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**TRENDS AND OUTLOOKS**  
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R95 **Russian Economy in 2018. Trends and Outlooks. (Issue 40)** / [V. Mau at al; ed. Editors – Alexei Kudrin, doctor of sciences (economics), Alexander Radygin, doctor of sciences (economics), doctor of sciences Sergey Sinelnikov-Murylev, doctor of sciences (economics)]; Moscow: Gaidar Institute Publishers 2019. – 616 pp. – ISBN 978-5-93255-556-9

The review “Russian Economy. Trends and Outlooks” has been published by the Gaidar Institute since 1991. This is the 40th issue. This publication provides a detailed analysis of main trends in Russian economy, global trends in social and economic development. The paper contains 6 big sections that highlight different aspects of Russia's economic development, which allow to monitor all angles of ongoing events over a prolonged period: the socio-political issues and challenges; the monetary and budget spheres; financial markets and institutions; the real sector; social sphere; institutional changes. The paper employs a huge mass of statistical data that forms the basis of original computation and numerous charts confirming the conclusions.

*Reviewer:* Lev Yakobson, Doctor of sciences (economics), professor, first pro-rector, NRU-HSE.

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#### **4.4. Russia's oil and gas sector in 2018<sup>1</sup>**

The oil and gas sector is among the basic ones of the Russian economy and is playing an important role in the income generation for the state budget and Russia's trade balance. Implementation of the OPEC+ agreement regarding the production restriction has resulted in the world crude oil prices growth. In 2018, the volumes of crude oil production peaked for the entire post-Soviet period and the extraction and export of the natural gas hit all-time high. Under the first stage of tax maneuver in force in the oil industry, the refining depth and increased volumes of export of petroleum products observed before its implementation were replaced by contraction of production and export of fuel oil and by the reduction of crude oil refining and export of petroleum

<sup>1</sup> This section was written by Yu. Bobylev, the Gaidar Institute, IAES RANEP.

products. Oil refining depth moved up markedly. It was decided to gradually complete tax maneuver in the oil sector and introduce the additional profits tax (windfall tax).

#### 4.4.1. Dynamics of global oil and gas prices

Recent years were marked by the emergence of two significant factors – the development of U.S.’s shale oil-fields bolstered by advanced drilling methods and cooperative agreements to limit oil production, known as OPEC+ – that have a strong impact on the global oil market. Rapid increase in the U.S.’s shale oil production led to a crude supply glut in the global market and drastic slump in oil prices in 2015–2016 (Table 20, Fig. 23). Facing this context, OPEC countries refused to cut their oil production quota and in fact switched to a policy of retaining their market share in the global oil market, seeking to increase supply volumes and thus offset contraction of revenues. Subsequently, the price of Russian crude oil Urals on the world market dropped from USD107.1 per barrel registered in H1 2014 to USD 51.2 per barrel in 2015 and to USD41.9 per barrel in 2016.

Table 20

World crude oil prices in 2014–2018, USD/bbl

	2014	2015	2016	2017	2018 March	2018 June	2018 September	2018 December
Brent crude price, UK	98.9	52.4	44.0	54.4	66.5	75.2	78.9	56.5
Urals crude price, Russia	97.7	51.2	41.9	53.1	63.7	73.4	78.1	57.6
Prices on Russian gas on European market, USUSD/thousand cubic m.	314	225	157	179	212.6	212.8	233.4	246.9

Sources: OECD/IEA, World Bank, Rosstat.

