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### **Russia to cure Dutch disease by 2024: a myth or reality**

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#### **Abstract**

The dominance of the oil and gas sector can be identified as the major peculiarity of the Russian economy. In 2019, before the COVID-19 hit, the share of the oil and gas sector in the GDP of Russia was 19.2 %. In 2020, this indicator was 15.2 % Currently, the Russian Federation still struggles with the Dutch disease since the global oil prices have a substantial impact on the key economic indicators of the country. Taking into account the recent recession in the global oil sector related to COVID-19, the examination of the Dutch disease in Russia is of special importance. The article examines whether it will be possible to get rid of this disease by 2024. The necessary information for the study has been taken from the website Federal State Statistics Service, sources of the Central Bank of the Russian Federation, the Ministry of Finance of the Russian Federation, and the Accounts Chamber as well as academic articles. According to the estimations of the Ministry of Finance of the Russian Federation and the Central Bank of the Russian Federation, in 2024, there will be certain differences when compared to 2021, such as a decrease in oil prices and a decrease in the GDP percentage of oil and gas revenues. However, these changes will not be significant enough to be able to prognosticate that Russia will cure Dutch disease by 2024. Thus, the article argues that the Dutch disease will be still present in Russian in 2024.

#### **Keywords**

Dutch disease, oil, gas, Russian Federation

#### **1. Introduction**

The major feature of the economy of the Russian Federation is its raw material orientation with the dominance of the oil and gas sector, which is characterized by high dependence on the state of the world market of raw materials. The concentration and specialization of the state in specific sectors of

the economy plays an intrinsic role in the formation of the state budget, the rate of growth of industrial production, the volume of imports/exports of services and goods, and the level of prices for resources and has a significant influence on the ruble exchange rate against major world currencies. In the era of coronavirus, the world oil market is subject to serious market fluctuations. Being one of the key participants of the world oil market, the government of the country, Russia has to forecast and take into consideration additional financial risks and enact measures directed to reduce the dependence of the economy of the country on the situation on the world market of these raw materials.

The coronavirus pandemic became the "black swan" which had a key influence on the dynamics of the world oil market in the first half of 2020. First of all, the outbreak of COVID-19 had an impact on the dynamics of oil prices, which are the most sensitive to the expectations of market players. The gradual spread of the COVID-19 and the implementation of quarantine measures by the majority of states entailed a record decrease in prices in April 2020 (Salikhov, 2020).

The detrimental effect of the crisis related to the spread of COVID-19 on the Russian oil and gas sphere is alleviated by the so-called budget rule. Such a rule is the imposition of long-term restrictions on the indicators of budgetary policy. To put it otherwise, this rule determines how to deal with the budget dependence on certain factors. In the majority of commodity-exporting countries, the budget rule is harnessed to reduce the economy's dependence on fluctuations in energy prices. In its final form, the budget rule has been applicable in the Russian Federation since 2018 (Brodunov et al., 2020). According to this rule, all windfall revenues received from the sale of oil (Urals) are sent to the National Welfare Fund. Windfall revenues can be defined as revenues to the budget (duties, taxes, fees) from the sale of oil at a price above 40 US dollars per barrel at the level of 2017. At the same time, each year there is an indexation of the price by 2 %. It means that in 2020, the "cut-off price" of Urals oil under the budget rule was 42.4 US dollars per barrel (Zaytseva & Gerasimenko, 2020; Abulela & Davenport Jr, 2020).

The main objective of this paper is to examine the current situation in the Russian oil and gas sector and determine the level of dependence of the Russian economy on this sector. Despite the fact there are numerous studies devoted to the examination of the oil dependence of the Russian Federation, this paper will go further. Certain scholars argue that the sharp decrease in oil prices related to the consequences of COVID-19 will give an impetus to the Russian economy to get rid of the oil dependence in the near future. Moreover, during one of his speeches, the president of the Russian Federation Vladimir Putin emphasized that the country is on the way to reducing its oil dependence (Nikolskiy, 2020). Thus, this paper will try to find out whether Russia will be able to cure the so-called Dutch disease by 2024.

