Implications of the EU Sanctions for the Resilience of the Russian Financial System under the Current Geopolitical Environment

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Abstract: *The military invasion of Ukraine by the Russian Federation turned into Europe's most prominent military conflict since World War II, severely modifying the economic and financial relations between the European Union (EU) and the Russian Federation. Since the beginning of the Russian aggression, the EU has imposed a large number of sanctions against the Russian Federation, which aimed at limiting Russian resources to finance the war and restricting its access to European financial markets. In this context, the paper aims to investigate the impact of the EU sanctions on the Russian financial system by assessing the banking system's resilience to imposed restrictions. The findings highlight that, in the initial phase, the Russian financial system has been significantly disrupted by the EU sanctions, facing a collapse of the rouble, the most significant drop in the history of Moscow's stock market, a banking liquidity crisis, but also a contraction in lending and in the interest rate spread. In a later phase, due to large-scale countermeasures taken by the Russian authorities and the Bank of Russia, it has been stabilized, reflecting its high level of resilience to risks.*

Keywords: *EU sanctions, Russian Federation, banking system, banking liquidity crisis, countermeasures.*

JEL classification: F51, G18, G28, G21.

Introduction

International sanctions have increasingly become a key element in contemporary international relations. They have evolved from a weapon of economic warfare to the most powerful peaceful tool of the international community designed to prevent or resolve threats to global peace and security. The use of sanctions to meet the challenges of armed conflict, terrorism, the proliferation of weapons of mass destruction and violations of international humanitarian law originates from centuries of coercive diplomacy trial and error (Carisch *et al.*, 2017). They have the purpose to send a message to the sanctioned entity by an international actor to make a change in

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its behaviour or to "coerce" its behaviour (Özdamar and Shahin, 2021).

The Russian Federation's unprecedented and unprovoked military attack against Ukraine, started on 24 February 2022, led to the largest territorial annexation in Europe since the end of the Second World War, directly contradicting all international objectives and values related to respecting the sovereignty and territorial integrity of states. This act of aggression against a sovereign state has determined the imposition of an unprecedented number of economic, commercial and financial sanctions by the Western states, aiming at putting pressure on Russia to change its foreign policy towards Ukraine. According to the Peterson Institute for International Economics, more than 120 financial sanctions were imposed against the Russian Federation between February 2022 and October 2022 (PIIE, 2022).

Most of these sanctions were directed towards the energy and financial sectors, given their essential role in the Russian economy[3], pursuing to reduce the ability of the state to continue financing its war in Ukraine. The energy sector was targeted through bans on the export of technology to Russian companies in the field, bans on the exports of technologies to Russia's defence and security industry, and multiple bans on importing energy. In addition, G7 and the EU countries agreed on a price cap on Russian oil, while the EU banned Russian crude oil imports. Sanctions imposed against the Russian financial sector had the purpose of isolating Russia financially by cutting the Bank of Russia's access to foreign reserves, limiting its credit institutions' access to external financing and international payment systems, restricting financial transactions with Russian state-owned enterprises that support war operations, and reducing financial flows originating from Russia.

EU sanctions are of utmost importance in changing Russia's behaviour, considering the close economic ties prior to the invasion. The European market was the second destination for Russian crude oil and natural gas, while Russia represented the main supplier of crude oil and natural gas in the EU (DG Trade, 2021). The decision to break this co-dependence with Russia was a costly decision for the EU authorities. According to some studies (Drăgoi *et al.*, 2022), the EU sanctions represent a "declaration of independence of the European authorities" that aimed not only at reducing energy dependence from an authoritarian and aggressive regime, but also at limiting the financial flows gained from the energy exports.

Previous studies that investigated the effects of international sanctions in the context of the annexation of Crimea in 2014 have revealed that the Russian economy and its financial system have not been significantly affected by them. Many studies found that the retaliatory measures did not generate a severe economic crisis, as Russia was able to cope relatively quickly with their direct impact (Ahn and Ludema, 2016), due to the major role of the state in the economy (Connolly, 2018). Despite a remarkable number of international sanctions adopted against Russia to stop the war, there is a lack of studies examining the impact of the 2022 sanctions on the Russian economy and its financial system, but also of those that explore how the Russian authorities act to mitigate the effects of the sanctions.

[3] The energy sector generates 25% of the revenues of the budget of the Russian Federation. In comparison, the banking sector continues to play an important role in financing the economy, reaching the level of 92% of GDP. At the same time, banks constitute the basis of the Russian financial sector, holding approximately 87% of the total assets of the financial sector (Ministry of Finance of the Russian Federation, 2023; Bank of Russia, 2023).

