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## The Mineral Resource Extraction Tax (MRET): Current Situation and Opportunities for Future Development

**Review.** Due to the resource oriented state of the Russian economy, the taxation of the recovery of minerals is one of the main sources of revenue for the budget of the Russian Federation. Even minor changes in the price of oil on the international market have a huge impact upon the national budget of the Russian Federation, and the problem of replenishing it has lately become quite relevant. Over the course of being enacted the Mineral Resource Extraction Tax (MRET) has proven its fiscal orientation, while its regulating regulatory function has moved to the background and in doing so, acquired multiple problems in the field of oil extraction. This article reveals the flaws within the MRET of the Russian Federation and reviews the ways of improving it under the current conditions. The conclusions are made on the quality of the conducted tax policies in the Russian Federation with regards to taxation of the petroleum extraction industry, including changes to the current legislation. Presently, we can observe an annual increase in the MRET revenue into the budget of the Russian Federation and the growth in the specific weight of tax within the overall structure of budget revenue. However, despite the positive dynamics of the MRET index, there is a growing number of flaws within the current system of oil taxation that have negative effect on the present state and future development of the industry.

**Keywords:** technology, investments, raw material base, incentives, tax burden, MRET, extraction of petroleum, revenue, tax strategy, the Mineral Resource.

he modern petroleum industry is the basis of Russia's economy and is a contributor to the national budget. The dynamics of the taxes and other revenues of the federal government (includes consolidated budget and non-budget funds) is presented in Table 1.

In the Table1 we can see that the revenue from taxes and fees associated with

taxation of oil, natural gas and petroleum products compile almost 1/3 of the overall tax withholdings in GDP. It is important to note that with the decrease of the portion of tax revenue into the GDP from 36.49% in 2007 to 33.31% in 2013, the specific weight of tax revenue from the oil and gas sector has a tendency for increase from 9.27% in 2007 to 10.58% in 2013.

Table 1. The dynamics of the federal government budget from taxation of extraction and export	
of petroleum and petroleum products during the period of 2007–2013,% to GDP $^{\scriptscriptstyle [10]}$	

	2007	2008	2009	2010	2011	2012	2013
Tax revenues ans payments	36.49	36.04	30.88	31.12	34.54	34.99	33.31
Revenues from taxes and fees related to the taxation of oil, gas, and petroleum products	9.27	11.17	8.19	8.64	10.81	11.22	10.58
MRET on petroleum	3.22	3.81	2.41	2.74	3.32	3.45	3.28
MRET on gas	0.29	0.24	0.21	0.20	0.26	0.43	0.49
Excise taxes on petroleum products	0.40	0.34	0.38	0.37	0.51	0.59	0.63
Export customs duties on petroleum	3.46	4.32	3.10	3.61	4.19	4.03	3.50
Export customs duties on gas	0.91	1.19	1.12	0.42	0.69	0.70	0.72
Export customs duties on petroleum products	0.99	1.27	0.98	1.30	1.68	1.83	1.81
Revenues from taxes and other payments not related to taxation of oil, gas, and petroleum products	27.21	24.87	22.69	22.48	23.73	23.76	22.73

*Table 2. Tax burden on the oil and gas sector and the effect on the revenue of the federal budget for the period of 2007–2013,% to GDP* [10]

	2007	2008	2009	2010	2011	2012	2013	
Tax revenues and payments	36.49	36.04	30.88	31.12	34.54	34.99	33.31	
The overall tax revenues to GDP by industry								
Extraction of crude oil and natural gas; services offered in these industries	11.85	12.00	8.69	9.22	11.23	11.48	10.89	
Other industries	24.64	24.04	22.19	21.90	23.31	23.51	22.42	
Tax revenues to GDP by industry								
Extraction of crude oil and natural gas; services offered in these industries	85.35	88.95	75.21	75.43	78.72	76.63	74.83	
Other industries	28.61	27.78	25.09	24.95	27.18	27.65	26.25	

Analyzing the level of tax burden by separate types of taxes in Russia attention should be paid to the tax on the recovery of minerals, since within the Russian Federation the revenues from this particular tax still make up a significant portion.

The taxation of oil and gas sector steadily provides almost 1/3 of the overall revenues. In 2013 the tax revenue from the oil and gas sector amounted to 10.9% of GDP, while receiving 22.4% of GDP from the rest of the industries. In addition to this, the tax bracket for the oil and gas sector is three time higher than for the rest of the industries: in 2013 it was 74.8%, and 26.3% respectively.