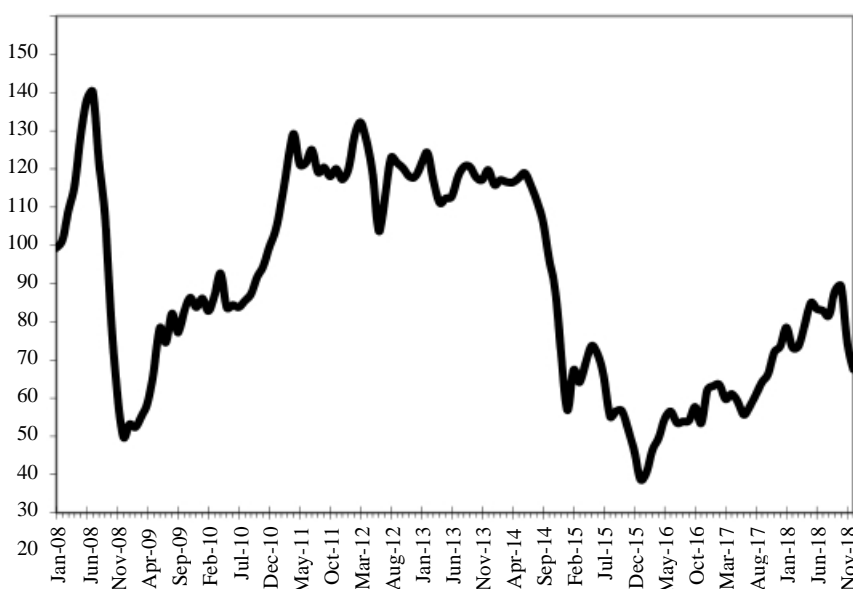


Fig. 23. Urals crude oil price in 2008–2018, USD/bbl.

Source: Rosstat.

The decline in oil prices spurred oil-producing countries into taking decisive actions on output cuts. At the end of 2016, OPEC and a group of oil producing countries from outside OPEC, including Russia, concluded a production cut agreement in effect since 1 January 2017. In compliance with this agreement OPEC+ obligated to reduce its oil production by 1.8 million barrel per day, and 11 non-OPEC countries, agree to cut output by 558,000 barrels per day, of which Russia by 300,000 barrel per day. In an effort to decrease further the oil supply glut, the OPEC and non-OPEC parties to the agreement decided in May 2017 to extend the agreement for another nine months, that is, between July 2017 and March 2018. In late November 2017, parties to the agreement took a decision to extend the effective date of the agreement through the end of 2018. Meanwhile, some of the parties to the agreement (Venezuela, etc.), for various reasons, experienced a drastic decline in oil production. As a result, the real reduction in oil production by OPEC+ has turned out to be considerably higher target than envisaged by the agreement.

In this context, in June 2018 OPEC+ decide to raise production from early July by 1 million barrels per day compared to May with a provision for switching from the previous per-country control over the agreed output targets to a control over total crude oil output (by 1.8 million barrels per day below the level of October 2016) of the parties to the agreement. As a result, countries with spare potential had the opportunity to boost their production in H2 2018. Saudi Arabia (representing nearly 70 percent of OPEC's available capacities) and Russia were the first to do this.

Implementation of OPEC+ agreements resulted in the excessive supply was cut and the world prices went up noticeably. For example, the Brent price rose from USD 44 a barrel in 2016 to USD 54.4 a barrel in 2017, and USD 71.1 a barrel on average in 2018. The Urals price averaged USD 69.8 per barrel in 2018, in other words moved up by 66.6 percent in comparison with 2016 and by 31.5 percent against 2017.

A markedly buoyant demand also had a positive effect on the market balance and on oil prices. Global oil demand increased 1.5 million barrels per day in 2017 (or 1.6 percent year-on-year), and by 1.5 million barrels per day in 2018, or by 1.3 percent in 2018, according to the International Energy Agency estimates, OECD.

What is important to note, however, is that the effect of the OPEC+ agreements has been increasingly weakening due to the recovered growth in the U.S.'s shale oil production as well as the increase in oil production by some other non-OPEC major oil producers. Technological advancement and cost effectiveness allowed the U.S. oil industry to adapt to lower prices. As a result, there has been growth since 2017 in the U.S.'s crude oil production and in the number of U.S.-based operating oil rigs. According to data from the U.S. Energy Information Administration (EIA), the United States pumped 9.35 million barrels/d in 2017, or 0.49 million barrels/d (5.5 percent) up from 2016, and in 2018 it was 10.88 million barrels/d, rising 1.53 million barrels per day (16.4 percent) above the level seen in 2016.

The oil price rise was somewhat influenced by announced U.S. sanctions against Iran effective since November 2018, which envisaged a ban on purchases of Iranian crude

oil and configured expectations of drastic oil output cut in the country. Consequently, crude oil was traded at more than USD 80 per barrel early in October. Later, however, the United States said it will temporarily (within a period of six months) allow eight countries, including big oil importers such as China, India, Japan and South Korea, to keep buying Iranian oil. That had a strong effect on market participants' expectations.

