

EVALUATION OF THE IMPACT OF SANCTIONS IN THE ENERGY SECTOR AGAINST RUSSIA AND THE POSSIBILITIES FOR STRENGTHENING THEIR EFFICIENCY

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Abstract

In response to the military aggression against Ukraine the European countries undertook fast and decisive steps by implementing restrictive measures and imposing sanctions targeting Russia. An important part of these sanctions is in the energy sector. The policy of imposing sanctions adopted by the EU and its allies is the key instrument for pursuing a common foreign and security policy. The imposition of sanctions is an attempt to respond adequately to the challenges resulting from the policy conducted by Russia in the energy sector that has consistently been using the energy supplies for the European countries as a means of exerting pressure and posing risks for their energy security.

The aim of the current economic sanctions is to have a negative impact on the Russian economy and efficiently obstruct its capacity to proceed with the aggression. To shed further light on the matter an evaluation of the research conducted with respect to the efficiency of the sanctions implemented against Russia in 2014 is presented. The article introduces a forecast and information about the effect of the sanctions imposed on the energy supplies from Russia. An analysis of the reasons leading to the so far unsatisfactory results is made. In conclusion some requirements and recommendations for the implementation of the future policy of sanctions imposed by the European Union are defined.

Keywords: sanctions, energy supplies, Russia, European Union, energy policy, effect from sanctions.

JEL: F51, F02, F17, H68

Goals of the EU policy of implementing sanctions against Russia

The relations between the European Union and Russia over the past decade have been marked by an increasingly growing mistrust and growing tension. The dialogue that existed between the two parties at the beginning of the century gradually turned from an instrument for cooperation into a field of confrontation. The stage at which different diplomatic and political maneuvers for finding a peaceful solution, which was reached after the Russian annexation of Crimea, has

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exhausted its potential. Its logical end was marked by the start of the unprovoked and unjustified Russian aggression against Ukraine. In response, the European countries undertook fast, decisive and uncompromising actions by imposing new restrictive measures and sanctions against Russia.

The policy of imposing sanctions by the EU and its allies against Russia is a main instrument used to carry out a common foreign and security policy. They are part of the integrated approach to pursuing the EU's foreign policy which also includes other political, diplomatic and economic instruments. The underlying goals of the adoption of sanctions are:

- safeguarding EU values, its key interests and security
- keeping world peace
- consolidating and supporting democracy, the rule of law, human rights and the principles of international law
- preventing conflicts and strengthening international security.

The sanctions aim to bring about change in politics or the behavior of the people they are aimed at in order to enhance the goals of the EU common policy. They can be addressed at:

- governments of non-EU member countries because of the policies pursued by them
- entities (organisations) which provide the means for implementing the respective policies
- groups or organisations, for example terrorist groups
- people who support the respective policies, participate in terrorist activities etc.

All restrictive measures undertaken by the EU are in full compliance with the obligations ensuing from international law (European Council, 2022). The implementation of restrictive measures in the European Union is determined by the regulations of the Common Foreign and Security Policy. This opportunity is set forth in article 215 of the Treaty on the Functioning of the European Union. The EU restrictive measures regime is compulsory within the EU jurisdiction (on the territory of EU member countries), as is for all individuals and legal bodies, which are residents of the EU countries, the subsidiaries and branches in third countries included.

In response to the Russian aggression against Ukraine, the EU imposed on Russia eight new packages of sanctions. They complement the existing restrictive measures, imposed on Russia in 2014 after the annexation of Crimea and the breach of the Minsk agreements, including a considerable number of individual, economic and diplomatic sanctions. The aim of the economic sanctions is to bring about major implications for Russia in response to its actions and to efficiently obstruct Russia's capacity for continuing the aggression.

Estimation of the effects of the imposition of sanctions on Russian energy supplies on its trade balance

An important aspect of the policy of implementing sanctions by the EU member states concerns the import of energy resources from Russia. The imposition of sanctions in this sector is a response to Russia's military aggression against Ukraine, as well as a response to the challenges related to the energy policy pursued by Russia. It should be pointed out that Russia's government, which came into power at the start of the new millennium, has been deliberately using energy supplies for European countries as an instrument for exerting pressure and posing risks for their energy security.

