




## Taxes and Customs Duties as Instruments for Extracting Oil Rent into the State Budget: The Case of Russia

Dmitry Yu. Fedotov<sup>1,2</sup>  , Vitaly Yu. Burov<sup>3</sup> 

<sup>1</sup> Baikal State University, Irkutsk, Russian Federation

<sup>2</sup> Financial University under the Government of the Russian Federation, Moscow, Russian Federation

<sup>3</sup> Transbaikalian State University, Chita, Russian Federation

 [fdy@inbox.ru](mailto:fdy@inbox.ru)

### ABSTRACT

For countries focused on the extraction and processing of natural resources, including Russia, a crucial task is to ensure the rational extraction and distribution of natural rent. The tax model applied to natural rent should facilitate its optimal allocation to the budget without undermining the motivation of resource users to invest. This study seeks to gauge the extent of oil rent extraction into the Russian budget and suggest strategies to enhance the efficacy of redistributing oil rent to the state budget. Our hypothesis proposes that export customs duties, compared to the mineral extraction tax, prove more effective in achieving the desired redistribution from resource users to the budget. To assess the extent of oil rent extraction, we devised a methodology based on calculating the oil rent generated in Russia. This method involves measuring the difference between the income generated by the oil industry and the total expenses incurred by oil sector companies. Our analysis reveals that, from 2005 to 2022, up to 87% of the oil rent generated in Russia was extracted through rent payments to the state budget. However, in recent years, the degree of oil rent extraction has decreased to 56%. This decline can be attributed to the tax maneuver initiated in Russia since 2015, entailing a reduction and eventual elimination of export customs duties, coupled with an increase in the mineral extraction tax rate. Our results indicate a diminishing effectiveness of rent-based taxation in Russia due to the reduced fiscal significance of rent payments. Furthermore, their regulatory function, designed to incentivize taxpayers for investment contributions, has weakened. These findings offer valuable insights for shaping fiscal policies and lay the groundwork for further research in this domain.

### KEYWORDS

tax, oil rent, customs duty, mineral extraction tax, tax maneuver, investments, budget

JEL E62; H21

УДК 336.244


## Налоговые и таможенно-тарифные инструменты изъятия нефтяной ренты в доход бюджета: опыт России

Д.Ю. Федотов<sup>1,2</sup>  , В.Ю. Буров<sup>3</sup> 

<sup>1</sup> Байкальский государственный университет, г. Иркутск, Россия

<sup>2</sup> Финансовый университет при Правительстве РФ, г. Москва, Россия

<sup>3</sup> Забайкальский государственный университет, г. Чита, Россия

 [fdy@inbox.ru](mailto:fdy@inbox.ru)

### АННОТАЦИЯ

Для стран, ориентированных на добычу и переработку полезных ископаемых, включая Россию, важной проблемой является обеспечение рационального изъятия и распределения природной ренты. Модель налогообложения природной ренты должна обеспечить наиболее полное изъятие природной ренты в бюджет, и не снижать склонность к инвестированию недропользователей.

Целью исследования является измерение величины изъятия нефтяной ренты в российский бюджет и разработка путей повышения качества перераспределения нефтяной ренты в доход государства. Гипотезой исследования является предположение о том, что вывозные таможенные пошлины лучше, чем налог на добычу полезных ископаемых справляются с задачей перераспределения нефтяной ренты от недропользователей в российский бюджет. Для того, чтобы выявить уровень изъятия нефтяной ренты в бюджет была разработана авторская методика расчета величины нефтяной ренты, создаваемой в России, в основе которой заложено измерение разницы между суммой дохода, полученной нефтяной отраслью, и суммой затрат, произведенных компаниями нефтяной отрасли. Был проведен корреляционный анализ между величиной нефтяной ренты и поступлением рентных платежей. Установлено, что посредством применения рентных платежей в доход государства в период 2005–2022 гг. изымалось до 87 % создаваемой в России нефтяной ренты. Однако в последние годы степень изъятия нефтяной ренты снизилась до 56 %. Выявлено, что причиной этого стало проведение с 2015 г. налогового маневра, заключающегося в снижении ставки вывозных таможенных пошлин, вплоть до обнуления, и увеличении ставки налога на добычу полезных ископаемых. Полученные результаты позволили сделать вывод о снижении эффективности рентного налогообложения в России из-за того, что сокращается фискальное значение рентных платежей, а также ослабляется их регулирующая функция, направленная на стимулирование налогоплательщиков к осуществлению инвестиционных вложений. Результаты исследования могут быть применены при осуществлении налоговой политики в России и проведении дальнейших научных исследований.

