Abstract

The article analyses the impact of the sanctions of civilized countries on the Russian economy. Particular attention is paid to sectoral sanctions on the markets of oil and oil products, in the banking and financial sectors, as well as on the market of transport services.

The authors analysed the prospects for expanding sanctions on the oil market for Russia in the context of setting a maximum price for the export of Russian oil by the main buyers. Conclusions are drawn not only about the impact of sanctions on Russian oil production, but also about a possible decrease in prices for oil and other energy resources in the region.

The authors positively assessed the US and EU anti-Russian sanctions in the financial sector. The impact of sanctions on the Russian banking system, insurance, and stock markets was studied. Particular attention was paid to the impact of disconnecting the banking system of the Russian Federation from the international payment system SWIFT.

The authors also focused on the gradual division of the Russian economy under the influence of sanctions and trends in the energy market into the energy sector and the rest. It was found that the most affected by the sanctions were air transportation, mechanical engineering, and ferrous metallurgy sectors.

Conclusions are drawn about the need to continue sanctions pressure on the Russian economy. High energy prices during the 200 days of the war with Ukraine allowed the Russian Federation to subsidize economic sectors that suffered from the war at the expense of the energy sector. A market reduction of the oil prices or their correction with the help of the sanctions policy should cause significant and irreversible damage to the Russian economy.

Keywords: sanction, anti-Russian sanction, inflation, development markets.

Introduction

Russia’s full-scale invasion of Ukraine had severe economic consequences for Ukraine. According to the official estimates of the Ukrainian government, as of July 1, 2022, direct losses from the military aggression reached 650 billion US dollars (Beshlei, 2022). The military actions that last for more than 200 days have led to damage to the Ukrainian economy that is equals to the amount of three years of GDP. The war in Ukraine, according to the UN, had a significant impact on the food supply of poor countries in Africa and the Middle East (Arni, 2022) and continues to have a significant impact on food prices in the Black Sea and Mediterranean regions. The potential scale of the war was reduced by sanctions against the

Corresponding author:

A Ph.D. in Economics, Associated professor, Department of finance named after Victor Fedosov, e-mail: nsahapran@gmail.com, ORCID: 0000-0002-4080-0833
B Ph.D. in Economics, Professor at the Department of Finance, e-mail: libritchenko@gmail.com, ORCID: 0000-0002-9196-8740
C Ph.D. in Economics, Professor, Department of finance named after Victor Fedosov, e-mail: haponiuk.mykola@kneu.edu.ua, ORCID: 0000-0002-1541-0307
D Professor, Ph.D. in Economics, Member of the National bank of Ukraine Council, e-mail: shapranv@gmail.com, ORCID: 0000-0002-1540-6834
Russian Federation (RF), which had an impact on oil, gas, and other energy prices. The situation has led to an increase in the defence budgets of the G-7 countries and EU countries, as well as an increase in global inflation and the risk of unemployment in the US, UK, and EU. In 100-150 days, a local conflict has acquired the status of a global one, and its impact both on the economy of the RF and on the global economy will be significant.

The scenario of the global crisis, launched after February 24, 2022, with the Russian invasion of Ukraine, was unexpected for the central banks of developed countries: the US Federal Reserve System (FRS), the European Central Bank (ECB), the Bank of Canada, the Bank of Japan, the Bank of Great Britain, etc. The mentioned central banks anticipated the offset of the increased issuing activity due to the COVID-19 pandemic by the growth of the stock markets. But Russia’s war in Ukraine confounded these expectations and led to high inflation, which very quickly acquired the features of a global inflation crisis (Shapran & Britchenko, 2022). Not only the end of the war in Europe but also the future of the entire Eurasian continent depends on the effectiveness of anti-Russian sanctions. Punishing the RF with economic sanctions and restrictions should be a lesson for other aggressors who are hatching plans to destabilize peaceful life in Europe. Therefore, economic sanctions and their effectiveness against the RF are so important for a peaceful life in Europe and on the Eurasian continent. The economy of Europe without war entails a growing economy, low inflation, high employment, large export potential, and a stable financial system.