Given the importance of the EU's sanctions for limiting the Russian Federation's ability to finance the war and isolating it financially and economically, the objectives of this study are to examine the implications of the EU sanctions on the Russian financial system and to analyse how the Russian monetary authorities responded to mitigate the effects. The methodology employed to achieve these aims consists in a chronological analysis of the EU financial sanctions against Russia, imposed between February 2022 and December 2022, alongside with the analysis of the main financial sector indicators of the Russian Federation, between August 2021 and August 2022. In addition, a chronological perspective of the main decisions of the Bank of Russia has been pursued, starting from February 2022 to October 2022. The information on the EU financial sanctions against Russia was gathered from the official database of the European Commission, the financial sector indicators of the Russian Federation were retrieved from the official database of the Bank of Russia and from Thomson Reuters Eikon, and the decisions of the Bank of Russia were collected from the official site of the monetary authority.

Literature review on the sanctions against the Russian Federation

When the Russian Federation illegally annexed Crimea and developed countries started to adopt sanctions against Russia to stop the war, a body of research investigated the effects of international sanctions on the Russian economy (Gurvich and Prilepskiy, 2015; Ahn and Ludema, 2016; Tuzova and Qayub, 2016; Connolly, 2018; Mamonov and Pestova, 2021a; Pala, 2021; Mamonov, 2021b). However, while the studies that analyse the effects of sanctions in the context of the military invasion of Ukraine are few (Astrov et al., 2022; Clichici et al., 2022), those that address the impact of the EU sanctions are completely lacking.

Gurvich and Prilepskiy (2015) argue the impact of the EU, the U.S. and a number of other states' financial sanctions imposed due to the 2014 annexation of Crimea on Russian banks and companies, through the lens of capital flows (taking into account the decline in oil prices). The results show that the sanctions directly affected sanctioned state-controlled banks and companies in the oil and gas industry, but also in the military industry, by severely constraining foreign financing, indirectly affecting unsanctioned companies.

Based on detailed firm-level data, Ahn and Ludema (2016) affirm that the US sanctions are quite "smart" as they strongly impact the targets themselves with relatively minimal collateral damage. According to the study, the sanctions had a relatively small impact on the Russian economy compared to the international oil price, which explains most of the decline in Russia's GDP, with only 1% of the economic decline being driven by sanctions. The conclusion that the international oil price was the main cause of Russia's weak macroeconomic outlook in 2014 is also presented by Tuzova and Qayub (2016).

According to Connolly (2018), international sanctions have greatly affected Russia, but not in the direction sought by Western states. One of the main reasons was the major role of the state in the economy, which is a typical environment that would hinder economic growth, competitiveness and innovation. However, in a crisis, it proved capable of mitigating the effects of sanctions. Although the Russian economy has avoided the devastating effects of sanctions, in the future it is set to become less competitive and innovative compared to other states.

Mamonov and Pestova (2021a) found that the effects of financial sanctions on the Russian economy were adverse in the case of both waves of sanctions, from 2014 and 2017. They significantly affected the financial macroeconomic variables (real interest rate and private external debt) and moderately impacted the actual variables (production, consumption, investment, trade balance and the real exchange rate of the rouble). Moreover, according to the research of Mamonov *et al.* (2021b), financial sanctions determined banks to adjust their international and domestic exposures by reducing their external assets and liabilities. Despite the government's support, the sanctioned banks have substantially contracted their lending to the domestic corporate sector, resulting in a potential loss of at least 4% of the domestic GDP. At the same time, the sanctioned banks increased lending to the population by almost the same magnitude, largely offsetting the GDP loss.

However, some authors argue that the Russian Federation is an example of the ineffectiveness of sanctions (Pala, 2021). Considering the main objective of the international sanctions imposed on Moscow in the context of the annexation of the Crimea region in 2014, i.e., to withdraw and stop supporting the self-proclaimed republics, the author mentions that it has yet to be achieved.

In the context of the Russian invasion of Ukraine, Astrov *et al.* (2022) analyse the scenarios regarding the economic impact of imposed sanctions. The results show that Western sanctions will not have a statistically significant impact on GDP and the exchange rate. However, the authors discovered that the Russian state is highly vulnerable to a reduction in the price or volume of energy exports. Apart from this, the most severe effects of the sanctions on the economy are the exclusion of Russian banks from the SWIFT system, the limited access to international currency markets, and the prohibition of exports of high-tech goods to the Russian Federation.