#### КЛЮЧЕВЫЕ СЛОВА

налог, нефтяная рента, таможенная пошлина, налог на добычу полезных ископаемых, налоговый маневр, инвестиции, бюджет

### 1. Introduction

Contemporary nations draw revenue from diverse channels, including taxes and compulsory contributions to the budget. The principal source is the national income generated by companies and individual entrepreneurs through their economic activities. In countries endowed with abundant natural resources, such as Russia, natural rent is an important source for budgetary augmentation, complementing the national income.

Russian companies specializing in natural resource extraction and processing derive a significant share of their earnings not from efficient business processes or innovative technologies but mainly from their right to extract rare minerals. The value of these minerals significantly surpasses the associated extraction costs. The additional income earned by these companies exceeds the normal level of economic profitability and constitutes natural rent, which is a significant source of revenue for the state budget.

For research on economic relationships associated with the generation and

redistribution of natural rent, it is essential to establish an optimal model for natural rent taxation. The taxation model, on the one hand, should channel most of the natural rent into the state budget; on the other hand, it must not suppress business activity in the extractive industries and should not discourage taxpayers' from investing. It is crucial to ensure the neutrality of the natural rent taxation system in this regard.

To extract natural rent, the government can choose from a variety of methods, including financial instruments that help redistribute surplus revenues generated by subsoil users – taxes, customs duties, and other special payments.

Figure 1 shows a list of mandatory payments in Russia used to collect natural resource rent.

Each type of rent payment allows for the extraction of natural rent at different stages of the production process:

- the mineral extraction tax (MET) and other subsoil use payments extract rent at the stage of mineral extraction;
- the personal income tax extracts a portion of the rent embedded in the in-

creased wages of employees of extracting companies during the production process;

- excise taxes capture rent upon the sale of finished products, such as petroleum products;

- corporate income tax and additional income tax are mechanisms that capture rent in the form of additional profits generated by companies during the finalization of their financial results;

- export customs duties result in the extraction of natural rent at the moment of exporting valuable minerals abroad.

Therefore, a company involved in extracting natural resources is responsible for making several rent payments, which collectively contribute to extracting a portion of the natural rent into the state budget.

Most natural rent in Russia is generated through oil extraction. This study examines the flow of payments into the consolidated budget, originating from oil extraction and processing, to assess the extent of oil rent being contributed to the budget.

Recent reforms in the taxation of oil rent in Russia have included a tax maneuver, initiated in 2015. This maneuver involves replacing the extraction of oil rent through export customs duties on crude oil and petroleum products with the MET. The tax maneuver concluded on January 1, 2024, when the export customs duty rates on oil and petroleum products were reduced to zero. Since 2019, the MET has been supplemented by the tax

on additional income, which is imposed on the super profits of certain oil and gas companies.

Various types of rent payment differ in their efficiency in extracting oil rent into the budget. In recent years, the bulk of oil rent has been extracted through the MET and export customs duties, yet their capacity to channel oil rent into the state budget revenue differs.

The *aim of the study* is to measure the extent of oil rent extraction into the Russian budget and explore strategies to enhance its effectiveness.

The *hypothesis of the study* is that export customs duties, as indirect mandatory payments, are more effective than the MET in redistributing oil rent from subsoil users to the state budget. In our view, this happens because, when shifted onto foreign consumers, export customs duties are less likely to be perceived as a tax burden by taxpayers. The latter are also less likely to evade payment of export customs duties compared to the mineral extraction tax.

## 2. Review of contemporary approaches to oil rent taxation

Contemporary research literature covers diverse aspects of acquiring, distributing, and taxing natural rent.

Shi et al. [1] argue that revenue from mineral extraction is positively correlated with GDP growth and effective governance, which they associate with control over corruption.