The research shows a steady growth of revenues of the budget system of the Russian Federation from taxation of petroleum, export duties, and MRET. In this respect the tax cut of 2009 was related to the enactment of new tax policies within the Russian Federation pertaining to the stimulation of development of new deposits and increase in effectiveness of petroleum extraction in the current high-yield deposits. These measures secured an increase of budget revenues due to the growth in extraction of petroleum.

For the purpose of comparing the tax burden in the Russian Federation, let's take a look at the data of the tax burden of the OECD member countries.

The average level of tax burden on the economy within the member states of the OECD in 2012 amounted to 34.91% of GDP, which is 0.08% lower than in Russia at 34.99% of GDP. At the same time the level of tax burden in Russia excluding the oil and gas revenues in 2012 amounted to 23.8% of GDP, which is 11.1% lower than the average level across OECD. The level of tax burden excluding the revenues into GDP from organizations conducting business or provide service in the crude oil and natural gas industry amounted to 23.5% of GDP in 2012, which is also 11.5% lower than the average level across OECD. Therefore, the MRET and the petroleum export duties carry an explicit fiscal character and can be viewed as a form of payments by the mineral developer to the owner — the government.

The high oil prices on the global market for a substantial period of time supported a high level of budget gains for the Russian Federation. However, despite the seemingly successful advancement of petroleum recovery, throughout all these years the problems only grew and started to manifest themselves as the oil prices began to fall on the global market.

Some of the factors that limit the development of the petroleum industry are: the worsening of the mineral base; partial depletion of the reserves; consumer attitude towards this economic sector, which is demonstrated by the lack of investments into this industry [16].

The accumulated problems lead to the fact that the future oil recovery will incur greater expenses and therefore be less profitable, while portion of the deposits will become completely unprofitable. On top of that, the new deposits are located beyond the already built infrastructure and would require new pipelines and purchasing of the necessary equipment. Currently the funding for the petroleum recovery companies

comes from amortized deductions, credit resources and profits earned, which will not be sufficient for capital investments into longterm projects of developing new oil deposits. For the discovery of new oil deposits the funding can be obtained by making changes to the normative regulations of the MRET to provide partial tax credit, for example in the form of a tax deduction. This method of financing would eliminate the need to pay interest on the loans or provide collateral. It would be reasonable to offer such deduction with conditions that it would be used by the developer for the purpose of investing into geological search and implementation of new leading technologies [5].

Despite the difficult economic situation within petroleum industry, the overall indexes of oil recovery continued to grow during the period from 2007 to 2013, but there is evidence of decrease in the rate of petroleum recovery.

In many countries the issue of keeping up with the needs for oil recovery is resolved by attracting small businesses. This experience can be useful in Russia as 75% of the mineral and raw resource base of petroleum recovery is represented by small deposits. Around the world such deposits are being developed by small oil companies. While in 2001 small companies in Russia were recovering roughly 10% of the overall oil, today it has lowered to only 4% [3].

The economic causes that negatively affect the development of the petroleum recovery industry are worsened by the imperfect legislation in the area of petroleum taxation, which does not take into account the specifics of conducting business in this field and does not allow for differentiation of tax burden depending on the difficulty of developing a particular deposit.

The current tax on the recovery of minerals simultaneously takes part in withholding both, mining tax and corporate tax. However, these two types of withholdings

Table 3. Tax burden on the economy in the OECD countries,% of GDP [9]