According to the results obtained by Clichici *et al.* (2022), despite an unprecedented number of international sanctions that were imposed on the Russian Federation in 2022, their negative impact was mitigated by extensive measures adopted by the monetary authorities, which managed to stabilize the financial system and restore lending to the real sector. However, Goldman (2022) argues that the massive waves of sanctions imposed by Western democracies will most likely deepen Russia into isolation, which will have a negative impact on its economic and technological development.

The contribution of this research to the literature is threefold. Firstly, we provide a review of financial sanctions imposed by the EU against the Russian Federation in the context of the invasion of Ukraine which started in February 2022. Secondly, we extend the literature by investigating the effects of the EU sanctions on the Russian financial system, specifically on the banking system. Thirdly, we present the most important countermeasures that the Russian authorities adopted to avoid a financial crisis.

Review of EU's financial sanctions against the Russian Federation

To impose a change in the Russian Federation's behaviour towards Ukraine, the EU adopted nine sanctions packages between 23 February and 16 December 2022 (Table 1). All nine sanctions packages targeted the Russian financial system, aiming at limiting its credit institutions' access to external financing and international payment systems. Although the financial sanctions imposed by the EU entailed a high cost for the member states, their unprecedented severity was necessary to send a strong message that the EU will not be intimidated by Russia's aggressive actions, and it will continue to act as a guarantor of state sovereignty in the region.

For the first time in the history of the Russian financial system (due to the EU sanctions adopted in February 2022), the ability of the state to use its foreign exchange reserves held in the EU banks was undermined. With no access to reserves to cushion the collapse of the rubble, the Bank of Russia was left with only two options, i.e., interest rate hikes and capital controls. Even though the largest stock of foreign exchange reserves is located in China, reaching a value of 16.8% of the total reserves[4] (followed by Germany, France and Japan, with 15.7%, 9.9% and 9.3%, respectively), it could not be accessed by the Russian government, as the Chinese authorities avoided violating Western sanctions. The sanctions were also primarily respected by the Chinese state because most Chinese banks could not afford to lose access to international financing. In contrast, many Chinese industries would have been seriously affected if they had lost access to Western technology.

With the freezing of international reserves, the EU authorities banned European banks from accepting bank deposits exceeding the amount of EUR 100,000 held by Russian citizens or legal entities from Russia and restricted the access of Russian citizens to the European capital market by banning the sales of securities to them. Regarding the impact of this sanction, it must be specified that it cannot be extraterritorially applied. Therefore, the Russian subsidiaries of the EU parent companies are not obliged to comply with the sanctions. However, the EU parent companies are prohibited from using their Russian subsidiaries to avoid sanctions obligations.

By March 2nd, the EU decided to exclude the most important Russian banks (Bank Otkritie, Novikombank, Promsvyazbank, Bank Rossiya, Sovcombank, VEB, VTB) from the SWIFT network, the main purpose being to prevent Russia from looking for ways to bypass the sanctions. Moreover, the European authorities banned the supply of euro banknotes to Russia and crypto-asset services, aiming to impose additional restrictive measures regarding the provision of specialized financial messaging services to certain Russian credit institutions.

By its next sanction packages, the EU imposed full transactions ban on four more Russian banks (VTB, Novikombank, Sovcombank and Otkritie Bank), excluded three other Russian banks (SberBank, Credit Bank of Moscow and Russian Agricultural Bank) from the SWIFT and imposed a ban on business-relevant financial services provided by European entities, such as accounting and tax consultancy, consultancy in management, market research and public opinion polling services for the Russian government as well for companies established in Russia. The most important financial

[4] The stock of international foreign exchange reserves of the Bank of Russia reached the level of 629.4 USD billion in February 2022 (Bank of Russia, 2023).

sanctions adopted by the EU are included in *Table 1*.

Table 1: The EU's financial sanctions against Russia imposed between February 23 and December 16, 2022[5]

Date	Sanction Package	Measures Imposed
23 February	I	• Prohibition of granting new loans or credits to any legal entity associated with the Russian government, as well as the total prohibition of transactions with Russian state-owned enterprises that support military efforts. • Prohibition of financing the Russian Federation, its government and the Bank of Russia by any bank located on the territory of the EU.
25 February	II	• Freezing international reserves in euros and dollars held by Russia. • Prohibition of accepting deposits exceeding EUR 100,000 from Russian citizens or residents. • Imposing a ban on the sailing of euro-denominated securities to Russian clients.
28 February and 2 March	III	• Excluding seven Russian financial institutions from the SWIFT financial messaging system (Bank Otkritie, Novikombank, Promsvyazbank, Bank Rossiya, Sovcombank, Vnesheconombank - VEB, and VTB Bank). • Prohibition of investments in projects co-financed by the Russian Direct Investment Fund. • Imposing a ban on the supply of euro banknotes to Russia. • Imposing a ban on transactions with the Bank of Russia, which aims to prevent it from accessing the large amounts of foreign exchange reserves held in the EU.
9 March	"Compliance package"	• Crypto-assets fall under transferable securities. • This package of sanctions also confirms that loans and credits also include crypto-assets. These clarifications were provided precisely so the financial sanctions could not be evaded.
15 March	IV	• Imposing a ban on the rating of Russia and Russian companies by EU credit rating agencies as well as a ban on providing rating services to Russian customers.