## **2. Literature review**

There are different academic sources devoted to the analysis of oil dependence of the Russian economy. Authors call this problem in different ways

including the oil curse and the Dutch disease. However, the majority of scholars agree that such dependence is strong.

In their studies, Benedictow, Fjaertoft, & Lofnaess (2010) and Perifanis & Dagoumas (2017) harness econometric models for illustrating the dependence of the Russian economy on the revenues of the oil sector. According to Benedictow, Fjaertoft, & Lofnaess (2010), in the case of significant fluctuations in oil prices, the economy of Russia becomes vulnerable. However, at the same time, it is indicated that the Russian economy may grow even if oil prices do not increase. Moreover, the econometrics analysis of Perifanis & Dagoumas (2017) has also shown the existence of substantial dependency of the Russian economy on oil revenues.

According to Pavlova et al. (2017), the imbalances in the economy of Russia occur primarily due to the dependence of the country on oil prices. It is pointed out that revenues obtained due to high prices of oil are re-invested in the oil sector. This fact together with the strengthening of the Russian ruble entails a low level of competitiveness in the manufacturing industry. It is pinpointed that the other negative effect is the absence of development in other sectors of the Russian economy which, in turn, retards the modernization of the country's economy in the long term.

In turn, Kozlova & Udaltsova (2017) analyze all the threats and opportunities of the oil dependence of Russia. It is underlined that the deep dependence of the exchange rate value of the Russian ruble on world oil and oil products prices entails the emergence of certain problems including general economic instability, rising inflation, a decline in GDP growth rates, and a decrease in real incomes of the population. On the flip side, Kozlova & Udaltsova (2017) believe that revenues from natural resource extraction can be indirectly viewed through the use of the multiplier effect as an opportunity for the development of other major sectors of the country such as manufacturing, metallurgy, and agriculture (Abulela & Harwell, 2020).

Novak & Kozlova (2018) emphasize that the problem of Russia consists in the fact that the economy of the country is commodity-oriented which implies that the volatility of oil prices substantially influences economic indicators. It is noted that the biggest mistake of the Russian government is that it concentrates the flow of capital investment on raw material industries. Therefore, these industries get support whereas the other sectors of the Russian economy remain underdeveloped. For instance, in 2017, the extraction of minerals accounted for 24 % of all investments or 2936.7 billion rubles (Novak & Kozlova, 2018; Akpur, 2020).

According to Gorodisheva (2019), the dependence of Russia's economy on world oil prices was inherited from the USSR - the level of economic diversification of the late Soviet Union was low. It is noted that historically, each of the economic crises in Russia was invariably associated with a drop in oil prices and periods of prosperity - with their increase. Meanwhile, even the "bright times" against the background of oil dependence entailed problems in the economy: when the national currency strengthened together with oil, goods produced in Russia became more expensive in the world market and became less competitive, provoking further

"withering" of all industrial sectors and making the country even more dependent on hydrocarbon exports. Gorodisheva (2019) indicates that by the end of 2018, Russia was still structurally dependent on fluctuations in the oil situation: oil and gas accounted for about 20 % of GDP, 45 % of federal budget revenues, and almost 60 % of exports.

In his article, Khanov (2019) examines whether the Dutch disease weakens in Russia or not. He underscores that one of the major factors showing the continued dependence of the country's economy on hydrocarbon exports is the fact that in 2018, for the first time in seven years, the Russian budget was executed with a surplus precisely because of the growth of oil and gas revenues. In this connection, Khanov (2019) pays attention to the fact that the state collects serious money not only at the expense of mineral extraction tax (further, MET) and export duties on oil and petroleum products. VAT and excise taxes on motor fuel inside the country are also significant budget revenue items. As to Khanov (2019), excise taxes, VAT and MET form the current domestic prices of motor fuel by about 70 %. It is noted that since the beginning of 2019, there has been an increase in the rate of VAT and excise taxes on diesel fuel and gasoline. At the same time, the government restrains retail prices in an administrative way. Thus, the government continues to increase indirect revenues from domestic sales of petroleum products (Khanov, 2019).

