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RUSSIAN OIL AND GAS INDUSTRY ON THE EVE OF CHANGES***

1. INTRODUCTION

In 2016 Russia's oil and gas industry celebrated 150th anniversary of its creation. 150 years before, in February 1866, in the valley of Kudako river in Kuban Oblast first oil in Russia flew. It was a breakthrough moment in the history of Russian economy's development due to two main reasons: firstly, it was a strong impulse to develop the national oil industry, secondly, a proof of huge technological potential of Russia.

Today, when oil industry is at its best technological revolution, Russian oil industry loses to its competitors. Current situation of Russian oil sector derives from the lack of any reforms for two decades when based on the Soviet Union's legacy. Most of production still comes from old soviet-era fields and this wealth is running out [27]. Therefore, mentioned anniversary is a good moment to consider contemporary Russia's oil industry, problems to be faced and prospects to its development.

It is hard to imagine Russia's economy without its accelerator – oil industry. Income from export of raw materials (mainly crude oil) has been a crucial part of federal budget of Russia-around 50% and allows subsidizing other branches of economy. Rising oil prices after 2000 made oil sector on one hand to become Russian's economy accelerator, but on the other hand – new risks appeared deriving from its raw material orientation and excessive sensitivity to changing oil prices. Year by year dependence of the national economy on the oil industry has been increasing and considering its diversification is less important than one outstanding fact: oil and gas will remain the fundamentals of Russia's budget.

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2. RESOURCES CONDITIONS AND EXPLOITATION REGIONS

Russia owns one of the biggest oil reserves in the world, which is 5–6% of world's reserves, what places Russia on the 6th position in world's classification, it is also one of the biggest producer of this raw material with 14% share in the world's production in 2013. According to data of Ministry of Energy, geological resources of crude oil in Russia is 74,3 bn of tonnes. Unfortunately, modern technical possibilities significantly limit the country's resources potential, what enables to assess exploitable resources for 22 bn tonnes. According to international classification, the oil resources in Russia is twice smaller [5]. It is connected with the fact that applicable in Russia assessment system is based on geological and technical parameters, whilst the economics of upstream facilities is not taken into account.

Among few regions of oil exploitation in Russia, for decades eastern Siberia has been placed as number one (Tab. 1). According to data for 2012, it takes 61,2% of the total annual production. Minor importance in terms of national share have other exploitation regions Ural-Volga – 22,7%, Timano-Pechora – 5,3%, Eastern Siberia – 6,8%, Far East– 2,7%, Caucasus – 1,3% [11].

Table 1

Regions of oil exploitation in Russia and their share in total production

Region	2011		2012	
	mln tonnes	% of Russian production	mln tonnes	% of Russian production
Eastern Siberia	316.3	61.8	317.2	61.2
Khanty-Mansi Autonomous	262.5	51.3	259.9	50.2
Yamalo-Nenets Autonomous	34.5	6.7	36.4	7
Tomskaya region	11.6	2.3	11.9	2.3
Novosibirskaya region	0.85	0.2	0.6	0.1
Omsk region	0.4	0.1	0.4	0.1
South Tyumen region	6.5	1.3	8	1.5
Ural-Volga	115.6	22.6	117.7	23
Timano-Pechora	28.5	5.6	27.2	5.3
Eastern Siberia	27.2	5.3	35.1	6.8
Far East	15.2	3	14.2	2.7
Caucasus	8.6	1.7	6.7	1.3
Total	511	100	518	100

Source: [11]

Western Siberia covers two-thirds of all the oil resources of Russia. Nine out of 550 developed oil fields belong to the category of unique (resources over 300 million tonnes), 52 – large (60–300 million tonnes). Additionally, there are located seven out of ten largest Russia's oil fields. In Western Siberia oil region high quality oil is being produced with low or medium sulfur content – about 70% of the documented reserves is light crude. As a result of many years of exploitation in this region, documented oil reserves are depleted in average of 50% [22].