[5] Note: Due to our research subject, we have chosen to select and briefly present only the financial sanctions. However, the nine packages of sanctions are also imposing multiple trade bans (including on the imports of oil and petroleum products), travelling and visa bans.

8 April	V	• Imposing a ban on providing services for cryptocurrencies and a ban on providing advisory services for trusts owned by Russian oligarchs. • Imposing a ban on Russian companies from participating in the EU public procurement tenders. • Freezing assets of four other Russian banks (VTB, Novikombank, Sovcombank and Otkritie Bank). • Imposing a ban on providing financial advice on trusts owned by Russian oligarchs.
3 June	VI	• Excluding three other Russian banks (SberBank, Credit Bank of Moscow and Russian Agricultural Bank) from the SWIFT financial messaging system. • Imposing a ban on the EU companies from providing accounting, auditing, statutory audit, bookkeeping, tax consulting, business and management consulting or other public relations services to the Russian government and to legal entities established in Russia.
21 June	"Maintenance and alignment package"	• Prohibition of European banks from accepting deposits from legal entities established in third countries if they are majority owned by Russian citizens or by persons residing in Russia. • The acceptance of deposits for non-prohibited cross-border trade will be subject to prior authorization from the competent national authorities.
5 October	VIII	• Extending crypto-asset bans to all crypto-asset e-wallets, accounts or custody services, regardless of their value (the previous sanctions allowed such e-wallets and accounts up to EUR 10,000).
16 December	IX	• Three other Russian banks were sanctioned, including by imposing a total ban on transactions with the Regional Development Bank of Russia. • Imposing a ban for EU citizens from participating in the financial management boards of all Russian state enterprises, including joint ventures with a Russian state company.

Source: Authors' representation based on the European Commission data (2022).

As a result, after the imposition of these financial sanctions, almost 70% of the major Russian state-owned companies and banks are unable to access funds on the EU capital market (European Commission, 2022). In addition, Cygan (2022) shows that the sanctions also affected the Russian Sovereign Fund which is now unable to sell assets abroad to finance Russia's military operations. As a result, Russia's strategy to accumulate foreign assets in peacetime in order to finance its war no longer seems viable.

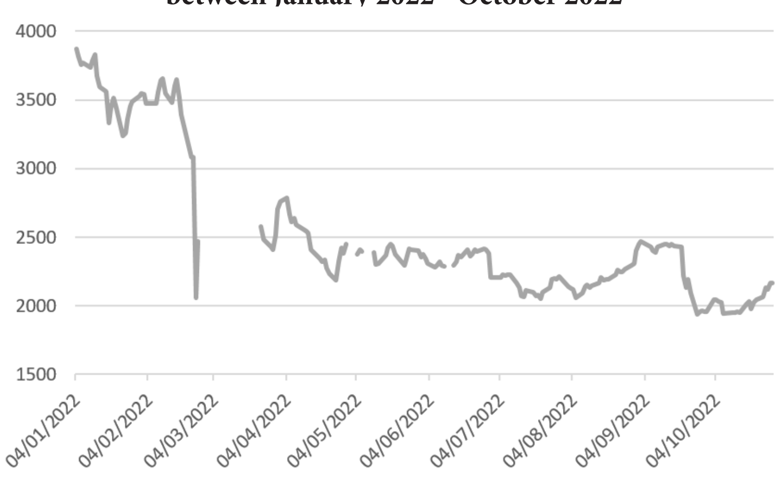
Moreover, because these sanctions are internationally coordinated and include countries that are normally reluctant to participate in such actions – such as Switzerland – they are expected to have substantial effects, particularly as they force the Russian economy to rely heavily on current revenues from energy exports and other basic resources. In addition, as countries that currently import energy resources from Russia will find alternative sources of supply, the constraint exerted by financial sanctions on Russian foreign exchange reserves will become stronger.