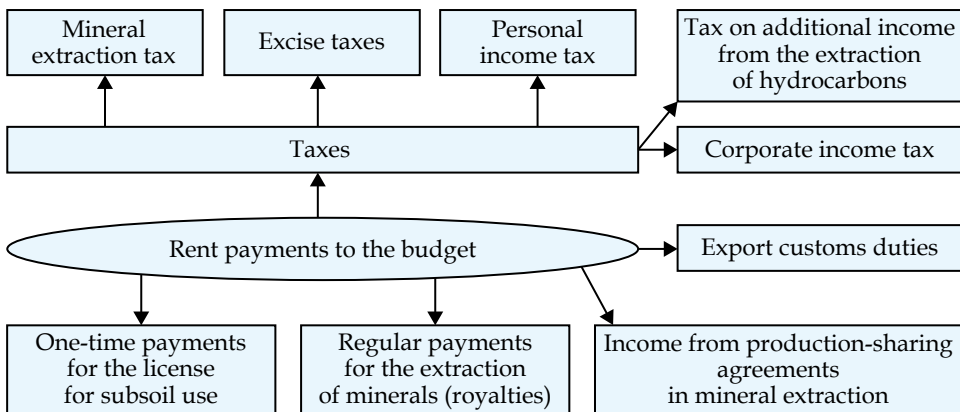


Figure 1. Compulsory payments contributing to the extraction of natural rent in Russia

In their analysis of 19 countries, encompassing both developed and developing economies from 1997 to 2019, Hoang et al. [2] discovered a consistent “Dutch disease” effect attributed to natural resource rent. Moreover, they observed variations in the impact of economic policy uncertainty, geopolitical instability, and natural resource rent on economic complexity across all the countries in their study.

Alsagr [3] shed light on the detrimental effects of oil rent on the economic growth of developing nations.

Nkoa et al. [4], employing an econometric research method based on the two-stage least squares (2SLS) approach, found that resource rent increases global instability in developing countries.

On the one hand, having the ability to extract natural rent is advantageous as it provides additional national income, but on the other hand, an economic policy centered on rent extraction can lead to stagnation in the national economy, a phenomenon commonly known as the “resource curse”.

Masi et al. [5] tested the resource curse hypothesis across 62 developing countries from 1995 to 2015, arguing that it is possible to develop the natural resource sector without harming the budgetary potential.

Canh et al. [6] tested the resource curse hypothesis across 90 developed and developing countries from 2002 to 2017, examining various types of mineral resources. They demonstrated that an increase in the level of economic development reduces the impact of natural rent from the extraction of minerals and gas but increases the impact of natural rent from coal extraction.

Sun et al. [7], focusing on the case of China, assessed the impact of resource taxation on the resource curse and showed that resource taxation policies in China exacerbated the country’s resource curse.

Mehlum et al. [8] insist that the quality of a country’s institutions determines the quality of natural resource exploitation. The resource curse is more likely to occur in countries with poorly developed institutions such as Nigeria, Zambia, and Sier-

ra Leone, facing issues like corruption, bureaucracy, and non-compliance with laws. These problems result in resource users trying to appropriate oil rent instead of improving their production. Conversely, in countries with good institutions (such as Norway and Botswana), the exploitation of natural rent contributes to economic development and the well-being of the population.

Similar conclusions are made by Robinson et al. [9], who show that in countries with good institutions, the extraction of mineral resources contributes to economic growth, while countries with poor institutions face the resource curse.

Numerous studies focus on quantifying the rent generated in production activities, in particular oil rent.

Pitelin [10] devised a method to calculate oil rent by measuring the value-added contribution of oil extraction to GDP and showed the variation in GDP in two scenarios: the current state and a hypothetical scenario where the country has no oil production.

Costa & Garcia-Cintado [11] developed and applied a DSGE model to calculate the natural rent generated by extracting enterprises in Brazil.

Jović et al. [12] calculated natural rent using soft computing methods and assessed the impact of natural rent on GDP growth. Their findings suggest that forest rent has the greatest influence on GDP growth.

Leiva [13] assessed natural rent using the example of copper mining in Chile.

Yuva & Filimonova [14] developed a model for calculating oil rent using an analysis of components constituting the rent (MET, customs duties, profits of oil companies, etc.), which were aggregated.

Osmundsen & Lovas [15] demonstrate that there is no one-size-fits-all model for taxing natural resources worldwide and that the construction of the optimal tax system depends on the individual characteristics of each country.

Until recently, Russia was actively using tax instruments alongside customs and tariff tools for extracting natural rent. A decade ago, these instruments held the

largest share among all means of extracting natural rent in the budget. Export duties are usually designed to steer clear of taxing oil and gas to prevent distorting export prices. However, Russia stands out as an exception to this norm, as noted by Tordo [16].