Material and methods

In our research, we primarily relied on official statistics published by Eurostat, the State Statistics Service of Ukraine, and state statistics agencies of EU countries. The statistics published by the authorities of the Russian Federation could be referred to only partially, because, in our opinion, it does not reflect the real picture of what is happening to the Russian economy.

We also used methods such as analysis, synthesis, and historical comparison in our research. One of the central methods of analysis is the comparison of data on the dynamics of the reaction of various industries of the RF to the sanctions with data that allows us to cross-check the official statistics of the main industries (electricity consumption, cargo turnover, etc.). Data from the Interfax news agency was taken in the analysis on an "as is" basis since this agency is registered in the RF and operates on its territory.

Perceiving the conclusions made in this research, it should be understood that the real situation in the Russian Federation under the influence of sanctions can be much worse than described in our study. Official statistics on the state of the economy and finances in the Russian Federation are distorted and it is not always possible to identify inaccuracies in such statistics promptly.

The Federal Statistics Service, the Central Bank of the RF (CBR), and the Government of the RF are making significant efforts to hide the effect of the sanctions. For instance, the CBR allowed banks and other financial institutions not to publish accounts and data on beneficiaries.

Results and discussion

In order to investigate the impact of sanctions on the Russian economy, we analysed three areas of their influence for economic anomalies: the real sector of the economy, public finances, and the financial sector (banking, insurance and stock markets). By economic anomalies we mean atypical tendencies and trends in the economy and finance that could not have developed under normal circumstances. By ordinary circumstances we imply the absence of military action and the cost of waging war and other
restrictions associated with war.

The real sector of the economy

According to CBR predictions, in 2022, Russia's GDP will fall by 4.2%, while inflation will estimate to be 12.9% (Interfax, 2022). Meanwhile, the World Bank expects Russia's GDP to decline by 8.9% instead of the 2.4% growth expected before the invasion. The IMF predicts inflation in the RF at the end of 2022 to be at the level of 18-23% (Interfax, 2022). Moreover, since there was no military action and no destruction of the civilian assets and industrial facilities on the territory of the RF, the main effect of the fall in GDP and rising inflation in comparison with pre-war forecasts for 2022 comes precisely from the sanctions. According to official statistics, unemployment in the RF is kept at a minimum level of 3.9% (May 2022). However, the analysis of the regional statistics showed that the consolidated data for the RF may be misleading. The drop in activity in a number of basic industries, the closure of foreign companies and joint ventures on the territory of the RF, as well as the efforts made by employment centres to retrain specialists show that the level of unemployment should be approximately 2-3 times higher than stated.

In the first half of 2022 (compared to the first half of 2021), a decrease in production volumes was noted in the following industries:
- production of motor vehicles, trailers and semi-trailers - by 62.2%;
- production of tobacco products - by 32.3%;
- production of ready-made metal products, except for machines and equipment (including construction structures) - by 16.9%;
- wood processing and production of wood and cork products - by 14.6%;
- production of computers and their components, computer peripherals, electronic and optical products - by 12.0%;
- production of textile products - by 7.9%;
- production of clothing - by 5.1%;
- production in the chemical industry - by 7.7%;
- metallurgical production - by 6.4%.

For the period from June 2021 to June 2022, the growth was shown only by extractive industries (+20.1%), production of medicines (+16.5%), and production in the segment of services for extractive industries increased by 8.1%. Transport statistics confirm the decline in GDP in the RF. Cargo turnover in the first half of the year fell by 0.6%. Passenger traffic in the first half of 2022 grew by 4.3%. Given this background, according to the Ministry of Transport of the Russian Federation, passenger traffic in aviation fell by 9% (Interfax, 2022). While considering these figures, it should be borne in mind that due to quarantine restrictions, passenger traffic in the RF in 2020-2021 was already one of the lowest in the last 5 years. Closed skies in the direction of the EU forced Russian companies to concentrate on the Asian direction and domestic flights.