The main implications of the sanctions imposed on the Russian financial system

The decision to invade Ukraine which led to large-scale financial sanctions by the EU, starting with the prohibition of financing the Russian Federation and its financial institutions, but also freezing its international reserves, has severely disrupted the Russian financial system in the initial phase. The primary financial risks materialized through the channel of foreign exchange and stock market, starting from 24 February. Similar to previous periods of increased volatility in the Russian financial market, investors sought to quickly sell assets held in Russia and convert the national currency (rouble).

Significant capital outflows led to the biggest drop in history on the Moscow stock market on February 24, when its main index (IMOEX) dropped by 39%, causing losses of approximately 70 billion dollars to the largest companies in Russia. Russian banks and oil companies were among the hardest hit by the stock market decline, with shares of Sberbank, Russia's biggest bank, losing 43% of their market value. Rosneft's value fell by 43%, while Gazprom's shares decreased by 35%. In this context, the Bank of Russia suspended trading in the stock market to eliminate the risk of excessive volatility of securities starting with February 28 (*Figure 1*).

Figure 1. Dynamics of the main index of the Moscow stock market, between January 2022 - October 2022



Source: Authors' representation based on Thomson Reuters Eikon data (2022).

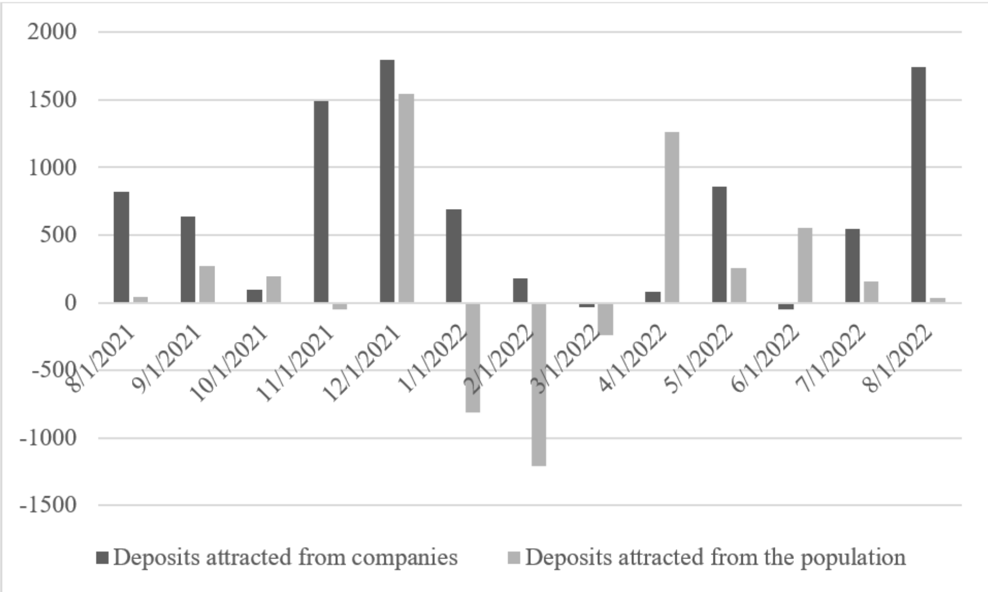
The stock market trading was resumed only on March 24, after large-scale countermeasures adopted by the Bank of Russia, aimed at mitigating the effects of the sanctions. Although the authorities managed to stabilize the stock market, IMOEX no longer recorded values similar to those of January 2022. In addition, limited access of the Bank of Russia to foreign reserves, one of its main instruments to stabilize the currency, led to a collapse of the rouble. It touched a record low on March 11, reaching 120 to the dollar, losing almost 60% of its value since the start of the year (*Figure 2*).

Figure 2. The evolution of the exchange rate between the Russian rouble and the US dollar, between January 2022 and October 2022

Source: Authors' representation based on Bank of Russia data (2022a).

In the second phase, when the European Commission adopted the third sanction package and excluded the Russian banks from SWIFT, the uncertainty related to the effects of sanctions on the banking system, but also the collapse of the rouble generated panic among the population. It spurred significant withdrawals of funds from Russian banks in February and March (*Figure 3*). However, the situation stabilized in less than a month, when the value of funds on current and deposit accounts recovered, due to an unprecedented rise of the key interest rate, from 9,5% to 20%, by the Bank of Russia on February 28.

