

Development of taxation system for oil production companies in Russia

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Abstract. The present article is devoted to the taxation system for oil production companies in Russia. The role of oil production companies in the realization of the fiscal function of the state is shown. Tax and due receipts at the consolidated budget of the Russian Federation from major economic sectors in the years 2013–2015 are presented and analysed. An investigation of oil production taxation peculiarities is carried out. In particular, mineral extraction tax analysis is made, the said tax being one of the basic taxes paid by oil production companies. The authors come to a conclusion that mineral extraction tax in Russia needs reforming. Based on the investigation realized possible ways of taxation system development in respect of oil production companies in Russia are proposed. Thus, taking into account the fact that oil industry is very important for budget revenue formation, initially it is planned to test the new taxation system principles in a limited number of deposits, so called ‘pilot projects’. For highly profitable minefield deposits it is planned to introduce progressive and regressive index, varying depending on oil prices. Within the framework of the investigation the authors come to a conclusion that it is necessary to introduce gradually the taxation system based on the definition of surplus profit depending on the cost effectiveness and taking into account oil prices.

1. Introduction

At the present time oil companies in Russia play a very important part in budget revenue formation and provide a considerable part of receipts at the consolidated budget of the Russian Federation. Oil sector taxation mechanism in Russia began its formation in the 90’s of the XX century. Oil production enterprises started paying resource taxes aimed for resource rent extraction together with standard taxes common for all the enterprises of the country. The taxation base for resource tax assessment was oil price, and not the financial result of operating activities. Tax assessment method for oil production companies formed in the 90’s was reorganized in 2001. As a result, a new chapter was included into the Tax Code of the Russian Federation – Chapter 26 Mineral Extraction Tax, which replaced three previous payments: mineral replacement tax, royalty and excise tax.

2. The problem statement

In Russia mineral extraction tax is included into the resource rent. However, according to many modern scientists, current mechanism of mineral extraction tax assessment does not fully correspond to the modern oil-field development economic conditions, which prompts the necessity to substitute such mechanism by a tax assessment mechanism based on the financial result.



Oil production companies are major budget revenue generating enterprises in the Russian Federation, which is visualized by the data presented in Table 1.

Table 1. Tax and due receipts at the consolidated budget of the Russian Federation from major economic sectors in the years 2013–2015 [1].

		2013		2014		2015	
		Receipts, million roubles	Share, %	Receipts, million roubles	Share, %	Receipts, million roubles	Share, %
TOTAL	budget revenue, including:	11,322,650	100.00	12,606,293	100	13,707,087	100.00
	Mineral extraction tax, including:						
	- crude oil and natural gas extraction;	3,274,721	28.92	3,764,146	29.86	4,297,049	31.35
	rendering of services in these areas	3,157,265	27.88	3,643,163	28.90	4,100,925	29.92
	Manufacturing	2,137,088	18.87	2,283,541	18.11	2,474,250	18.05
	Wholesale and retail trade; repair of vehicles, motorbikes, household goods and personal demand items	1,145,575	10.12	1,336,439	10.60	1,518,714	11.08
	Real estate operations, lease and rendering of services	1,121,028	9.90	1,271,593	10.09	1,493,563	10.90
	Transport and communications	706,159	6.24	783,621	6.22	801,370	5.85
	Construction	586,862	5.18	607,080	4.82	601,091	4.39
	Other types of activity	2,351,217	20.77	2,559,873	20.29	2,521,050	18.39

According to the data visualized in Table 1, the share of tax revenue at the consolidated budget of the Russian Federation from oil extraction companies in the years 2013–2015 averages 30 % and rises every year. Moreover, it should be noted that crude oil and natural gas extraction, as well as rendering of services in these areas, in the described period averages 96 % of all mineral extraction, which obviously evidences the importance of the industry for the state budget and the development of economy in whole.

With a view to investigate the peculiarities of taxation system for oil production companies in Russia we've examined mineral extraction tax (MET) receipts at the consolidated budget of the Russian Federation in 2013–2015 visualised in Table 2.

According to the data presented in Table 2 mineral extraction tax receipts at the consolidated budget of the Russian Federation in 2013–2015 average 75 %. In its turn crude oil and natural gas MET reach 98 % of all receipts, which yet again proves the importance of MET both for the development of the industry and the region. It is therefore necessary to pay special attention to existing problems of mineral extraction tax assessment and to find ways to solve such problems. Thus, as existing deposits deplete, the structure of reserves worsens and oil production costs increase, current

tax assessment system fails to ensure the necessary cost-effectiveness of existing field production. As a result about 30–40 % of oil reserves registered in the State Balance and technologically extractable will not be developed because of total unprofitability of development in the context of current tax assessment system. Simultaneously, as the current tax assessment system is based on industry average costs, highly profitable oil deposits have relatively low tax burden, and the rent from such assets received by the state is not full.