Energy supplies, the way Russia interprets them, became 'the energy weapon' (Romanov, 2009) and a repressive instrument used to fulfill its political ambitions and to establish its domination as a great power that has resurrected.

The potential effect of imposing an embargo on the export of Russian energy resources is the object of a number of macroeconomic forecasts. Generally, it is accepted that the ban (Chepeliev, Hertel and van der Mensbrugge, 2022) on Russian export of fossil fuels might have a considerably unfavourable impact on Russian economy and become the "fastest way to put an end on Putin's war in Ukraine" (Guriev, and Itskhoki, 2022). The forecast results, however, show that the embargo imposed by the European countries would not erode considerably Russia's finances at the moment, mostly because of the record high prices of exported resources (even with the introduction of significant trade discounts). It should be pointed out that during the pre-war 2021 Russia reported a current account surplus resulting from the record high export to the tune of \$ 490 billion (Pestova, Mamonov, Ongena, 2022). According to the official data about the balance of payments, the share of oil and gas products has reached about half of that amount. In 2022 the potentially envisaged restrictive measures adopted by the EU and other countries on Russian energy resources would decrease Russian total export by a quarter, i.e. \$ 130 billion. The ban on metal import from Russia will further reduce Russia's revenues by another \$3 billion. The restrictions on food export, agricultural produce, wood and paper, imposed by Russia as counter measures will have less impact on the trade balance since they constitute about 10% of the total export. On the other hand, however, it can be expected that as a result of the imposed sanctions there will be a decline in both Russia's export and import, which will decline almost two times. The effect from the drop in import leads to reducing Russian expenses by about \$200 billion. Therefore, it can be expected that the decline in revenue from Russian export will be counterbalanced by the decline in export-related expenses. The forecast shows that the 2022 (Pestova, Mamonov, Ongena, 2022) trade balance will be relatively the same like the one in 2021, i.e. before the war.

Evaluation of the efficiency of the sanctions imposed against Russia in 2014

The comparison between the aims and the instruments used for their achievement presupposes the adoption of a rational and well-grounded decision related to their selection. The effect achieved from the imposition of sanctions should exceed as much as possible the spending of assets needed for the implementation of a policy of sanctions.

The ratio between expenditure and the efficiency of sanctions was the object of research conducted in 2016 by the Center d'Etudes Prospectives et d'Informations Internationales (CEPII). The Centre published research which evaluates the losses incurred by the economies of the countries which imposed sanctions against Russia, after the annexation of Crimea. The research results show that the European countries have lost about \$ 60.2 billion from export with view of the fact that the main losses have occurred in those groups of goods which were not an object of retaliatory measures imposed by Russia.

According to the European Commission the losses incurred by the European economy amounted to €50 billion and the Austrian Institute for Economic Research (WIFO) states losses amounting to €92 billion in the long term (Russian International Affairs Council, 2022). A similar amount is pointed out in the results of a Russian research where the direct and indirect negative effects of the sanctions imposed on Russia in 2014 on the economies of the EU countries are evaluated at 0.5% of GDP (about €80 billion) (Shirov, Litovskyi, Potapenko, 2015).

The evaluation of Russian losses (Shirov, Litovskyi, Potapenko, 2015) resulting from the sanctions point to a significant negative effect of the imposed sanctions of up to 8 – 10% of Russia's GDP /\$126 – 200 billion/. It should be borne in mind that for the 2014 – 2016 period Russian GDP dropped from \$ 2, 048 billion in 2014 to \$ 1,356 billion and to \$ 1.280 billion in 2016. The drop in Russian GDP for that period was over 37% reaching \$ 768 billion. Even if other factors have influence, it can be assumed that the effect of sanctions on Russian economy considerably outweigh the negative effects on the European economy.

This data provides for the assumption that irrespective of their limited impact the sanctions imposed in 2014 were efficient and had a considerable negative impact on the Russian economy.