Figure 3. Resources attracted from companies and the population, between August 2021 and August 2022 (monthly change, in billions of roubles)

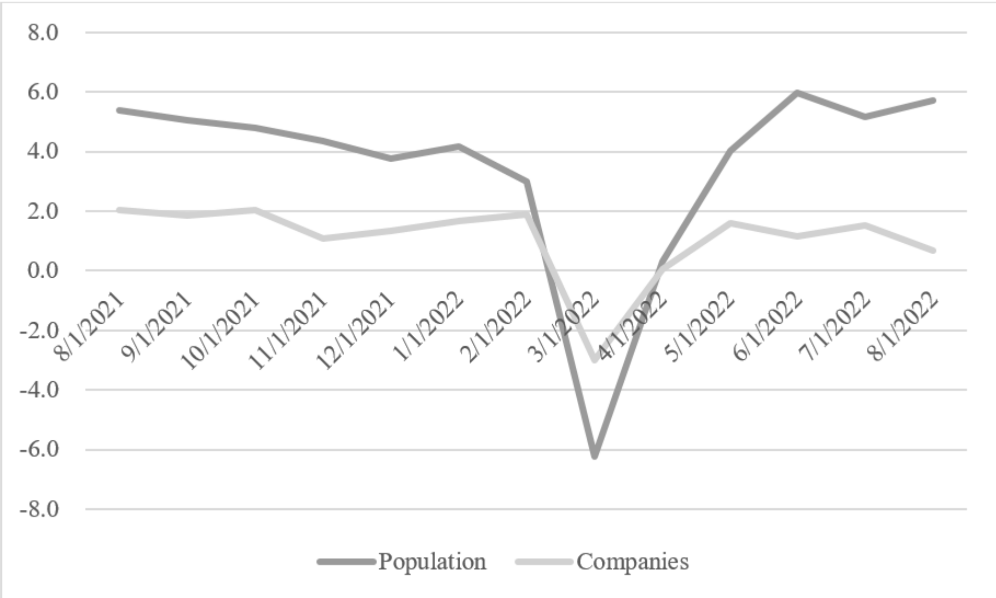


Source: Authors' representation based on Bank of Russia data (2022a).

Russian companies have been less affected compared to the population, having access to government support in the context of international sanctions. In addition, high international prices for energy fuelled the growth of Russian oil and gas companies' revenues.

Although, by rising the key interest rate, Bank of Russia mitigated the withdrawal of funds by the population from the banking system, which led to an increase in financing costs and a significant reduction in the banking interest rate spread. Thus, the interest rate spread on population, with a maturity of more than one year, reached a negative value in March, of -6.2 percentage points, while that related to companies was -3 percentage points (*Figure 4*).

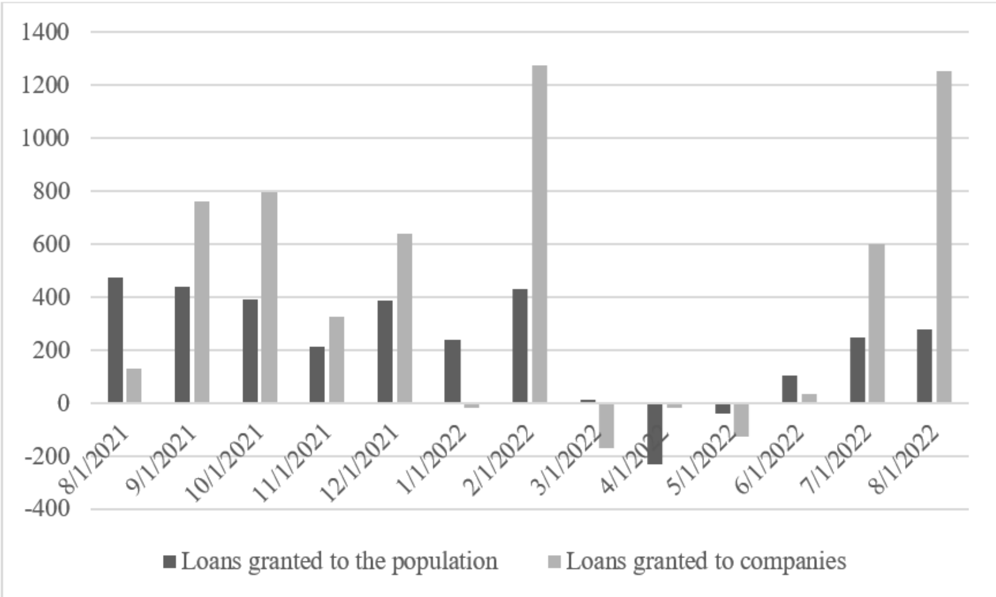
Figure 4. The interest rate spread on the population and companies, between August 2021 and August 2022 (with a maturity of more than one year, in percentage points)



Source: Authors' representation based on Bank of Russia data (2022a).