According to Yang et al. [17], Russia is experiencing the resource curse, mainly linked to positive shocks in natural gas rent. However, shocks in oil rent are considered a blessing due to their positive impact on GDP growth.

Korkmaz [18] and Hasanov et al. [19] also confirmed the positive impact of oil rent on economic growth in Russia.

Zakharov [20] found that the increase in oil revenues negatively impacts the quality of institutions in Russia. He argues that the rise in tax revenues due to exogenous positive shocks in oil prices does not alter regional incomes but exacerbates corruption and diminishes regional democracy and the quality of governance.

Many researchers have analyzed the taxation of extracting companies in various countries around the world.

Daubanes & Lasserre [21] argue that carbon emission taxation in non-renewable energy sources should be increased when there is a need for government revenue. They propose a tax formula that is an augmented, dynamic version of the standard Ramsey tax rule.

Balde [22] investigates the impact of taxation on the duration of the period starting from the discovery to the development of a deposit by estimating a duration model. He empirically demonstrated that this period depends on the fiscal regime applied by the country to secure its share of revenue in the form of natural rent.

Beer & Loepric [23] identified internal channels for profit shifting among hydrocarbon companies and concluded that profit shifting within the country constitutes approximately one-third of the total hidden income.

Kjær et al. [24] argued that it is often difficult to establish an effective tax mechanism for extracting natural rent in developing countries.

Keller [25] investigated the effect of oil revenues on non-resource taxation for 19 oil-exporting countries using the synthetic control methodology. He demonstrated that the effect is heterogeneous and arises only in oil-exporting countries with a low level of institutional quality that heavily depend on oil and prefer using tax instruments rather than non-tax instruments. Additionally, the dynamics of the effect differ in countries with a state-owned oil sector compared to those with a private oil sector.

Cordella & Onder [26] investigated how unforeseen oil revenues can impact political conflicts in a country and showed that direct payments to the population are the most effective means of preventing conflicts.

Ishak & Farzanegan [27] examined the connection between oil rent and tax revenues, emphasizing the significance of the shadow economy as a restraining factor in these relationships. They found that the reduction of oil rent due to negative oil price shocks ceases to have a significantly positive impact on tax revenues in countries where the shadow economy constitutes more than 35% of GDP.

Brown et al. [28] assessed the consequences of changes in oil extraction taxation in several U.S. states and found that an increase in the tax burden reduces the profitability of oil extraction to a greater extent than a decline in the selling price of oil.

Wolfson & Koopmans [29] identified tax methods that may help stimulate environmentally friendly resource use.

There is a separate group of publications dedicated to the distorting impact of rent taxation.

Smith [30] conducted an analysis of methods used to study tax distortions in resource-extracting industries.

Lund [31] examined the distorting impact of rent taxation and proposed a model to assess how higher tax rates on subsoil users reduce their motivation for investment and business development.

Nakhle [32] investigated the neutrality of rent taxation in the UK and showed that oil-extracting enterprises on the continental shelf are less willing to invest after an increase in the tax burden.

Lund [33] examined the effective restructuring of taxation in Norway in 1986, leading to the establishment of a neutral model for the taxation of oil extraction.

Our review of the research literature has showed that diverse approaches are employed for the measurement of natural rent. Ample reserves of natural resources and the potential extraction of resulting natural rent may have a different impact on a country's economic growth. In some nations, natural rent acts as a catalyst for economic growth, while in others, it serves as a constraint on economic development.

Developing countries often experience the resource curse, understood as the inefficiency of economies focused on resource extraction. A number of studies highlight the ineffectiveness of Russia's current model for taxing oil rent, which relies on levying the mineral extraction tax (known as NDPI) on oil-extracting companies.

### 3. Methodology

#### 3.1. Evaluation of the total oil rent

At the first stage of our study, we calculated the amount of the oil rent generated in Russia by applying a methodology based on the approaches outlined in [13].

The oil rent in Russia comprises two components: the rent generated during the primary extraction of crude oil and rent generated during the processing of crude oil. Therefore, the total amount of oil rent was calculated by using Formula (1):

$$R_o = R_{co} + R_p, \quad (1)$$

where  $R_o$  is the amount of oil rent;  $R_{co}$  is the amount of rent on crude oil; and is the amount of rent on petroleum products.