Additionally, according to Stambler (2020), the COVID-19 pandemic has shown that the growth model of the Russian economy which is based on oil has exhausted itself. The International Energy Agency prognosticates that the annual revenues of the oil and gas sphere will decrease from 320 billion US dollars to 274 billion US dollars by 2040. Hence, based on this prognosis, Stambler (2020) does not believe that the bold statements about doubling the indicator of GDP due to oil revenues in upcoming decades are feasible.

Similarly, Van den Beukel & Van Geuns (2021) also underline that the model chosen by the Russian Federation is unsustainable. It is noted that the dependence of the Russian economy on the oil and gas sector is directly related to the support of Russian president Vladimir Putin. To be more specific, the biggest Russian oil and gas companies are provided with tax exemptions which positively influence their profits. High profits, in turn, lead to the attraction of more investments. Therefore, thanks to revenues from the oil and gas sector, the entourage of Putin becomes richer (Van den Beukel & Van Geuns, 2021).

### **3. Methodology**

In this study, both primary and secondary sources have been harnessed. More precisely, the necessary information has been obtained from the website of Federal State Statistics Service, "Main trends of unified state monetary policy for 2022, 2023, and 2024" prepared by the Central Bank of the Russian Federation, "The Main Directions of Fiscal, Tax, Customs, and Tariff Policy for 2022 and for the Planning Period of 2023 and 2024" prepared by Ministry of Finance of the Russian

Federation, the report of the Accounts Chamber on the Execution of the Federal Budget for January-September 2021, and articles of Russian and foreign scholars.

#### **4. The concept of "Dutch disease"**

The notion of "Dutch disease" came into existence at the end of the 1950s in the Netherlands. After the discovery of the Groningen natural gas field in 1959 in the northern part of the country, the fuel deposits were developed and exports increased. The sharp growth in export revenues in the 1970s entailed an inflow of foreign currency into the Netherlands which, in turn, led to the strengthening of national currency. Furthermore, the growth of personal income created additional demand for services and goods which entailed inflation and more imports (Brahmbhatt, Canuto, & Vostroknutova, 2010). Goods from foreign producers became more accessible to the people living in the Netherlands when compared to local ones. At the same time, the local producers began to encounter difficulties both in terms of importing goods and marketing domestically. This, in turn, led to rising unemployment in the industrial sector. As a result, against the backdrop of the booming extractive industry, there was a significant deterioration of the population and businesses not associated with natural gas extraction (Brahmbhatt, Canuto, & Vostroknutova, 2010). In addition, the booming extractive industry caused an overflow of labor and investment, which limited the resources of the manufacturing industry.

Thus, the symptoms that are peculiar to the Dutch disease are strengthening of the national currency, a decline in the competitiveness of manufacturing industries, the rapid growth of the raw materials sector compared to the manufacturing sector, the regional imbalance caused by higher incomes in the "raw material" regions, and macroeconomic instability caused by fluctuations in prices for resources (Oomes & Kalcheva, 2007). Besides, the "Dutch disease" has both long-term and short-term consequences for the economy of the state. The increase in supply on the international market of extractive industry products leads to the alteration of the exchange rate of the national currency. A proper economic environment becomes a condition for a surge in exports of raw materials and leads to an increase in foreign exchange earnings, which causes the exchange rates to rise. Under such conditions, the efficiency of exports of other goods, especially of the goods of processing and knowledge-intensive industries decreases. In turn, the manufacturing sector loses consumers since it is no more competitive in the domestic market because of the influx of cheaper goods imported from other countries (Oomes & Kalcheva, 2007).

In the long run, commodity production activities are losing ground to imported goods. Labor costs of domestic producers exceed the allowable maximum because there is an insufficient investment. Industries cannot afford to invest because of high costs whereas external revenues are directed to the extractive sector. Gradually, the price crisis worsens, which is followed by technological backwardness.

### 5. The dependence of Russia on the oil and gas sector

In order to assess the impact of the oil industry on the Russian economy, it is necessary to analyze exports of crude oil from the Russian Federation and determine what share in the total exports of goods from this country is taken by oil exports in the period between 2006 and 2017 (see Table 1).

