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R95 **Russian Economy in 2012. Trends and Outlooks.**
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The review provides a detailed analysis of main trends in Russia's economy in 2012. 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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Russian Oil and Gas Sector in 2012

The oil and gas industry remains the primary sector of the Russian economy playing a leading part in shaping state budget revenues and the trade balance of the country. By 2012, the continued high levels of world oil and gas prices had had a positive effect on the development of the oil and gas sectors of the Russian economy. This has ensured high revenues for Russian oil and gas companies and considerable state budgetary income. Oil production in Russia had reached its maximum level for a period since 1990. At the same time, there had been an observed deterioration in the conditions for oil extraction as well as a decline in oil production from "old" oil fields and considerably higher costs relating to the development of new ones, especially in regions with no infrastructure. In these circumstances additional measures have been taken on tax incentives for the development of new oil fields. At the same time, the tax burden on the gas sector has been raised.

The dynamics of world prices for oil and gas

The situation in the world oil market in 2012 was characterised by the persistence of high world oil prices. The average price for Brent crude oil in 2012 was 112.0 USD/bbl while the price for Russian Urals oil on the world (European) market was 110.3 USD/bbl which was higher than the previous year (*Table 19, Fig. 32*). The main factors explaining the high prices are the increase in oil demand (*Table 20*) due to growth in the world economy, primarily, the economies of China, India and other Asian countries, sufficiently restrained OPEC policy with regard to increase of oil production by member states, the low growth rates of oil production outside of OPEC and geopolitical risks. In 2012 the aggregate oil production quota for OPEC members was 30 million barrels per day, including Iraq which had not been subject to such limitations before, and to Lebanon (this quota actually corresponded to the level of oil production reached by OPEC in 2011). Despite some overproduction by OPEC countries above the official quota, the world oil market was generally balanced and the average oil production by OPEC countries in 2012 (31.4 million barrels per day) was lower than the 2008 level (31.6 million barrels per day). At the end of 2012 oil production by OPEC countries was close to the official quota and in December reached 30.4 million barrels per day.

Table 19

World oil prices in 2000-2012, USD/bbl

	2000	2005	2006	2007	2008	2009	2010
Brent oil price, UK	28.5	54.4	65.2	72.5	97.7	61.9	79.6
Urals oil price, Russia	26.6	50.8	61.2	69.4	94.5	61.0	78.3

cont'd

	2011	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2012
Brent oil price, UK	111.0	118.5	108.9	110.0	110.4	112.0
Urals oil price, Russia	109.1	116.9	106.5	109.0	108.8	110.3

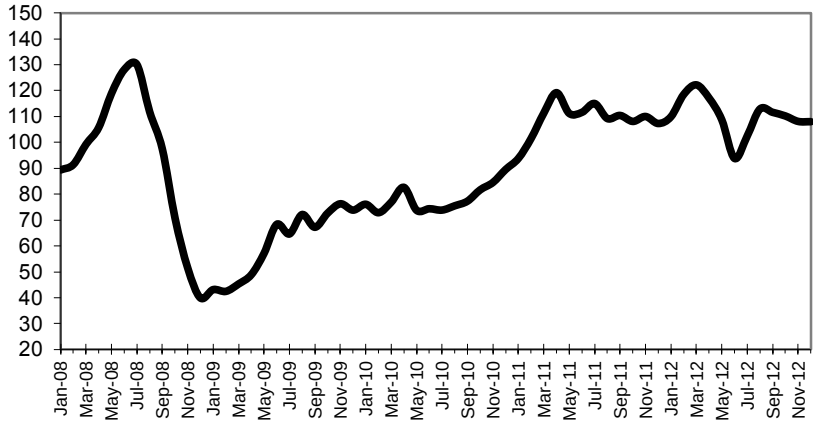
Source: IMF, OECD/IEA.

Table 20

World oil prices in 2000-2012, % change compared with relevant year

	2008	2009	2010	2011	2012
World, total	–0.6	–1.2	3.1	0.9	1.1
OECD countries, including:	–3.6	–4.2	1.3	–0.8	–0.9
North America	–5.2	–3.7	2.0	–0.3	–1.0
Europe	–0.6	–4.7	–0.3	–2.3	–3.6
Asian and Pacific region	–4.0	–4.6	1.8	0.4	4.2
Non-members of OECD, including:	3.3	2.5	5.2	3.0	3.3
Asia (excluding Middle East countries and former USSR countries)	1.7	4.4	7.9	3.2	3.3

Source: OECD/IEA.



Source: Ministry of Economic Development in Russia.

Fig. 33. Prices for Urals oil 2008-2012, USD/bbl

The prices for Russian natural gas on the European market were also quite high, exceeding the level of the preceding year. Prices for natural gas supplied under long-term contracts are determined on the basis of the prices for energy sources which are alternatives to natural gas (mainly, gasoil/diesel fuel and residual oil), and these depend on world oil prices. As a result, world gas prices follow, with a certain lag, world oil prices. The price for Russian natural gas on the European market reached its peak in 2008 while the price minimum occurred in 2010. In 2011-2012, under the conditions of increasing world oil prices, the price for Russian gas on the European market increased considerably (*Table 21*). At the same time, the changing circumstances in the European gas market had a reducing effect on Russian gas prices. In particular this was the increased gas supply from other gas producing countries (especially due to the considerable growth of supply of compressed natural gas) and the lower level of spot-prices for gas, compared to the prices under Gazprom's long-term contracts (*Table 22*). This forced Gazprom to reduce its gas prices on the European market.

Table 21

World prices for oil and natural gas in 2002-2012

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Average world oil price, USD/bbl	24.95	28.89	37.76	53.4	64.3	71.1	97.0	61.8	79.0	104.0	105.0
Price for Russian natural gas on the European market, USD/thousand cubic metres	96.0	125.5	135.2	212.9	295.7	293.1	473.0	318.8	296.0	381.5	431.3

Source: IMF.

Table 22

Price for Russian natural gas on the European market in 2011-2012, USD/thousand cubic metres

	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4
Price for Russian natural gas on the European market	329.4	360.6	401.0	434.9	444.7	452.4	409.9	418.2
Spot-price for Russian natural gason the European market, Austria	333.6	357.5	344.5	334.2	355.1	350.0	333.7	361.0

Source: IMF, CEGH.

