

**ISCKMC 2020**  
**International Scientific Congress «KNOWLEDGE, MAN AND CIVILIZATION»**  
**SANCTIONS WAR AGAINST RUSSIAN OIL INDUSTRY**

Raisa Husainovna Azieva (a)\*

\*Corresponding author

(a) Grozny State Oil Technical University named after Acad. M.D. Millionschikov, 100, Ave. H. Isaeva, Grozny,  
Russia, raisaazieva@list.ru

**Abstract**

Russian petroleum industry in the 21<sup>st</sup> century has faced various problems, including those of the global level. Since oil and gas is a strategic resource of the national economy, maintaining oil and gas production at the level of world standards is the main priority of the state. The priority direction of the development of the oil and gas complex is development and introduction of new technologies, which can give sustainable positive results to overcome the sanctions imposed by the initiating countries, such as the USA and the EU to weaken the country's economic potential and, above all, its key sector. Despite the short-term impact of economic sanctions with significant but not large losses, the industry will likely face more tangible and painful consequences if energy measures are not taken to modernize oil and gas production and processing. While maintaining or expanding the current sanctions, we can expect a decrease in the share of Russian companies in the oil market. In this regard, Russian petroleum industry will have to fight against Western sanctions in order to maintain a high-tech level and increase competition in the market. By 2025 the Russian oil and gas sector may feel serious consequences due to sanctions leading to oil production decline. Therefore, in order to maintain oil production and its decline under the sanctions regime, it is necessary to create additional measures and efforts to solve technological problems through joint actions of the state and oil companies.

2357-1330 © 2021 Published by European Publisher.

*Keywords:* Economic sanctions, petroleum industry, blockade, trade relations, Russia, USA



This is an Open Access article distributed under the terms of the Creative Commons Attribution-Noncommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

## 1. Introduction

Sanction is a frequently used method in international politics. Its effect is achieved due to the absolute closure of the country from the world community.

In the 6-7th centuries in the era of “classical antiquity” and the Old Age the sanctions were known as “repressions”. In modern interpretation, sanctions mean an indication, an order, i.e. a stringent order. They are usually introduced by large states that are active in the global foreign policy.

In the 19th century, blockades were a fashionable tool of sanctions. In modern times, during the period of the 20–21st centuries, economic sanctions become quite popular. In our opinion, economic sanctions are planned actions of the state to cancel trade and financial transactions, both for political purpose and with economic benefit.

In his study Emadi (2012) notes that in the history of economic sanctions, America was the main ringleader of aggression, and later the United Nations. Despite the fact that most of the announced sanctions belong to the United States of America, recently, as Morozov and Shepelev (2014) write, the EU has begun to take the most active part in the sanctions, although the key role in organizing and creating coalitions for sanction tools still belongs to the United States. Back in 1919, American President Thomas Woodrow Wilson said: “Impose economic, peaceful, quiet, deadly measures on the country, and then you do not have to use your power. It is disgusting, but no one died of it, but it will give such pressure that no state can bear”.

Disagreements about the usefulness of sanctions began in 1918, i.e. the period of the end of the First World War and last up to now. Researchers argue that the sanctions are 50 % successful if aggression is directed against friendly countries, 33 % – if against neutral countries, and only 19 % – if against an enemy country.

The Robert Pape’s analysis in 1997 showed that economic sanctions in the 20th century had little success, estimated as 34%, and only one third of all economic sanctions imposed were successful (Pape, 1997). In the study of Garfield et al. (1995), when assessing economic sanctions, the range of sanctions success reaches only 21–31 %, in general they recognize 30 % of cases as successful. The study conducted by Robert Pape, which gave the impact of sanctions at 34 %, was criticized by a number of world-class economists due to the declaration by Adam Taylor of the study results conducted in 2014. During the analyzed period (1921–2002) Taylor established only 13 cases of sanctions (probability of success – 6 %), which in his opinion were quite good.

