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The review provides a detailed analysis of main trends in Russia's economy in 2013. The paper contains 6 big sections that highlight single aspects of Russia's economic development: the socio-political context; the monetary and credit spheres; financial sphere; the real sector; social sphere; institutional challenges. The paper employs a huge mass of statistical data that forms the basis of original computation and numerous charts.

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Russia's Oil and Gas Sector in 2013

Oil and gas comprise the main sector of the Russian economy that continues to play a key role in shaping the state budget revenues and the balance of trade. In 2013, against the background of continuing high global prices for oil and gas, petroleum production in Russia reached its highest level since 1990, and the export of oil and petroleum products reached a historic high. However, there was then a slowdown in petroleum production and a worsening of conditions for its production. In 2013, in order to create appropriate conditions for the further development of the oil and gas sector legislative solutions were adopted involving tax incentives for the development of resources where oil recovery was difficult, the differentiation of gas production taxation and the application of a special tax regime for deposits being developed on the continental shelf, together with a liberalisation of the export of liquefied natural gas (LNG).

Dynamics of global oil and gas prices

The situation in the global oil market in 2013 was characterised by the persistence of high oil prices. The average price of Brent crude in 2013 was 108.8 dollars/barrel, while the price of Russian Urals oil was 107.7 dollars/barrel on the global (European) market. (*Table 19, Fig. 40*). The main factors keeping the prices high were the increased demand for oil (*Table 20*) due to the growth of the world economy, primarily the economies of China and other Asian countries, the conservative policy of the OPEC oil-exporting counties in respect of increasing oil extraction, in addition to geopolitical risks. In 2013 the global demand for oil increased by 1.4%, while demand for oil in North America increased by 1.6% and in China by 3.0%. Global oil production rose by 0.7% in 2013. At the same time there was a noticeable growth of oil extraction by countries other than by those of OPEC (by 2.5%) mainly due to increases in oil extraction in the USA and Canada as a result of the development of unconventional oil reserves. Meanwhile the level of oil recovery by countries from OPEC decreased from 31.1m barrels per day in 2012 to 30.4m barrels per day in 2013, i.e. approaching OPEC's quota for oil recovery (30m barrels per day) established officially by OPEC at the end of 2011. As a result, the global oil market has remained broadly balanced.

 $Table\ 19$ Global oil prices in 2000–2013 dollars/barrel.

	2000	2005	2006	2007	2008	2009	2010
Price of Brent crude, Great Britain	28.5	54.4	65.2	72.5	97.7	61.9	79.6
Price of Urals oil, Russia	26.6	50.8	61.2	69.4	94.5	61.0	78.3

Cont'd

	2011	2012	2013 I qtr.	2013 II qtr.	2013 III qtr.	2013 IV qtr.	2013
Price of Brent crude, Great Britain	111.0	112.0	112.9	103.0	110.1	109.4	108.8
Price of Ural oil, Russia	109.1	110.3	110.8	102.1	109.7	108.2	107.7

Source: IMF, OECD/IEA.

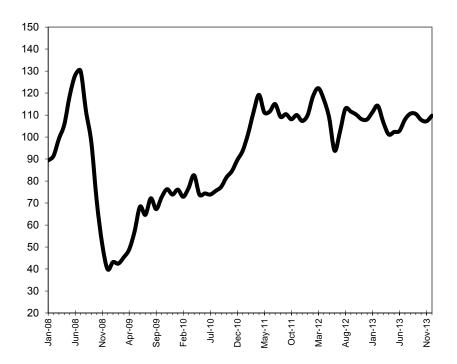
Table 20

Change in global demand for oil in 2008-2013 as a % of the previous year

	2008	2009	2010	2011	2012	2013
World, total	-0.6	-1.2	3.1	0.9	1.1	1.4

OECD countries	-3.6	-4.2	1.3	-0.8	-1.1	0.2
including:						
North America	-5.2	-3.7	2.0	-0.3	-1.4	1.6
Europe	-0.6	-4.7	-0.3	-2.3	-3.8	-0.7
Non-OECD counties	3.3	2.5	5.2	3.0	3.6	2.6
including: Asia (except for counties of the Middle East and former USSR)	1.7	4.4	7.9	3.2	3.9	2.6

Source: OECD/IEA.



Source: Russian Ministry of Economic Development.

Fig. 40. Price of Urals oil in 2008–2013 in dollars/barrel

The prices for Russian liquefied natural gas on the European market were also quite high, although lower than in 2012. The price for gas supplied under long-term contracts, is generally determined on the basis of the prices for energy derived from alternatives such as gasoil/diesel and fuel oil, the prices of which depend on the level of global oil prices. As a result, world gas prices follow global oil prices, although with a lag. Prices for Russian gas on the European market reached their highest level in 2008, while they were at their lowest in 2010. Between 2011–2012, with the growth of global oil prices, Russian gas prices on the European market increased considerably (*Table 21*). At the same time there was a changing situation in the European gas market, in particular the growth in gas supply (especially the considerable growth in supply of liquefied natural gas) from other gas producing countries, and the lower level of spot prices compared with the prices of long-term "Gazprom" contracts. There was a resulting downward pressure on the price of Russian gas which subsequently forced "Gazprom" to reduce its price of gas on the European market.