Table 1. Share of Oil Exports in Total Exports of Goods From the Russian Federation for 2006-2017

Year	Russia's crude oil exports (million US dollars)	Share of crude oil in total exports (%)
2006	102282.9	34.4
2007	121502.8	35.1
2008	161147	34.6
2009	100593.2	33.9
2010	135799.3	34.6
2011	181812.4	35.3
2012	180929.7	34.3
2013	173668.3	33.3
2014	153895.5	31
2015	89587.8	26.2
2016	73712.3	26.17
2017	93306.4	26.4

**Source:** <https://rosstat.gov.ru/> and <http://www.cbr.ru/statistics/?PrId=svs>

After the examination of Table 1, it is possible to point out that crude oil exports from the Russian Federation occupy a significant place in the sum of total exports of goods from Russia, since from 2006 to 2014, the share of crude oil in total exports of goods was more than 30%. In turn, from 2015 to 2017 the share of crude oil was more than 26 %. It should be emphasized that such a decrease in the share of crude oil exports is related to global and regional political and economic circumstances. More precisely, different factors including political instability in Ukraine, the termination of the Free Trade Zone Treaty between Ukraine and Russia, a drop in world oil prices, the imposition of economic anti-Russian sanctions had a negative impact on the position of the Russian Federation on the world stage which, in turn, affected the country's oil and gas industry (Novak & Kozlova, 2018). Thus, it can be concluded that in the period from 2006 to 2017, the economy of Russia was closely related to the global oil prices.

Moreover, when examining statistical data from 2017 to 2020, it can be seen that the indicators in 2020 are the lowest which is caused by the spread of the COVID-19 pandemic. As a result of quarantine measures, demand for oil sharply decreased which, in turn, negatively affected oil prices. Thus, in 2020, the share of the oil and gas sector in the GDP of Russia was 15.2 %. To compare with,

in pre-Covid 2019, this indicator was 19.2 % (see Figure 1). In addition, while in 2019 the share of oil and gas revenues in the federal budget was 39.3 %, in 2020, it decreased by 11.3 % and became 28 %. There was also a decrease by 11.6 % in the share of oil and gas in Russia's commodity exports. In 2019, this indicator was 56.2 % whereas, in 2020, it became 44.6 %.