Effects of the sanctions imposed on Russia after the start of the military activity in Ukraine

Although it has been a short time since the imposition of sanctions against Russia in response to its aggression in Ukraine, specific data related to their effect are already available. They show the following:

1. In the first two months after the invasion in Ukraine Russia provided energy supplies amounting to € 63 billion. The EU share in these supplies is 71% or € 44 billion on average.
2. The biggest suppliers are Germany with an import of € 9.1 billion, Italy - € 6.9 billion, China – € 6.7 billion, the Netherlands – € 5.6 billion, Turkey – € 4.1 billion and France – € 3.8 billion.
3. Irrespective of the fact that there were no sea blockades, Russian supplies by sea transport have decreased. Oil supplies from Russia to foreign ports dropped by 20% in the first three weeks of April relative to the period January-February before the start of the invasion. Despite that, export of coal increased by 20%. The supplies of liquefied gas increased by 50%. There was a decline in the export of crude oil in the period after mid-March.
4. At the same time the oil supplies for the EU decreased by 20%. The drop in coal import for the EU is 40%, whereas the supplies of natural gas increased by 20%. The purchase of gas delivered by pipelines in the EU increased by 10%.
5. Supplies of oil to destinations outside the EU increased by 20% with significant changes in these destinations. The supplies of coal outside the EU has increased by 30% and of liquefied gas the increase is by 80%.
6. Russia has tried to redirect energy supplies for which there are no European buyers. There is a sharp increase in the number of ships leaving Russian ports without a particular destination.
7. One fourth of fossil fuel supplies from Russia get delivered to only six EU ports: Rotterdam (the Netherlands), Maasvlakte (the Netherlands), Trieste (Italy), Gdansk (Poland) and Zeebrugge and Antwerp (Belgium).
8. The big oil and energy companies and industries went on buying Russian fossil fuels in this period. Oil companies like Exxon Mobil, Shell, Total, Repsol, BP, Lukoil, Neste and Orlen and Trafigura, utility companies – RWE, KEPCO, Taipower, Tohoku Electric Power, Chubu Electric Power, TEPCO, Kyush Electric Power, as well as industrial companies – Nippon Steel, POSCO, Formosa Petrochemical Corporation, Mitsubishi, Hyundai Steel, Sumitomo and JFE Steel continue to buy Russian fuels.

9. There is a marked tendency towards an increase in oil supplies for India, Egypt and other “unusual” destinations for Russian export. However, these destinations cannot make up for the drop in export to Europe².

The data given show that until now the sanctions imposed do not essentially have a significant impact on the revenues from export of Russian fossil fuels. The following conclusion can be drawn:

1. There is an obvious contradiction in terms of the expected effect of the sanctions. It has been found that despite the sanctions imposed this year, which are way more comprehensive than before, Russia’s revenue from the export of energy resources in Europe have not decreased, but actually increased by around € 20 billion for a period of two months. It turns out that the sanctions imposed in 2014, although considerably more limited in their scale than the ones imposed this year, were notably more efficient and brought about considerable losses for the Russian economy. The drop in Russian economy for the period 2014 – 2016, as was already pointed out, was € 768 billion.
2. On the other hand, there is a big problem related to the existence of much more negative consequences for the European economy itself. These negative effects have various relevance for the different European countries. The different negative effect is based on the different degree of energy dependence on Russian energy supplies. In that respect we should point out that the German economy might suffer major losses. According to the forecasts of five research institutions - the Kiel Institute for the World Economy, the German Institute for Economic Research, the Institute for Economic Research (IFO), the Institute for Economic Research IWH and the Rhine-Westphalia Institute RWI (Gromova, 2022), Germany will suffer losses to the amount of € 220 billion which will be the result of cutting production within the next two years should Russian energy supplies stop immediately. According to their joint forecast, the total cut of import of Russian gas will lead Germany to a “dramatic recession” (Ilieva, Popov, 2022).

A similar result is pointed out in another research (Bachmann et al., 2022) according to which the German economy might lose up to 3% of GDP should the country impose a complete embargo on the import of Russian oil and gas.

Without doubt the supposed negative effect on the common European economy would be even more profound. In conclusion, it should be pointed out that there is a completely unacceptable result which shows that the implementation of restrictive measures by the European countries would lead to a significant increase in Russia’s revenues. This effect would be completely different from the one achieved in 2014. Back then the negative impact of the imposed restrictive

² The data in this part come from research by CREA – Financing Putin’s war on Europe: Fossil fuel imports from Russia during the invasion of Ukraine.

measures amounted to 8 – 10% of Russia's GDP with expenditure of only 0.5% of EU's GDP.