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Average price of oil,	53.4	64.3	71.1	97.0	61.8	79.0	104.0	105.0	104.1
dollars/barrel									
Price of Russian gas on the	212.9	295.7	293.1	473.0	318.8	296.0	381.5	431.3	402.0
European market,									
dollars/thousand m ³									

Source: IMF.

Dynamics and structure of production in the oil and gas sector

In 2013 oil production in Russia reached 523.3 million tonnes, its highest level since 1990 (*Table 22, 23*). There had been a positive impact on the dynamics of petroleum production as a result of changes in the tax system and the coming on stream, in recent years, of several large new oil fields in Eastern Siberia (the Vankorskoye, Talakanskoye, Verkhnechonskoye and Tas-Yuryakhskoye fields) and in the northern European part of the country (the Yuzhno-Khylchuyusskoye field, and the Trebs and Titov fields). Also in 2013 the Prirazlomnoye oil field was put into operation in the Pechorskoye Sea and became the first oil field developed on the Russian arctic continental shelf.

As a result of active geological exploration work, the growth in identified oil reserves currently exceeds production. According to the Ministry of Natural Resources of the RF, in 2013 the increase in identified oil reserves in Russia was 688.8 million tonnes (in 2011 - 744.7 million tonnes and in 2012 - 742.7 million tonnes).

At the same time, there has been a significant decrease in the rate of oil recovery in recent years; which is primarily due to an objective worsening of production conditions. A significant proportion of the currently operating deposits are entering the stage of declining production whilst the new fields, are in most cases, characterised by poorer mining, geological and geographical parameters, requiring greater capital, operational and transport expenditure in their development.

As statistics show, the Russian oil industry is approaching the limit of its production capacity. In order to compensate for the decrease in oil recovery at the producing fields it is necessary both to develop new oil fields in regions either lacking, or with only poor infrastructure, and to exploit the lower quality reserves in the more developed regions.

 ${\it Table~22}$ Petroleum production and refining in the Russian Federation in 2000–2013

	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
Oil recovery including gas condensates, millions of tonnes.	323.2	470.0	480,5	491.3	488.5	494.2	505.1	511.4	518.0	523.3
Primary oil refining, millions of	173.0	208.0	220.0	229.0	236.3	236.0	249.3	258.0	270.0	278.0
tonnes. Ratio of oil refining to its	53.5	44.3	45.8	46.6	48.4	47.8	49.4	50.4	52.1	53.1
recovery, %	33.3	74.5	73.0	70.0	70.4	77.0	77.4	30.4	32.1	55.1
Oil conversion ratio, %	71.0	71.6	71.9	71.7	72.0	71.9	71.1	70.8	71.5	71.4

Source: Federal Statistics Service, Ministry of Energy of the RF.

At the same time in 2013 the rate of growth of oil refining remained higher than that of oil recovery; in general this was due to a rapid growth in exports of petroleum products, stimulated by the lower export taxes for these compared with those for crude oil. As a result of this higher rate of growth of primary oil refining, the refining to recovery ratio increased from its 2004 value of 42.4% to 53.1% in 2013. However, during the same period the efficiency of oil refining did not increase, and in 2013 remained at 71.4% which corresponded to its 2005 level. The

level of oil refining efficiency is currently close to its pre-reform value (in 1990 the oil refining efficiency in Russia was 67%) and is still much lower than in developed countries where the oil refining efficiency reaches 90-95%. In this respect raising the technological level of the oil refining industry is still one of the most pressing issues for the development of the oil sector of Russia's economy.

Table 23 Production of oil, petroleum derivatives and natural gas in 2000–2013, as % of the previous year

	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
Oil including gas condensate	106.0	102.2	102.1	102.1	99.3	101.2	102.1	100.8	101.3	100.9
Primary oil refining	102.7	106.2	105.7	103.8	103.2	99.6	105.5	103.3	104.9	102.7
Petrol	103.6	104.8	107.4	102.1	101.8	100.5	100.5	102.0	104.3	101.3
Diesel fuel	104.9	108.5	107.0	103.4	104.1	97.7	104.2	100.3	98.7	103.1
Residual fuel oil	98.3	105.8	104.5	105.2	101.9	100.8	108.5	104.6	101.6	103.3
Natural gas	98.5	100.5	102.4	99.2	101.7	87.9	111.4	102.9	97.7	102.1

Source: Federal Statistics Service, Ministry of Energy of the RF.

In 2013 the largest amounts of oil were produced by "Rosneft", "Lukoil", "Surgutneftegas" and "Gazprom". The share of these four companies reached 74.4% of the total oil recovery in the country. The share of medium-sized companies ("Tatneft", "Slavneft", "Bashneft" and "Russneft") accounted for 13.0% of total oil extraction. In 2013 the operators of production sharing agreements produced 2.7% of Russian oil while the share of other manufacturers, including more than 100 small oil-recovery organisations, was 9.1% (*Table 24*).

In 2013 the state-owned oil company "Rosneft", completed its acquisition, of the "TNK-VR" oil company from its owners, the AAR consortium and the British company BP. The total cost of this transaction was \$61bn, and was the most significant in the Russian oil and gas sector (previously the most significant one had been the transaction for purchasing 75.5% of "Sibneft" shares by "Gazprom", at a cost of \$13.1bn, in 2005).