The dynamics and structure of production in the oil and gas industry

The fast growth of oil production in Russia in the first half of 2000 (in 2002-2004 the oil production growth rate reached 8.9-11% per year) was associated with the expansion of oil export opportunities (in particular, due to the creation of the Baltic Pipeline System), intensification of development of existing deposits (in particular, due to the application of the foreign technologies of horizontal drilling and hydraulic fracturing treatment) and expansion of the investment capabilities of oil companies due to the growth in world prices. In later years, oil production growth rates slowed substantially, while in 2008 a shrinkage was observed (*Tables 23, 24*). This was an indication of the exhaustion of the capacity to increase the country's oil production due to the intensification of development of existing deposits which evidenced the necessity for more proactive development of new oil fields.

In 2012, against a background of high world prices, oil production in Russia reached 518 million tons, which was the maximum level since 1990. The dynamics of oil production were influenced positively by the start-up, in recent years, of several new large deposits in Eastern Siberia (the Vankorskoe, Talkanskoe and Verkhnechonskoe deposits) and in the north of the European part of the country (the Yuzhno-Khylchuyusskoe deposit), as well as by changes in the taxation system, aimed at reducing the tax burden on the oil sector, stimulating further development of existing deposits and the development of new extraction fields.

The reduction in the growth rate of oil production, which has been observed recently, can be explained, primarily, by the objective worsening of the conditions of its extraction. A considerable part of the existing deposits have entered a declining production phase and new deposits are mostly characterised by poorer mining, geological and geographical parameters. Their development requires higher capital, operational and transportation costs.

Table 23

Oil production and refining in the Russian Federation in 2000-2012

	2000	2005	2006	2007	2008	2009	2010	2011	2012
Oil production, including gas condensate, million tons	323.2	470.0	480.5	491.3	488.5	494.2	505.1	511.4	518.0
Primary oil processing, million tons	173.0	208.0	220.0	229.0	236.3	236.0	249.3	258.0	270.0
Oil refining to oil production ratio, %	53.5	44.3	45.8	46.6	48.4	47.8	49.4	50.4	52.1
Depth of crude oil refining, %	71.0	71.6	71.9	71.7	72.0	71.9	71.1	70.8	71.5

Source: Rosstat (Russian Statistics Agency), Ministry of Energy of the RF.

At the same time, in 2012 the growth rates for oil refining remained higher than those for oil production, mainly due to the higher growth rates in exports of oil products, stimulated by

lower export duties compared to those on crude oil. In 2005-2012 the growth rates for primary crude oil processing were 3.2-6.2% per year (except for 2009) while oil production growth rates were only 0.8-2.2% per year (excluding 2008). As a result, the oil refining to oil production ratio increased from 42.5% in 2004 to 52.1% in 2012. However, oil refining depth showed practically no increase during this period and was only 71.5% in 2012 (which closely corresponds to the 2005 level).

If we consider a longer period, it can be stated that despite the programme goal set by the government of increasing the oil refining depth, at the moment this figure actually remains close to the pre-reform level (in 1990 the oil refining depth in Russia was 67%) and it is still considerably lower than in developed countries, where the depth of oil refining reaches 90-95%. The quality of refined oil products produced in Russia is also substantially lower than elsewhere in the world. Modernisation of the oil refining industry is one of the most relevant objectives in the development of the oil sector of the Russian economy.

Table 24

Production of crude oil, oil products and natural gas in 2000-2012, % to the preceding year

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

Source: Rosstat (Russian Statistics Agency), Ministry of Energy of the RF.

The largest oil volumes in 2012 were produced by the following oil companies: Rosneft, LUKOIL, TNK-BP, Surgutneftegaz and Gazprom. The share of these five companies was 73.8% of the country's total oil production. The share of medium-sized companies (Tatneft, Slavneft, Bashneft and RussNeft) was 14.3% of the total oil production. Operators of Production-Sharing Contracts produced 2.7% of Russian oil in 2012. The share of other producers, which includes over 100 small oil producing companies, accounted for 8.5% (*Table 25*).

In October 2012 the state oil company Rosneft announced its acquisition of the TNK-BP oil company, which was previously owned by a Russian consortium, AAP and the British company, BP. The total amount of the transaction, which is to be completed in the first half of 2013, is USD 61 billion. Upon completion of the transaction, in addition to its monetary consideration, BP is supposed to obtain 18.5% of Rosneft shares. As a result, BP's share in the Rosneft share capital will be 19.75% (taking into account the 1.25% of Rosneft shares already owned by BP).

The acquisition of TNK-BP by Rosneft is the largest transaction in the oil and gas sector. Before that, the biggest transaction was the 2005 acquisition by Gazprom of 75.7% of Sibneft shares, for USD 13.1 billion (after the takeover by Gazprom, Sibneft was renamed Gazprom Neft).

Table 25

Oil production structure in 2008-2012

	Oil production in 2008, million tons	Share in total production, %	Oil production in 2010, million tons	Share in total production, %	Oil production in 2011, million tons	Share in total production, %	Oil production in 2012, million tons	Share in total production, %

1	2	3	4	5	6	7	8	9
Russia, total	488.5	100.0	505.1	100.0	511.4	100.0	518.0	100.0
Rosneft	113.8	23.3	112.4	22.3	114.5	22.4	117.5	22.7
LUKOIL	90.2	18.5	90.1	17.8	85.3	16.7	84.6	16.3
TNK-BP	68.8	14.1	71.7	14.2	72.6	14.2	72.5	14.0
Surgutneftegaz	61.7	12.6	59.5	11.8	60.8	11.9	61.4	11.9
Gazprom + Gazprom Neft	43.4	8.9	43.3	8.6	44.8	8.8	46.1	8.9
including: Gazprom	12.7	2.6	13.5	2.7	14.5	2.8	14.5	2.8
Gazprom Neft	30.7	6.3	29.8	5.9	30.3	5.9	31.6	6.1
Tatneft	26.1	5.3	26.1	5.2	26.2	5.1	26.3	5.1
Slavneft	19.6	4.0	18.4	3.6	18.2	3.6	17.9	3.5
Bashneft	11.7	2.4	14.1	2.8	15.1	3.0	15.4	3.0

cont'd

1	2	3	4	5	6	7	8	9
RussNeft	14.2	2.9	13.0	2.6	13.6	2.7	13.9	2.7
NOVATEK	2.7	0.6	3.8	0.8	4.1	0.8	4.2	0.8
Operators of Production-Sharing Contracts	12.0	2.5	14.4	2.9	15.1	3.0	14.1	2.7
Other producers	24.1	4.9	38.2	7.6	41.1	8.0	44.1	8.5

Source: Ministry of Energy of the RF, IEP calculations.