An analysis of countering the sanctions by the Russian government showed that during the 200 days of the war, the government decided to allocate subsidies to the following sectors of the real sector:
- aviation in 2022 will receive subsidies of up to 110 billion roubles, of which 54 have already been allocated;
- companies that specialize in the production of cars will receive up to 300 billion roubles from the budget (this estimate takes into account direct subsidies);
- in August 2022, after an increase in freight transportation prices by the Russian Railways company, the government promised to subsidize Russian steelmakers up to 80% of the cost of transporting export products.

There are also "dark horses" in the subsidies statistics system in the Russian Federation. For example, after the imposition of sanctions, it turned out that up to 60% of components in the shipbuilding industry of the RF are not subject to rapid import substitution. As a result, there are no consolidated statistics on subsidies in the industry, but a special government commission has been created that will distribute subsidies for organizing the production of imported parts for ships within the Russian Federation.
Meanwhile, the industry itself in the first half of 2022 showed growth of 5%, but this is due to the completion of large projects, as well as increased demand for ship repairs.

The ban on the export of high-tech products, aviation spare parts, equipment for the oil industry, and even computer chips to the RF led to the collapse of the supply chains. The shortage of components was the first to affect mechanical engineering: as of the beginning of summer 2022, only 2 out of 14 car assembly plants were operating in the RF, and in August the situation improved, but not dramatically.

The problems also affected the banking sector: due to the withdrawal of VISA and Master Card from the market, banks needed to reissue MIR cards, but there were no chips for cards on the market in the required volumes. As a result, the Ministry of Defence of the RF even had to extend the MIR cards issued for the military personnel of the RF until 2029 (Ministry of Defense of Russian Federation, 2022). It was the inability to quickly replace imported components and the ban on the supply of products and services abroad that led to a drop in economic activity in the non-energy sector of the economy.

Relatively good macroeconomic statistics in the RF in the first half of 2022 were provided by high oil prices on the world markets. The RF used the windfall from the oil and gas trade to finance the war and industries that were in crisis due to sanctions. Such cross-subsidization, according to our estimates, can reach 10% of Russia's GDP in 2022. Therefore, the successful impact of sanctions on the Russian economy in the future will depend on how the world community manages to limit the Russian Federation's income from trading in oil and other energy resources.

Due to the sanctions policy, the RF already experienced difficulties with the sale of its main brands of oil, URALS, and SOKOL, in the first half of the year. Difficulties in trading through foreign banks and difficulties in transporting oil by tanker fleet meant that Russian oil grades were often traded at up to 20% discounts compared to Brent. Furthermore, the cost of transportation to the buyer has increased and the black market for oil has expanded since many buyers (for example, in India) would not like to advertise that they are buying Russian energy raw materials.

Despite the growing discount on Russian oil and the oil embargo by the EU and the US, the oil and gas revenues of the federal budget of the Russian Federation in January-July 2022 amounted to 7.2 trillion roubles. It is 1.5 times higher than in the same period last year. This effect was achieved only due to high oil prices. At the end of 2022, the Russian Ministry of Finance expects to overfulfill the plan for oil and gas revenues by 1.5–2 trillion roubles (Interfax, 2022). However, only if prices for Russian grades of oil remain at a high level.

For the further effective impact of sanctions on the Russian economy, civilized countries should stop the flow of petrodollars to the RF and make it impossible to subsidize non-energy sectors of the Russian economy, bringing its budget to a state of the total deficit. For these purposes, the G-7 decided to set the maximum price level for oil of Russian origin transported by sea. It is expected that the maximum price of oil will be fixed at the level of 35-40 dollars, which is close to the upper value of the cost of oil.

Announced by the G-7, the project is open to all countries of the world, and in fact, is a cartel of oil buyers. The success of this sanction measure largely depends on the number of countries that want to join the cartel. The largest buyers of Russian oil - China and India - will not be able to buy the entire volume of oil that Russia previously exported to the EU and the USA. It follows from official statistics that in 2021, China bought 30% of its oil exports from the RF, or 70.1 million tons per year (table 1). In total, China imports 170 million tons per year for its needs. However, the RF cannot replace the entire volume of oil imports to China due to logistical difficulties. China gets Russian oil at a 30% discount from the cost of Brent. And until the end of 2022, Russian oil imports to China will amount to about 100 million tons.
Table 1. The structure of Russian oil exports by countries in 2021