As a result of the acquisition of "TNK-VR" (including its share in "Slavneft") representing 15.7% of total Russian oil production, "Rosneft" significantly strengthened its position in Russian oil sector and became one of the largest oil companies in the world. In 2013 oil extraction by the company (including its shares in recovery by other organisations) reached 202.4 million tonnes, or 38.7% of Russian oil recovery.

Table 24 Structure of petroleum production in 2008–2013

	Oil recovery, in 2008, m. t.	Share in total recovery, %	Oil recovery, in 2010, m. t.	Share in total recovery, %	Oil recovery, in 2012, m. t.	Share in total recovery, %	Oil recovery, in 2012, m. t.	Share in total recovery, %
1	2	3	4	5	6	7	8	9
Russia, total	488.5	100.0	505.1	100.0	518.0	100.0	523.3	100.0
Rosneft	113.8	23.3	112.4	22.3	117.5	22.7	192.6	36.8
LUKOIL	90.2	18.5	90.1	17.8	84.6	16.3	86.7	16.6
TNK-VR	68.8	14.1	71.7	14.2	72.5	14.0	-	_
Surgutneftegas	61.7	12.6	59.5	11.8	61.4	11.9	61.5	11.8
Gazprom + Gazprom neft	43.4	8.9	43.3	8.6	46.1	8.9	48.5	9.3
including: Gazprom	12.7	2.6	13.5	2.7	14 5	2.8	16.3	3.1

Cont'd

1	2	3	4	5	6	7	8	9
Gazprom neft	30.7	6.3	29.8	5.9	31.6	6.1	32.2	6.2
Tatneft	26.1	5.3	26.1	5.2	26.3	5.1	26.4	5.0

Slavneft	19.6	4.0	18.4	3.6	17.9	3.5	16.8	3.2
Bashneft	11.7	2.4	14.1	2.8	15.4	3.0	16.1	3.1
Russneft	14.2	2.9	13.0	2.6	13.9	2.7	8.8	1.7
NOVATEK	2.7	0.6	3.8	0.8	4.2	0.8	4.3	0.8
Operators of PCA	12.0	2.5	14.4	2.9	14.1	2.7	14.0	2.7
Other operators	24.1	4.9	38.2	7.6	44.1	8.5	47.6	9.1

Source: Ministry of Energy of the RF, estimates were made by the author.

"Gazprom" remains the main producer of natural gas. However its share in total Russian production has significantly decreased in recent years, i.e. from 83.2% in 2008 to 71.5% in 2013. (*Table 25*). At the same time the shares of other manufacturers, i.e. oil companies, "NOVATEK", the PCA operators and others, increased. In general, the share of the independent producers in gas recovery reached 28.5% in 2013, including 7.7% by "NOVATEK", the largest independent producer of gas.

Table 25 Structure of gas production in 2008–2013

	Gas recover in 2008, billion m ³	Share in total recovery,	Gas recover in 2010, billion m ³	Share in total recovery, %	Gas recover in 2012, billion m ³	Share in total recovery, %	Gas recover in 2013, billion m ³	Share in total recovery, %
Russia, total	664.9	100.0	665.5	100.0	671.5	100.0	684.0	100.0
Gazprom + Gazprom neft	553.1	83.2	513.9	77.2	489.4	72.9	489.1	71.5
including: Gazprom	550.9	82.9	509.0	76.5	478.5	71.3	476.3	69.6
Oil companies	54.8	8.2	66.6	10.0	71.1	10.6	76.8	11.2
NOVATEK	30.8	4.6	37.8	5.7	51.3	7.6	53.0	7.7
Operators of PCA	8.5	1.3	23.3	3.5	26.8	4.0	27.8	4.1
Other manufacturers	17.6	2.6	23.9	3.6	32.9	4.9	37.3	5.5

Source: Ministry of Energy of the RF, estimates were made by the author.

As a result of the acquisition of "TNK-VR" by "Gazprom" the state sector was significantly expanded. The share of state companies in Russian oil production reached 49.0% in 2013 (*Table 26*). It should be noted that in 2003, prior to the acquisition by "Rosneft" and "Gazprom" of the private oil companies "YUKOS" and "Sibneft" and the entry of "Gazprom" into the "Sakhalin-2" project, the share of state companies in Russian oil production was only 7.3%. In 2013 share of state companies in national gas recovery was 79.1%.

 ${\it Table~26}$ Share of state companies in oil and gas recovery in Russia in 2013

	Oil recovery, million tonnes	Share in total oil recovery, %	Gas recovery, billion m ³	Share in total gas recovery, %
Rosneft	192.6	36.8	40.6	5.9
Share of Rosneft in recovery by other organisations (Slavneft, Sakhalin-1)	9.8	1.9	2.5	0.4
Rosneft including the share of Rosneft in recovery by other organisations	202.4	38.7	43.1	6.3
Gazprom including Gazprom neft	48.5	9.3	489.1	71.5
Share of Gazprom in recovery by other organisations (Sakhalin-2)	2.7	0.5	8.8	1.3
Gazprom including Gazprom neft and the share of Gazprom in recovery by other organisations	51.2	9.8	497.9	72.8
Zarubezhneft (recovery on Russian territory)	2.8	0.5	0.1	0.0
State companies, total	256.4	49.0	541.1	79.1

Source: Ministry of Energy of the RF, estimates were made by the author.