As a result of the acquisition of TNK-BP, which (including its share in Slavneft) accounts for 15.7% of the total oil production in Russia, Roseft will have considerably strengthened its positions in the Russian oil sector and it will have become one of the largest oil companies in the world. The company's oil production (taking into account its share in other companies' production) will account for about 200 million tons per year, or 38.7% of Russia's total oil production.

The state sector will be considerably expanded. In general, after Rosneft's acquisition of TNK-BP the share of state companies in Russia's overall oil production will increase to 48.1% (*Table 26*). Note that in 2003, i.e. before Rosneft and Gazprom acquired the assets of the private oil companies YUKOS and Sibneft, and before Gazprom entered into the Sakhalin-2 project, the share of state companies in overall Russian oil production had been only 7.3%.

Table 26

Share of state companies in Russia's oil production, including Rosneft's acquisition of TNK-BP, 2012

	Oil production, million tons	Share of total oil production, %
Rosneft, including TNK-BP	190.0	36.7
Share of Rosneft and TNK-BP in oil production of other companies (Slavneft, Sakhalin-1)	10.4	2.0
Rosneft, including TNK-BP and the share of Rosneft and TNK-BP in oil production of other companies	200.4	38.7
Gazprom, including Gazprom Neft	46.1	8.9
Share of Gazprom in oil production of other companies (Sakhalin-2)	2.8	0.5
Gazprom, including Gazprom Neft and the share of Gazprom in oil production of other companies	48.9	9.4
State companies, total	249.3	48.1

Source: Ministry of Energy of the RF, IEP calculations.

Table 27

Gas production structure in 2008-2012

	Gas production in 2008, billion cubic metres	Share of total gas production, %	Gas production in 2010, billion cubic metres	Share of total gas production, %	Gas production in 2011, billion cubic metres	Share of total gas production, %	Gas production in 2012, billion cubic metres	Share of total gas production, %
Russia, total	664.9	100.0	665.5	100.0	687.5	100.0	671.5	100.0
Gazprom + Gazprom Neft	553.1	83.2	513.9	77.2	519.0	75.5	489.4	72.9
including: Gazprom	550.9	82.9	509.0	76.5	510.1	74.2	478.5	71.3
Oil companies	54.8	8.2	66.6	10.0	69.1	10.1	71.1	10.6
NOVATEK	30.8	4.6	37.8	5.7	53.5	7.8	51.3	7.6
Operators of Production-Sharing Contracts	8.5	1.3	23.3	3.5	25.2	3.7	26.8	4.0
Other producers	17.6	2.6	23.9	3.6	20.7	3.0	32.9	4.9

Source: Ministry of Energy of the RF, IEP calculations.

As for gas production, Gazprom has traditionally remained the leader. However, its share in overall gas production in Russia has considerably declined over recent years: from 83.2% in 2008 to 72.9% in 2012 (*Table 27*) while the ratio of other producers (the oil companies, NOVATEK, operators of Production-Sharing Contracts and other producers) in total gas production has increased. The share of state companies in overall Russian gas production in 2012 was 75.9%. After Rosneft's acquisition of TNK-BP, the share of state companies will increase to 79.6% of total Russian gas production (*Table 28*).

Table 28

Share of state companies in gas production in Russia, including Rosneft's acquisition of TNK-BP, 2012

	Gas production, billion cubic metres	Share of total gas production, %
Gazprom, including Gazprom Neft	489.4	72.9
Rosneft, including TNK-BP	35.9	5.3
Share of Gazprom and Rosneft in production of other companies (Slavneft, Sakhalin-1, Sakhalin-2)	9.3	1.4
State companies, total	534.6	79.6

Source: Ministry of Energy of the RF, IEP calculations.

The dynamics and structure of oil and gas exports

Along with growth in oil production a significant increase in oil exports has been observed: according to preliminary estimates the net export of crude oil and oil products in 2012 increased to 375.7 million tons and the ratio of the net export of crude oil and oil products to oil production was 72.5% (*Table 29, 30*). The growth in oil exports was achieved due to the increased export of oil products (up by 4.4% compared to 2011) while crude oil exports declined (by 1.8%). The proportion of produced crude oil which was exported in 2012 decreased to 46.3%. At the same time, the share in exports of residual oil products in 2012 was 91.0% and for diesel fuel it was 59.4%. Under the influence of restrictive export duty, petrol exports declined in 2012 by 16.5% and the proportion of product petrol which was exported decreased to 8.4% (for comparison: the share of exports in production of petrol was 7.2% in 1999, 18.5% in 2005, 8.2% in 2010, and 10.6% in 2011). Meanwhile, 2012 saw a substantial reduction in imports of oil products (by 63.3% compared to 2011) and a reduction of the proportion of imports to supply domestic demand. Along with a considerable increase in domestic production, the proportion of petrol imported decreased from 2.6% in 2011 to 0.5% in 2012 (for

comparison: the proportion of petrol imported was 8.7% in the first half of 1998, 0.7% in 2008 and 1.4% in 2010). The proportion of imported diesel fuel decreased from 1.1% in 2011 to 0.3% in 2012.