Many researchers note that before the World War II, economic sanctions had a better chance of success. The success of sanctions between world wars was estimated at 50 %. The period of the 1970s, after the Second World War, is associated with the largest decrease in the success of economic sanctions. Thus, in 1970–1990, this figure on average did not exceed 20 % (Eriksson, 2011). There are only a few cases when the sanctions caused sensitive economic damage to target states.

Determining the impact of economic sanctions on Iran’s foreign oil trade with 42 partner countries from 1977 to 2006 some analysts concluded that the sanctions generally had a negative impact on Iranian oil trade causing painful economic damage to the country (Hadinejad et al., 2010).

Thus, in the work of Davis and Engerman (2003), the successful economic sanctions applied by the United States and the United Nations in 1990 against Iraq, which GDP decreased by 42 %, were

considered as a model. Besides, regarding effective economic sanctions, it is possible to recognize the actions taken from 1965 to 1979 by the UK against Rhodesia, which cost this country 10 % of its GDP.

Since 1911, the largest number of sanctions was imposed in 1991–1995 (34 cases), the smallest number was observed from 1911 to 1915 (only 1 case) and from 1941 to 1945 (only 1 case), and only in 1926–1930 not a single case was identified.

But Russia regularly falls victim to sanction attacks from the West. For the first time this happened in the middle of the 16<sup>th</sup> century, and since then, the number of sanctions began to increase, as the list of goals set for them expanded. Today's sanctions are characterized by their targeted focus, i.e. restrictions for individual industries and organizations. From 2013 to 2020, 524 organizations of the Russian Federation were subject to sanctions by the United States, of which 133 were fuel and energy companies. Among Russian petroleum companies the Fitch Rating analysts included Rosneft, Gazprom Neft, as well as Lukoil, Novatek and Tatneft into the list of victims of the sanctions.

## **2. Problem Statement**

To reveal problems in current sanctions and their consequences on petroleum industry of the country against the background of further strengthening.

## **3. Research Questions**

Due to the imposed sanctions against the Russian Federation, which had a negative impact on the production stability of the Russian petroleum industry, the impact of sanctions on the development of oil and gas companies was determined, an analysis of the state of the industry was also carried out and a forecast of its further development was given.

## **4. Purpose of the Study**

The purpose of this study is to analyze the current state of Russian petroleum industry in the conditions of the sanctions regime, determine the directions to overcome the current situation and to develop new guidelines for the industry due to the strengthening of sanctions.

## **5. Research Methods**

This scientific study is based on general scientific methods in the framework of comparative, logical and statistical analysis, as well as the scenario forecasting method.

## **6. Findings**

The problem of the influence of sanctions against Russia, which mostly affected such a crucial sector of the country's economy as the oil and gas complex has recently been particularly important. In relation to Russia, the sanctions put pressure on both the decline of the country's economy and the change

in its course in the global issues. However, according to V.V. Putin: “No one in the history has ever been able to and no one will ever be able to submit Russia to its influence”.

Russia is a sweet spot in the raw materials and petroleum industries, and its economy, with proper management, can develop in a short time to colossal limits. Therefore, for the entire existence of this country, someone always wanted to snatch part of its territory. However, the developed military industry and available nuclear, chemical and biological weapons suppress the desires and limit many actions of Western countries, as well as the United States. However, this does not prevent them from fighting a cold war representing a struggle of the media, empty charges, attempts to influence through other countries. After the conflict with Ukraine, the “provocateur” countries found reason to undermine the situation of the Russian Federation through sanctions, as a result of which they partially managed to weaken the power and economy of Russia (Gazizov & Galiev, 2015).

But, despite the terror, the Russian economy began to balance back, and the sanctions of the United States and Western countries turned into a loss.

According to the Ministry of Economic Development, the damage to the Russian economy from sanctions at the end of 2018 amounted to US\$ 6.3 billion, of which US\$ 2.4 billion accounted for the EU countries, US\$ 1.1 billion – America, \$ 0.8 billion – Ukraine and US\$ 0.7 billion – Turkey.