Country	2007	2008	2009	2010	2011	2012
Australia	29,71	27,06	25,82	25,62	26,51	н.д.
Austria	41,77	42,70	42,45	42,20	42,32	43,18
Belgium	43,60	44,16	43,10	43,54	44,06	45,28
UK	35,75	35,67	34,17	34,86	35,75	35,25
Hungary	40,33	40,18	39,85	38,04	37,05	38,92
Germany	36,10	36,97	37,37	36,17	36,93	37,59
Netherlands	38,73	39,09	38,18	38,95	38,56	н.д.
Greece	32,47	32,57	30,49	31,65	32,17	33,76
Denmark	48,90	48,18	47,76	47,42	47,68	47,96
Israel	36,39	33,77	31,35	32,42	32,60	31,58
Ireland	31,12	28,76	27,59	27,38	27,90	28,28
Iceland	40,64	36,79	33,88	35,18	35,98	37,19
Spain	37,29	33,26	30,92	32,50	32,15	32,87
Italy	43,19	43,27	43,39	42,96	43,01	44,42
Canada	32,27	32,33	31,42	30,56	30,39	30,74
Luxemburg	35,63	35,55	39,05	37,34	37,00	37,76
Mexico	17,74	21,00	17,42	18,87	19,72	19,63
New Zeeland	34,49	33,72	31,11	31,14	31,52	32,88
Norway	42,93	42,60	41,99	42,64	42,51	42,21
Poland	34.77	34.29	31.74	31.71	32.31	N/A
Portugal	32.48	35.25	30.71	31.24	33.00	32.48
Slovakia	29.48	29.32	29.08	28.29	28.73	28.45
Slovenia	37.66	37.18	36.99	38.13	37.05	37.38
USA	26.86	26.06	23.29	23.76	24.01	24.35
Turkey	24.08	24.22	24.64	26.20	27.83	27.66
Finland	42.97	43.13	42.85	42.51	43.68	44.08
France	43.67	43.18	42.46	42.87	44.07	45.29
Czech Republic	35.87	36.04	33.76	33.95	34.93	35.50
Chili	22.78	22.50	17.21	19.53	21.21	20.84
Switzerland	27.69	29.08	28.74	28.05	28.55	28.17
Sweden	47.36	46.30	46.56	45.42	44.19	44.31
Estonia	31.43	31.70	35.35	34.01	32.28	32.52
South Korea	26.52	26.52	25.53	25.06	25.91	26.81
Japan	28.51	28.15	26.96	27.60	28.63	N/A
Average rate throughout OECD	35.03	34.72	33.62	33.76	34.12	34.91
Russia	36.49	36.04	30.88	31.12	34.54	34.99
Russia (excluding oil and gas revenues)	27.21	24.87	22.69	22.48	23.73	23.76

Table 4. Oil extraction in the Russian Federation between 2007 and 2013

Oil extraction	2007	2008	2009	2010	2011	2012	2013
Thousands of tons	457944	462657	465102	473829	478631	485433	487711
In percentage compared to the last year	X	101	101	102	101	101	100

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2008 2009 2010 2011 2012 2013 Overall changes in revenues 34.3 -34.5 31.5 46.2 13.4 3.6 Effect of base rate 0 6.4 5.4 Effect of the incentives factor -5.6 -3.5 -0.1 -2.2 -1.4 -1.6 Effect of the prices coefficient 34.3 -29.2 32.6 44.8 7.6 -0.7 Effect of the tax base 1.4 0.3 2.4 1.5 1.6 0.5

Table 5. Effect of the factors upon the changes in revenue from MRET in the Russian Federation in 2007–2013,% [6]

are substantially different and therefore are collected by different taxing mechanisms.

The recovery tax is based on the size, quality, and location of the mineral deposits, while corporate tax is based on the profits made by the companies during the sale or export of petroleum [2].

MRET should serve as a mechanism for withholding mineral recovery tax, and the profits should be taxed by other tax mechanisms that are used abroad. For example, a progressive tax of profits, or tax of additional income. Implementation of two separate mechanisms for collecting the recovery and corporate taxes would help regulate the energy prices on the domestic market. Today the MRET mainly relies only on the corporate taxes and practically none at all on the quantity of recovered oil. The Table 5 presents the factors that affect the amount of tax revenue intake by MRET.

The Table 5 visually presents that it is namely the price factor that is ahead of all other components of MRET.

The development of petroleum industry is hindered by the absence of an institution that would regulate prices on the domestic market. There has yet to be an effective methodology devised to regulate these prices. This issue raises a lot of debates. The discussion concentrates on what should become the basis: domestic prices of crude oil set relative to the global prices, or set using the administrative method.

The federal antimonopoly service devised a bill according to which it is proposed to set the prices based on a concept that the

sales on the domestic and global markets should bring equal profits. Therefore, the export duties and transportation costa are deducted from the price, and then the VAT and excise tax are added. But this methodology is imperfect as with the fall of the global prices and growth of the excise tax rate, the prices on domestic market can become higher than on the global market.

One of the major problems that the petroleum industry faces today is the deterioration of raw material base, which is evident in the number of new deposits, as well as the quality thereof. The new deposits turn out to be smaller than estimated resulting in the growth of write offs of the reserves due to not meeting forecasts.

The abolishment of tax on the mineral reserves replacement and the enactment of MRET lead to the fact that the companies have stopped investing into geological exploration, which further worsened the existing situation within the petroleum industry [9].

The portion of oil reserves deemed difficult to extract has already reached 55–60% and continues to grow. Recovery of the remaining oil reserves and opening of new deposits requires ever growing financial expanses. In addition to that, the overall number of wells has diminished, while the number of inactive wells has grown.