High level of oil stock depletion in the traditional exploitation regions enforces the necessity of managing new, unexplored regions. The most prospective areas are:

1. Eastern Siberia,
2. Far East,
3. Arctic shelf,
4. Caspian Sea and Black Sea shelf.

In the case of two first mentioned provinces, oil production has already been underway, although it remains on a relatively low level. According to the SE-2035, Eastern Siberia in the future is to become one of the most important petroleum provinces of Russia, compensating for the decline in production at the depleted fields in Western Siberia [20].

According to government data, the share of Eastern Siberia in the total oil production in 2012 amounted to about 6.8%, but by 2030 should rise to 16% [16]. However, the implementation of shelf projects – due to high investment cost at the stage of exploration and research, the need for modern technological solutions and difficulties related to the western sanctions imposed on Russia – belongs to the future [29].

3. THE LEVEL OF OIL PRODUCTION IN RUSSIA

After 1991 as a result of disintegration of Soviet system of production, distribution, processing and sale of raw materials, Russian oil and gas sector plunged into crisis. As a result, the level of oil production reduced to 301.2 million tonnes in 1996, while still in 1990 (before the Soviet Union disintegration) 516 million tonnes of oil from fields located in the territory of Russia were produced.

At the beginning of the 2000s oil sector started a stable development within the model of a free market economy based on a private property and initiative. In order to perform successful research and exploration work and managing new, unconventional oil reservoirs, Russian companies have benefited from the support of foreign capital towards agreement on dividing the production and creating joint ventures which resulted in the growth of future production. In the heyday of raw materials “oligarchy” (2001–2002) oil production increased by 9% year on year.

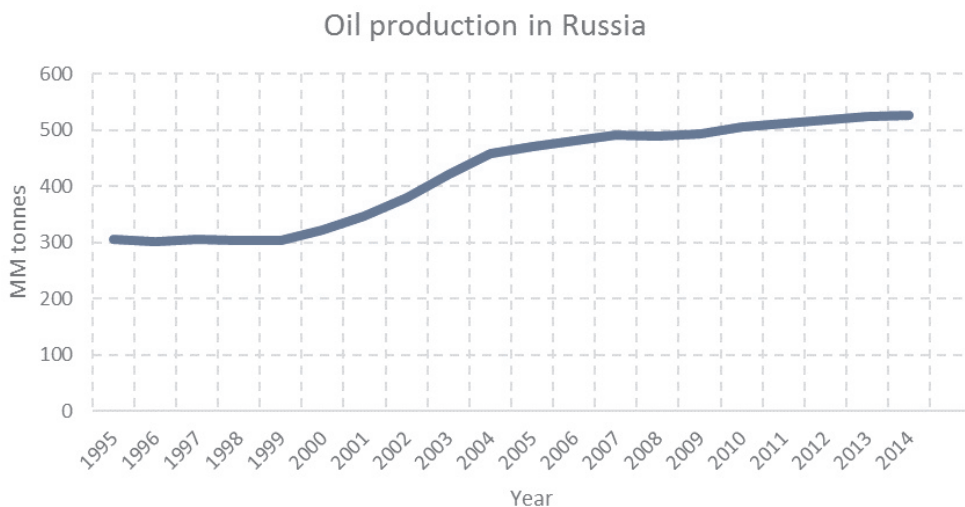


Fig. 1. Oil production in Russia [11]

Optimistic forecast prepared by the players of oil market assumed a rapid increase in the level of oil in the first decade of the XXIst century. However, the actions of Russian government in the years 2003–2004 resulted in the freezing or cancellation of previously adopted long-term investment projects, which were to become a guarantee of sector’s dynamic development in the future. An important role in weakening the condition of oil industry played a government’s decision of March 2004 to raise a tax rate for the sector and the lack of permission to build a private oil pipeline “Eastern Siberia – Murmansk” lobbied by Yukos. What is more, they blocked possibility of using on the territory of Russia agreements concerning division of production, stimulating investments into large oil and gas projects. Being unable to create favourable development incentives, in the same time the country also initiated a process to nationalize the oil industry.

