russian organization became toxic. Having analyzed ORCID data, it has been identified that several dozen authors in 2021 deleted information about their work in Russia. It is difficult to say whether this was an attempt to avoid sanctions or simply an expression of a civic position. According to the HSE Institute for Statistical Studies and Economics of Knowledge, the decline in publication activity of Russian scientists, while not yet catastrophic, is noticeable. Regarding international publications, Russia has slipped to the 11th position, reverting to the levels seen in 2016-2017.

This leakage in academic and research prodigies will hamper the future of Research and Development in Russia. Without actual investment in Research and Development, they will not be able to reach their goal of being a superpower. Thus, war and sanctions have invariably affected the positive status of the Russian scientific community and other academic fields; Russia needs to recuperate its status as a holistic educational and cultural development space.

## **SFB ANALYSIS**

The SFB model, created by heterodox economist Wynne Godley, is based on fundamental double-entry accounting principles: each debit has a matching credit, and every financial asset has a corresponding financial liability. Unlike more complex, this macroeconomic model relies on basic accounting principles to ensure stock-flow consistency.

In a three-sector economy consisting of the domestic private sector, government sector, and external sector (which includes both private and government sectors), the net financial asset accumulation across sectors must sum to zero. This means that the financial asset accumulation in any industry requires a corresponding accumulation of financial liabilities in at least one of the other sectors. The SFB

equation does not permit all sectors to accumulate net financial assets simultaneously.

Thus, the Equation is:

$$(S-I) + (T-G) + (M-X) = 0$$

Where S is private sector savings, I is private sector investment, G is government expenditure, T is tax receipts, X is exports, and M is imports. A current account deficit (CAD), where  $X-M - M-X$  is less than zero, indicates an inflow of capital into the domestic economy, resulting in foreign investors accumulating assets domestically or the domestic sector accumulating liabilities to foreigners. This Equation holds whether the parameters are in absolute terms or as a percentage of GDP.

The equation can also be expressed as:

$$(S-I) = (G-T) + (X-M)$$

In the case of the domestic private sector, to accumulate net financial assets, the government must run a fiscal deficit, and the country must run a current account surplus (CAS), causing foreigners to accumulate net liabilities. The private sector, composed of households and firms, inherently desires to save and earn returns on those savings. Physical assets such as gold and property can be inconvenient and subject to theft, legal issues, and price fluctuations. Financial assets mitigate some of these problems but still carry risks. Therefore, the private sector prefers holding financial assets issued by the government, like treasury bills and bonds, which are considered safe because they are supported by the government's ability to issue sovereign currency.

Negative asset accumulation or net financial liabilities by the domestic private sector, known as leveraging, can occur, especially during economic booms. However, this is unsustainable in the long term due to the need for debt repayments. Deleveraging, where the private sector reduces consumption and investment to save and reduce debt, can lead to a recession. Governments, however, can indefinitely accumulate net financial liabilities, which are the private domestic sector's and foreign entities' assets, enabling a country to run a CAD.

In the following table, we have included the data required for SFB analysis from a Russian perspective. The data extends from 2012 to 2023, and we could infer some observations from the table (every value as per cent of GDP).

<b>YEAR</b>	<b>X-M</b>	<b>G-T</b>	<b>S-I</b>
2012	3.2	-0.1	3.1
2013	1.4	-0.5	0.9
2014	2.7	-0.5	2.2
2015	4.9	-2.4	2.5
2016	1.9	-3.4	-1.5
2017	2	-1.5	0.5
2018	6.9	2.9	9.8
2019	4	1.9	5.9
2020	2.4	-4	- 1.6
2021	6.6	0.8	7.4
2022	10.5	-2.3	8.2
2023	2.5	- 1.9	0.6

*TABLE 1 (SOURCE: TRADING ECONOMICS)*

Considering the SFB analysis, we can see that, over the years, private asset accumulation has undergone different fluctuations. During the conflict year of 2022, Russia had a substantial positive current account surplus due to the unprecedented situation. Thus, private asset accumulation has also been largely positive as a percentage of GDP. However, compared with the financial year 2023, the current account deficit underwent a considerable dip, and this paper has already discussed the various reasons for the dip. This situation, along with the high maintenance of defence expenditure, has primarily been the reason for a very massive decrease in private asset accumulation. This SFB analysis shows that unlike the macroeconomic stability discussed in the mainstream media, the Russian economic situation was not favorable for private asset accumulation because people were always uncertain regarding what to do with their money in a warlike situation. Thus, this analysis strengthens our argument of exposing the charades concerned with macroeconomic prudential policies.

## THE CONTEMPORARY SCENARIO AND THE WAY FORWARD

Throughout the paper, the primary emphasis was on exposing the arguments concerned with the macroeconomic stability and resilience of the Russian economy. Approaching the topic critically has given different ideas to support the topic, but it is equally relevant to assess the contemporary scenario with Russia.

Most recently, the World Bank has upgraded Russia from an 'upper middle-income country to a high-income one, a status they had back in 2014. The ranking was boosted by the growth in trade (+6.8%), the financial sector (+8.7%), and construction (+6.6%), which led to an increase in both the real (3,6%) and nominal (10.9%) GDP.

On a surface level, this might seem like data for a country having rigorous economic growth. Still, there are many unchecked factors behind this economic boost. This Russian economy is primarily war-driven; in such a case, growth depending on sustaining warfare is not a positive economic factor.

Thus, the central idea that should be conveyed is that we should not assess growth only based on the face value of different macroeconomic variables. Instead, we should prioritize political and social developments and economic boosts to frame a holistic economic policy.

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