In addition, the tightening of lending standards by credit institutions, but also the sharp decrease in imports as a result of the sanctions imposed on Russian companies, affected the lending activity of banks. Starting from March, the companies' demand for loans decreased for three consecutive months, by 310 billion roubles (*Figure 5*), being amplified by logistics problems, international restrictions on equipment imports and goods, as well as difficulties in finding new partners and markets for the Russian products. However, with the reorientation of the companies' exports to the markets that did not impose sanctions on the Russian Federation, paired with other sources of imports, the demand for credits increased starting from July.

Figure 5. Loans granted to companies and to the population, between August 2021 – August 2022 (monthly change, in billions of roubles)



Source: Authors' representation based on Bank of Russia data (2022a).

At the same time, the demand for bank loans from the population decreased in April and May by 271 billion roubles (*Figure 5*). However, the situation stabilised with the reduction of the monetary policy rate in April, from 20% to 17%. Starting from June, an upward trend in demand for loans from the population can be observed. In addition, the high level of capitalisation and the relaxation of capital buffer requirements allowed banks to absorb loan losses.

Russia's countermeasures to mitigate the impact of sanctions on the financial system

The governmental authorities and the central bank announced unprecedented large-scale measures aiming to mitigate the adverse effects of the EU sanctions on the Russian financial system[6].

Against the background of severe devaluation of the rouble, as the monetary no longer had the option of using foreign exchange interventions, a series of capital controls were introduced on February 28. Firstly, the requirement of mandatory sale of 80% of the foreign exchange earnings of the exporters was announced. Moreover, the key rate was increased, from 9.5% to 20%, aiming at mitigating the withdrawal of funds from bank deposits, preventing the materialization of systemic liquidity risk and reducing inflationary pressures. Starting with March 1st, quantitative restrictions

[6] Between February and October 2022, more than 50 measures were adopted to restore the normality of the stock market and of the foreign exchange market, as well as for the stability of the banking system (Clichici *et al.*, 2022).

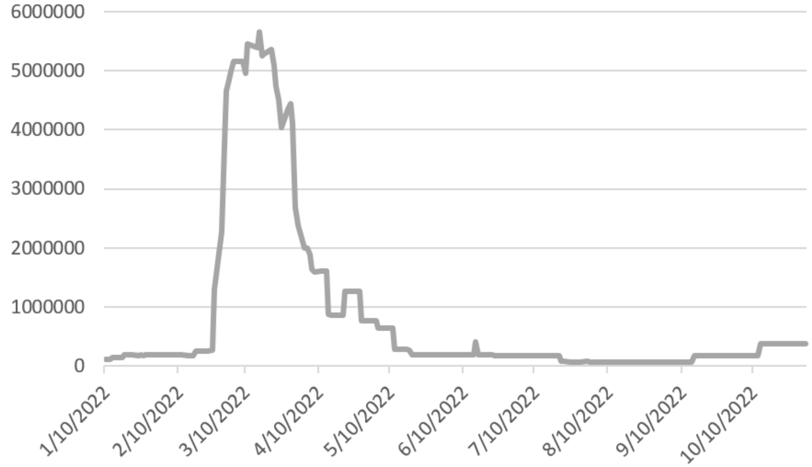
were introduced on cash withdrawals in foreign currency and cross-border currency transfers, as well as restrictions on the purchase of foreign currency on the Russian market by non-residents. To limit the demand for foreign currency, an additional 30% commission fee for the purchase of certain types of foreign currencies (USD, EUR, GBP) was introduced. In response to the fourth package of sanctions approved by the EU, the Russian authorities have approved, starting from April 1st, that the payment of debts to foreign debtors be made only in roubles and that the purchase of natural gas is only possible with payment in roubles.

As the currency stabilised, the authorities decided on the same date, to relax the limits on the maximum values that can be transferred abroad, the conditions on the sale and purchase of foreign currency and the requirements for the sale of foreign currency by exporters. In addition, starting from May, banks were allowed to sell, without restrictions, except for US Dollars and Euro, foreign currency to citizens.

A number of measures were also taken to stabilize the stock market. On February 28, the Bank of Russia banned the sale of securities and other Russian assets by non-residents, limiting foreign currency transfers, and suspended trading on the Moscow Stock Exchange. To prevent excessive volatility and risks to financial stability, the central bank announced its readiness to purchase Russian government bonds on 18 March. However, on March 23, the Bank of Russia announced the resumption of trading for 33 shares included in the main index of the Moscow Stock Exchange.