In the end, this resulted in a smaller than expected increase in oil production in Russia in the coming years (after 2004 dynamics rate in the upstream segment decreased from 8.9% to 2.4–2.2% in 2005–2007, and since 2009 has been oscillating around 1%).

Increase in the level of production in 2009–2013 was connected with introducing into operation three large oil fields of Western Siberia: Vankor, Talakan and Verhnechonsky, which in 2010 produced more than 20 million tonnes of oil [7]. It is worth mentioning that all three fields began to operate due to reduced tax rates.

At the same time, production in traditional oil provinces showed a decreasing trend. According to experts, in order to fully overcome the natural decline in production, it becomes necessary to introduce each year three or four oil fields with a potential of approximately 500 million tonnes [5] (Fig. 1). However, Russian oil companies are not currently prepared to perform this task without the support of foreign capital.

Majority of oil production comes from the region of Western Siberia. Currently, 90% of the oil is being extracted from reservoirs discovered by 1988, and only 10% – from reservoirs discovered in the following years [5].

In order to maintain oil production on the current level, the authorities should be focused on minimizing the expected decline in production in old fields of Western Siberia oil region, and utilization of a new “generation” of crude oil, located in non-conventional reservoirs. Solution to the first issue will be connected with the use of advanced production methods for mature fields and the need to conduct geological and exploration research for further managing and exploitation of unconventional oil fields.

4. THE IMPORTANCE OF OIL SECTOR FOR THE RUSSIAN ECONOMY

The main reason of currently weak condition of Russian economy are low oil prices, raw material, export income which for years has been a major part of federal budget. In 2000 oil profit share in a federal budget was 25% but already in 2015 it was somewhere about 50%. The revenue surplus from the sale of energy resources is spent on the development of other industries of Russian economy, infrastructure projects and the accumulation of reserve funds.

Discussion concerning accumulation of financial reserves in Russia started at the beginning of the twenty-first century, when situation on the global commodity markets had improved and with the increase in the following years, the budget surplus appeared in the issue of budget planning. The derivative of still rising oil prices on the international market was creation in 2002 first Russian financial reserve.

In 2004 a Stabilization Fund was created, its development and activities can be divided into three stages:

- Stage I.** At this stage (until 2003) financial reserve was created, which later became the basis for the Stabilization Fund. In practice, the federal tax office was opened, and the money generated from energy exports was transferred there. The specificity of financial policy concerning creating reserves in this period was the fact that the profit from export sales of oil and gas was not a subject of accumulation but the “excess profit” when the real price of raw materials turned out to be much higher as forecast by the state.
- Stage II.** It began on January 1, 2004 when Stabilization Fund was established. Stabilization Fund, like its predecessor, was a part of federal budget of the state. The official reason for its establishment was the need to create a “safety cushion” in case of “Dutch disease”.
- Stage III.** The final stage of the activity of analyzed subject was separating funds of Stabilization Fund for newly created Reserve Fund and National Welfare Fund. At the time of its transformation, the fund gathered 3,852 billion RUR [18].

The aims of Stabilization Fund – according to the act – were formed in the following way:

“The fund is called in order to guarantee the sustainability of the federal budget in case of a drop in oil prices below the baseline. The fund promotes the stability of the country’s economic development, is one of the basic tool of suppression unnecessary liquidity, reducing inflation pressure, reduces the dependence of the national economy from adverse fluctuations in export earnings of raw materials” [3].

The immediate successor of the Stabilization Fund was Reserve Fund (with a few exceptions), and the National Welfare Fund, created similarly to Norwegian Oil and Gas Fund (Government Pension Fund Global), had to guarantee a long-term stability of a pension system [4].