The increase in output by biggest oil-producing nations (The United States, Saudi Arabia, and Russia), relaxation of the U.S. sanctions against Iran and some other factors led to a substantial decline in oil prices during the last few months of the year. Brent crude oil dropped to USD 65 per barrel in November and slid to USD 56.5 in December.

In this context, OPEC+ members agreed on 7 December 2018 to reduce, from 2019 onwards, their crude oil production by 1.2 million barrels per day from the output seen in October 2018. The output cut agreement is supposed to stay in force until the end of June 2019 and can be updated in April 2019. Under the agreement, OPEC members will reduce their output by 800,000 barrels per day and non-OPEC major oil producers by 400,000 barrels per day, with Russia taking on 228,000 barrels per day (by 2 percent). However, the output cut commitments do not apply to Iran, Venezuela and Libya where oil production is already low, plus Iran is facing the risk of reducing further its output in case of tougher U.S. sanctions against purchases of Iranian crude. Owing to weather conditions and technological environment, Russia will reduce its oil production in Q1 2019, under the agreement, and maintain it at the same level for the next three months.

Prices on Russian natural gas exported abroad on long-term contracts, as a rule, are linked to the prices of petroleum products and owing to this factor follow the world crude oil prices with a certain lag. Owing to the plunge average export price on Russian natural gas in 2018 moved up to USD 221.2 per thousand cubic meters or up 40.9 percent in comparison with 2016 and by 23.6 percent against 2017. Meanwhile changes that took place on the European market over recent years—increased supply of gas by other natural gas producers and lower spot prices on natural gas compared to the prices of long-term contracts signed by Gazprom produce downward pressure on the Russian natural gas.

#### 4.4.2. Dynamics and structure of production in oil and gas sector

Volumes of crude oil output in 2018 were governed by Russia's compliance with her commitment taken within OPEC+ agreements. Owing to the possibility granted by the agreement in H2 and at 2018-end, oil output in Russia reached 556 million tons up 1.7 percent in comparison with the previous year (*Table 21, Fig. 24*). This was an all-time high since 1989 (Russia peaked its oil output in 1987 by 569.4 million tons). Extraction of gas (including natural, associated, and gas condensate) in 2018 increased to 741 billion cubic meters, which is an all-time high. Russia boasts of a significant potential in order to maintain and increase current volumes of oil and gas output. At the same time, the oil sector faces deteriorated production conditions. Considerable share of

producing fields demonstrate a downward trend of extraction and the new deposits in the majority of cases have not as good mining-and-geological and geographic parameters. Their development requires higher investment, running and transportation costs. In order to offset falling production on the brown fields, it is necessary of develop both new oil deposits in regions with underdeveloped infrastructure or in those regions that lack infrastructure all together, and to develop low quality deposits in developed regions<sup>1</sup>.

Table 21

**Production of crude oil and natural gas and oil refining  
in Russia in 2010–2018**

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Extraction of crude oil including gas condensate, million tons	505.1	511.4	518.0	523.3	526.7	534.0	547.6	546.8	556.0
Extraction of natural gas, billion cubic meters	665.5	687.5	671.5	684.0	654.2	645.9	652.6	704.1	741.1
Primary crude oil refining, million tons	249.3	258.0	270.0	278.0	294.4	287.2	284.5	284.3	290.7
Share of crude oil refining in crude production, percent	49.4	50.4	52.1	53.1	55.9	53.8	52.0	51.9	52.3
Crude oil refining depth, percent	71.1	70.8	71.5	71.7	72.4	74.4	79.1	81.0	82.1

Sources: Rosstat, Ministry of energy of the Russian Federation.