Table 29

Export of crude oil, oil products and natural gas from Russia in 2002-2012, % of the preceding year

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Crude oil, total	113.9	117.8	115.0	98.4	98.0	104.0	94.0	101.8	101.2	97.6	98.2
including: to non-CIS members	109.9	118.9	116.3	99.1	98.0	104.8	92.6	102.9	106.1	95.7	98.7
Oil products, total	118.5	103.6	105.5	117.9	106.3	108.0	105.0	105.3	106.2	98.5	104.4
including: to non-CIS members	119.1	102.6	104.9	119.1	104.5	107.6	102.0	107.1	109.6	94.6	100.8
Gas, total	102.4	102.0	105.5	103.7	97.6	94.6	101.8	86.2	105.6	104.0	96.6

Source: Rosstat (Russian Statistics Agency).

Exports of natural gas in 2012 declined by 3.4% compared to the preceding year. The main reason for the decrease in gas exports in recent years has been the reduction of supplies to Europe, where the share of supply from other gas producing countries has significantly increased. As a result, in 2012, compared to 2006 when the maximum supply volume of Russian gas to Europe was reached, exports of Russian gas to non-CIS countries declined by 30.4%. At the same time, the ratio of net exports compared to gas production decreased from 31.4% in 2005 to 26.0% in 2012.

Table 30

Correlation of oil and natural gas production, consumption and export in 2000-2012

	2000	2005	2006	2007	2008	2009	2010	2011	2012
Oil, million tons									
Production	323.2	470.0	480.5	491.3	488.5	494.2	505.1	511.4	518.0
Export, total	144.5	252.5	248.4	258.4	243.1	247.4	250.4	244.6	239.9
Export to non-CIS countries	127.6	214.4	211.2	221.3	204.9	210.9	223.9	214.4	211.6
Export to CIS-countries	16.9	38.0	37.3	37.1	38.2	36.5	26.5	30.2	28.4
Net export	138.7	250.1	246.1	255.7	240.6	245.6	249.3	243.5	238.9
Domestic consumption	123.0	123.1	131.2	124.1	130.4	125.3	125.9	140.7	142.3
Net export as a % of production	42.9	53.2	51.2	52.0	49.3	49.7	49.4	47.6	46.1
Oil products, million tons									
Export, total	61.9	97.0	103.5	111.8	117.9	124.4	132.2	130.6	138.0
Export to non-CIS countries	58.4	93.1	97.7	105.1	107.6	115.4	126.6	120.0	121.0
Export to CIS-countries	3.5	3.9	5.8	6.7	10.3	9.0	5.6	10.6	17.0
Net export	61.5	96.8	103.2	111.5	117.5	123.3	129.9	127.2	136.8
Oil and oil products, million tons									
Net export of oil and oil products	200.2	346.9	349.3	367.2	358.1	368.9	379.2	370.7	375.7
Net export of oil and oil products as a % of oil production	61.9	73.8	72.7	74.7	73.3	74.6	75.1	72.5	72.5
Natural gas, billion cubic metres									
Production	584.2	636.0	656.2	654.1	664.9	596.4	665.5	687.5	671.5
Export, total	193.8	207.3	202.8	191.9	195.4	168.4	177.8	184.9	178.7
Export to non-CIS countries	133.8	159.8	161.8	154.4	158.4	120.5	107.4	117.0	112.6
Export to CIS-countries	60.0	47.5	41.0	37.5	37.0	47.9	70.4	67.9	66.0
Net export	189.7	199.6	195.3	184.5	187.5	160.1	173.5	180.6	174.4
Domestic consumption	394.5	436.4	460.9	469.6	477.4	436.3	492.0	506.9	497.1
Net export as a % of production	32.5	31.4	29.8	28.2	28.2	26.8	26.1	26.3	26.0

Source: Rosstat (Russian Statistics Agency), Ministry of Energy of the RF, Federal Customs Service, IEP calculations.

Crude oil export was still dominant in the oil export structure, accounting for 63.6% of the total crude oil and oil product exports in 2012. The major part of the export of oil products was comprised of residual oil and diesel fuel. The major part of energy resources (88% of crude oil and oil products and 63% of gas) was exported outside the CIS.

Analysis of the trends in Russian oil exports over a long period shows a strengthening of the export orientation of the oil sector, compared to the pre-reform period. The ratio of net exports of crude oil and oil products to oil production increased from 47.7% in 1990 to 72.5% in 2012. However, we should take into account that this is connected not only with an increase in absolute export volume but also with a substantial reduction of domestic oil consumption due to the market transformation of the Russian economy and the substitution of residual oil by natural gas. At the same time an increase in the share of oil products in oil exports can be noted: it increased from 18.2% in 1990 to 36.4% in 2012 (*Table 31*). However, due to the low depth of oil refining the major part of Russian oil product exports is represented by residual oil, which is used in Europe as a raw material for further refining and the production of light petroleum products. In 2012 the share of residual oil in the total export of oil products was 55.1%.

Table 31

Net export of oil products in 2002-2012

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Net export of oil products, million tons	74.8	78.2	81.4	96.8	103.2	111.5	117.5	123.3	129.9	127.2	136.8
Share of oil products in net export of crude oil and oil products, %	29.2	26.8	24.3	27.9	29.5	30.4	32.8	33.4	34.3	34.3	36.4

Source: Rosstat (Russian Statistics Agency), Federal Customs Service, IEP calculations.

An increase in world oil prices and the growth of exports growth has resulted in an increase in revenues in the oil sector of the economy (*Fig. 34, 35*). The aggregate revenues from the export of crude oil and primary oil products (petrol, diesel fuel and residual oil) reached USD 269.1 billion in 2012, which is a record for the entire reforming period (*Table 32*). For comparison, it should be noted that the minimum level of income from oil exports was in 1998, when world oil prices were falling, and the revenues from crude oil and oil product exports was only USD 14 billion.

Table 32

Revenues from crude oil and oil products export in 2000-2012, billion USD

	2000	2005	2006	2007	2008	2009	2010	2011	2012
Revenue from export of crude oil and main types of oil products	34.9	112.4	140.0	164.9	228.9	141.2	193.9	259.5	269.1

Source: calculated based on data of Rosstat (Russian Statistics Agency).