The main reason for these results can be explained with the current situation and the dynamics on the global energy markets. Excluding Russia as a possible supplier for the European countries and other partner states leads to generating additional demand and pressure on the prices of alternative energy resources which have to replace Russian supplies. As a result of an increased demand the market prices considerably increased. Competition between energy markets in Europe and Asia also increased. As a result of this process the prices of energy resources increased, those exported from Russia included. Although limited in terms of physical volume by the sanctions, Russian energy resources are bought at the current high prices. They guarantee Russia relatively higher revenues from export compared to the revenues prior to imposing the sanctions. As a result of this process the revenues from import of Russian oil, coal and gas in the EU for the two months after the start of the military activities reached € 44 billion. In the past year incomes from export of energy resources for the same two months were € 24 billion on average (Sergeev, 2022). There was a different situation in 2014 when due to the limited range of sanctions, there was no abrupt increase in demand on energy markets. As a result the price level remained relatively stable and did not allow for an increase in Russia's income from energy supplies.

These facts give reasons for assuming that the model of economic sanctions in the energy sector implemented so far is not an efficient instrument for achieving their key goal which refers to causing "severe consequences for Russia because of its actions and to effectively obstruct Russian capacity to continue the aggression".

It should be pointed out that the sanctions imposed by the European countries are applied at a time when "the first global energy crisis which in terms of its scope and implications is much more serious than the crisis in the 70ies of the past century" arose. During this crisis there is one primary goal – to remove "Russia as the most important exporter of oil globally and the largest exporter of natural gas in the world and a key player on the market of materials used in the energy sector"³ from the energy markets. It is very difficult for the other energy producing countries to replace such a big market share in a short time with the capacity they have. Without any doubt the sanctions against Russia and the retaliatory measures will have dramatic implications for the energy market. The instability of the energy markets will continue and it is highly unlikely that the world will go back to the days with low prices and stable market conditions.

On the other hand, it should be taken into account that the world is facing a humanitarian catastrophe caused by the global food supply crisis. It was a result

³ Statement made by Fatih Birol – Executive Director of the International Energy Agency (MAE) at a press conference in Vienna /author's note/.

of the Russian invasion in Ukraine. Russia imposed an embargo on the export of its agricultural produce and along with that it blocked Ukrainian ports from where agricultural produce is being exported. Russia and Ukraine produce around 30% of the world wheat. They account for nearly one third of the export of barley, 17% of the export of maize and over 50% of sunflower oil and essential oil seeds.

The effects from the sanctions imposed until now, as well as the crises which outline the situation in which the world today is, determine the need for adapting the instruments used to conduct a policy of imposing sanctions against Russia. They should guarantee that the EU's political goals are achieved in the context of the current state of the global economy and the specific economic characteristics of certain European countries. The pursued policy of imposing sanctions should be effective and harm the Russian economy as much as possible along with preserving the resources of the European economy.

Guidelines and instruments used to implement the policy of imposing sanctions against Russia

The sanctions imposed on Russia in the energy sector are part of the common system of sanctions and policies imposed on Russia. When implementing these policies, the following considerations should be observed.

1. The physical restriction on Russian export achieved through imposing sanctions should match the overall volume of the guaranteed alternative supplies, taking into consideration the effect of introducing renewable energy sources and the saved consumption as a result of the measures adopted in order to achieve higher energy efficiency in Europe.
2. The physical restriction on Russian export should be implemented mostly where the share of Russian supplies is low and there is possibility for guaranteeing fast alternative supplies. In this hypothesis it is important for the energy market to be capable of absorbing the deficit of Russian supplies without marked fluctuations.
3. The physical restriction on Russian export should also be applied to "the more elastic" Russian supplies on the global markets such as the oil products, liquefied gas, crude oil, metals etc. These restrictions should be implemented along with a sea blockage of the Russian navy at the European ports and of other European partner countries.
4. In the cases where the share of Russian supplies in the respective market segment is high and there is lack of reliable alternative sources, it is appropriate to use instruments related to the financial aspects of supplies, for example, price limits. The implementation of this approach would limit

Russia's financial revenue without exerting pressure on the markets and spending significant economic resources of the European countries.