Dynamics and structure of oil and gas exports

In 2013 a further increase of oil exports together with a growth in oil extraction (*Tables 27*, 28). In 2013 net oil exports reached 383.9 million tonnes (an all-time high). 73.4% of that extracted was exported as crude oil or as petroleum products. The growth of oil exports was achieved due to an increase in the export of petroleum products (by 8.7% compared with 2012), while there was a decrease in the export of crude oil by 1.6% to 45.1% in 2013. Additionally, in 2013 the proportion of residual oil exported was greater than 90%, and of diesel fuel was 59.3%, of their production. In 2013 exports of petrol increased by 33.9% being 11% of production. (This compares with 18.5% in 2005, 8.2% in 2010, 10.6% in 2011; and 8.4% in 2012). At the same time, the import of petroleum products decreased (by 3.6% compared with 2012). The share of imports of petrol from all sources in 2012 was 1.3% (as a compared with an average of 1.5% during 2010-2012). In 2013 the proportion of imports in resources of diesel fuel increased to 0.2% (in 2011 it was 1.1%, and in 2012 – 0.3%).

 $Table\ 27$ Ratio of production, consumption and export of oil and natural gas in 2000-2013

-	······································									
	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
			(Oil, million	tonnes	•				
Production	323.2	470.0	480.5	491.3	488.5	494.2	505.1	511.4	518.0	523,3
Export, total	144.5	252.5	248.4	258.4	243.1	247.4	250.4	244.6	239.9	236,6
Export to countries other than members of CIS	127.6	214.4	211.2	221.3	204.9	210.9	223.9	214.4	211.6	208,0
Export to members of CIS	16.9	38.0	37.3	37.1	38.2	36.5	26.5	30.2	28.4	28,7
Net export	138.7	250.1	246.1	255.7	240.6	245.6	249.3	243.5	239.1	235,8
Domestic consumption	123.0	123.1	131.2	124.1	130.4	125.3	125.9	140.7	142.1	137,5
Net export in % to production	42.9	53.2	51.2	52.0	49.3	49.7	49.4	47.6	46.2	45,1
			Petroleun	n products,	million tor	ines.				
Export, total	61.9	97.0	103.5	111.8	117.9	124.4	132.2	130.6	138.1	151,4
Export to countries other than members of CIS	58.4	93.1	97.7	105.1	107.6	115.4	126.6	120.0	121.2	141,1
Export to members of CIS	3.5	3.9	5.8	6.7	10.3	9.0	5.6	10.6	16.9	10,3
Net export	61.5	96.8	103.2	111.5	117.5	123.3	129.9	127.2	136.8	150,0
		Oi	and petro	leum prod	ucts, millio	n tonnes				
Net export of oil and petroleum products	200.2	346.9	349.3	367.2	358.1	368.9	379.2	370.7	375.9	385,8
Net export of oil and petroleum products as % of petroleum production	61.9	73.8	72.7	74.7	73.3	74.6	75.1	72.5	72.6	73,7
			Na	tural gas, b	illion m ³					
Production	584.2	636.0	656.2	654.1	664.9	596.4	665.5	687.5	671.5	684,0
Export, total	193.8	207.3	202.8	191.9	195.4	168.4	177.8	184.9	178.7	196,4
Export to countries other than members of CIS	133.8	159.8	161.8	154.4	158.4	120.5	107.4	117.0	112.6	138,
Export to members of CIS	60.0	47.5	41.0	37.5	37.0	47.9	70.4	67.9	66.0	58,4
Net export	189.7	199.6	195.3	184.5	187.5	160.1	173.5	179.2	171.6	189,3
Domestic consumption	394.5	436.4	460.9	469.6	477.4	436.3	492.0	508.3	499.9	494,7
Net export as a % of production	32.5	31.4	29.8	28.2	28.2	26.8	26.1	26.1	25.6	27,7

Source: Federal State Statistics Service, Ministry of Energy of the RF, Federal Customs Service; estimations were made by the author.

In 2013 exports of natural gas improved significantly (by 10.6% in comparison with the previous year). The main factor causing the decrease of gas exports in recent years has been a reduction in its supply to Europe where the market has seen a significantly increased proportion of supply from other gas-producing countries. As a result, in comparison with 2006 when the greatest quantity of Russian gas was supplied to Europe, 2012 saw a reduction in the export of

Russian gas to non CIS countries by 30.4%. At the same time the share of net exports of gas produced fell from 31.4% in 2005 to 25.6% in 2012. In 2013, due to a reduction in both owngas recovery in Europe and the supply of gas from North America, exports of Russian gas reached the 2006 level, and the share of Russian gas on European market, including Turkey, increased from 26% in 2012 to 30.1% in 2013 (according to estimates by "Gazprom"). At the same time net exports showed an increase to 27.9% of gas production.

In order to expand the opportunities for Russian gas exports in 2013 a liberalisation of the export of liquefied natural gas (LNG) was stipulated by Federal Law № 318-FL as of 30.11.2013: "On amendments to articles 13 and 14 of the Federal Law "On the principles of state regulation of foreign trade activity' as well as to articles 1 and 3 of the Federal Law 'On the export of gas'" thus allowing the export of LNG not only by "Gazprom" but also by other Russian producers. There are currently plans for the construction of LNG production facilities by "NOVATEK" (project "Yamal LNG") and "Rosneft". There is the prospect of significantly increased LNG production in Russia in the future and its export to global markets.