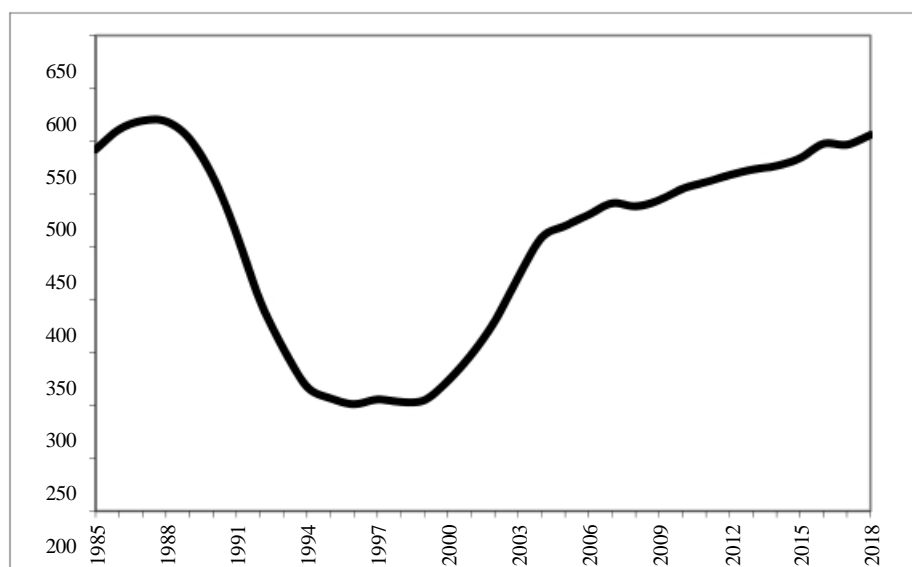


Fig. 24. Oil production, including gas condensate in 1985–2018, mn t

Sources: Rosstat, Ministry of energy of Russia.

Year 2018 demonstrates that the tax maneuver has delivered positive results from the first phase of the tax maneuver in the oil sector: a structural tax reform in this sector

<sup>1</sup> See Yu. Bobilev, O. Rasenko. Russia Oil Sector: main trends. Moscow, Delo Publishers, RANEPА, 2016.

envisages gradual reduction of export duties on both crude oil and petroleum products, as well as higher mineral extraction tax (MET)<sup>1</sup>. According to the adopted for 2015–2018 parameters of tax maneuver effective marginal export duty rate was cut from 59 percent in 2014 to 30 percent in 2017. Meanwhile, export duty rate on fuel oil went up from 66 percent to 100 percent from crude oil export duty rate. Such restructuring of the tax system has created incentives for upgrading of oil refining capacities and has resulted in trend changes.

In 2000's and H1 2010's the Russian oil sector saw growing volumes of both oil refining and exports of petroleum products owing to the increase of production and exports of fuel oil (the least valuable refining product which in Europe is used for further refining and obtaining light petroleum products). Oil refining depth was not growing at that and constituted solely 71–72 percent (while, in the leading industrial countries it came to 90–95 percent). Then tax system actually conserved technological backwardness of Russia's oil refining sector and led to marked losses for the state budget (as a result of hidden subsidizing of the oil refining sector and other EAEU member states owing to lower compared to the world oil prices as well as lower export duties on petroleum products against the oil export duties).

Implementation of the tax maneuver resulted in the turnaround of existing trends. Among the new trends emerged in 2015–2018, and some of them deserve to be mentioned here: firstly, oil refining depth increased notably as production of fuel oil declined, secondly, owing to the contraction of exports of fuel oil more lucrative crude oil exports moved up, thirdly, crude oil refining declined in volume terms due to the above two factors. Oil refining depth in Russia increased from 72.4 percent in 2014 to 82.1 percent in 2018 which is the all-time high (*Fig. 25*). Production of gasoline and diesel fuel went up while production of fuel oil declined by 37.2 percent. The share of refined oil in its production decreased from 55.9 percent to 52.3 percent. Petroleum products exports contracted by 8.9 percent.

Thus, thanks to the implementation of tax maneuver previously observed trends which demonstrated growth of refined oil volumes and growing exports of petroleum products due to increasing production and exports of fuel oil were replaced by trends which show contraction of production and export of fuel oil and as a result contraction of the oil refined volumes and petroleum products exports. Meanwhile, depth of the oil refining increased notably.