5. In the presence of connections without alternatives /for example, natural gas supplied via gas pipelines for Europe/ the approach given can be implemented overall by gradually reducing the supply volumes in combination with limiting prices. The volume of these supplies can be efficiently regulated depending on Europe's specific needs.
6. The countries with high energy dependence should adopt a balanced approach which does not hurt their own economy when the energy supplies from Russia are cut. The economic sacrifice, irrespective of its scale, made by some of these countries, would be pointless in the current situation and will not lead to the desired effect on the Russian finance.
7. The deadlines for reducing and giving up on Russian hydrocarbons can be different for the different countries, since the level of their energy dependence is different. Europe should demonstrate greater tolerance to its variety and admit that it is acceptable that in different spheres of energy policy different processes take place at different rates.
8. There is a very high likelihood that Russia will try to offset the reduced volumes of its supplies by sailing under "a foreign flag". In that case it would be possible to deliver energy resources to Europe not only using sea transport but by pipelines which cross third countries, for example Turkey and Azerbaijan.
9. The sanctions aimed at limiting Russian export of energy resources should be integrated with the sanctions on import of equipment in Russia⁴. In this context restricting its access to technologies and equipment which would limit its capacity to extract fossil fuels and the functioning of its energy infrastructure should be a priority⁵.
10. Achieving efficiency by imposing EU sanctions in the energy sector suggests constant and systemic monitoring and measures aimed at controlling the Russian energy supplies. There have already been attempts to break the imposed oil embargo by introducing illicit trade schemes used in the past to export oil from sanctioned countries like Iran and Venezuela⁶.

⁴ In 2021 about 40% of Russian import came from the European Union, Great Britain and the USA. The main items imported in Russia are machinery, mechanisms and vehicles which account for around 40% of all purchases abroad (Prokofyev, 2022).

⁵ The main suppliers of these goods are European companies. They provide around 30 – 70% of production in the key manufacturing sectors of the Russian economy. Dependency on import is most critical in the production of computers and electronics, machinery, mechanisms and vehicles. About 40% of the added value in the chemical industry is provided by imported goods (Prokofyev, 2022).

⁶ Russian oil is transported to big ships where it is mixed with other types of oil. This scheme has already been used to export oil from countries like Iran and Venezuela, where there

Recommendations concerning future relations between the EU and Russia in the energy sector

Russia and Europe are closely interconnected in the energy sector. This connectedness is facilitated by the construction of a large-scale cross-border infrastructure. A new system of international political and economic relations will have to be created once the military conflict ends. It is difficult to say at this stage whether and to what extent the relations between Russia and Europe will be preserved because Russia proved itself an unreliable, untrustworthy and unpredictable partner. In order to guarantee their energy security the European countries should include in their energy policy the following guidelines:

1. The European Union should steadfastly and consistently continue to pursue the „REPowerEU: Joint European Action for more affordable, secure and sustainable energy“ (2022) plan in order to put an end to our dependence on Russian fossil fuels before 2027. The need for reducing dependency on Russian energy supplies should be combined with the faster and large-scale transition of the European energy sector to a higher technological level. This would make it possible for Europe to emerge from the current difficult confrontation stronger, revived and more competitive.
2. The partnership with exporting countries from the Persian gulf, the USA, Australia, Algiers, Nigeria, Egypt and Angola, Latin America and others should be strengthened based on strategic goals. Due attention should be paid to energy supplies from Norway and the fourth gas corridor from Azerbaijan via the Trans Adriatic Pipeline (TAP).
3. It is my personal opinion that there should not be a total and final ban on Russian energy export. Russia should be given the chance to preserve to a certain degree its archaic economic model and resource positioning in the system of international trade. If not, it might try and find a new technologically higher place in the global economy and therefore improve its competitive capacity.
4. Russian natural gas supplies via pipelines could be part of the future energy markets in Europe. However, they can be a complementary, not a key element of the energy markets. In this context, it should be taken into consideration that Russia is heavily dependent on the European market. Even after signing the so called “Chinese Deal” in 2014, it does not have plausible alternative destinations for supplying natural gas via pipelines in the midterm.
5. Regardless of the fact that Russia’s role on the energy markets will be drastically reduced, Russian energy export should be preserved as a source

were sanctions. There are new types of oil on the energy market, which are called Latvian and Turkmen oil which actually contain large quantities of Russian oil (Hirtenstein, 2022).

of means for the future recovery of Ukraine. Russian energy supplies should be paid for following a special arrangement and the funds should be provided to Ukraine.