Moreover, with a significant portion of the central bank's international foreign exchange reserves frozen, the central bank could no longer provide foreign currency liquidity to banks through foreign exchange swap and repo operations. Instead, in addition to the rouble lending facility offered to banks, the Bank of Russia announced that it would continuously inject rouble liquidity into the banking system starting from February 28. As a result, credit institutions repurchase agreements with the Bank of Russia reached 5.6 trillion roubles on March 16 (*Figure 6*).

Figure 6. Value of repo operations, in national currency, of the central bank between January 2022 and October 2022 (in millions of roubles)



Source: Authors' representation based on Bank of Russia data (2022a).

At the end of March, aiming to increase banks' access to the central bank's resources, the central bank relaxed the requirements for participation in refinancing operations and extended the term of permanent credit facilities from one day to 90 days. In addition, it reduced the minimum reserves requirement from 4.75% to 2% for all categories of funds attracted by credit institutions, freeing up additional liquidity in the amount of 2.7 trillion roubles. The monetary authority also eased the requirements regarding the liquidity of systemically important financial institutions, approved the temporary use of capital buffers, thus making available 891 billion roubles, but also cancelled the mandatory contributions to the deposit insurance system, determined by the increase in interest rates to deposits (Bank of Russia, 2022b).

Consequently, at the end of March 2022, the liquidity demand of credit institutions decreased due to massive interventions of the central bank. Moreover, against the background of the liquidity surplus registered at the end of April, the Bank of Russia raised the minimum reserve requirements for foreign currency liabilities and announced that it would start to absorb liquidity from the banking system. In addition, the Bank of Russia initiated the monetary policy interest rate reduction cycle, from 20% to 17%, following six interest rate cuts, reaching in September 2022 a level of 7.5%.

Although five more EU sanctions packages have been adopted starting with April 8, the Russian authorities' unprecedented capital restrictions have limited the rouble's convertibility, and the exchange rate has returned to its pre-Ukraine war level starting from April. At the same time, the relaxation of prudential requirements towards banks, but also the significant amount of liquidity injected into the banking system, contributed to mitigating the liquidity crisis. The national payment infrastructure played an important role in stabilizing the situation. The National System of Card Payments ensured the accessibility of cashless payments on all types of cards within Russia. At the same time, the Financial Messaging System of the Bank of Russia enabled the processing of financial messages within Russia, supporting communication with 12 countries[7].

Conclusions

The analysis of the main implications of the EU's financial sanctions on the resilience of the Russian financial system reveals some important aspects. Firstly, it has unveiled that all nine sanctions packages adopted by the EU authorities between February and December 2022 targeted the financial system of the Russian Federation, aiming at reducing its ability to finance the war with Ukraine, as well as its exclusion from the European financial system. The EU resorted to unprecedented measures, such as freezing the international reserves of the Russian Federation, excluding the main Russian banks from the international payment system, but also limiting the access of Russian citizens to the European capital market and to the EU banks.

Secondly, the loss of access of the Bank of Russia and of the Russian financial institutions to foreign currency resources and to the international payment system led to the largest drop in the history of the rubble and of the Moscow stock market index.

[7] Since 2019, a number of agreements have been concluded to connect the Financial Messaging System of the Bank of Russia to the payment systems of other countries, such as China, India and Iran, but also the countries of the Eurasian Economic Union (Armenia, Belarus, Kazakhstan, Kyrgyzstan).

As a result, stock market trading was suspended for about a month. Uncertainty related to the effects of the Western sanctions, but also to the severe collapse of the rubble led to the withdrawal of funds from the current and deposit accounts by the population, causing a major liquidity crisis in the banking system in March 2022. In addition, the increase in the key rate affected the demand for loans from both the population and companies, but also the bank income, significantly reducing the interest spread.

Thirdly, to counteract the impact of the sanctions and to avoid a financial crisis, the Russian authorities have adopted more than 50 measures, mainly resorting to extensive capital controls, the increase in the key rate, but also to the massive injection of liquidity into the banking system. Through such measures, the Russian authorities managed to stabilize the financial system and to overcome the currency and the liquidity crisis from March 2022.

In conclusion, although Russian financial institutions have managed to adapt to the new situation, the effects of the asset freeze will have long-term repercussions, with the Russian financial system becoming increasingly autarchical and vulnerable. In addition, as a result of maintaining the EU's sanctions in 2023, the war effort will become increasingly burdensome, and this fact shows that the impact of the financial sanctions will constitute a major stress factor for the stability of both the Russian economy and its financial sector if the current geopolitical status-quo remains unchanged.

However, considering that the Russian financial market is working on different grounds than the financial markets from Western countries, further research is needed to explore the peculiarities between these markets, along with the implications of other countermeasures taken by the Russian authorities that are not related to the financial sector.

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