According to the UN, the damage from sanctions to the economy of Russia’s “opponents” amounted to three GDP of Ethiopia, i.e. approximately US\$100 billion, and the Russian economy – half less. The countries that initiated the sanctions lost revenues, which are estimated at US\$3.2 billion per month.

According to Anti-Corruption Foundation, the real losses of the Russian Federation from sanctions are within 1–1.5 % GDP on an annualized basis. Bloomberg experts estimated that since 2014 the Russian economy has received less than 6 % GDP due to sanctions and other trade restrictions.

According to Alfa Bank, the largest bank of the Russian Federation, the annual losses of the Russian economy amount to 0.5 GDP. According to expert estimates, the damage from sanctions and falling oil prices amounted to 0.6 trillion dollars in 2014–2017.

As a result, the number of Russians concerned with the economic sanctions imposed both by Western countries and the European Union against Russia is growing, and over the year from 2017 to 2018 their number increased by 15 %.

In February 2014, there was an American boom in shale oil production, which led to a decrease in oil demand worldwide, thereby in Russia the price of oil fell from US\$100 to US\$60 per barrel by December 2014. If the price of oil falls by even \$1, it will incur billions of dollars in losses, so this recession has had a great negative impact on the Russian economy, since half of the country’s income comes from petroleum industry, and therefore Russia suffered from the so-called Dutch disease, i.e. the economic trouble.

However, despite losses due to sanctions, as well as the decline in oil price per barrel, in 2012–2016 oil production in Russia increased from 518 to 548 million tons. However, the increase in the level of production was achieved due to the commissioning of new fields.

In 2017, oil production in Russia decreased by 0.1% compared to 2016. In December 2017, oil production in Russia decreased (–2.2 %) for the fourth month in a row in annualized terms due to the

current production limitation at the level of “minus” 300 thousand barrels by October 2016 in accordance with OPEC agreement. In general, in 2017, as the Analytical Center expected in November, oil production decreased by 0.1 % (–0.6 million tons) compared to 2016. In 2017, oil exports grew by 1.3 % by 2016, and the volume of processing almost did not change (–0.1 % by 2016).

In 2017, in Russia, gasoline production decreased to the level of 2016, while diesel fuel production increased. In December 2017, gasoline production did not change compared to December 2016 after a decrease in October-November in annualized terms. In 2017, gasoline production decreased by 1.8 % (–0.7 million tons) to 39.2 million tons, which may be caused by the stagnation of domestic demand. Diesel fuel production in December decreased by 2.7 %, but in 2017 it increased by 0.8 % compared to 2016, which was provided by stable domestic and external demand. Fuel oil production in 2017 in Russia decreased (–10.3 %) for the third year in a row due to current tax policy.

Russia has strengthened its position in APR oil market. According to the FCS of Russia, for 11 months of 2017, relative to 11 months of 2016, oil supplies from Russia to APR increased by 9.5 %, and to Europe and the CIS decreased by 2.4 % and 3.2 %, respectively. The supply of petroleum products to APR during the same period decreased by 5.5 %, to the CIS – by 8.5 %, to Europe – by 3.4 %. China remains the main source of growth in demand for Russian oil abroad (+11.4 % in January-November 2017 relative to the same period in 2016). According to preliminary estimates by Thomson Reuters, the share of Russian suppliers in China’s total oil imports increased to 14.2 % in 2017 from 13.8 % in 2016. Under these conditions, Russia will retain the leadership in oil supplies to China achieved in 2016. In addition to China, India and the Republic of Korea also demonstrated a noticeable increase in oil supplies from Russia to the Asia-Pacific region in 2017.

In 2017, the depth of oil refining in Russia amounted to 82.1 %, which is 2.2 percentage points higher than in 2016. A considerable increase in oil refining depth over the past three years was achieved due to a decrease in fuel oil production (–36 % over 2014-2017) and stable oil refining volumes at the level of 285–290 million tons per year.