Table 28

Dynamics of oil, petroleum products and natural gas export by Russia in 2005–2013 as a % of previous year

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Oil, total	98.4	98.0	104.0	94.0	101.8	101.2	97.6	98.2	98,6
including:									
to countries other than members of CIS	99.1	98.0	104.8	92.6	102.9	106.1	95.7	98.7	98,3
Petroleum products, total	117.9	106.3	108.0	105.0	105.3	106.2	98.5	104.4	109,6
including:									
to countries other than members of CIS	119.1	104.5	107.6	102.0	107.1	109.6	94.6	100.8	116,4
Gas, total	103.7	97.6	94.6	101.8	86.2	105.6	104.0	96.6	109,9

Source: Federal State Statistic Service.

Crude oil still dominates in the structure of oil exports at 61.2% of the total exports of oil and petroleum products. The main share of petroleum products being exported is of residual fuel oil and diesel fuel. Most of the energy resources (88% of oil, 94% petroleum products and 71% of gas) were exported beyond the borders of the CIS.

An analysis of the dynamics of Russian oil exports over a long period of time shows a considerable strengthening of the export orientation of oil sector in comparison with the pre-reform period. The share of the net export of oil and petroleum products from petroleum production increased from 47.7% in 1990 to 73.4% in 2013. However, one must take into account that this is connected not only with the absolute export volume but also with a significant decrease in the domestic consumption of oil due to the market transformation of the Russian economy and the replacement of residual fuel oil by natural gas. At the same time it should be mentioned that there was an increase in the proportion of petroleum products in oil exports: increasing from 18.2% in 1990 to 38.8% in 2013. (*Table 29*). Here it is also important to consider that the low efficiency of oil refining in Russia means that the majority of the petroleum products going for export is actually residual fuel oil, which is used in Europe as a raw material for further refining to produce light-petroleum products. In 2013, 55.6% of the total exports of petroleum products was residual fuel oil.

As a result of the physical growth of the export volume of petroleum products and natural gas the proportion of fuel and energy goods in Russian exports reached 70.6% in 2013, the share of crude oil being 33%, and of natural gas -12.8%. (*Table 30*).

Table 29

Net export of petroleum products in 2005–2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Net export of petroleum	96.8	103.2	111.5	117.5	123.3	129.9	127.2	136.8	150,0
products, mln t									
Share of petroleum products in	27.9	29.5	30.4	32.8	33.4	34.3	34.3	36.4	38,9
net export of oil and petroleum									
products, %									

Source: Federal State Statistics Service, Federal Customs Service; estimations were made by the author.

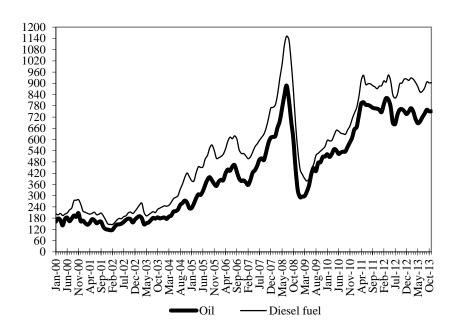
Table 30

Cost and relative importance of export of fuel and energy goods 2005–2013

	2005		2010	2010		2012		}
	Billion US dollars	%*						
Fuel and energy goods, total	154.7	64.1	267.7	67.5	369.4	70.2	371.8	70.6
including: oil	83.8	34.7	134.6	34.0	180.9	34.5	173.7	33.0
Natural gas	31.4	13.0	47.6	12.0	63.0	11.8	67.2	12.8

^{*} As % of total volume of Russian exports.

Source: Federal State Statistics Service.



Source: calculated according to data from the Federal State Statistics Service.

Fig. 41. Average prices for exported oil and diesel fuel in 2000–2013 dollars/tonne.

Dynamics of prices for energy products on the domestic market

The prices for oil and petroleum products on the Russian domestic market are basically determined by the corresponding global prices and these equal the yield supplies to the foreign and domestic markets, i.e. because net-back prices equal the global price after the deduction of customs export duty and the expenses for export shipment. In 2012-2013 due to an increase in global prices the prices for oil and light-petroleum products on the domestic market also

increased. These prices, however, are still lower than their highest levels of 2008 when the average domestic price for oil (producer price) reached USD 410.2 per tonne, and the average price for petrol reached USD 810.3 per tonne. (*Table 42, Fig. 43*). In fact the domestic prices for oil in Russia are still significantly lower than global prices. In 2013 the domestic price for oil (producer price) was approximately 45.5 dollars/barrel or 42.2% of the global price (price of Urals oil on the European market).