<table>
<thead>
<tr>
<th>Country</th>
<th>Mln. Ton</th>
<th>Share, %</th>
<th>Bln. $</th>
<th>Share, %</th>
<th>Average price of ton, $</th>
<th>Average price of barrel, $</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>70.1</td>
<td>30.48%</td>
<td>34.9</td>
<td>31.70%</td>
<td>497.86</td>
<td>68.36</td>
</tr>
<tr>
<td>Netherlands</td>
<td>37.4</td>
<td>16.26%</td>
<td>17.3</td>
<td>15.71%</td>
<td>462.57</td>
<td>63.51</td>
</tr>
<tr>
<td>Germany</td>
<td>19.2</td>
<td>8.35%</td>
<td>9.3</td>
<td>8.45%</td>
<td>484.38</td>
<td>66.50</td>
</tr>
<tr>
<td>Belarus</td>
<td>14.9</td>
<td>6.48%</td>
<td>6.4</td>
<td>5.81%</td>
<td>429.53</td>
<td>58.97</td>
</tr>
<tr>
<td>South Korea</td>
<td>13.5</td>
<td>5.87%</td>
<td>6.4</td>
<td>5.81%</td>
<td>474.07</td>
<td>65.09</td>
</tr>
<tr>
<td>Poland</td>
<td>11.2</td>
<td>4.87%</td>
<td>5.4</td>
<td>4.90%</td>
<td>482.14</td>
<td>66.20</td>
</tr>
<tr>
<td>Italy</td>
<td>8.9</td>
<td>3.87%</td>
<td>4.2</td>
<td>3.81%</td>
<td>471.91</td>
<td>64.79</td>
</tr>
<tr>
<td>USA</td>
<td>7.4</td>
<td>3.22%</td>
<td>3.7</td>
<td>3.36%</td>
<td>500.00</td>
<td>68.65</td>
</tr>
<tr>
<td>Finland</td>
<td>6.3</td>
<td>2.74%</td>
<td>3</td>
<td>2.72%</td>
<td>476.19</td>
<td>65.38</td>
</tr>
<tr>
<td>Slovakia</td>
<td>5.3</td>
<td>2.30%</td>
<td>2.5</td>
<td>2.27%</td>
<td>471.70</td>
<td>64.76</td>
</tr>
<tr>
<td>Others</td>
<td>35.8</td>
<td>15.57%</td>
<td>17</td>
<td>15.44%</td>
<td>474.86</td>
<td>65.20</td>
</tr>
<tr>
<td>Total:</td>
<td>230</td>
<td>100.00%</td>
<td>110.1</td>
<td>100.00%</td>
<td>478.70</td>
<td>65.72</td>
</tr>
</tbody>
</table>

1 barrel = 0.1373 ton of URALS
Sources: Federal service of statistic of Russian Federation

If the RF fulfils its promise and stops supplying to the countries that are ready to buy oil at the price set by the G-7, then Russian oil exports will fall to 110-120 million tons per year instead of 230 million tons in pre-war 2021. It is crucial that before the creation of the cartel of buyers, the EU countries and the USA announced an oil embargo. It means that if Russian oil sellers refuse to deal at a reduced price, they risk not receiving any proceeds at all. Strengthening sanctions on oil transportation insurance will increase the URALS discount to BRENT up to 35-40%, i.e. Russian oil exported to China will gain an even bigger discount.

Meanwhile, it is important to take into account that the threat of the Russians not to supply oil at a reduced price cannot be fulfilled for technological reasons. In the RF, there is an acute shortage of large oil storage facilities, so they cannot produce oil for storage. It is possible to build such storage facilities in 3-5 years, which also requires significant costs. But it is impossible to stop oil production, as this will require the conservation of wells, which is expensive.