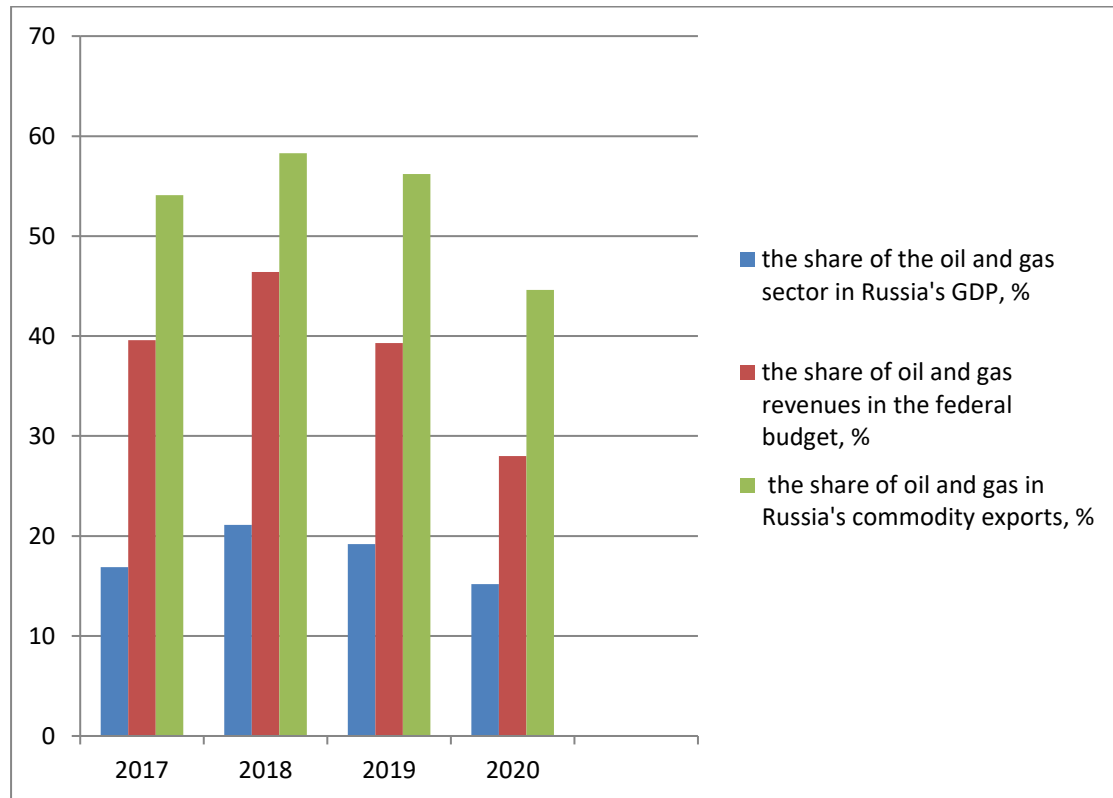


Figure 1. Russia's oil and gas dependence (source: author's creation based on the data obtained from Federal State Statistics Service, The Central Bank of the Russian Federation, and Ministry of Finance of the Russian Federation)

As to the results of 2018, the share of Russian raw materials exports was 47.7 % in dollar terms. This segment increased by 33 % when compared to 2017. Moreover, in 2018, the share of Russia's non-resource exports was 52.3 %. This indicator increased by 19.5 % in comparison with 2017. It is also noteworthy that in 2017, the share of exported Russian products with a high degree of processing was 8.6% in dollar terms whereas, in 2018, it increased by 2 %. The leading segments in the structure of the Russian exports were crude oil (28.7 %), oil products (17.4 %), and natural gas (12.6 %) with a total share of 58.7 %. (Khanov, 2019)

According to the report of the Accounts Chamber on the Execution of the Federal Budget for January-September 2021, the dependence of the Russian budget on oil and gas revenues in the first three quarters of 2021 has increased. To be more specific, oil and gas revenues in this period accounted for 34.5 % of total revenues to the treasury which is 5.3 % higher when compared to the same period of 2020. In absolute terms, revenues from the sale of oil and gas reached 6.185 trillion rubles, which is 2.3 trillion more than in January-September 2020.

## 6. The future of the Russian oil and gas sector

As to the Main directions of budget, tax, and customs-tariff policy for 2022 and the planning period of 2023 and 2024, steady growth of federal budget revenues is forecasted in the next three years due to the fact that the Russian economy is on the vector of stable growth. According to forecasts, in 2021 oil and gas revenues will amount to approximately 8.5 trillion Russian rubles or 35.6 % of the total budget revenues. In 2022-2023, this figure will increase to 9.5 trillion rubles, and since 2024, will go on the decline. (Ministry of Finance of the Russian Federation, 2021)

At the end of 2021, the share of oil and gas revenues will be about 6.8 % of GDP (see Figure 2). Their decline is projected from 2023 to 2024. In 15 years, oil and gas revenues in the structure of GDP may amount to only 3.5 %.