Conclusion

The measures suggested aim to ensure that the future system of energy markets and supplies can guarantee the needed energy security of the European countries. The problems related to energy markets and supplies on the continent are part of the whole range of problems that exist in the relations between the developed democratic countries and Russia. Their solution will be part of the decisions that will be made at the highest, global level. The future global order should put an end to the present economic and military confrontation, remove the mistrust and hostility that accumulated in the past, set the beginning of equality in cooperation between countries.

Russia can find its place in the new system of political and economic relations. This, however, will become possible only after a radical change of its political regime and government system. Even then its role in the energy markets system should be limited and strictly regulated in its most important aspects. If Russia does not accept its new role and once again attempts at retaliating, it will without doubt run the risk of finding itself in the familiar from the past century state of failed state.

References

- Bachmann, R., Baqaee, D., Bayer, C., Kuhn, M., Löschel A., Moll, B., Peichl, A., Pittel, K. and Schularick, M. (2022). What if? The Economic Effects for Germany of a Stop of Energy Imports from Russia, ECONtribute Policy Brief No. 028.
- Chepeliev, M., Hertel T. and van der Mensbrugghe, D. (2022). Cutting Russia's fossil exports: Short-term pain for long-term gain, VoxEU.org.
- CREA. (2022). Financing Putin's war on Europe: Fossil fuel imports from Russia during the invasion of Ukraine, available at: <https://energyandcleanair.org/financing-putins-war/>
- European Commission. (2022). REPowerEU: Joint European Action for more affordable, secure and sustainable energy, available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1511
- European Council. (2022). How and when the EU adopts sanctions, available at: <https://www.consilium.europa.eu/bg/policies/sanctions/>

- Gromova, G. (2022). I speak clearly and unambiguously. Germany does not need any longer Russian energy resources, available at: <https://www.gazeta.ru/politics/2022/04/20/14759306.shtml?updated>
- Guriev, S. and Itskhoki, O. (2022). The Economic Rationale for Oil and Gas Embargo on Putin's Regime.
- Hirtenstein, A. (2022). The West Is Still Buying Russian Oil, but It's Now Harder to Track, The Wall Street Journal, available at: <https://www.wsj.com/articles/russian-oil-flows-but-increasingly-under-the-radar-11650541684>
- Investor.bg. (2022). Cutting Russian energy supplies may cost Germany €220 billion, available at: <https://www.investor.bg/evropa/334/a/spiraneto-na-ruskite-energiini-dostavki-moje-da-udari-germaniia-s-220-mlrd-evro-350138/>
- Pestova, A., Mamonov, M., Ongena, S. (2022). The price of war: Macroeconomic effects of the 2022 sanctions on Russia, available at: <https://voxeu.org/article/macroeconomic-effects-2022-sanctions-russia>
- Prokofyev, D. (2022). Island "Russia", Novaya Gazeta, available at: <https://novayagazeta.ru/articles/2022/03/03/ostrov-rossiia>
- Romanov, P. (2009). Gas as a poisonous political weapon, RIA Novosti, available at: <https://ria.ru/20090114/159184646.html>
- Russian International Affairs Council. (2022). Sanctions, available at: <https://rusiancouncil.ru/sanctions>
- Sergeev, M. (2022). Ministry of Finance will no longer pump out money from Russian economy to the USA, Novaya Gazeta, available at: https://www.ng.ru/economics/2022-04-28/4_8430_money.html
- Shirov, A., Litovskyi, A., Potapenko, V. (2015). Evaluation of the potential impact of sanctions on the economic development of Russia and the EU, Forecasting Problems, issue 4, pp 3-16.