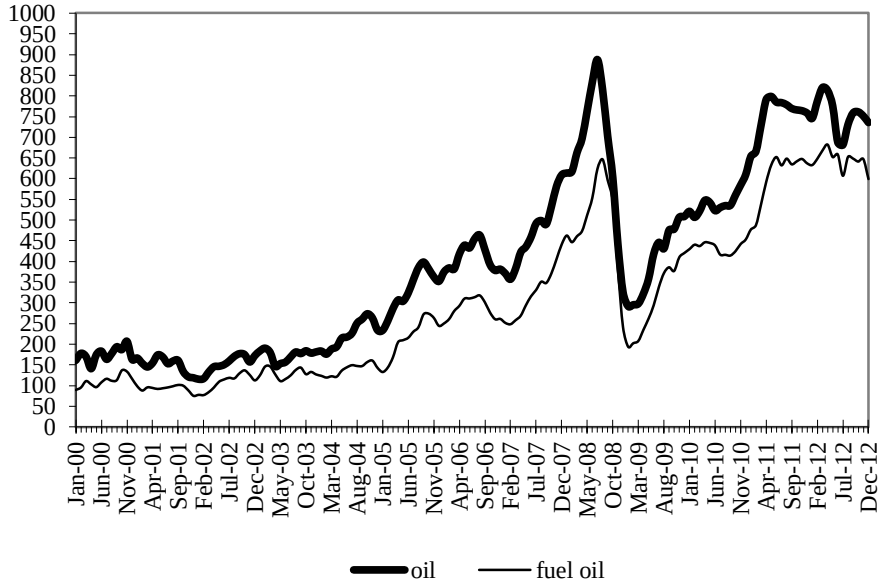
As a result of the growth of world oil and gas prices, and the increase in the physical volumes of export of oil products and coal, the share of fuel and energy products in Russian exports reached 70.4% in 2012, with the share of crude oil being 34.5%, and of natural gas, 12.0% (*Table 33*).

Table 33

Amount and ratios of exports of fuel and energy products in 2005-2012

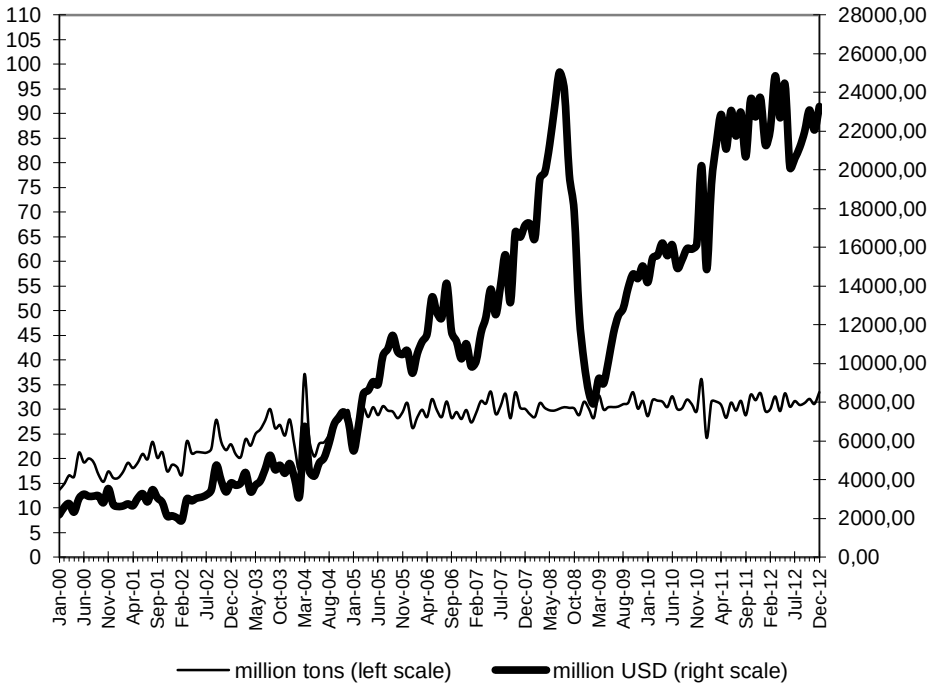
	2005		2010		2011		2012	
	billion USD	%*	billion USD	%*	billion USD	%*	billion USD	%*
Fuel and energy goods, total:	154.7	64.1	267.7	67.5	357.2	69.2	369.4	70.4
including: oil	83.8	34.7	134.6	34.0	179.1	34.7	180.9	34.5
natural gas	31.4	13.0	47.6	12.0	63.8	12.4	63.0	12.0

* As a % of the total volume of Russian exports.
Source: Rosstat (Russian Statistics Agency).



Source: calculated based on data of Rosstat Rosstat (Russian Statistics Agency).

Fig. 34. Average export prices for oil and residual oil in 2000-2012, USD/ton



Source: calculated based on data of Rosstat (Russian Statistics Agency).

Fig. 35. Export of crude oil and oil products in physical and monetary terms in 2000-2012

Trends in the prices for energy goods on the domestic market

Prices for oil and oil products in the Russian domestic market are based on world prices for these goods, reflecting the equal profitability of supplies to the external and internal markets, i.e. as the net back price is equal to the world price, less export customs duty and export transportation costs. Since the export duty rate has increased to a lesser extent than the world price (for example, the maximum growth of the export duty rate is only 65% of the growth in the price of Urals oil), an increase in world prices inevitably leads to increases in internal prices. The same was observed in 2012, when, under the influence of world prices, the prices for oil and light petroleum products on the domestic market grew as well. However, these prices remain below the maximum values reached in July 2008 when the average domestic oil price (producers' price) reached USD 410.2 USD per ton and the average price for petrol reached USD 810.3 per ton. At the end of 2008 and at the beginning of 2009, with declining world oil prices, a considerable reduction of the domestic prices for crude oil and oil products (in USD) was observed, however, thereafter due to the growth of world prices the domestic prices for crude oil and oil products grew substantially (*Table 34*, *Fig. 36, 37*).