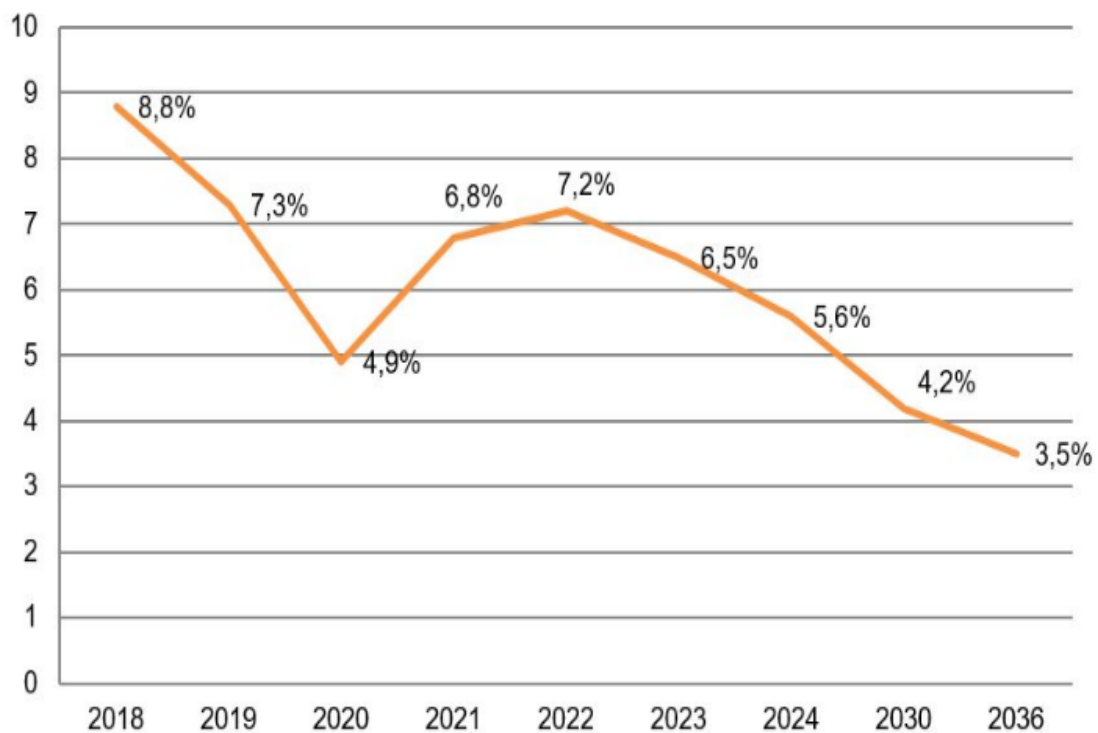


Figure 2. Dynamics of oil and gas revenues of the budget system, percent of GDP.  
(source: Budget Forecast of the Russian Federation for the period up to 2036)

According to the Ministry of Finance of the Russian Federation (2021), the fall in the share of oil and gas revenues will be caused by three reasons. First of all, as restrictions under the OPEC+ agreement are lifted, oil production will begin to grow, which will lead to a return of oil prices to levels close to pre-crisis levels. The oil price is projected to stabilize to 52-53 US dollars per barrel by 2025-2030, which corresponds to the base oil price. Secondly, Russia's GDP is predicted to almost double in 18 years, given that revenues from the oil and gas sector will fall against the background of price stabilization. Thirdly, the share of oil production in the fields with privileged tax regimes will grow and the depletion of developed natural resources will increase. As a consequence, in the structure of oil production, the share of fields with lower efficiency will grow.



Moreover, according to the "Main directions of budget, tax and customs-tariff policy for 2022 and planning period of 2023 and 2024", in 30 years the demand for oil will drop fivefold. It is prognosticated that after peaking in 2025, it will begin to decline steadily. (Ministry of Finance of the Russian Federation, 2021)

According to the Central Bank of the Russian Federation (2021), in 2024, Russia's GDP growth will be 2-3 %, inflation will be 4 %, and the price of Urals oil will be 50 US dollars per barrel. It should be also noted that the Central Bank of the Russian Federation (2021) prognosticates the price of Urals to be 60 and 55 US dollars in 2022 and 2023 respectively.

## **7. Discussion**

Currently, the oil and gas sector still accounts for about a third of Russia's budget revenues, while the world has accelerated the transition to alternative energy sources. Russia does not have clear plans for replacing oil and gas in the future and what is more, it is not yet even clear how it would be possible to stimulate the very abandonment of raw materials. The situation is complicated by the fact that demand for hydrocarbons and coal may fall even earlier than planned under the energy transition program due to the decarbonization plans of the world's largest economies.

Based on the above-mentioned prognoses, it would be naive to believe that Russia will be able to cure the Dutch disease by 2024. For instance, when considering the indicator of the share of the total budget revenues, it becomes clear that in 2024, it will only start declining after the increase in 2022 and 2023. This automatically means that in 2024, oil revenues will still play a significant role in the formation of budget revenues.