According to the National Bank data – Russian reserve fund – at the end of 2014 entered a group of first fifteen biggest world’s funds – gathering 174.7 billion USD of financial reserves. Unfortunately, it is highly probable that within few next years reserve funds which helped Russia to survive crisis of 2008/2009 and became the main source of covering budget deficit since the West’s sanctions have reduced Russia’s access to the international capital market, will begin rapidly reduce the status of their resources or even will be completely exhausted. Low prices of oil on the international markets have caused that in 2016 Russia entered the economic collapse. Unlike the previous economic crisis of 2008–2009, when after a sudden and profound drop there was a sharp (although short-term) growth, in the current situation smoother and longer decline will likely be replaced by a similar slow increase. Unfortunately, the bouncing point of Russian economy from the bottom is constantly moved in time, and no forecasts predict a rapid post-crisis growth. Most economists believe that without carrying out extensive structural and institutional reforms, the pace of economic growth in the year will amount on the lower level than the average worldwide – 1.5–2%.

Fluctuations in oil prices on world markets at the end of 2015 caused difficulties in approving by Russian government budget for 2016, when repeatedly made adjustments to it. Finally, in autumn 2015 Representatives of the State Duma approved a three-year budget, based on the price of oil at \$ 100 a barrel, while assuming the use of 500 billion RUR in 2015 from the Reserve Fund to cover the budget deficit.

Even then, Finance Minister Anton Siluanow warned that assumed in the budget level of oil prices is far overstated, which will reflect into greater than planned budget deficit. Minister’s assumptions came true. In the first half of 2015 Russia recorded the highest deficit in ten years non oil-gas federal budget – 11% of GDP (in recent years amounted to around 2.3% of GDP). That is why in the first half of 2015, 500 billion of RUR was transferred from accounts of Reserve Fund to federal budget, and by the end of August another 500 billion RUR [26].

In addition, from the National Welfare Fund for investment in the Russian economy 350 billion RUR was redirected. As of September 1, 2015 the scale of Russian wealth funds amounted to RUR 9.6 trillion, or 12.9% of GDP (Reserve Fund – RUR 4.7 trillion, the National Welfare Fund – 4.9 billion RUR) [17].

The Ministry of Finance is planning to use all the resources of the Reserve Fund until the end of 2017, before using the National Welfare Fund. In the 2017 from the National Welfare Fund will be used 437 billion RUR, in 2018 – 575 billion; at the end of 2015 years the National Welfare Fund will total 2.4 trillion RUR, without taking into account the 60% of which are intended for investments. The Ministry of Finance assumes that in the National Welfare Fund at the end of 2018 remain 1.2 trillion RUR, not taking into account the money for investments (while the Reserve Fund will be exhausted in 2017) [17].

Therefore, in the next decade in the new market realities (low oil prices that ravaged the federal budget and do not allow the Russian economy to recover from the crisis) the oil industry in order to maintain production on the current or higher level, as established in the Energy Strategy of Russia until 2030 year, it will have to face several problems that could impede its development.

These include:

- Deficit of investments in the segment of production and exploration.
- Unfavourable investment atmosphere for foreign and private investors.
- Unfavourable fiscal system.
- Western sanctions imposed on Russia as a result of conflict with Ukraine.

5. DEFICIT OF INVESTMENTS IN THE EXPLORATION SEGMENT

Low, compared to international standards, level of annual investment in the oil sector – 44 billion USD in 2013 [2] – mainly due to the fact that in recent years Russia's oil and gas were not forced to carry out active work of geological exploration because of significant potential guaranteed by existing reservoirs. Nonetheless, current situation on geological and exploration level has been changing. Ernst&Young's detailed analysis on Russian oil industry showed that companies will be able to operate and manage the existing and prospective reservoirs by 2025. Later on, maintaining the current size of the investment on the level of geological and exploration work, may face the problem of compensation of oil resources [12]. What is more, a significant part of resources on existing reservoirs belongs to the category of difficult access [8].

Some problems can be resolved with the planned accelerated exploitation of Eastern Siberia fields and the Caspian area, as well as through the use of modern

methods of advanced oil exploration. However, after 2025, according to the ratings of Ernst & Young, in the oil sector it will be necessary to increase production with the new projects for geological exploration at the level of 20 million tonnes in 2025 and 90 million tons in 2030 [12].