Thus, the surplus in the amount of approximately 100 million tons per year needs to be put somewhere, which means it will have to be sold at G-7 prices. With the application of the cartel price and the growing URALS discount, the revenue of the oil industry in the RF may fall by 2–2.5 times. A more accurate forecast can be made after the value of Brent oils develops on the international market and G-7 announces its price. An important factor in the scheme proposed by the G-7 is that the national governments of Hungary, India, and China would find it difficult to explain to their voters their unwillingness to join the cartel of buyers, even if such unwillingness is dictated by some political motives. For example, Hungary, when it did not want to participate in the oil embargo on Russian oil, explained this decision with its national interests. But now these national interests dictate joining the cartel of buyers and buying oil at a lower price.

In turn, the European Commission will need to put in the effort and work on mistakes regarding the gas market. It must be admitted that the European gas market has gone down the wrong path of development and is, therefore, still heavily monopolized, and dependent on Gazprom and the weather conditions. A SPOT gas price of 2,000-3,000 euros is completely inadequate. If to compare the energy equivalent of oil and gas, with an oil price of up to $100 per barrel, the cost of gas should not exceed 500 euros.

The EU needs to return to the Groningen principle of cost replacement and the formulaic linkage of gas prices to oil prices. And of course, the cost of Russian gas should be tied to oil prices set by
the G-7. The RF will not be able not to supply gas to the EU for a long time, not only because of technological limitations and the low capacity of gas pipelines in China but also because of the lack of export earnings to support the economy. The cartel of buyers for oil and the new rules on the gas market in the RF must start to work simultaneously so that two energy export industries of the RF get damaged at the same time. Of course, buyers should be prepared to refuse to buy energy from the RF if they want to dictate the terms of transactions again. It is required for the cartel to work and the sanctions to achieve their goal.

Public finances

In accordance with the federal budget of the RF, revenues of 25.02 trillion roubles and expenses of 23.69 trillion roubles were planned for 2022, i.e., a surplus should estimate at 1.32 trillion roubles (Interfax, 2022). The budget of the RF was planned with consideration of a short war and high oil prices at $62.2 per barrel. Most likely, by the end of 2022, the surplus will be lower since the cost of Russian oil will be regulated only from December 5, 2022. But due to the already existing discount, the URALS cost may be lower than $62.2. And of course, because of the oil embargo, the exports fell.

At the moment, the system of public finances in the RF is not transparent. Information may come from different departments that contradict each other. However, from the statements of senior members of the Russian government and the CBR, one can draw conclusions about the hidden trends that now prevail in the system of public finances. So, on September 8, 2022, the RF Ministry of Finance unexpectedly announced its readiness to start placing Government federal bonds (OFZ) already in September. The ministry announced small volumes of placements in September: up to 20 billion roubles. Since the beginning of the full-scale invasion of Ukraine, OFZ has never been deployed. The unexpected return of the Ministry of Finance of the Russian Federation to the idea of placing OFZ suggests that even a surplus budget does not suit the Ministry of Finance, and the public finance system requires new injections. The imposed sanctions against the Russian Federation by the US, the EU, and Japan, in fact, prohibit residents of these countries from buying Russian OFZ. Therefore, the Ministry of Finance of the Russian Federation officially admitted that the absence of non-residents in the OFZ market against the backdrop of the crisis in the banking sector does not make it possible to attract more resources in September (Interfax, 2022).

However, the biggest blow was dealt by the sanctions on CBR, the reserves of which are frozen in the US, EU, UK, Japan, Switzerland, and even Canada. According to official CBR information, they lost control of $392 billion worth of reserves. The inability to hold CBR reserves in US dollars or euros led to an increase in investments in the Chinese yuan. The Russian central bank currently holds the equivalent of about $100 billion in yuan (Bloomberg, 2022). However, in August 2022, it was discovered that the People's Bank of China was not ready to support such volumes of liquidity for CBR and, therefore, a special intergovernmental agreement between the Russian Federation and China is required to withdraw funds from the yuan in other currencies. Although the IMF included the yuan in the basket of reserve currencies as early as October 1, 2016, the yuan is not yet ready to play the role of a key global reserve currency due to restrictions in its domestic foreign exchange market (Stohnei, 2022).