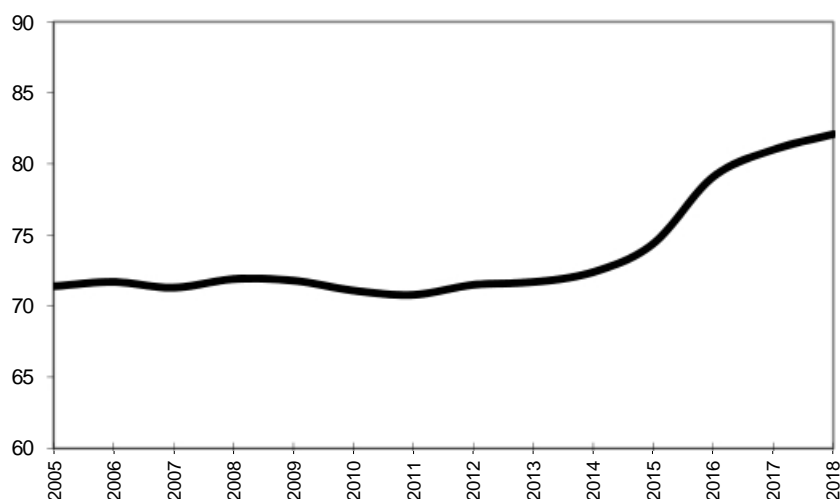
The structure of the oil sector is characterized by a predominance of major vertically-integrated companies and high share of state property. In 2018, five major companies (Rosneft, LUKOIL, Surgutneftegaz, Gazprom, and Tatneft) accounted for 80 percent of crude oil extraction. Recently, the market share of Rosneft grew markedly. In 2013, Rosneft took over TNK-BP and in 2016 acquired controlling stake in Bashneft. The share of Rosneft in the overall crude oil production moved up from 22.3 percent in 2010 to 38.3 percent in 2017–2018 (*Table 22*). Small and medium-size oil producing

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<sup>1</sup> See Yu. Bobylev. Tax Maneuver in Oil Industry. Russian Economic Developments. 2015. No. 8, pp. 45–49.



companies remains underdeveloped. Oil companies producing up to 2.5 million tons per year (up to 50 thousand barrels per day) account for merely 3 percent of the total production. Meanwhile, the US experience shows that such companies are efficient in developing marginal oilfields and tight oil which sizes in Russia are rather significant.



*Puc. 25.* Refining depth in 2005–2018, percent

Sources: Ministry of energy of Russia, Rosstat.

*Table 22*

### Crude oil production structure in 2016–2018

	Oil output in 2016, million t	Share in total output, percent	Oil output in 2017, million t	Share in total output, percent	Oil output in 2018, million t	Share in total output, percent
Rosneft, including Bashneft	211.1	38.6	209.3	38.3	213.1	38.3
LUKoil	83.0	15.2	81.7	14.9	82.1	14.8
Surgutneftegaz	61.8	11.3	60.5	11.1	60.9	11.0
Gazprom, including Gazpromneft	55.2	10.1	56.9	10.4	56.9	10.2
Including Gazprom	17.4	3.2	17.4	3.2	17.4	3.1
Tatneft	37.8	6.9	39.5	7.2	39.5	7.1
Bashneft	28.7	5.2	28.9	5.3	29.5	5.3
Slavneft	15.0	2.7	14.3	2.6	13.8	2.5
RussNeft	7.0	1.3	7.0	1.3	7.1	1.3
NOVATEK	8.0	1.5	7.7	1.4	8.3	1.5
PSA operators	16.0	2.9	16.5	3.0	18.7	3.4
Other producers	61.7	11.3	64.0	11.7	65.5	11.8

Sources: Ministry of Energy of RF, own calculations.

#### 4.4.3. Dynamics and structure of oil and gas exports

In 2018, total Russia’s exports of crude oil and petroleum products constituted 410.3 million tons, up 2.3 percent against the previous year. This indicator is close to an all-time high reached in 2015. The share of net exports of crude oil and petroleum products in 2018 constituted 73.8 percent (*Table 23*). It should be noted that 2015–2018 saw a notable growth of 16.5 percent of crude oil exports spurred by the “tax maneuver”

and a 8.9 percent decline in exports of petroleum products mainly owing to a fall of the fuel oil exports (*Table 24, 25*). The share of crude oil in total oil exports constituted 63 percent, and that of petroleum products – 37 percent. As a result, the share of crude oil in total oil exports up from 57.5 percent in 2014 to 63.4 percent in 2018, and the share of petroleum products down from 42.5 percent to 36.6 percent. Meanwhile, exports of diesel fuel markedly up 15.6 percent. The share of exports in diesel fuel production in 2018 made up 72.5 percent, and in gasoline production – 10.9 percent.