Starting from 2025 the possibility of operating and developing current onshore reservoirs will be insufficient to achieve the government's planned level of 500 million tonnes. In 2030 and especially in 2035 the difference between planned and actual production can be overcome only under condition of implementing to the exploiting cycle new, yet unexplored reservoirs.

The above data indicate the need for geological and exploration work in new regions such as the Black Sea shelf, the Arctic shelf, Sea of Okhotsk, and others.

As previously noted, in 2013, Russian oil companies WINK allocated \$ 44 billion for investments. Investments in the segment of exploration and oil production amounted to slightly more than \$ 30 billion, 2% more than in the previous year. In the years 2005–2013 the average annual growth rate of costs in the analyzed segment amounted to 17%.

In the past eight years WINK increased level of costs associated with drilling. If in 2005 the cost of drilling production wells amounted to slightly more than 30% of investment in exploration and production segment, in the past five years, the rate oscillates around 40%.

The share of the investment that are intended exclusively for exploratory drilling is still very low – 4% [2]. This is due, among other things, to the fact that Russian companies have led the work mainly in the area of land where the cost of the well is up to about \$15 million (excluding wells with a depth of 6–7 km with hydrogen sulfide). Meanwhile, on the shelf, investment costs for a single borehole may rise to 60–120 million USD [12].

Ernst & Young analysts concluded that Russian companies will be forced to at least a double increase in investment in geological and exploration work. First, greater investment will cover the rising costs of drilling. The share of seismic and other types of preliminary tests will decrease in relation to the total cost of geological exploration as shelf drilling will require much larger investments [12].

Yet at the beginning of 2014, the Russian energy minister Aleksander Nowak, highlighted the success of oil and gas industry in the area of attracting investments. According to the estimates by the Ministry of Energy of Russia, their growth in the oil sector year on year (2013) amounted to 65 billion RUR. Only WINK company invested in mining 900 billion RUR. By 50% increased investment in the refinery segment, amounted to 270 billion RUR [1].

The sharp decline in oil prices, recorded in the second half of 2014 resulted in an adjustment of investment plans both in global and Russian oil companies. The correction of the investment plans of Russian oil companies was additionally influenced by the

sanctions of the West introduced in the second half of the year. In the new conditions, Russian companies re-planned their budgets assuming the price of oil at the level of 50–70 USD per barrel, and began to prepare reducing investment programmes. In 2015, 15% of oil projects were questioned.

From the above, one can conclude that Russian oil companies will not be able to maintain a stable level of production within next thirty years, utilising non-traditional, capital-intensive oil reservoirs. Implementation of such projects will be possible only in case of foreign investments [12].

6. UNFAVOURABLE INVESTMENT ATMOSPHERE FOR FOREIGN AND PRIVATE INVESTORS

Attracting foreign capital to the oil sector will be extremely difficult as Russian oil and gas companies in recent years have been successfully trying to fence off “their” native reservoirs from foreign investors [23]. Russia’s authorities have been practising strategy of “protecting” the national economy from foreign investment. It could be noticed in regulation on extending the list of strategic sectors, imposed on the eve of global economic crisis in 2008. Updated catalogue includes a total of forty-two branches of industries, which represents almost half of the Russian economy. On the list there is also the oil sector and specifying – segment of geological research of reservoirs.

Accepted in 2008 amendments to the regulation “About minerals” [28], impede access to the most attractive areas of concession, not only for foreign investors but also Russian companies which do not have the state as a main shareholder. According to amendment, users of oil concession areas (all offshore reservoirs, as well as concession areas located onshore with recoverable volume of 70 million tonnes of oil and 50 billion m³ of gas) can only be Russian legal entities.

Moreover, additional access restrictions might be imposed while applying for competitions and auctions for companies with foreign capital. Private Russian companies have no chance to obtain an exploration lease on the continental shelf. The legislator stipulated that shelf work may be lead by Russian companies with state participation over 50%, additionally with at least five-year experience working in the areas of continental RF shelf. Most probably, Gazprom and Rosneft, were promised subsidies from the federal budget on a geological research of concession areas. All other companies – private and foreign – can participate in shelf projects only as partners of state’s companies. Between foreign investors and Russia’s state companies, joint venture contracts are signed – as in case of foreign Shell, ExxonMobil and Lukoil.