Table 31

Domestic prices for oil, petroleum products and natural gas in US dollars in 2000–2013 (average producer prices, dollars/tonne)

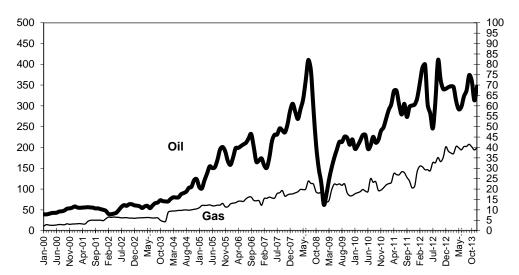
	2000	2005	2006	2007	2008	2009
	December	December	December	December	December	December
Oil	54.9	167.2	168.4	288.2	114.9	219.3
Petrol	199.3	318.2	416.5	581.2	305.1	457.4
Diesel fuel	185.0	417.0	426.1	692.5	346.5	394.8
Residual fuel oil	79.7	142.7	148.8	276.5	125.0	250.8
Gas, dollars/thousand cu m	3.1	11.5	14.4	17.6	18.1	16.9

Cont'd

	2010 December	2011 December	2012 December	2013 June	2013 December
Oil	248.2	303.3	341.1	297.9	346.1
Petrol	547.9	576.9	628.7	566.6	614.4
Diesel fuel	536.1	644.9	774.2	596.4	698.0
Residual fuel oil	246.3	274.6	275.3	244.3	235.8
Gas, dollars/thousand cu m	20.5	21.3	40.3	38.9	39.8

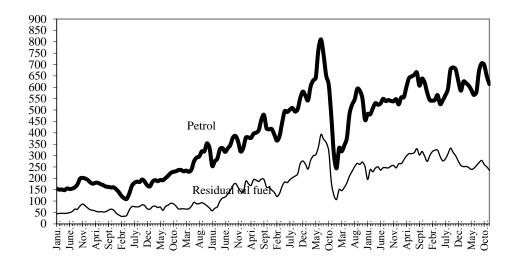
Source: calculations based on data from the Federal State Statistics Service

Domestic prices for gas are still subject to state regulation. In order to ensure the competitiveness of the national economy the government supports a significantly lower level of prices for domestic gas compared with the world price. In 2013 the domestic price (the price for purchasing gas by industrial consumers without indirect taxes) was on average 27.4% of the price for Russian gas on the European market.



Source: calculations based on data from the Federal State Statistics Service.

Fig. 42. Average prices given by manufacturers for oil and gas in US dollars in 2000-2013 dollars/tonne, dollars/thousand cu m



Source: calculations based on data from the Federal State Statistics Service

Fig. 43. Average producer prices for petrol and residual fuel oil in US dollars in 2000-2013, dollars/tonne.

Tax regulation of the oil and gas industry

Alterations to tax regulations have ensured that a reduction of the tax burden and an increase in the flexibility of tax assessment have played key roles in the development of the Russian oil sector during recent years. In order to stimulate the development of new oil and gas fields located in undeveloped regions without any infrastructure, a tax holiday has been applied since 2007 in respect of MET, by using a zero rate of such tax, either for a predetermined period of time or until a specified extraction volume has been achieved. In order to stimulate in-depth development of fields where the reserve depletion is greater than 80%, a special reduction factor (Cd) has been applied to the basic rate of MET since 2007. To encourage the development of small fields a reduction factor Cr (*Table 32*) has been applied since 2007 in respect of fields with initial recoverable reserves of less than 5 million tonnes. Furthermore, reduced rates of oil export duty have been applied since 2009. At the end of 2011 the total rate of export duty for oil was reduced by applying a coefficient 0.60 instead of 0.65 for calculating the rate of export duty. Such measures, by decreasing the tax burden on the oil and gas industry, have thus positively influenced oil extraction.

Table 32
Rates of MET for oil extraction in 2005–2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Basic rate of MET for recovery	419	419	419	419	419	419	419	446	470		
of oil, rubles/t.											
Coefficient of dynamic of		$(P_R - 9) \times P/261$				$(P-15) \times P/261$					
global oil prices (Cp)						$(F - 13) \times F/201$					
Coefficient related to level of											
reserve depletion of subsurface	-	_			3	$.8 - 3.5 \times N$	V				
area (Cd)											
Coefficient related to region's	- 0.125xV ₃ +						2 1 0 275				
subsurface reserves (Cr)				_				0.123XV	3 + 0.575		

Legends: P_R – average level of Urals oil price for tax period, dollars/barrel; P – average US dollar exchange rate against ruble stipulated by Central Bank of the RF for tax period; N – accumulated oil recovery on the subsurface

area; *V* – initial recoverable reserves of oil of classes A, B, C1 and C2 in the subsurface area; *V*₃ – initial recoverable reserves of oil, million tonnes.

Source: Tax Code of the RF (edition 2005-2013), Federal Law № 158-FL as of 22.07.2008, Federal Law № 151-FL as of 27.07.2006.

A significant event in 2013 was the adoption of Federal Law № 213-FL, as of 23.07.2013 "On amendments to part two of Chapters 25 and 26 of the Tax Code of the Russian Federation and article 3.1. of the Law of the Russian Federation 'On Tax Rates'". This law includes several measures to stimulate the development of hard-to-recover oil reserves and to establish a differentiation of MET rates depending on indicators representing the permeability of the reservoir, the size of the oil-filled formation and the degree of field depletion.

The law allows for the application of a special reduction coefficient Cr, representing the difficulty of oil recovery, to the MET rate. Depending on the parameters of the particular field (raw hydrocarbon deposit) the following values of the coefficient Cr have been established. (*Table 33*).

When oil is being recovered from a low-permeability reservoir, the established values of coefficient Cr are applied for 120 tax periods (10 years) starting from 1 January of the year when the extent of reserve depletion of that particular deposit exceeded 1%. Where oil is being recovered from deposits related to the productive sediments of the Tyumen Formation and to the Bazhanov, Abalakskiy, Khadumskiy and Domanikov productive sediments, the established values of coefficient Cr are applied for 180 tax periods (15 years) with effect from 1 January of the year when the extent of reserve depletion of that particular deposit exceeded 1%.