Table 23

**Ratio of production, consumption and exports of crude oil and natural gas in 2010–2018**

	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Crude oil, mn t</b>									
Production	505.1	511.4	518.0	523.3	526.7	534.0	547.6	546.8	556.0
Exports, total	250.4	244.6	239.9	236.6	223.4	244.5	254.8	252.6	260.2
Exports to - non-CIS countries	223.9	214.4	211.6	208.0	199.3	221.6	236.2	234.5	241.7
Exports to CIS countries	26.5	30.2	28.4	28.7	24.1	22.9	18.6	18.1	18.5
Net exports	249.3	243.5	239.1	235.8	222.6	241.6	254.0	252.0	259.7
Domestic consumption	125.9	140.7	142.1	137.5	141.3	122.2	138.3	147.1	146.7
Net exports as percent of production	49.4	47.6	46.2	45.1	42.3	45.2	46.4	46.1	46.7
<b>Petroleum products, mn t</b>									
Exports, total	132.2	130.6	138.1	151.4	164.8	171.5	156.0	148.4	150.1
Exports to non-CIS countries	126.6	120.0	121.2	141.1	155.2	163.3	148.1	137.4	139.0
Exports to CIS countries	5.6	10.6	16.9	10.3	9.6	8.3	8.0	11.0	11.0
Net exports	129.9	127.2	136.8	150.0	162.8	170.2	155.3	147.7	149.6
<b>Crude oil and petroleum products, mn t</b>									
Net exports of crude oil and petroleum products, mn t	379.2	370.7	375.9	385.8	385.4	411.8	409.3	399.7	409.3
Net exports of crude oil and petroleum products as percent of crude oil production	75.1	72.5	72.6	73.7	73.2	77.1	74.7	73.1	73.6
<b>Natural gas, billion cubic meters</b>									
Production	665.5	687.5	671.5	684.0	654.2	645.9	652.6	704.1	741.1
Exports, total	177.8	184.9	178.7	196.4	172.6	185.5	198.7	210.2	220.6
Exports to - non-CIS countries	107.4	117.0	112.6	138.0	124.6	144.7	164.7	175.9	184.0
Exports to CIS countries	70.4	67.9	66.0	58.4	48.0	40.7	34.0	34.3	36.6
Net exports	173.5	179.2	171.6	189.3	165.5	178.4	189.8	201.4	211.2
Domestic consumption	492.0	508.3	499.9	494.7	488.7	467.5	462.8	502.7	529.9
Net exports in percent to production	26.1	26.1	25.6	27.7	25.3	27.6	29.1	28.6	28.5

Sources: Rosstat, Russian Ministry of Energy, Federal Customs Service, own calculations.

Analysis of Russia's crude oil exports over the course of a long period demonstrates a marked increase in the export-led component of oil industry. The share of net exports of crude oil and petroleum products in crude oil production went up from 47.7 percent in 1990 to 73.6 percent 2018. This, however, is due not only to the increase in absolute volumes of exports but to a crucial contraction of internal oil consumption against the Soviet period and more efficient oil consumption and the replacement of petroleum products (fuel oil) by natural gas<sup>1</sup>.

<sup>1</sup> Bobilev Yu. Development of Russia's oil sector // *Voprosy ekonomiki*. 2015, No. 6, pp. 45–62; Bobilev Yu. The Development of the Russian Oil Sector // *Problems of Economic Transition*. Vol. 58. 2016. Issue 11–12: The Real Sector Potential. pp. 965–987.

Exports of natural gas in 2018 went up 4.9 percent in comparison with the previous year and hit 220.6 billion cubic meters, which is an all-time maximum. The share of net exports in the natural gas production in 2018 constituted 28.5 percent.

Owing to the plunge of global prices on crude oil and natural gas, the share of oil and gas sector products in Russian exports declined markedly in 2015-2017 notably – from 65.2 percent in 2015 (including oil and petroleum products – to 42.2 percent). Due to the increase of the world prices in 2018 and the growth of the physical volumes of oil and gas exports it moved up to 56.7 percent (including oil and petroleum products – to 45.8 percent). In spite of the price plunge oil and gas sector products constitute above one-half of Russia’s exports (*Table 24*).

*Table 24*

**Value and share of exports of oil and gas sector products in Russia’s exports in 2017–2018**

	Exports in 2017, billion US dollars.	In percent to total volume of Russia’s exports	Exports in 2018, billion US dollars.	In percent to total volume of Russia’s exports
Oil and gas sector, total	189.70	52.8	256.2	56.7
Crude oil and petroleum products	151.55	42.2	207.1	45.8
Crude oil	93.31	26.0	129.0	28.5
Petroleum products	58.24	16.2	78.1	17.3
Natural gas	38.15	10.6	49.1	10.9

*Sources:* Federal Customs Service, own calculations.