Since the period of 2014, the petroleum industry of the Russian Federation has been influenced by not only the economic sanctions imposed by the United States and the EU, but also by technological sanctions, i.e. a ban on equipment supply, both for exploration and production of oil and gas, as well as its sale. This negatively affects the industry, since Russian companies do not have their own equipment and technologies, and import substitution measures did not have the proper effect. A huge part of offshore facilities, shale oil development projects are frozen due to sanctions on technology and equipment.

According to SEneC forecast, by 2030 the effect of sanctions between the base scenario and the expected result will increase to 55 million tons, i.e. 10 % of current production. To prevent Russian oil production from falling, it is already necessary to invest today in major technologies without setting aside for the future, since in recent years the share of high-quality oil reserves in the Russian Federation has been steadily declining (out of 18 billion tons of proven reserves, 12 billion tons are hard-to-recover). The reserves forecast is 35 years, and without taking into account hard-to-recover oil – not more than 20 years. In this regard, it can be said that oil is among the poorly reserve-secured resources.

2014 is a turning point for Russia’s oil sector. Now the Russian energy market is in a difficult situation. Experts identify the main motives for influencing the development of the national fuel and

energy complex, which include long-term falling oil prices, rapid development of technologies, as well as sectoral sanctions against the fuel and energy complex. But, despite some negative trends, Russia's share in global energy generation and production has remained steadily high for several years.

The contribution of petroleum industry to domestic GDP is not higher than 20 %, although oil and gas play the main role in the country's revenue.

Based on the assessment of economic experts, in the 2000s, the contribution of petroleum industry to the country's GDP was equal to 20 %, and by 2014 it decreased to 17 %.

Oil and gas revenues in 2014 made 9.6 % GDP, and in 2016 they amounted to 5.6 % GDP, which is the lowest in the past decade. The share of oil and gas sector in the structure of domestic budget income, which in 2017 amounted to 36 %, is also declining.

Back in early 2015, it was announced by the World Bank Vice President for Europe and Central Asia that a period of economic problems in Russia had passed and its economy is reviving. 2017 indicates its growth from published S&P data, and according to the Analytical Credit Rating Agency, the country's GDP growth level will be 1.5 % until 2021, which is equal to the GDP growth level of the EU and the USA.

The effect of sanctions does not always decrease after years, sanctions may tighten and then the damage for the economy will greatly increase.

Experts predict that the likelihood of new sanctions against Russia is still high, and the timing of their introduction is unknown.

US and Western sanctions are currently extended until June 23, 2020. However, based on the fact that since 2014 the sanctions have been extended for a year, no one will deny that they will last beyond 2020.

Interfax also believes in the introduction of additional tough measures by the USA against the Russian oil and gas sector based on the State of Affairs in the World report by the Diplomatic Academy of the Russian Foreign Ministry.

Further strengthening of sanctions will lead to the following:

- ban for equipment and service supply for all projects in the country;
- restriction of foreign service companies in the Russian Federation;
- cancellation of new projects scheduled for commissioning until 2025.

The energy center of the Skolkovo business school presents options for further development – the basic option and the option that determines the strengthening of sanctions. According to the first option, by 2025 oil production in Russia will decrease to 540 million tons, according to the second option – to 505 million.

Besides, based on the forecast option, by this period, i.e. by 2025, the production at new fields will reach its rise of 90 million tons, according to another option – 75 million. According to the forecast, until 2030 the total oil production at existing and new fields will fall in both cases.

But global oil demand will continue to increase, at least in the medium term until 2025, even if the most unfavorable technological conditions for the global oil market are realized (Idilov et al., 2018).

According to IEA forecast, oil demand will annually increase in the amount of 1.2 mmbbls/s (1.2 %) until 2021. Earlier, the largest increase was in 2015 – 1.6 mmbbls/s (1.7 %). By 2035, global oil demand may reach 110 million barrels per day, at the current 99–100 (Table 01).