Table 34

Domestic prices for crude oil, oil products and natural gas in USD in 2000-2012 (average producers' prices, USD/ton)

	December 2000	December 2005	December 2006	December 2007	December 2008	December 2009
Crude oil	54.9	167.2	168.4	288.2	114.9	219.3

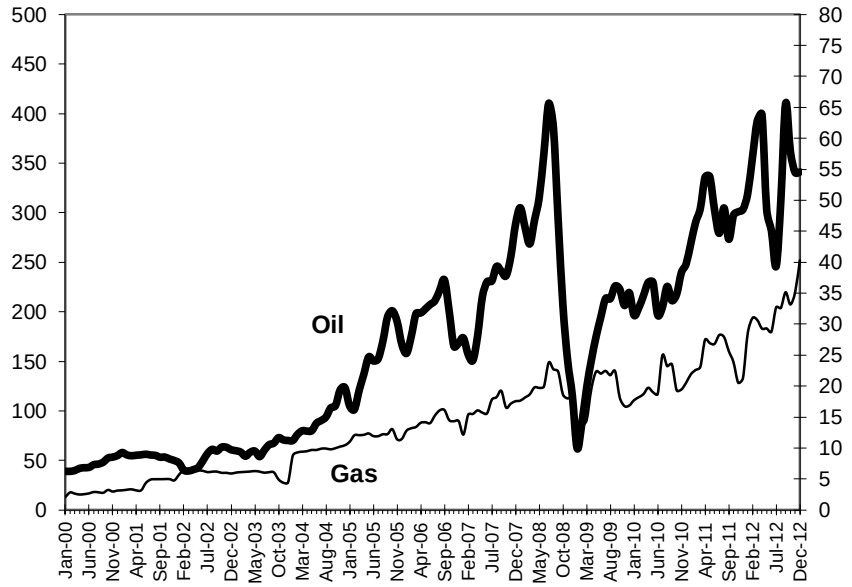
Petrol	199.3	318.2	416.5	581.2	305.1	457.4
Diesel fuel	185.0	417.0	426.1	692.5	346.5	394.8
Residual oil	79.7	142.7	148.8	276.5	125.0	250.8
Gas, USD/thousand cubic metres	3.1	11.5	14.4	17.6	18.1	16.9

cont'd

	December 2010	**June 2011**	**December 2011**	**June 2012**	**December 2012**
Crude oil	248.2	302.7	303.3	281.8	341.1
Petrol	547.9	647.7	576.9	542.3	628.7
Diesel fuel	536.1	605.2	644.9	597.1	774.2
Residual oil	246.3	308.8	274.6	276.8	275.3
Gas, USD/thousand cubic metres	20.5	26.8	21.3	28.8	40.3

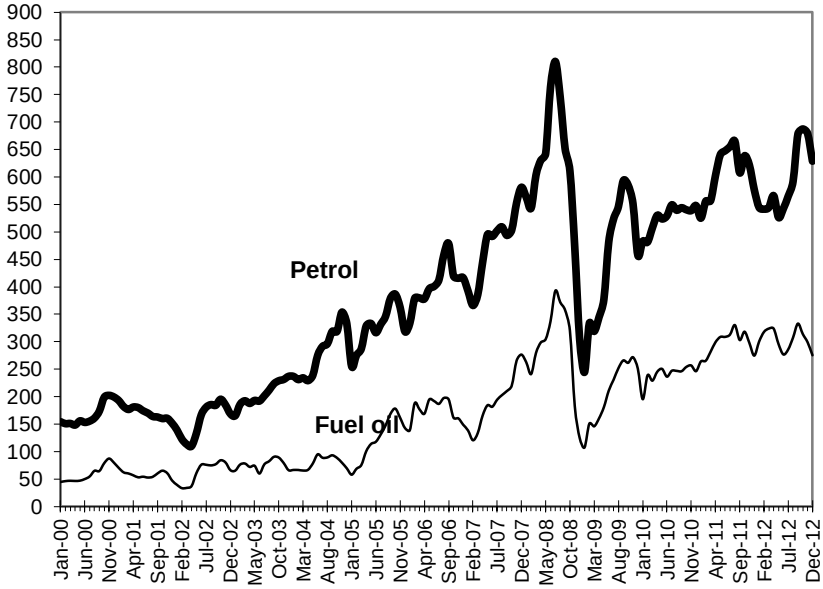
Source: calculated based on data of Rosstat (Russian Statistics Agency).

Meanwhile, domestic oil prices in Russia still remained lower than world prices. For instance, in 2012 the internal oil price (producers' price) was, on average, only 46.4 USD/bbl, or 42.1% of the world price (Urals oil price on the European market). The gap in the levels of world and domestic prices is the result of the existence of export customs duty and the additional transportation costs relating to exports. Domestic prices for gas remain under state regulation. In order to ensure competitiveness of the national economy the government supports a considerably lower level of domestic gas prices compared to the rest of the world. In the IV quarter of 2012 the internal gas price (the purchase price for industrial consumers without indirect taxes) was only about 26% of the Russian gas price on the European market.



Source: calculated based on data of Rosstat (Russian Statistics Agency).

Fig. 36. Average producers' prices for oil and gas in USD in 2000-2012, USD/ton, USD/thousand cubic metres



Source: calculated based on data of Rosstat (Russian Statistics Agency).

Fig. 37. Average producers' prices for petrol and residual oil in USD in 2000-2012, USD/ton

Tax regulation of the oil and gas sector

Changes in the taxation system, aimed at reducing the tax burden and encouraging further development of existing deposits and the development of new oil fields, have had a positive impact on the oil industry Since 2009 a non-taxable price minimum used in the formula for calculation of the coefficient Cp, which reflects the dynamics of world oil prices and applies to the basic MET (Mineral Extraction Tax) rate for oil production, was raised from 9 USD/bbl to 15 USD/bbl (*Table 35*), which led to a considerable reduction of the MET rate applied to oil production. Furthermore, the requirement for the use of a direct accounting method for oil extracted from specific deposits in order for them to be eligible for the application of a reduced coefficient for the MET rate (Cw) was abolished for deposits with a high degree of resource depletion. This enabled all depleted deposits to benefit from the exemption, which, in turn, stimulated the extension of operation periods and additional oil production.