The key causes for the wells being transferred to the inactive category are the low oil output and a high level of water delusion, which make oil extraction within the current tax system unprofitable [1].

In order to expand the mineral base it is also necessary to implement innovational technologies such as secondary and tertiary recovery methods, increase of the oil recoverability factor, gas liquefaction technologies, manufacturing of synthetic fuels, recovery of difficult to extract carbons, and others. The current tax legislation on innovational work, although has been improved, does not provide comprehensive solutions to the problems accumulated within the petroleum industry. The flat rate of MRET results in the fact that it becomes unprofitable for companies to develop partially extracted deposits. In order to increase effectiveness companies practice extracting only a part of the easiest to access deposits [4].

Another equally as important aspect that would relieve the tax burden and stimulate investing would be a discount on the reinvested profits. The current mechanism of taxing petroleum recovery forces the oil companies to develop only the most attractive oil deposits and implement inexpensive technologies for increasing output in order to raise the profit margin. MRET is structured extremely unsuccessfully since it has no connection at all to the realistic financial results of the recovery company [12].

Attracting new investments into the industry is being hindered by the lack of a favorable investment climate as the legislation that regulates petroleum recovery is unstable. The tax legislation is known for its frequent corrections, while the amount of time it takes to fully exploit an oil deposit is approximately 25 years.

The current tax on mineral recovery does not fully consider the geological and geographical conditions. In addition to that, the MRET should be implemented on a case by case basis depending on the stage of oil extraction. All oil deposits go through the following three stages of oil recovery: increasing extraction, consistent maximal extraction, and decreasing extraction [8].

The first stage involves minimal extraction and significant financial commitment. The second stage represents maximal oil recovery on the already built infrastructure. And the third stage often requires additional financial investments in order to gain secondary returns. At this stage it is necessary to plan an economic strategy to retain the interest of the investing enterprises in order to avoid a mass refusal of projects involving difficult to recover oil deposits, which can lead to increase of abandoned wells. Therefore, depending on the stage of development it seems reasonable to implement differentiating rates of MRET.

In making a decision on the system of taxing the final stage of development it is necessary to take into account not only the impact of tax, but also the following factors:

- Inflow of revenue resulting from additional oil recovered;
- Investment activity of the region;
- Social and economic problems of the region [17].

In order to prolong the period of oil extraction the company must lower its expenses. These expenses can be split into the following two groups: spending directly related to oil recovery, and expenses associated with paying taxes according to the legislation of the Russian Federation. Thus, as long as the expenses are lower than the return, the extraction remains profitable; but the higher the taxes, the faster the oil deposit becomes unprofitable.

While the government receives less in immediate tax revenue, it does get the following in return:

- Additional volume of oil, which results in additional revenues from its sales;
- Longer period of deposit development, which also resolves certain social and economic problems.

Another negative factor in creating an effective taxation system is the lack of the necessary and comprehensive information

Tax 2010 2011 2012 2012/2010 Corporate tax 371.1 498 5 615.0 1.7 331.3 1.5 VAT 276.3 414.4 1.8 **MRET** 176.1 262.9 323.9 306.3 324.6 365.6 1.2 Corporate property tax 15.7 1.5 Personal property tax 12.3 18.2 1.5 1.4 0.9 1.5 Transportation tax (legal entities) Transportation tax (private parties) 4.7 5.4 6.3 1.3 42.2 50.0 68.6 1.6 Land tax (legal entities) Land tax (private parties) 1.5 1.6 1.9 1.3 1.5 Total 1 192.0 1 491.5 1815.4 2.6% 2.9% % to GDP 2.7% 1.1%

Table 6. Tax expenses of the budget system of the Russian Federation for the period of 2010–2012 by types of tax, in billions of rubles.

on the oil deposits, which would help in considering the conditions of the environment that affect oil recovery.

This problem could be solved by developing and maintaining a cadastral database of the oil deposits for the purpose of taxation.

Today, Russian legislation attempts to resolve the problems of starting and final stages of oil recovery by implementing certain tax breaks, among which are usually tax abatement for the beginning stage, and the ratio of reserve depletion and 0 tax rate for the final stage.

The deterioration of the mineral base that happens each year is visually is illustrated in the Table 6, which reflects tax expenses that represent the shortfall of the budget revenue.

The analysis of the data in Table 6 reveals that the tax incentives under the MRET are taking third place among other shortfalls of the budget revenue after corporate taxes and VAT. It is worth mentioning that among other taxes the number of incentives under the MRET increases most rapidly. Between 2010 and 2012 the number of incentives has increased by 1.8 times.