Table 33
Coefficient characterising the difficulty of oil recovery (Cr)

	Value of coefficient Cr
When oil is recovered from a deposit related to the productive sediments of the Tyumen Formation	0.8
When oil is recovered from a deposit with a permeability of not more than 2 10 ⁻³ micron ² and efficient	0.4
thickness of oil-filled layer greater than 10 m	
When oil is recovered from deposit with permeability not more than 2·10 ⁻³ micron ² and efficient	0.2
thickness of the oil-filled layer of less than 10 m	
When oil is recovered from a deposit related to the Bazhanov, Abalakskiy, Khadumskiy and Domanikov	0
productive sediments.	

Source: Federal Law № 213-FL, as of 23.07.2013.

To determine the values of the coefficient Cr, the applied parameters of permeability and efficient thickness of the oil-filled layer for raw the hydrocarbon deposits are those as indicated in the state balance of mineral reserves.

At the same time, for the purposes of administering the tax, the following special requirements are established for indicating the quantity of oil recovered from deposits where the coefficient Cr is applied:

- A record of the amount of recovered oil must be kept for each well working the deposit;
- Measurement of the quantity of liquid recovered from well together with a determination of its physical and chemical properties must be carried out for each well working the deposit at least 4 times per month.

Federal Law № 213-FL also stipulates a special coefficient Cdv, characterising the extent of depletion of the reserves in particular deposits of raw hydrocarbons. In the case of a high level of reserve depletion in a particular deposit (more than 80%) this coefficient is decreased and its value is calculated using a special formula.

Thus, 5 coefficients representing the main rent-forming factors are applied to the basic rate of MET:

- 1) coefficient Cp characterising the dynamics of global oil prices;
- 2) coefficient Cd characterising the extent of reserve depletion of each particular oilfield;
- 3) coefficient Cr characterising the amount of reserves in a particular oilfield;
- 4) coefficient Cr characterising the degree of difficulty of oil recovery;
- 5) coefficient Cdv characterising the extent of reserve depletion in a particular deposit of raw hydrocarbons.

The application of coefficient Cp allows the level of taxation to take into account the global oil price which determines the gross income of the producer. This coefficient is applied for all fields. The other coefficients are applied to reduce the tax burden in respect of those fields characterised by high expenses for their development (depleted fields, small fields and hard-to-recover reserves). The higher expenses related to the development of such fields are taken into account by means of the application of a lower tax rate.

It should be mentioned that shale oil currently has a Cr coefficient of zero, the same as that of the productive deposits. Reserves of such oil are actively being developed in the USA at present. However, in Russia they remain undeveloped though there are many such reserves in the country and the bulk of them are located in regions which have already been developed, primarily Western Siberia.

Amendments to Law № 5003-1, as of 21.05.1993, "On tax tariffs" were adopted by Federal Law № 213-FL. In accordance with these, oil recovered from fields in which the initially recovered oil reserves are classed as being similar to the productive deposits of the Tyumen Formation, where the initially recovered oil reserves of the field equal 0.8, are included in the list of oil types to which specific formulas are applied for calculating the relevant export tax duties. In accordance with such formulas, reduced export tax duties are established for oil from such fields.

Currently, special formulas to calculate export tax duty rates are applied to high-viscosity oil as well as to oil recovered from the fields located in Eastern Siberia (within the borders of the Sakha Republic (Yakutia), the Irkutsk Region and Krasnodarskiy Territory), the Nenets Autonomous Area and the Yamalo-Nenets Autonomous Area north of latitude 65 degrees, in the Caspian Sea and on the continental shelf.

There are plans to increase the rate of MET during 2014–2016 and these should compensate for the reduced rate of oil export tax. Federal Law № 263-FL, as of 30.09.2013, "On amendments to Chapter 26 of part two of the Tax Code of the Russian Federation "On tax tariffs' determines an increase in the basic rate of MET for oil recovery (from 470 Rb/tonne in 2013 to 559 Rb/tonne in 2016) with a decrease in the coefficient in the formula to calculate the rate of export tax duty for oil from 0.60 to 0.55. (*Table 34*).

Rates of MET and export duty for oil in 2013-2016

Table 34

	2013	2014	2015	2016
Basic rate of MET for oil recovery, rubles/tonne	470	493	530	559
Oil export duty coefficient used in the formula for calculating the rate of export duty	0.60	0.59	0.57	0.55

Source: Federal Law as of 30.09.2013 № 263-FL as of 30.09.2013.

There is one further important issue concerning the rates for export duties. In order to ensure the efficiency of oil refining and the export of petroleum products, such rates are set at a lower level than the rate for export duty on oil. This stimulates the growth of oil refining within the country and the export of petroleum products. However, recent years have shown that such a differentiation of export duties has hardly stimulated growth in the depth of oil refining. In 2013 oil refining efficiency in Russia was 71.4%, i.e. it has not increased within the last 10 years. In fact the Russian export of petroleum products increased during recent years mostly due to an increase in the export of residual oil, which is used in Europe as a raw material for further refining to obtain light petroleum products.