This fact is evidenced by the practice of annual introduction or revision of single point tax deductions in respect of oil extraction activity; in particular, at the present moment there is preferential taxation for shelf fields, two export customs duty privileges, eleven regional tax allowances, and nine mineral extraction tax allowances for certain collector types and oil quality. Therewith allowances are often stated the way that their use and administration requires professional knowledge in geology and field development technology, which means that current conditions can't provide tax administration simplicity.

Table 2. MET receipts at the consolidated budget of the Russian Federation in 2013–2015 [1].

	2013		2014		2015	
	Receipts, million roubles	Share, %	Receipts, million roubles	Share, %	Receipts, million roubles	Share, %
Total taxes connected with mineral extraction, including:	3,274,721	100	3,764,146	100	4,297,049	100
Mineral Extraction Tax (MET), including:	2,481,561	76	2,824,460	75	3,179,625	74
- crude oil and natural gas MET; rendering of services in these areas	2,434,347	74.34	2,771,858	73.64	3,100,934	72.16

Peculiarities of existing mineral extraction tax allowances in the area of oil production in Russia are presented in Table 3.

Table 3. Conditions and peculiarities of mineral extraction tax allowances in Russia.

Reason for deduction (region, deposit characteristics)	Year, from which the deduction takes effect	Allowable extraction volume, million tons	Duration of deductions, years
Field depletion	2007	Depletion above 80 %	Without limitation
High-viscosity oil	2007	Without extraction volume limitation	Without limitation
Northern shelf within the Arctic Circle	2009	35	10
Size of reserves	2012	Reserves less than 5 million tons	Without limitation

As you can see in Table 3, beginning from 2007 mineral extraction tax rate in Russia depends on the depletion of reserves. Beginning from 2009 there are allowances for several new oil production

territories, beginning from 2012 the list of oil production territories, where allowances are applicable, is enlarged. However, the character of innovations in the tax system doesn't correspond to the requirements of modern taxation system.

3. Results and discussion

One of the most important aspects of functioning of Russian taxation system is the problem of tax burden and its influence on an enterprise business activity. The main task of all tax reforms is to lower tax burden under the condition of compensation for lost income. The more oil and oil products the company sells, the more hydrocarbons are exported, and the more tax receipts there are, and vice versa, the more natural gas is sold, and the more of it remains in the domestic market, the less is the tax share in the income. This is quite logical, because the higher the selling price is, the greater is its difference from production and sales costs, and the seller can afford to pay more taxes. Therewith, increasing tax share in the income does not always mean increasing the seller's tax burden, but often shows such seller's high tax possibilities regarding such income. The dynamics of tax levies, tax burden and cost-effectiveness for oil companies is visualised in Table 4.

Table 4. Dynamics of tax levies, tax burden and cost-effectiveness for Russian oil companies

Companies	Volume of taxes paid, billion \$			Specific value of taxes per barrel, \$	2015	
	2013	2014	2015		Tax burden versus income, %	Profitability of sales, %
Lukoil	38.4	39.3	38.9	51.1	27.5	5.5
Rosneft	46.7	54	78.2	44.9	53	11.7
Gazpromneft	17.4	21.1	18.6	49.5	39.3	12.5
Surgutneftegas	22.1	26.5	26.3	50.8	63.5	21.3
Tatneft	10.9	10.3	10.1	41	50	12.4
Bashneft	6.8	7.5	5	21.9	28.2	8.2
RussNeft	4.4	3.5	1.7	21.9	27	6
Slavneft	2.9	3.3	3.1	23.8	50.8	23.5

As it is shown in Table 4 tax burden is very different for different companies. Thus, in Surgutneftegas it equals 63 %, and in Bashneft 28.2 %. Because of high tax share in the income, especially in such companies as Surgutneftegas, Rosneft, Tatneft and the higher amount of taxes journalists, economists and public servants working with oil production companies more and more often come to a conclusion that tax burden in oil and gas complex in Russia is excessive.

Thus, A V Novak insists that “the level of fiscal tax burden on oil industry in Russian is the highest compared to existing tax systems in other oil producing countries” and according to him equals 70 % of the income. The minister suggests lowering the tax share in the income to 65 % [2]. Therewith he doesn't find crucial the situation with depreciation effect for our companies, but, of course, the budget was seriously affected, because the income depends on oil prices.