#### 4.4.4. Dynamics of domestic prices on energy products

The pricing mechanism for crude oil and petroleum products in the Russian domestic market is based on equal-netback pricing, that is, prices are equal to the world price less export duty and transportation costs. The domestic price in dollar terms declined in the second half of 2014-2016, owing to tumbling global prices on crude oil and petroleum products (*Table 25, Fig. 26*). In the meantime, there is still a wide gap between world and domestic oil prices due to the export duty. Along with this, a convergence of international and domestic prices is observed owing to a lower rate of export duty envisaged as part of the tax maneuver. In 2014, the domestic oil price (producers’ price) constituted 42 percent of the global price (Urals crude price on the European market), while in 2018 – 66 percent.

*Table 25*

**Domestic prices on crude oil, petroleum products and natural gas in USD terms in 2010–2018 (average producers’ prices at year-end, USD/ton)**

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Crude oil	248.2	303.3	341.1	346.1	178.9	156.7	207.8	302.4	320.8
Motor gasoline	547.9	576.9	628.7	614.4	372.3	301.8	380.3	460.0	423.3
Diesel fuel	536.1	644.9	774.2	698.0	419.3	349.4	421.3	515.2	550.7
Fuel oil	246.3	274.6	275.3	235.8	128.7	49.5	129.7	166.1	186.0
Gas, USD/thousand cubic m	20.5	21.3	40.3	39.8	29.1	24.5	23.6	34.2	28.9

*Source:* own calculations based on data released by Rosstat.

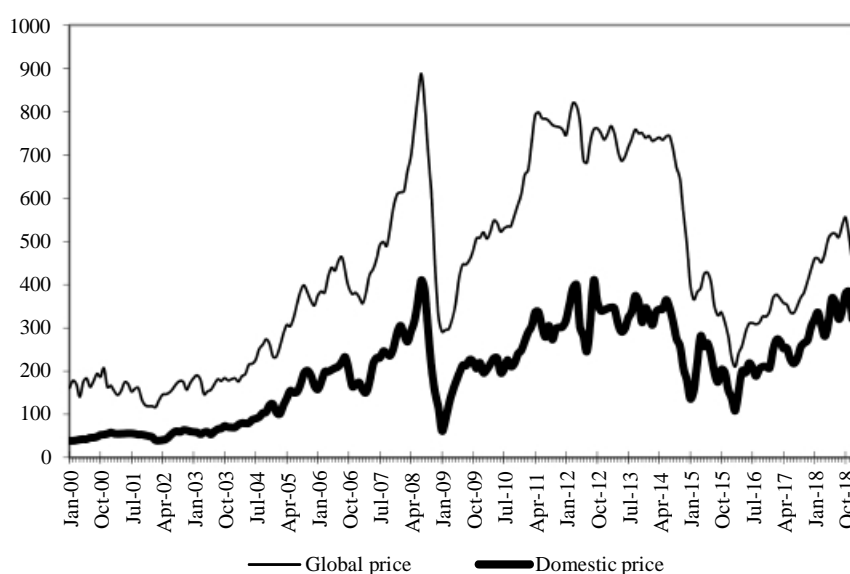


Fig. 26. Global and domestic oil prices in 2000–2018, USD/t

Sources: Rosstat, own calculations.

Upward movement of oil prices in 2017–2018 determined growth of consumer prices on motor fuel (*Table 26*) which set the pricing policy on net-back prices taking into account indirect taxes (excises, VAT) and markup. Russia regarding the share of indirect tax burden in the final motor gasoline price ranks in the middle between leading EU countries where this share is the highest and the USA where it is relatively low.<sup>1</sup> With lower non-tax gasoline prices and such level of tax burden the consumer prices on motor gasoline in Russia are approaching the US prices, but remain significantly lower than in other developed countries. According to our calculations in late 2018 consumer motor gasoline price in Russia came to the level of the USA 96 percent, Canada 74 percent, Japan 45 percent and regarding the average level of leading EU-5 – 41 percent (*Table 26*). Thus, effective system of export duties and the level of tax burden on petroleum products in Russia ensures lower price level on motor fuel on domestic market in comparison with the developed countries.