In order to stimulate modernisation of the Russian oil refining industry and to increase oil refining efficiency, the Russian Government adopted several solutions providing successive increases in the rate of duty for residual oil exports from 39% (average level from 2006-2010) to 66% of the rate of export duty for crude oil. (*Table 35*). Such increases in the rate of export duty for residual oil failed, however, significantly to influence the situation; the production and export of residual oil have continued to grow, whilst oil refining efficiency has actually remained unchanged.

Table 35
Rates of export duties for oil and petroleum products in 2011–2016

	From 1 January 2011 until 30 April 2011	From 1 May 2011until 30 September 2011	From 1 October 2011 until 31 December 2013	2014	2015	2016
Oil*	0.65	0.65	0.60	0.59	0.57	0.55
Commercial petrols, straight-run petrol **	0.67	0.90	0.90	0.90	0.90	0.90
Diesel fuel, light distillates, medium distillates **	0.67	0.67	0.66	0.65	0.63	0.61
Residual oil, lubricating oils and others**	0.467	0.467	0.66	0.66	1	1

^{*} Coefficient in formula for calculating the rate of export oil duty with marginal rate is defined by the formula 29.2 + 0.65x (P - 25)x7.3, where P is the price of Urals oil, dollars/barrel, in accordance with the RF Law № 5003-1 "On tax tariffs" and with a price of Urals oil exceeding 25 dollars/barrel.

Source: Federal Law as of 30.09.2013 № 263-FL, Resolutions of Government of the RF as of 27.12.2010 № 1155, as of 26.08.2011 № 716.

It should also be noted that the Russian government has announced an increase in the rate of export duty for residual oil from 2015 to match the rate of export duty for crude oil and that this has prompted the oil companies to begin modernisation of their oil refining capacity. Currently oil companies have implement special programmes to modernise oil refining capacity which have been agreed with the federal authorities, the execution of which should significantly improve both the level of technology in the oil refining industry in Russia and its efficiency.

A key point in tax regulation has been the significant strengthening of the tax burden on the gas sector as a result of phased increases in the MET rate for natural gas, from 147 Rb/thousand cu m in 2010 to 622 Rb/thousand cu m in the second half of 2013. Such an increase allowed the government to obtain more of the gas rent generated by this sector. An OPGT reduction coefficient (in 2013 the coefficient was 0.455) has been applied to the independent producers which, unlike "Gazprom", have no income from the shipment and export of gas.

In 2013 Federal Law № 263-FL as of 30.09.2013 "On amendments to Chapter 26 of part two of the Tax Code of the Russian Federation and article 3.1 of the Russian Federation 'On tax tariffs'" introduced essential alterations to the system of tax assessment for the gas sector. This law defined a new procedure to determine the rate of MET for natural gas and gas condensate recovery, by means of new formulas and coefficients which take into consideration various factors influencing the production profitability and sale of gas condensate. This order will come into force from 1 July 2014.

^{**} Coefficient with respect to the rate of export duty for oil.

In accordance with the new procedure for calculating the MET rates for natural gas and gas condensate, several essential rent-forming factors will be taken into account, including the prices for natural gas on the external and domestic markets, the prices for gas condensate, the price for Urals oil, the level of oil export duty, the US dollar to ruble exchange rate, the proportion of gas in the total amount of product recovered from raw hydrocarbon deposits, the extent of reserve depletion of the subsurface area, the geographical location of the subsurface area, the depth of the raw hydrocarbon deposit and the specifics of the development of the individual oilfield deposits.

The procedures adopted to determine the rate of MET for natural gas will allow a significant increase in the efficiency of the tax system for the gas sector. The current tax system, based on a single undifferentiated rate of MET for natural gas is very inefficient, both in terms of the security of government revenues and from the point of view of creating favorable conditions for investment in developing the fields.

The new procedure for determining the rate of MET for natural gas allows for a consideration of the main factors determining the profitability of production and the sale of gas and for ensuring the required differentiation of the tax burden, depending on the particular conditions for the development of each individual field.

2013 saw the adoption of Federal Law № 268-FL as of 30.09.2013 "On amendments to the first and second parts of the Tax Code of the Russian Federation and particular legislative acts of the Russian Federation to stimulate the recovery of raw hydrocarbons on the continental shelf of the Russian Federation by means of measures taken with respect to tax and custom tariffs". This law determines the special preferential tax regime for the development of new off-shore fields. This regime is based on an ad valorem reduction in the MET rate, differentiated in accordance with the areas of shelf involved and standard tax on profits. The rates of MET determined for this regime are 30%, 15%, 10% and 5% depending on the shelf areas (categorised by project complexity). No export tax duty will be imposed on exported products and property related to the off-shore projects.

The Russian oil extraction industry is currently nearing its production capacity. Oil recovery in the developed regions, including Western Siberia, the main oil production region of the country, is currently falling due to the depletion of the fields located there. In order to compensate for this reduction in oil recovery it is necessary to develop new fields both in regions with undeveloped infrastructure, including the fields on the continental shelf, and the unexploited, poorer quality reserves in the developed regions.

The development of new fields and the hard-to-recover reserves incurs substantially higher production expenses, and within a common tax assessment would be uneconomic. In this regard, the adoption of the above legislative solutions in respect of the tax assessment of the oil and gas industry is extremely important. This will allow the development of a significant proportion of the raw hydrocarbon reserves which are currently undeveloped, thus maintaining the levels of oil and gas recovery in the country.