Moreover, in 2024, oil and gas revenues will account for 5.6 % of GDP which is lower than in 2021, but higher when compared to 2020. The price of Urals is also expected to be lower in 2024. However, it does not mean that the Dutch disease will be healed. First of all, these changes are not significant to end the dependence of Russia. The oil and gas industry will remain the most developed sector of the Russian economy while other sectors will lag behind. However, the gradual lowering of oil dependence is quite possible and in the period of 20-25 years, Russia can get rid of the Dutch disease.

## **8. Conclusion**

Currently, the biggest vulnerability of the Russian economy is its dependence on hydrocarbons. To be more specific, changes in oil prices directly affect budget revenues. Therefore, when the prices of oil go up, the Russian ruble becomes stronger while in the case of a decrease in prices, the national currency of Russia weakens against the major currencies. Moreover, the intensive extraction of oil and gas thwarts the development of other sectors of the economy since more money is invested in this sphere.

It can be concluded that the chances of the Russian Federation to cure the Dutch disease by 2024 are extremely low. The prognoses show that there will not

be any significant shift towards the elimination of oil dependence in the upcoming three years. However, in the long-term perspective, Russia is expected to gradually lower its dependence on oil prices. Therefore, it is quite possible that the country will manage to cure the Dutch disease in 20-25 years.

### References

- Abulela, M. A., & Davenport Jr, E. C. (2020). Measurement Invariance of the Learning and Study Strategies Inventory-(LASSI-II) across Gender and Discipline in Egyptian College Students. *Educational Sciences: Theory and Practice*, 20(2), 32-49. <https://doi.org/10.12738/jestp.2020.2.003>
- Abulela, M. A., & Harwell, M. (2020). Data analysis: Strengthening inferences in quantitative education studies conducted by novice researchers. *Educational Sciences: Theory & Practice*, 20(1), 59-78. <https://doi.org/10.12738/jestp.2020.1.005>
- Akpur, U. (2020). A systematic review and meta-analysis on the relationship between emotional intelligence and academic achievement. *Kuram ve Uygulamada Egitim Bilimleri*, 20(4), 51-64. <https://doi.org/10.12738/jestp.2020.4.004>
- Benedictow, A., Fjaertoft, D., & Lofnaess, O. (2010). Oil dependency of the Russian economy: an econometric analysis. *Discussion Papers no. 617*. Retrieved from <https://www.ssb.no/a/publikasjoner/pdf/DP/dp617.pdf>
- Brahmbhatt, M., Canuto, O., & Vostroknutova, E. (2010). Dealing with Dutch Disease. *Economic Premise* 16. Retrieved from [https://www.researchgate.net/publication/227641128\\_Dealing\\_with\\_Dutch\\_Disease](https://www.researchgate.net/publication/227641128_Dealing_with_Dutch_Disease)
- Brodunov, A., Bushueva, N., Averin, A., & Berezina, E. (2020). The budget rule: reducing oil dependence. *E3S Web of Conferences* 164. Retrieved from [https://www.e3s-conferences.org/articles/e3sconf/pdf/2020/24/e3sconf\\_tpacee2020\\_11041.pdf](https://www.e3s-conferences.org/articles/e3sconf/pdf/2020/24/e3sconf_tpacee2020_11041.pdf)
- Connolly, R., Hanson, P., & Bradshaw, M. (2020). It's deja vu all over again: COVID-19, the global energy market, and the Russian economy. *Eurasian Geography and Economics* 61(4-5), 511-531. Retrieved from <https://www.tandfonline.com/doi/full/10.1080/15387216.2020.1776627>
- Gorodisheva, Y. (2019). Russia has had oil dependency for a long time. But there is a chance to fix it. Retrieved from <https://lenta.ru/articles/2019/04/24/independence/>
- Khanov, M. (2019). The dependence of the Russian economy on oil. Retrieved from <https://tass.ru/opinions/6259252>
- Kozlova, Y. & Udaltsova, N. (2017). Russia's Oil Dependence: an opportunity or a threat to the development of the national economy? *Journal of International Economic Affairs* 4(4). Retrieved from <https://www.researchgate.net/publication/322351673>