Table 26

**Consumer prices on motor gasoline in Russia 2014–2018, RUB/liter**

	2014 January	2015 January	2016 January	2017 January	2017 December	2018 January	2018 December
Regular unleaded gasoline	29.53	32.35	33.86	35.57	37.95	38.12	41.58
Premium 95 octane and plus	32.64	35.16	36.81	38.69	41.01	41.05	44.83

Source: Rosstat.

<sup>1</sup> See Yu. Bobylev. Gasoline prices in Russia and other countries: comparative analysis. Russian Economic Developments. 2016, No. 10, pp. 28–31.

Table 27

**Level of consumer price on motor gasoline in Russia against other countries, percent**

	2014 January	2018 December
USA	95.8	95.8
Canada	72.9	73.7
Japan	55.0	45.2
Germany	44.4	39.6
Great Britain	43.3	41.8
France	45.3	39.7
Italy	39.5	37.2
Spain	48.7	46.6
EU-5	44.1	40.8

Source: own calculations of data released by OECD/IEA and Rosstat.

Domestic prices on natural gas are under the state regulation. In order to ensure competitiveness of the national economy, the government maintains significantly lower level of domestic prices on gas compared to the world gas prices. Meanwhile, owing to a regulated increase of the domestic gas prices and a significant decrease of the world prices on natural gas there is a gradual convergence of domestic and world gas prices. In 2018, domestic gas price (corporate consumers' price less indirect taxes) averaged 32 percent of the price of Russian gas.

#### 4.4.5. Prospects for development of the Russian oil industry

Russia disposes of vast oil reserves, which are enough to maintain high levels of crude oil extraction and exports for many years to come. There is a high potential for crude oil extraction owing to both undeveloped deposits in undeveloped areas and oilfields in new producing areas. At the same time, there is a rather significant potential for additional extraction on already producing oilfields thanks to an in-depth development. Russia's oil refining rate is markedly below the average world level. Moreover, Russia disposes of extensive currently undeveloped unconventional oil reserves including shale oil. Upgrade of the oil refining depth allows satisfying domestic demand in motor gasoline with relatively lower volumes of oil consumption.

In future, global demand for oil will grow, which will allow Russia to retain and even to increase current volumes of crude oil exports, first of all, by increasing shipments to China and other countries of Asia. In the context of low crude oil prices, options for the development of new oilfields and unconventional reserves will be significantly restricted in Russia because investment in the cost demanding projects will be unprofitable. In this context enforced technological sanctions against Russia, which ban exports to Russia of equipment and technologies for the development of deposits located on the Arctic shelf, deep-water oil fields and shale oil deposits will negatively affect the oil industry development.

In the circumstances, conventional oil reserves located onshore will be the basis for further development of the Russian oil sector. In-depth development of producing oilfields and increase of the oil recovery rate are of major importance. Options for

additional oil production at such oil fields will largely depend on technological progress, development of import substitution aimed at increasing the oil recovery index.

Measures adopted within the state tax policy should contribute to the development of the oil sector – gradual completion of the tax maneuver in the oil sector and the introduction of Additional Extraction Tax (windfall tax).

The Federal Law of August 3, 2018 No. 305-FZ “On Introduction of Amendments in the Article 3.1 of the Law of the Russian Federation ‘On the Customs Tariff’” envisages gradual reduction of the oil export duty rate from 2019 through 2024 to the zero level. Simultaneously, the Federal Law of August 3, 2018 No. 301-FZ “On Introduction of Amendments into the Second Part of the Tax Code of the Russian Federation“ envisages offsetting increase over the same period of Mineral Extraction Tax (MET) rates in oil production. Such tax system restructuring is creating incentives for further modernization of the oil refining sector, reduces subsidizing of domestic consumers, first of all, in the refining sector, cuts subsidizing by Russia of other EAEU countries, and strengthens incentives for increasing energy efficiency.

The Federal Law of July 19, 2018 No. 199-FZ “On Introduction of Amendments in Part One and Two of the Tax Code of the Russian Federation” from early 2019 changed the tax system by introducing a new special tax – windfall tax on extraction of hydrocarbon raw materials. Implementation of this tax will promote investments in oil production, including development of oilfields with higher production costs<sup>1</sup>. Initially, application of windfall tax is envisaged on a limited number of oilfields, and it is envisaged to widen the scope of application of this tax in the future.

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