In 2005–2022, approximately half of the oil extracted in Russia was exported, while the remaining part was processed at oil refineries inside the country. A significant portion of the country's oil products was also exported. Therefore, when calculating the total oil rent, we took into account the revenues from both the extraction of crude oil and the production of oil products, considering both domestic consumption and exports.

#### 3.2. Evaluation of crude oil rent

When calculating the crude oil rent, we considered all revenues associated with selling crude oil, including those directed for domestic consumption and export. The calculations were made according to Formula (2):

$$I_{co} = Q_d \cdot P_d + Q_e \cdot P_e, \quad (2)$$

where  $I_{co}$  is the total income from crude oil sales;  $Q_d$  is the volume of domestically processed oil;  $Q_e$  is the quantity of exported oil;  $P_d$  is the domestic price of oil; and  $P_e$  is the export price of oil.

In calculating the costs of oil extraction and marketing, the following were taken into account: (1) material costs associated with oil extraction, storage, and transportation; (2) labor expenses; (3) wage accruals; (4) depreciation expenses, which reflect the amount of investment sufficient to renew the production capacities of oil-producing enterprises.

We did not include other expenses such as taxes and other mandatory payments in the calculations because we intended to measure the total oil rent before taxation, from which mandatory payments to the budget would be deducted later.

Furthermore, other expenses include a range of non-production expenditures, such as representation and managerial costs, for example, supporting professional sports teams and other "charitable" expenditures. These types of expenditures are traditionally inflated in the oil industry. Oil extraction enterprises can afford and tend to incur these expenses, primarily due to the substantial oil rent.

Labor expenses were calculated through an alternative method. When determining the amount of wage costs and contributions to wage payment, paid to off-budget funds, we considered not the actual expenses incurred by oil extraction enterprises for these purposes but the number of workers in the oil extraction industry and the average monthly wage in Russia. This way we were able to determine the "normal" expenses for a production factor like labor, incurred by average Russian enterprises lacking oil rent to artificially inflate wage costs.

A peculiarity of statistical accounting in Russia is that expenses for oil extraction enterprises are not tracked separately. Their indicators were included in the extraction of fuel and energy minerals until 2017, and since 2017, they have been accounted for in the total costs of oil and natural gas extraction.

Therefore, the cost of oil extraction was calculated based on the share of the cost of oil extraction in the total costs of oil and natural gas extraction (this share varied annually within the range of 75.1% to 87.7%); and in the costs of extracting fuel and energy minerals (ranging from 58.6% to 63.6%).

Considering the aforementioned conditions, the cost of oil extraction and marketing was calculated by using Formula (3):

$$C_{co} = C_{mo} + W_{ao} + A_{ao} + D_o, \quad (3)$$

where  $C_{co}$  stands for the costs for oil extraction and sale;  $C_{mo}$  for material expenses linked to oil extraction;  $W_{ao}$  for the labor costs calculated through an alternative method using the country's average wage and the industry's workforce;  $A_{ao}$  accruals for labor remuneration derived from the calculated wage ( $D_o$ ); and  $W_{ao}$  depreciation allowances.

Using the input data we obtained, we were able to calculate crude oil rent by applying Formula (4):

$$R_{co} = I_{co} - C_{co} - P_{ao}, \quad (4)$$

where  $R_{co}$  is crude oil rent;  $C_{co}$  is the costs associated with oil extraction and sale; and  $P_{ao}$  is the calculated profit of oil-producing enterprises based on the average level of profitability in the country.

According to Formula (4), the amount of rent is determined by subtracting the total revenues of oil extraction enterprises from the expenses for oil extraction and marketing, and the "normal" profit level in the Russian economy. Since most of the oil rent settles into the profits of oil extraction enterprises, the profitability of companies in this industry exceed the average Russian level by 2-3 times, reaching up to 35% in the given period. Therefore, we calculated the "normal"

profit using the average Russian level of profitability, enabling a satisfactory return on capital in the national economy, without considering the oil rent.

### 3.3. Assessment of oil rent from oil processing

In a similar manner, we calculated the amount of rent derived from the processing, production, and sale of petroleum products.