In the cases, when 70 % tax burden on income is mentioned, it is meant that from the total volume of products and services offered by the company only one type of activity is taken into account – exported crude oil, in which customs duties and mineral extraction tax really make it about 70 %. Meanwhile it is not taken into account at all that in recent years; the state actively began to grant considerable mineral extraction tax export duty allowances for oil and gas production in the Northern Regions, in Eastern Siberia and in shelf field.

In this situation it is not taken into account that most companies are vertically integrated, and crude

oil is not the only end product of their activity. Thus, for example, in Gazpromneft and Bashneft only 19 % and in Lukoil 25.5 % of the income is received from the sale of crude oil; and the price per barrel for all the hydrocarbons extracted and sold in 2013 was \$78, while the world oil price was \$108. The difference between the world oil price and specific average revenue per barrel in Russian companies of nearly \$30 is connected with the fact that the companies not only sell crude oil outside CIS, but they also sell it to CIS countries and sometimes in the domestic market. And in each selling destination there exists its own level of prices and different tax payments are applicable.

In the world practice the problems of the taxation system for oil production companies were investigated in the articles of the following authors: T D Skolrud, G I Galinato [3], S Tappen, J Baek [4], J G Weber, Y Wang, M Chomas [5], E A Poltavtseva [6], B J A Willigers, K Hausken [7], S Bell, A Hindmoor [8]. Problems and peculiarities of the taxation system for oil companies in Russia were presented in the articles of the following authors: A R Khafizova, I A Fassakhov [9], L P Lunden, S Group [10], A Cherepovitsyn, N Smirnova [11], E Garden [12]. Factors influencing oil extraction were examined by R S Khisamov, V P Lavushchenko, L I Motina, [13], A Russell, R A Dawe [14].

Dramatic differences in the level of tax burden for companies calculated as the ratio of tax payments to the income rise two questions: are these tax burdens relevant and why are their levels so different for different companies? We think that tax burden calculated as the share of tax payments in the income can't be relevant, especially in oil and gas industry. First of all it is connected with the fact that pricing in this sector doesn't actually form under the influence of competitors, whose activity makes the prices stay at the level of average production costs and the minimum margin, but under the influence of other factors that provide a considerable difference between the market price and the production cost. Russian oil production companies have greater tax burden per extracted barrel than the biggest foreign oil production companies, whose average tax burden per extracted barrel equals USD29.24, while for Russian oil production companies it reaches USD43.22.

Average oil and oil product sale prices and export duties in Russia, including average sale prices within and outside CIS, the level of prices in the domestic market, and average export duties for the years 2013–2015 are visualized in Table 5.

Table 5. Average oil and oil product sale prices and export duties in Russia.

Aspects	2013		2014		2015	
	\$/ton	%	\$/ton	%	\$/ton	%
Average oil sale price in countries outside CIS	834	100	807	100	789	100
Average oil sale price in CIS countries	559	67	392	49	377	48
Average oil sale price in Russian domestic market	541	65	327	41	346	44
Average oil export duty	321	38	395	49	396	50
Average oil product export duty	171	20	357	44	357	44
Average fuel oil product export duty	68	8.2	262	33	262	33

In 2015, when oil was sold in the external market, export duty for it was 50% of the price. If we add mineral extraction tax and some other taxes to the export duty, the total amount will be 70% of the income, as it has been mentioned already. In the biggest oil and gas companies of the USA world oil price was 10 times higher than extraction costs, in Brazil and China it was 13 to 14 times higher, in England – 17 times higher, and in Russian companies specialized in oil extraction it was 16 to 40 times higher.

4. Conclusion

Thus, the level of fiscal tax burden on oil industry in Russian is the highest compared to existing tax systems in other oil producing countries. It is necessary to point out that the higher the selling oil price is, the greater is its difference from production and sales costs, and the seller can afford to pay more taxes. Therewith, increasing tax share in the income does not always mean increasing the oil seller's tax burden, but often shows such seller's high tax possibilities regarding such income. In other words, an oil producing organization receives considerable surplus profit. That is why tax burden can only be assessed more adequately with the help of such criterion as profitability of oil production companies' costs.

The presence of natural resource rent, which is taken into account in the taxation system in many countries, predetermines the reforms of domestic taxation system in line with the world practice, where taxation is differentiated depending on certain environmental conditions, which will help to make the position of business entities working in different environmental conditions equal, and to make the development of depleted deposits cost-effective.