The amendment to regulation “About minerals” became a serious obstacle to continue geological research on the shelf and utilizing offshore reservoirs. The Act

strengthened monopoly of Rosneft and Gazprom on the Russian shelf, although both state-owned companies are not able to manage such wealth. Both are severely in debt, have a funding deficit and decline to implement capital-intensive projects.

In September 2013, the head of Lukoil Wagit Alekpierow checked whether state-owned companies are ready to work in new reality, and having received a negative result, he directed to the Government the following letter, fighting for the right of access to the shelves of private companies:

“I hope that finally it will be achieved [admission to the shelf by private companies – Authors]. When – I do not know. It might be prolonged, or solved very quickly. For the time being, the law is still valid, and we will fulfill it, but continue to fight. As this bill reduces the investment attractiveness of the Russian economy and affects its development” [25].

At the end of 2012 the Russian Ministry of Energy estimated that the development of the Russian Arctic shelf by 2050 will cost the state about \$ 500 billion. It is worth noting that the execution of one well in the seas of the Arctic is the cost around 3 billion RUR. The annual investment costs of Russian federal budget for the implementation of shelf research and exploration is about 1 billion RUR [30].

Therefore, it is unlikely that in the next decade, the state would take over the burden of conducting research and exploration in the promising oil provinces. It also appears that at the current low price of oil, potential support of private Russian oil sector will not be helpful – estimated by Lukoil analysts, oil price for a viable management of deep-sea reservoirs should be between 50 to 90 USD depending on the depth and area of extraction [5].

Therefore, the representatives of the Ministry of Environmental Protection of Russia for years have been warning that keeping monopoly of two state-owned companies on the shelf will prolong managing prospective offshore reservoirs to 165 years. The conclusions of the above considerations indicate that improvement cannot be expected in the condition of the upstream segment of the Russian oil sector without liberalization of access for foreign investors to work on Russian shelf [9].

Transformation of Russian legislation in the direction of tightening state control over the activities of foreign business in the oil sector, introducing a number of additional restrictions within development of shelf reservoirs led to deterioration of the investment climate in the industry and outflow of foreign capital. It resulted in a decrease of issuing licenses for license areas – more than 70% of the auction planned for 2009–2010 was cancelled due to a lack of challengers. The sum of one-time fees for licenses decreased in 2010, almost ten times compared with 2007 [30].

Due to foreign capital outflow in March 2015, president Putin ultimately ordered the liberalization of access to the shelf and to develop criteria based on which Russian

companies will receive the opportunity to work in these prospective regions of oil and gas [24]. On the other hand, the Ministry of the Environment FR submitted a bill, which allows foreign companies to independent work on so-called Russian fields of federal importance in case they discovered them themselves. Fields of federal significance include the licensed areas with the size of recoverable oil resources of 70 million tonnes, gas – 50 billion m³, gold – 50 tonnes, copper – from 500 thousand tonnes [24].

According to experts, the decision of Russian government is good, but late for a decade. Investors' approach to projects in Russia is negative, and the interest in oil and gas falls as a result of low raw material prices on world markets [24].

7. WESTERN SANCTIONS IMPOSED ON RUSSIA AS A RESULT OF GAS WAR WITH UKRAINE

Additional problem in encouraging foreign investors to the oil sector might be western sanctions imposed on Russia due to political and economic conflict between Russia and Ukraine. Imposed on September 12th, 2014 by USA influenced five Russian oil sector companies: Gazprom, Gazprom Nefte, Lukoil, Surgutneftegaz and Rosneft. The same day Europe limited access to European capital market to three biggest energy companies of Russia – Transneft, Gazprom Nefte and Rosneft. Both individuals and legal entities were imposed a ban on granting listed companies of oil sector, loans with a repayment term longer than thirty days and perform transactions with securities with over a month term return [13].