Revenue from the sale of petroleum products ( $I_p$ ) is determined by using official statistical data on the cost of shipped oil products. The calculation of the costs for the production of oil products was based on Formula (5):

$$C_p = C_{mp} + W_{ap} + A_{ap} + D_p, \quad (5)$$

where  $C_p$  corresponds to expenses for oil processing;  $C_{mp}$  to material costs associated with oil processing;  $W_{ap}$  the labor costs calculated through an alternative method based on the average wage in the country and the industry's workforce;  $A_{ap}$  accruals for labor payment based on the calculated wage ( $W_{ap}$ ); and  $D_p$  depreciation deductions.

In Formula (5), material costs ( $C_{mp}$ ) include all material expenses associated with oil processing, including the cost of crude oil purchased for processing, which constitutes a predominant portion of material costs for raw materials and supplies.

Labor costs ( $W_{ap}$ ) are calculated by using the average number of employees in oil processing plants and the established average wage nationwide. The salary in the oil refining industry is not as high as in the oil extraction sector – it exceeds the average Russian level by only 1.5-2.0 times. It should be noted, however, that people working in the oil refining industry tend to have higher wages because they have the opportunity to receive a share of the oil rent, given the relative scarcity of this resource.

Rosstat – the Federal State Statistics Service – accounts for the expenses of oil production as part of the overall costs of the category "Production of coke and petroleum products". Hence, the calculation of oil production costs was based on the

annual proportion of the cost of shipped oil products in the total volume of shipped products under the category “Production of coke and petroleum products”. The share of oil products in this sector is dominant and changes annually within the range of 97.2% to 98.9%.

Oil rent derived from oil processing was calculated by using Formula (6), which is similar to Formula (4) we used for calculating crude oil rent:

$$R_p = I_p - C_p - P_{ap}, \quad (6)$$

where  $R_p$  corresponds to the amount of rent from oil products;  $C_p$  denotes costs for oil processing; and  $P_{ap}$  is the profit of oil processing enterprises, calculated by using the data on the average level of profitability in the country.

In Formula (6), the income obtained from oil processing was reduced by the profit calculated by an alternative method, based on the average level of profitability. This adjustment was made to account for the amount of oil rent embedded in the profits of oil processing enterprises.

The suggested methodology for calculating oil rent enables us to measure the added value generated during the extraction and processing of oil beyond the “normal” level anticipated from a similar application of production factors like labor and capital in other sectors of the Russian economy.

The “normal” level is considered as the average return in the form of capital profit and the average level of labor remuneration in the form of wages in the economy and the country, respectively.

### 3.4. Assessment of the degree of oil rent extraction into the budget

To gauge the extent of oil rent extraction into the budget, we gathered and analyzed mandatory payments in the national budgetary system, through which oil rent is extracted.

These include 7 types of taxes and other mandatory payments to the consolidated budget:

- 1) mineral extraction tax on crude oil;
- 2) excise taxes on petroleum products.

Excise taxes on petroleum products are

levied domestically (exported goods are exempt from excise taxes), and these taxes are paid when petroleum products are sold within the country. However, starting from 2019, Russia has introduced a system of reverse excise tax on crude oil. Under this mechanism, oil processing enterprises receive a reimbursement from the federal budget for the excise tax imposed on the portion of petroleum products intended for domestic consumption;

3) income generated through agreements on the allocation of production during oil extraction (corporate income tax, regular payments for mineral extraction (royalties), and the state’s share of profitable production);

4) tax on additional income from the extraction of hydrocarbons;

5) one-time payments for the license for subsoil use;

6) export customs duties on crude oil;

7) export customs duties on petroleum products.

The data were sourced from the Treasury’s reports on the execution of the country’s consolidated budget ([www. roskazna.ru](http://www roskazna.ru)). We did not consider tax payments imposed on the ongoing activities of all economic entities, including those unrelated to rent incomes. These include the following taxes: corporate income tax, value-added tax (VAT), personal income tax, water tax, business property tax, transport tax, gambling tax, and land tax.

In addition, the study relied on statistics from the official websites of the Federal State Statistics Service (Rosstat) and the Ministry of Economic Development of the Russian Federation. Official documents, including the Tax Code of Russia and the Law of the Russian Federation on the Execution of the Federal Budget for 2022, were obtained from the legal reference system *Consultant+*.

Due to the restrictions imposed by Western countries on Russian oil exports, since 2022, Rosstat has ceased publishing official data on Russian oil and petroleum product exports. The information for the year 2022 was derived from the data cited in interviews by the Deputy Chair-



man of the Russian government Alexander Novak<sup>1</sup>.