- Ministry of Economic Development of the Russian Federation. (2018). Forecast of socio-economic development of the Russian Federation for the period up to 2036. Retrieved from [https://economy.gov.ru/material/directions/makroec/prognozy\\_socialno\\_ekonomicheskogo\\_razvitiya/prognoz\\_socialno\\_ekonomicheskogo\\_razvitiya\\_rossiyskoy\\_federacii\\_na\\_period\\_do\\_2036\\_goda.html](https://economy.gov.ru/material/directions/makroec/prognozy_socialno_ekonomicheskogo_razvitiya/prognoz_socialno_ekonomicheskogo_razvitiya_rossiyskoy_federacii_na_period_do_2036_goda.html)
- Ministry of Finance of the Russian Federation. (2021). The Main Directions of Fiscal, Tax, Customs, and Tariff Policy for 2022 and for the Planning Period of 2023 and 2024. Retrieved from [https://minfin.gov.ru/common/upload/library/2021/09/main/ONBNiTTP\\_2022-2024.pdf](https://minfin.gov.ru/common/upload/library/2021/09/main/ONBNiTTP_2022-2024.pdf)
- Nikolskiy, A. (2020). Putin: it is necessary to reduce the dependence of Russia's economy on oil prices. Retrieved from <https://ria.ru/20150922/1273453755.html>
- Nyngarik, A., Mikhaylov, A., & Richter, U. (2019). Influence Oil Price towards Macroeconomic Indicator in Russia. *International Journal of Energy Economics and Policy* 9(1), 123-129. Retrieved from <https://www.zbw.eu/econis-archiv/bitstream/11159/2711/1/104679275X.pdf>
- Novak, M. & Kozlova, Y. (2018). Influence of Russian oil industry on the country's economy and prospects of solving this dependence. *Innovative Economy: Prospects for Development and Improvement* 7(33). Retrieved from <https://cyberleninka.ru/article/n/vliyanie-neftyanoy-otrasli-rossii-na-ekonomiku-strany-i-perspektivy-resheniya-dannoy-zavisimosti>
- Oomes, N. & Kalcheva, K. (2007). Diagnosing Dutch Disease: Does Russia Have the Symptoms? *IMF Working Paper WP/07/102*. Retrieved from <https://www.imf.org/external/pubs/ft/wp/2007/wp07102.pdf>
- Pavlova, E., Duborkina, I., Sokolova, A., Doronkina, I., & Konovalova, E. (2017). Dependence of the Russian Economy on Oil Prices in the Context of Volatility of the Global Oil Market: Articulation of Issue. *International Journal of Energy Economics and Policy* 7(3), 225-230. Retrieved from <https://www.econjournals.com/index.php/ijee/article/download/4996/3014>
- Perifanis, T. & Dagoumas, A. (2017). An Econometric Model for the Oil Dependence of the Russian Economy. *International Journal of Energy Economics and Policy* 7(4), 7-13. Retrieved from <http://www.zbw.eu/econis-archiv/bitstream/11159/1254/1/1005148570.pdf>
- Salikhov, M. (2020). More oil, less money: what will happen to the energy market in 2021. <https://www.forbes.ru/biznes/415071-bolshe-nefti-menshe-deneg-chto-stanet-s-ryнком-energonositeley-v-2021-godu>
- Stambler, M. (2020). Russia's Economic Growth Model Based on Oil is No Longer Sustainable. Retrieved from <https://www.climatecard.org/2020/05/russias-economic-growth-model-based-on-oil-is-no-longer-sustainable/>

- The Central Bank of Russian Federation. (2021). Main trends of unified state monetary policy for 2022, 2023, and 2024. Retrieved from [https://cbr.ru/Content/Document/File/126064/on\\_project\\_2022\(2023-2024\).pdf](https://cbr.ru/Content/Document/File/126064/on_project_2022(2023-2024).pdf)
- Van den Beukel, J. & Van Geuns, L. (2021). Russia's Unsustainable Business Model: Going All In on Oil and Gas. Retrieved from <https://hcss.nl/wp-content/uploads/2021/01/Russias-Unsustainable-Business-Model.pdf>
- Zaytseva, O. & Gerasimenko, O. (2020). The impact of coronavirus on the oil market. Retrieved from <https://cyberleninka.ru/article/n/vliyanie-koronavirusa-na-neftyanoj-rynok/viewer>