In 2013 Russia has introduced the socalled "tax maneuver" within the petroleum industry, which consisted of lowering the tax rate of the export customs duties on crude oil, as well as the tax rate of the export customs duties for the light distillates (excluding gasoline) and simultaneously raising the base rate of MRET on the oil extraction.

Any tax maneuvers undertaken should contribute to the modernization of petroleum recovery industry, particularly the extraction of oil is planned to be supported by smaller oil deposits and extraction from the deposits with high yield, for which the legislation developed the tax reduction factors: the coefficient of reserve depletion and the coefficient of the volume of the deposit. In addition to that, the Tax Code of the Russian Federation also provides lowering coefficients depending on the difficulty of the environmental conditions in order to relieve the tax burden. To stimulate the exploration of oil deposits the Tax Code of the Russian Federation needs to provide specific subsidies on mineral recovery in form of tax deductions. In order to stop the effect of the global oil prices upon the methodology of the tax calculation it is necessary to keep separate accounting for the oil that is sold on the domestic market from that which is sold on the global market.

## **References (transliterated)**

- 1. Azarova A. I. Problemy nalogooblozheniya i finansovye rezul'taty neftegazovogo predpriyatiya. Problemy ucheta i finansov № 4. 2011. S.57–66.
- 2. Vinogradova A. V. Teoreticheskie aspekty formirovaniya i raspredeleniya prirodnoi renty. Dissertatsiya. 2008. S.28–35.
- 3. Davydov I. P. Formirovanie modeli rentnogo nalogooblozheniya neftedobychi v Rossii. Dissertatsiya. 2010.s.95–96.
- 4. Kartovneko I. V. Dinamika nalogooblozheniya neftedobychi v sovremennoi Rossii. Finansy i kredit № 8(344). 2009. S.71–77.
- 5. Kimel'man S., Andryushin S. Makroekonomicheskaya politika. Problemy neftegazovoi orientatsii ekonomiki Rossii. Voprosy ekonomiki № 4. 2006. S.53–66.
- 6. Malkina M. Yu., Pavlinova O. V. Issledovanie faktorov, vliyayushchikh na postupleniya naloga na dobychu poleznykh iskopaemykh ot neftedobychi v regionakh Rossiiskoi Federatsii. Finansy i kredit № 35 (611) sentyabr" 2014. S.34–46.
- 7. Nalogovyi kodeks RF. Chast" 2. (v redaktsii Federal'nogo zakona № 109-FZ ot 05.05.2014g.).
- 8. Novoselov A. L. Ekonomika prirodopol'zovaniya. 2012. S.240.
- 9. Ognev I. A. Chernye gody chernogo zolota. EKO. Vserossiiskii ekonomicheskii zhurnal  $N^{\circ}$  5. 2009. S.93–111.
- 10. Osnovnye napravleniya nalogovoi politiki Rossiiskoi Federatsii na 2015 god i na planovyi period 2016 i 2017 godov.
- 11. Pavlinova O. V. Analiz al'ternativnykh mekhanizmov iz''yatiya prirodnoi renty v neftedobyvayushchei otrasli zarubezhnykh stran. Finansovaya analitika № 20 (206) mai 2014. S.48–58.
- 12. Ruderman Ya.L. Nalogooblozhenie v neftepererabotke: sumbur vmesto muzyki. EKO. Vserossiiskii ekonomicheskii zhurnal № 8. 2012. S.25–39.
- 13. Smirnov A. A. Nalogovye osobennosti neftedobychi v Rossii: tekushchaya situatsiya i gryadushchie izmeneniya. Ernst end Yang (SNG) B.V. 2013.
- 14. Federal'naya nalogovaya sluzhba Rossiiskoi Federatsii. Ofitsial'nyi sait. URL: http://www.nalog.ru/.
- 15. Federal'naya sluzhba gosudarstvennoi statistiki Rossiiskoi Federatsii. Ofitsial'nyi sait. URL: http://www.gks.ru/.
- 16. Shteinberg R. K. Sovershenstvovanie nalogooblozheniya neftegazovogo kompleksa Rossii. Avtoreferat dissertatsii. 2012. S.4.
- 17. Yarullin R. R., Khanov F. G. Sovershenstvovanie nalogooblozheniya predpriyatii neftedobyvayushchei otrasli. Vestnik OGU № 80. Yanvar" 2008. S.109–116.