Now the CBR and the Russian government have 2 problems at once. Firstly, the reserve closure of dollars, euros, pounds, yen, and Swiss francs has made it problematic to place the country’s reserves. Wherever the RF sends its oil and gas, their prices are formed in US dollars. If the calculations are translated into yuan, dinars, or other soft currencies, the RF makes itself dependent on events in the market of these local currencies against the US dollar. And secondly, if the RF plans to evade the price limit for Russian varieties of oil set by the G-7, most likely, all proceeds from the sale of oil and gas will be in yuan. And it is already problematic for CBR to take yuan from China.

It is obvious that the CBR expects new sanctions. It turned out that the Central Bank of the RF took a direct part in the military aggression in Ukraine. In particular, the operations department of the CBR
has been providing settlements between the military units of the RF and comprehensively services the RF Ministry of Defence. About 225 institutions of the CBR field bank worked in the CBR structure, which provided settlement and cash services for military units participating in the war in Ukraine. The military was paid salaries through the field offices of the CBR. In addition, CBR issued permission to open branches of Promsvyazbank in the Ukrainian cities of Kherson and Melitopol: these branches were opened on the basis of seized branches of Ukrainian banks, which is a criminal offense, since Ukrainian banks did not give their permission for these actions and, in essence, lost their property due to the assistance of the CBR (Interfax, 2022). Based on this, we expect increased personal sanctions against CBR.

Thus, the system of public finances in the RF is absolutely not ready for a new round of sanctions and the creation of a cartel of buyers of Russian oil. CBR does not have a coherent strategy for managing foreign exchange reserves, and although China is a reliable trading partner of the Russian Federation, their relationship has not yet been tested by huge volumes of energy purchases. The events of August 2022 showed that the yuan is not fully ready yet to play the role of a liquid global reserve currency.

The financial markets

The stock market in the RF is almost completely paralyzed. Most issuers cannot raise capital through depositary receipts in the US and the EU since their depositary receipts have been cancelled, and the shares were returned for circulation in the RF. The stock market encountered the war with the Moscow Exchange index at 3482 points, then in February it dropped to 2443, and now it has barely reached 2450. The flight of non-residents from the Russian stock market and the return of shares from the depositary receipts market to the US and the EU has led to a situation where the capacity of the national market cannot meet the growing demand for capital. The corporate bonds market has shifted towards the Hong Kong Stock Exchange however, it is too early to analyse the debut yuan loans of RUSAL and other companies. CBR got burned with the use of the yuan six months later, so the bond issuers from the RF may face the same disappointment in half a year.

Analysing the situation of the Russian banking system is like looking for a black cat in a dark room. Bank statements are not published. There was a moratorium on bankruptcy on the market, which allowed many Russian companies to avoid default, but did nothing to improve their credit risks. The quality of the loan portfolios of Russian banks has obviously deteriorated, but this is not evident from the official statistics. However, the RF Ministry of Finance negatively assesses the liquidity of the Russian banks and their ability to buy OFZ (Interfax, 2022).

The additional capitalization of Russian banks also signals the problems in the banking sector of the RF. Thus, the main bank of the military-industrial complex of the RF, Promsvyazbank, announced an additional capitalization in August 2022 for 43.7 billion roubles. VTB bank was saved from additional capitalization by a forced merger with the troubled Otkritie bank. 120 billion roubles will be allocated for additional capitalization of Vnesheconombank (VEB), etc.

Citibank, Société General, HSBC, and other Western banking groups have already announced their readiness to leave the Russian market. However, funds received by international banking groups for their Russian subsidiaries are not released from the RF. This somewhat restrains the process of capital outflow, but the tendency of Russian companies to receive Western loans or trade finance has already been revoked. The exit of large banking groups from the Russian market was accompanied by the de-dollarization of bank balance sheets. A number of Russian banks (one of the first was Tinkoff Bank) began to introduce commissions for keeping foreign currency on deposits. Commissions related to accounts in euros and dollars, and their size reached 12% per annum. A decrease in the volume of foreign currency in the deposit portfolios of banks significantly increases the risk of the deposit outflow in case of a sharp rouble devaluation, for example, due to a decrease in oil prices. In addition, the transition to lending exclusively in roubles will also increase the nominal rates on loans.
The RF insurance market in the segment of large risks was also paralyzed by the sanctions of the EU, the US, Japan, and the UK. Before the invasion, there was a reform of the RF insurance market. The state tried to create a large reinsurance company - the Russian National Reinsurance Company (RNRC). However, its capacity under the sanctions will not be enough even for the implementation of large projects within the Moscow region. The RF is making attempts to search for options for reinsurance of large risks, without insurance of which the development of its economy is impossible.