The process of formation of a flexible taxation system should be regarded as a very important part of the total system of oil industry state regulation, including the regulation of development and extraction processes, prices, and access to transportation infrastructure. This process should be carried out gradually, and each step should be synchronized with activities on the reformation of other elements of the regulation system, and with the development of oil product market. We find it appropriate to divide the strategy of transformation to a flexible taxation system for oil production industry into successive steps.

One of the steps of transformation to a rent taxation system is the introduction of differentiated mineral extraction tax rates in respect of oil. To achieve this it is necessary to form an appropriate system of accounting of operational, financial and economic performances in oil production companies. Later it will be necessary to adjust differentiated tax rates, simultaneously reforming the system of oil price regulation.

The following step supposes a transfer to differentiated ad valorem mineral extraction tax rates expressed as a percentage, which will give an opportunity to account domestic and external market prices more adequately. The necessary conditions for the realization of this step are: the introduction of a reference price system used to count the price of taxable products; extension of the limits of tax rate differentiation taking into account such factors as the size of the deposits and their depletion level.

The next step is the introduction of progressive and regressive excess profit tax, depending on the profitability and taking into account oil prices. We think it possible to build a strategy of transfer to a flexible taxation system for oil industry with its gradual transformation from production approach to economic approach. All this will create the necessary conditions to change mineral extraction tax for rental payments.

Transfer to the financial result taxation in oil industry will help to:

- seize additional surplus profit from the development of highly profitable oil deposits, which in current taxation system have a relatively low tax level;
- provide for the cost effectiveness of mature production field development, as well as the extraction of reserves difficult to recover and reserves with no infrastructure;
- take into account oil price changes in the world markets, as well as other macroeconomic aspects.

Taking into account the fact that oil industry is very important for budget revenue formation, initially it is planned to test the new taxation system principles in a limited number of deposits, so called 'pilot projects'.

For highly profitable minefield deposits it is suggested to introduce progressive and regressive index, varying depending on oil prices.

Within the framework of the investigation the authors come to a conclusion that it is necessary to introduce gradually the taxation system based on the definition of surplus profit depending on the cost

effectiveness and taking into account oil prices.

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References

- [1] Summary reports for the Russian Federation in a whole and for subjects of the Russian Federation Available from: https://www.nalog.ru/rn77/related_activities/statistics_and_analytics/forms/
- [2] Koliender A 2007 Russian companies don't have high income from high prices *The Wall Street Journal* November
- [3] Skolrud T D, Galinato G I 2017 Welfare implications of the renewable fuel standard with an integrated tax-subsidy policy *Energy Economics* **62** p 291
- [4] Tappen S, Baek J 2016 Can oil tax policy change exploration levels?: Empirical evidence from Alaska oil legislation *Energy Sources, Part B: Economics, Planning and Policy* **11** p 1055
- [5] Weber J G, Wang Y, Chomas M 2016 A quantitative description of state-level taxation of oil and gas production in the continental U.S *Energy Policy* **96** p 289
- [6] Poltavtseva E A 2013 Vietnam taxation of petroleum companies *Neftyanoe Khozyaistvo (Oil Industry)* **5** p 117
- [7] Willigers B J A, Hausken K 2013 The strategic interaction between the government and international oil companies in the UK: An example of a country with dwindling hydrocarbon reserves *Energy Policy* **57** p 276
- [8] Bell S, Hindmoor A 2014 The Structural Power of Business and the Power of Ideas: The Strange Case of the Australian Mining Tax *New Political Economy* **19** pp 470-486
- [9] Khafizova A R, Fassakhov I A 2015 Development of the oil companies taxation system *Mediterranean Journal of Social Sciences* **6** p 21
- [10] Lunden L P, Group S 2013 Russian tax and license policy - A hurdle for offshore development? Society of Petroleum Engineers - *SPE Arctic and Extreme Environments Conference and Exhibition, AEE 2013* **3** p 2691
- [11] Cherepovitsyn A, Smirnova N 2013 Features of the Russian license and tax policy at offshore oil and gas fields development Society of Petroleum Engineers - *SPE Arctic and Extreme Environments Conference and Exhibition, AEE 2013* **3** p 2632
- [12] Garden E Russia limits access to arctic *Offshore Engineer* **39** p 64
- [13] Khisamov R S, Lavushchenko V P, Motina L I 2013 Economic factors contributing to sustainable oil production in the Republic of Tatarstan *Neftyanoe Khozyaistvo (Oil Industry)* **7** p 8
- [14] Russell A, Dawe R A 2013 How the oil revenue is shared *Energy Sources, Part B: Economics, Planning and Policy* **8** p 346