Table 35

MET rates applied to oil production in 2005-2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Basic MET rate in oil production, rub/ton	419	419	419	419	419	419	419	446	470
Coefficient reflecting the dynamics of world oil prices (Cp)	$(P–9)\times R/261$				$(P–15)\times R/261$				
Coefficient reflecting the degree of deposit depletion (Cw)	–		$3.8 – 3.5\times N/V$						
Coefficient reflecting the deposit's reserves (Cr)	–							$0.125\times I/3 + 0.375$	

Symbols: P – the average Urals oil price level in USD per barrel over the tax period; R – the average USD/RUR exchange rate set by the Central Bank of the RF over the tax period; N – cumulative amount of oil extracted from

the deposit; *V* – initially extractable oil reserves of categories A, B, C1 and C2 in the deposit; *Vз* – initially extractable oil reserves of the deposit, million tons.
Source: Tax Code of the RF (revision 2005-2012), Federal Law No.158-FZ dated 22.07.2008, Federal Law No.151-FZ dated 27.07.2006, Federal Law No.33-FZ dated 07.05.2004.

In order to stimulate development of the oil fields located in underdeveloped regions with no infrastructure MET tax holidays were introduced. The mechanism of MET tax holidays is the application of a zero tax rate for the period until a certain cumulative oil production volume is reached, or for a specified period from the date of state registration of the licence for the use of subsurface resources. This speeds up the return on capital investments and ensures the required yield on investments in the development of new oil fields.

The first region where the tax holiday mechanism was applied was the Eastern Siberian oil and gas province in the Sakha (Yakutia) Republic, Irkutsk oblast and Krasnoyarsk krai where, since 2007 a zero MET rate has been set for the period until the cumulative oil production volume reaches 25 million tons, provided that the development of the reserves does not exceed 10 years; or for periods from the date of state licence registration of 10 years, for a licence for the development of subsurface resources, and 15 years for a licence for the use of subsurface resources both for geological studies (exploration and development) and production.

For the purpose of further stimulation of development of fields in the Eastern Siberian oil and gas province the Government of the RF has set zero export duty rates for oil fields located in this regions since 1 December 2009. These rates were applied until 1 July 2010. Thereafter the Government started applying reduced export duty rates to oil extracted in this region.

Starting from 2009, MET tax holidays were also introduced for new oil deposits located in the Nenets Autonomous Okrug and on the Yamal Peninsula, on the continental shelf to the north of the Arctic Circle as well as in the Caspian and Azov Seas. From December 2010 reduced export duty rates also began to apply to deposits located in the Caspian Sea.

Since the beginning of 2012 a number of changes in the taxation of the oil and gas sector have come into force. In order to promote the development of small oil fields a special-purpose reduction coefficient reflecting the size of the reserves in the relevant deposit (Cr) was introduced for the MET rate for oil production in 2012. This coefficient is calculated using a specific formula (see *Table 35*) and is applied to deposits with initially recoverable oil reserves of up to 5 million tons and a reserve depletion of up to 0.05. Prior to this, the procedure for calculating MET on oil production had not provided for tax differentiation depending on the size of the oil reserves in the deposit and, as a result, the development of small oil fields usually turned out to be uneconomic due to the high capital and operational costs. The application of the special decreasing coefficient, Cr, to the MET rate should create conditions for the development of new small deposits which would be unprofitable under the general system of taxation.

Within the framework of implementation of the policy for encouraging the development of new production regions the MET tax holiday regime was extended to new oil fields located in the Yamal-Nenets Autonomous Okrug, to the north of the 65th parallel north. For subsurface sites located in this region, with the exception of those located on the Yamal Peninsula, the same parameters of tax holidays as for the Vostochny region were set. Since 2012 the MET tax holiday regime has also been applied to oil fields located in the Black Sea and the Sea of Okhotsk. These decisions should create the necessary economic conditions for the development of the deposits of the Yamal-Nenets Autonomous Okrug, the Black Sea and the Sea of

Okhotsk, which are uneconomic under the common system of taxation due to the necessity for large volumes of capital investment needed for the creation of the infrastructure and the special conditions relating to the development of deposits located in these regions.

In 2012 the mechanism of application of reduced export duty rates to new deposits in Eastern Siberia, the Yamal-Netets Autonomous Okrug and the Nenets Autonomous Okrug was legally approved. Such an approach had already been applied in practice: reduced export duty rates were envisaged for deposits in Eastern Siberia, the Caspian Sea, and the Prirazlomnoe field on the Arctic shelf, for high-viscosity oil, although the mechanism for setting such rates was not legally approved.

Considerable undeveloped reserves of oil and gas are located on the continental shelf of the Russian Federation. However, the development of offshore deposits requires extremely high capital and operational costs and under the common system of taxation these would not provide a return on the investments required, so this has impeded the development of these fields. In 2012 the Ministry of Energy of the RF developed a concept for the taxation of hydrocarbon extraction from the Russian continental shelf which provides for special preferential tax treatment for the development of subsea fields. It was proposed to base this tax regime on a reduced ad valorem MET rate, differentiated on the basis of the shelf zone and the standard tax rate. It has been suggested that export duty should not be charged on export products within the offshore project framework.

Within the framework of an effective tax system, a differential reduction of MET rates and of export duty rates for certain regions characterised by high development costs is, in principal, justified because this enables investors gain the necessary return on investments in the development of new fields. At the same time, the tax holidays and reduced rate mechanisms applied for these purposes, which are simple from the point of view of tax administration, are far from perfect. For all fields within a certain region (the shelf zone) a unified, averaged approach is applied where no account is taken of the considerable differences in costs relating to development of specific fields in the region. As a result, for deposits having the highest costs, an “average” tax burden turns out to be extremely high and these deposits are not being developed.

A better form of taxation for oil production, as applied in developed countries, is the taxation of additional (net) income. This approach ensures automatic differentiation of the tax burden depending on the specific conditions of oil extraction. Such an approach takes into account, not only the gross income gained by the producer (as in the application of MET or export duty) but also the costs relating to oil extraction from particular deposits. The application of such a tax regime would allow for the creation of the conditions necessary for the development of new deposits where there are high capital, operational and transportation costs.