At one of the meetings of the Eurasian Economic Union (EAEU), the member countries reached the agreement in principle to create an EAEU reinsurance company, the potential capacity of which was estimated in total at 2 billion US dollars (Interfax, 2022). This capacity is insufficient for the implementation of large projects: for example, the cost of building the Crimean bridge was approximately 4 billion US dollars. Therefore, after the British Lloyd’s and several American reinsurance companies refused to cooperate with the RF due to sanctions, the RF does not have sufficient reinsurance protection. The existing capacity within the RF is only sufficient for insuring the retail risks but not the aviation, nuclear and military risks. If such risks materialize, the elimination of damage will fall on the federal budget of the RF, which formally remains in the surplus.

**Destruction of the structure of industry markets**

Sanctions of the US, EU, UK, Japan, Canada and other countries against Russia are working well. The collapse of the financial system, the disorientation of the management of central bank reserves and their partial confiscation, the elimination of connections with liquid and well-regulated capital markets, as well as sanctions against oil transportation, payments through SWIFT or letters of credit – all this led to the destruction of the structure of industry markets in the RF that existed before war with Ukraine. Recently, the G-7 has taken the last step towards the destruction of the Russian economy, which is setting a maximum price for Russian oil. The economic effect of this action will be so strong that its power can be compared with a nuclear weapon. We hope that after the application of this sanction, the military efforts of the Russian Federation will be stopped, and peace and an era of low energy prices will come to Europe.

We have depicted the described system of sanctions schematically; the figure summarizes most of the sanctions measures taken by the EU, the US, and the UK against the RF (Fig. 1).

![Figure 1. Generalization of the anti-Russia sanctions (Shapran, 2022)](image-url)
continent, meaning the reduction of the defence complex costs, and, accordingly, the increase of the funds that can be allocated to the development of civilian infrastructure.

Conclusions

1. The EU, US, UK, Swiss and Japanese sanctions are working. The RF was deprived of a significant part of its economic potential in 2022. Of course, this was accompanied by losses of the foreign companies in the RF, but the structure of the industrial markets of the RF is destroyed, and the ability of the government to subsidize the rest of the economy through the energy sector is in question. Russian financial sector has cut ties with developed capital markets. Now companies from the RF cannot raise capital through the international stock or bond market and take loans in dollars or euros at a low rate. It is now impossible to insure large projects within the RF. In addition, the CBR's ability to manage foreign exchange reserves has been disrupted. Furthermore, significant damage has been done to the financial sovereignty of the RF, and the dependence of the RF on the decisions of the government and the People's Bank of China, and on events in the dollar-yuan market has substantially increased.

2. Sanctions that limit the prices of Russian oil, and which, according to the decision of the G-7, will come into force on December 5, 2022, are not only an effective tool for influencing the RF but also a properly created motivational tool for enforcing peace on the Eurasian continent. Sanctions should not prohibit or give the decision-making initiative to sanctioned persons. Sanctions should stimulate action and suppress resistance to the sanctions themselves. It is difficult to find such a solution, but it is possible if the majority of market participants unite. Income from the energy sector is the last frontier in the RF that can guarantee the availability of a financial reserve during the war.

3. In addition to sanctions, the system of economic punishments is vital. The CBR, which is directly involved in the war in Ukraine, should suffer the most severe punishment: it should be completely deprived of assets abroad, and its leaders should be subjected to personal sanctions.

4. In no case should the EU and other international partners of Ukraine stop the sanctions pressure on the RF. It needs to be understood that the issue is not so much in helping Ukraine, but in the principles of the security system in Europe. Any aggressor country on the Eurasian continent must learn that the economic price for aggression is absolutely incomparable with the potential benefits.

References