**Table 1.** World oil supply and demand (mmbbls/s)

	2019	2020	2021
Global demand	99.3	100.5	101.6
OPEC supply	58.3	58.9	59.7
OPEC oil	33.2	33.5	33.6
OPEC gas condensate	7.1	7.1	7.2
Global demand	98.7	99.5	100.5
Supposed change of reserves	-0.7	-1.0	-1.1

Source: International Energy Agency Energy Information Administration (EIA); Global Insight.

Despite the five-year sanctions of the European Union and the West, oil production in the Russian Federation during this period increased by more than 6%, which is associated with huge investments of previous years and the introduction of new oil and gas fields giving the production increase by 77 %. But from 2020, due to the lack of native equipment and the growth of hard-to-recover reserves, the petroleum industry of the Russian Federation expects a negative effect, which will lead to a decrease in oil production in the country by 5 % by the year 2025 and by 10 % by the year 2030.

## 7. Conclusion

Through both economic and political efforts America employs a whole arsenal of tools, tries to dictate the commodity markets, thus eliminating the main rival regulators, thereby becoming a threat to the development of the world energy. Russia, Venezuela and Iran are under American sanctions, which account for about a third of the world's oil reserves and a fifth of the world oil production. In 2018–2019 oil imports from Iran to the EU decreased by a third, and America increased EU oil supplies to 23 million tons, i.e. 2.5 times. Besides, since 2017, oil production in the United States has grown by 40%, and demand for American oil has increased in more than 40 countries.

If earlier the Russian Federation, Saudi Arabia and the United States were regulators in the global oil market, now the trend is that America will be not only the main “regulator”, but the only one.

The imposed sanctions will exert increasing pressure on the oil and gas sector of the Russian Federation, and if it is not possible to develop native technologies, then the decline in oil production can become very sensitive. Russian companies do not develop their own technologies to replace foreign counterparts, although their development may become one of the main ways to mitigate the negative effects of the sanctions.

The strategic question remains relevant – to what extent the oil and gas complex of the Russian Federation is sensitive to new economic sanctions, how will its companies respond to them and what consequences will they lead to?

## Acknowledgments

The study was carried out with the financial support of RFFI in the framework of the scientific project No. 20-010-00583.

## References

- Davis, L., & Engerman, S. (2003). Sanctions: Neither War nor Peace. *J. of Econ. Perspect.*, 17(2), 187–193.
- Emadi, M. (2012). The impact of economic sanctions of the UN Security Council on Human Rights. *J. of Foreign Policy*, 26, 121–161.
- Eriksson, M. (2011). *Targeting peace: understanding UN and EU targeted sanctions*. Ashgate.
- Garfield, R., Devin, J., & Fausey, J. (1995). The Health impact of Economic Sanction. *Bull. of the New York Acad. of Med.*, 72(2), 454–469.
- Gazizov, I. F., & Galiev, R. M. (2015). *Analysis of the impact of sanctions on the Russian economy*. <http://cyberleninka.ru/article/n/analiz-vliyaniya-sanktsiy-na-ekonomiku-rossii>
- Hadinejad, M., Mohammadi, T., & Shearkhani, S. (2010). *Examine the sanction's Efficiency on Iran's non-oil Trade (Gravity Model)*. [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1661723](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1661723)
- Idilov, I. I., Azieva, R. H., & Abubakarova, M. M. (2018). OPEC and Russia: looking to the future. *Risk Manag.*, 1(85), 3–7.
- Morozov, S. G., & Shepelev, I. G. (2014). Analysis of sanctions against Russia, determination of their possible impact on the development of domestic military-industrial complex and industry as a whole. *Econ., manag, and investment*, 2(4), 1.
- Pape, R. A. (1997.) Why Economic Sanctions do not Work? *Int. Security*, 22(2), 90–136.