7.1. Three spheres of influence US and EU sanctions

Freezing projects involving foreign investors

The first sphere of sanctions, when the consequences should be the fastest and most visible, includes the participation of Western companies in oil and gas projects in Russia.

The greatest havoc in Russian oil industry, made the US company ExxonMobil, which has decided to stop its activities in the Russian Federation. The agreement on strategic cooperation between Rosneft and ExxonMobil assumed realisation of ten joint projects, including exploration and potential on the Black Sea shelf, in the Arctic and Western Siberia [6].

In this situation, the company Rosneft started to freeze or seek a postponement of the realization of capital-intensive projects in the Arctic shelf until the appeal of sanctions. Already in September 2014, the Russian oil giant came out with a proposal to move in time geological exploration work of the Arctic shelf from ten to fifteen years. The company also wants to postpone the work of geological exploration for reservoirs

in Eastern Siberia from seven to ten years [14], as well as considering the postponement of drilling in the Kara Sea until 2018. Among the reasons for such a decision including Western sanctions are mentioned: worse financial condition of the company and low oil prices.

Following Americans, European corporations also had to agree with imposed on Russia sanctions.

Therefore Shell resigned from Bazhenovsky fields in the Khanty-Mansi AO. As a result of the sanctions, just started cooperation between Lukoil and Total company was interrupted. In May 2014, the parties agreed on the establishment of a joint venture to Bazhenovsky fields development on three license areas in Western Siberia (Tashlinsky, Vostochno-Kovensky and Liaminsky). Under the agreement, the company still have three years to return to Bazhenovsky fields [10].

While Washington has blocked all the joint projects with Russia in the field of deep-sea reservoirs exploration, as well as Arctic oil and shale, the EU allows the possibility of cooperation in case the contracts had been signed earlier.

Restricted access to the European capital market

Much stronger influence on Russian companies was to limit access to financing sources. It was connected with two factors.

Firstly, Russian companies WINK in recent years of activity were increasing their debt which they partially paid back by borrowing additional loans. Implementing sanctions excluded possibility of action, and therefore raises the question of whether WINK companies will be able to keep the subsequent payment of their debts.

Secondly, the implementation of new large-scale projects aimed at maintaining the existing level of production, requires considerable financial resources. Only investments in the development of Arctic reservoirs were estimated by Rosneft at \$ 400 billion within twenty years. Not a small part of this amount was supposed to be acquired precisely as loans from Western banks.

Nevertheless, the events of the second half of 2014 years did not result in a drastic deterioration in the current financial condition of Russian oil companies: two-time devaluation of the ruble compensated for the losses of exporters as a result of a double-drop in oil prices.

WINK companies operate in the ruble zone, they pay taxes and salaries in ruble, they fund investment programmes. In a positive way on the financial condition of oil companies influences the fact that oil is sold using future diagrams (e.g. in the middle of 2015 the companies received cash in-flows at a price of 70–80 USD per barrel in accordance with agreed three months earlier contracts) [21]. The main problem of Russian WINK remains debt. Among the largest oil companies, Rosneft is in particular affected by this problem.

Ban on exports to Russia of equipment and technology for the oil sector

Third key area of sanctions is delivery to RF technology and equipment for the oil sector. In the research concerning the impact of sanctions on the oil and gas complex of RF, the Fitch agency concluded that forbidding delivery to Russian market a specific type of equipment and technology will not have a significant impact on the level of mineral resources extraction in the short term. However, in case of sanctions extension in the medium term, the oil industry could encounter difficulties.

Thus, the situation in the field of technology is similar to the one which occurred in the sphere of joint projects (especially shelves) and sources of external financing. It means that sanctions in the short term does not pose a real threat to the oil industry. However, no one knows yet if they influence long-term development of oil and gas complex.

Russia has won only some battles so far, but the final result of the sanction war has not been decided yet. Keeping strained relations with western countries, not to mention their deterioration, with no doubt will reflect in a negative way the condition of oil industry in the long term. On the other hand, hypothetical stepping away from a sanction regime will not remove the problems that faced the oil sector long before the introduction of sanctions. It is about, among others, the need to redefine the fiscal policy of the state in relation to the energy complex.