2012 has also become the first year of operation of the new scheme of taxation for crude oil and exported oil products (the so called 60-66-90 scheme). At the end of 2011 the general export duty rate was decreased by applying a coefficient of 0.60 (instead of 0.65) in the formula for the calculation of the export duty rate (*Table 36*). This has reduced the tax burden on the oil production industry and should have a positive effect on oil production.

Table 36

Maximum rates of oil export duty

World price for Urals oil	Rate, USD/ton
Up to 15 USD/bbl	0
From 15 to 20 USD/bbl	$0.35\times(P-15)\times 7.3$

From 20 to 25 USD/bbl	12.78+0.45×(*P*–20)×7.3
Over 25 USD/bbl	29.2+0.65×(*P*–25)×7.3

Symbols: *P* – Urals oil price, USD/bbl
Source: Law of the RF No.409-FZ on Customs Tariff.

The export duties on petroleum products are set at a lower level compared to the export duties on crude oil. In 2006-2010 the export duty on light petroleum products was about 0.72 of the duty on crude oil exports, and the rate of export duty on dark petroleum products was about 0.39 of the crude oil export duty. This stimulated the growth of oil refining within the country and an increase in the export of oil products. Whilst oil production grew by 7.5% during the period of 2006-2010, primary oil processing increased by 19.9% and the export of oil products grew by 36.3%. The oil refining growth of 85% observed during this period was facilitated by the growth in oil product exports.

At the same time, such differentiation of export duties did not stimulate an increase in the depth of oil refining. In 2011 the oil refining depth in Russia was only 71%, i.e. for the period from 2000 it has shown practically no increase. The growth of Russian exports of petroleum products observed in recent years has mainly been due to the increase in exports of residual oil, which is used in Europe as a raw material for further refining and the production of light petroleum products.

In these circumstances, in order to stimulate modernisation of the Russian oil refining sector and to increase the depth of oil refining, a number of decisions were made in 2010-2011 for a stage-by-stage increase of export duty on residual oil to the level of 66% of the rate of crude oil export duty (*Table 37*). At the same time, in 2011, under the conditions of the so called "petrol crisis" and market saturation, an increased (limiting) export duty on petrol was introduced at the rate of 90% of the rate of crude oil export duty.

The results for 2012 show that the increase of the export duty on residual oil, up to 66% of the crude oil export duty, did not have any effect on the situation: production of residual oil and its export continued to grow and the depth of oil refining showed practically no increase. At the same time, the forthcoming increase (to be introduced in 2015) in export duty on residual oil, up to that for crude oil, has provided an incentive for oil companies to begin the modernisation of their oil refining facilities. At the moment oil companies are implementing special programmes for the modernisation of oil refining facilities approved the by federal governmental authorities. Implementation of these programmes should considerably increase the technological level of the oil refining sector and improve the depth of oil refining in Russia.

Table 37

Export duty rates on petroleum products in 2011-2015 (as a ratio to the rate of crude oil export duty)

	From 1 January to 30 April 2011	From 1 May to 30 September 2011	From 1 October 2011 to 31 December 2014	From 1 January 2015
Commercial petrol, directly distilled petrol	0.67	0.90	0.90	0.90
Light distillates, medium distillates, diesel fuel	0.67	0.67	0.66	0.66
Residual oil, lubricating oils, etc.	0.467	0.467	0.66	1

Source: Resolutions of the RF Government dated 27.12.2010 No.1155, dated 26.08.2011 No.716.

An important aspect of tax regulation in 2012 was the considerable increase in the tax burden on the gas sector. In 2011-2012 the MET rate on natural gas was raised significantly. For the period of 2006-2010 this rate had remained unchanged whilst wholesale prices for gas on

the domestic market had increased more than two-fold. As a result, the MET rate for natural gas during these years decreased both in absolute and relative terms (as a percentage of the price). In 2011 this tax rate was indexed at 1.61 times which actually corresponded to the cumulative inflation for the period 2007-2010.

However, the high profitability of the production, transportation and sale of natural gas evidenced a considerably lower level of tax burden in the Russian gas sector compared to the oil sector and the possibility of a further substantial increase of the MET rate. As shown by calculations based on the annual financial statement data of companies acting in the industry, in 2011, the after-tax income calculated as a percentage of net profit to gross income for the oil sector was 14.6%, whilst for the gas sector it was 33.9%.

As a result, in 2012, the MET rate for natural gas was increased to 509 rubles/thousand cubic metres, or by 2.15 times compared to 2011. For 2013-2015 there are additional increases in this tax rate (*Table 38*). These should bring the tax burden on the gas sector to that of the oil sector and withdraw a major part of the additional (essentially rental) income from the proposed increase in domestic gas prices for the benefit of the state.

Table 38

MET rate for natural gas production in 2010-2015

	2010	2011	2012	2013 I half	2013 II half	2014	2015
MET rate, rubles/thousand cubic metres	147	237	509	582	622	700	788

Source: Tax Code of the RF (revision of 2010-2012), Federal Law dated 29.11.2012 No.204-FZ.

The decisions made have considerably increased the tax burden on OAO Gazprom, which, as the owner of the Unified Gas Supply System, receives relevant income from the transportation and export of natural gas. For all organisations other than owners of the Unified Gas Supply System facilities and organizations in which owners of the Unifired Gas Supply System facilities hold over 50% of the shares a reduced coefficient is applied to the established rate (in 2012 this coefficient was 0.493).

The increase of the MET rate on natural gas will provide for a more complete withdrawal of gas rent and increase state budget revenues. In the future it is expedient to set the MET rate for natural gas on the basis of a special formula which takes into account the main rent forming factors, above all, the price of gas. At the same time it would be expedient to ensure differentiation of the MET rate for gas, depending on the actual conditions of its extraction. For new gas deposits, the development of which requires higher capital and operational costs (for example, deposits on the continental shelf), it would be expedient to apply reduced MET rates.

In prospect, it is reasonable to introduce a level of tax on additional income from new gas fields which will allow for an automatic differentiation of the tax burden, depending on the conditions relating to the development of the relevant deposits.