8. CONTROVERSIAL FISCAL POLICY OF RUSSIA'S OIL SECTOR

Tax reform in Russian oil sector has a long history of more than fifteen years, which consisted of four consecutive fiscal maneuvers. The main objective of reforming the fiscal system of the oil sector in this period was to increase the transfer of revenues from the oil production to the Treasury.

The main tax paid with reservoir exploitation activities is introduced in 2002, tax on extraction of mineral resources – NDPI. For the tax base, for all types of oil, exploited from reservoirs of different geological structure, was taken the quantity of produced raw materials. By 2007, the scale of NDPI was flat, did not take into account the uniqueness of parameters of individual reservoirs, the degree of exploitation, which raised a number of problems, such as decline in oil production, selective exploitation from rich reservoirs, lack of interest in developing new fields, difficult conditions for the development of small businesses, which mostly operate on small, hard to reach oil reservoirs. Due to the decline in oil production in 2007, a number of tax credits were introduced to stimulate exploration of new and mature fields [15].

The main objective of the fiscal rules was to provide the advantage of a large oil companies, which managed best fields, as well as consolidation of the sector in their

hands, at the cost of crowding out small and medium-sized players. Already in 2002, experts warned about such a step, forecasting negative impact of NDPI tax on oil exploitation from the vast number of small, hard to reach and mature fields. However, the strategy of the state, both then and now, is reduced to provide adequate financial income to the federal budget. It was easier to protect interests of the largest tax payers, which accounts for 95% of domestic oil production, than to take care of hundreds of small and medium-sized oil companies.

According to RBK experts' evaluations in the period from 1999 to 2012, the tax burden on oil companies income increased from 20% to 55%, and profits – from 32% to 81%. At a price of 70 UDS per barrel of Ural crude to the federal budget was getting only as NDPI about 65% of company revenues, excluding other taxes [19].

Fourteen-year old practice of NDPI (including four tax manoeuvres) showed that existing tax system is not able to cope with current problems of the oil sector. It is aimed at the confiscation of current income generated due to the favourable price on world markets. Currently used tax system is justified only for projects that are not associated with major capital expenditures, but does not apply for the implementation of new capital-intensive projects in exploration regions and on the shelves of northern seas. Current tax policy in oil sector does not take into account the need of creating new favourable conditions to develop the sector, which without proper economic support in the nearest years might face investment deficit. The only logical solution would be creating differentiated level of taxation, based on the financial results of individual investment projects.

9. CONCLUSION

In the coming years Russia's oil sector will have to face many challenges, both external (low oil price, sanctions) and internal (reducing production level, tax reform). Sudden fall of oil prices on world markets at the end of 2014, less than 50 USD per barrel, showed that Russian economy is not ready for such situation in the long run. Decreasing oil prices paralysed federal budget in half donated by oil revenues. Maintaining oil prices on low level – 35–40 USD per barrel – or further decrease, may cause Russian economy to stay in recession for another two years, experts claim. However, oil sector will struggle with a problem of underinvestment on a higher level than currently. The crisis once again has exposed the danger resulting from the mismanagement of the economy by targeting raw materials, in turn, oil companies were forced to search for effective solutions to optimize production and reduce costs.

Although Russian oil sector is about to implement necessary reforms, however, under conditions of great dependence of the federal budget on oil revenues (which no

longer continue to grow) their introducing is uncertain. It is highly probable that despite negative experience of economic crisis, Russia's authorities will not resign from the perception of oil sector as a driving force of the national economy. It can be proved by a project "Energetic Strategy of Russia until 2035", for which a solution to Russian economy's problems is only possible due to choosing raw-innovative development strategy, using the potential of the exploitation industries, domestic science, innovation and new technologies. But, as Tuzowa and Qayum [27] emphasized Russia should find and develop other tradable industries or its long-term economic prospect will not be optimistic.

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