To assess the adequacy of oil rent extraction for the needs of the national economy, a correlation analysis was conducted. This analysis explored the relationship between oil rent and the receipt of associated payments, including taxes and mandatory fees paid by companies specializing in oil extraction and processing.

#### 4. Results

##### 4.1. Total oil rent generated in Russia

We calculated the oil rent generated in Russia between 2005 and 2022 (see Figure 2).

In the given period, the absolute amount of oil rent increased from 3.2 to 14.6 trillion rubles. The maximum amount of oil rent was generated in 2021 when it reached 16.2 trillion rubles.

Oil rent constitutes the part of added value that is generated due to the scarcity of this resource and its ability to generate income while being processed. Therefore, it is interesting to compare oil rent with the total amount of value added, formed by the country's GDP.

<sup>1</sup> <http://tass.ru/ekonomika/17248419?ysclid=lppnrok5g387669797/>

The share of oil rent in Russia's GDP is shrinking steadily: over the given period, it reduced from 14.7% to 9.5%. As the absolute size of oil rent was increasing, the relative amount of oil rent was falling. Therefore, it can be concluded that the reduction in the share of oil rent in GDP was the result of the increased diversification in the Russian economy. In other words, the share of the oil industry decreased due to the increase in the share of other sectors in the Russian economy.

##### 4.2. Analysis of oil rent extraction to the Russian budget

The bulk of the natural rent is channeled into the budget through taxes imposed on oil companies. For the purposes of this study, customs duties are included in the overall tax payments, although under Russian budgetary legislation, they are not classified as taxes.

The comparison of budgetary revenues from oil rent with the proportion of oil rent extraction is illustrated by Figure 3.

In the given period, the degree of tax extraction of oil rent varied within the range of 51-87% of the generated rent, with the maximum degree of extraction observed in 2008 and 2014.

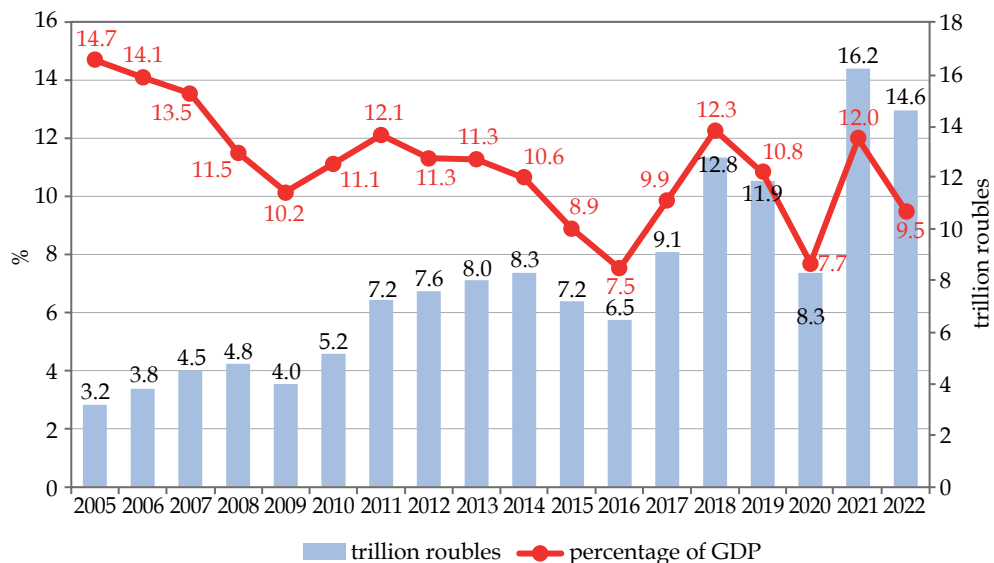


Figure 2. Oil rent in Russia in 2005-2022

Note: Compiled by the authors based on Rosstat data

In 2005–2014, there was an increase in the degree of oil rent extraction into the state budget, reaching 86.5% of the generated oil rent by 2014, with the average annual value being 74.3%. In the subsequent years, there was a steady decline in the degree of oil rent extraction – the average annual value in this period decreased to 62.4%.

Moreover, due to the increase in the overall volume of generated oil rent, the absolute amount of rent payments to the budget increased year by year. Some decrease in the inflow of rent payments was observed in certain years, for example, in the crisis year 2020.

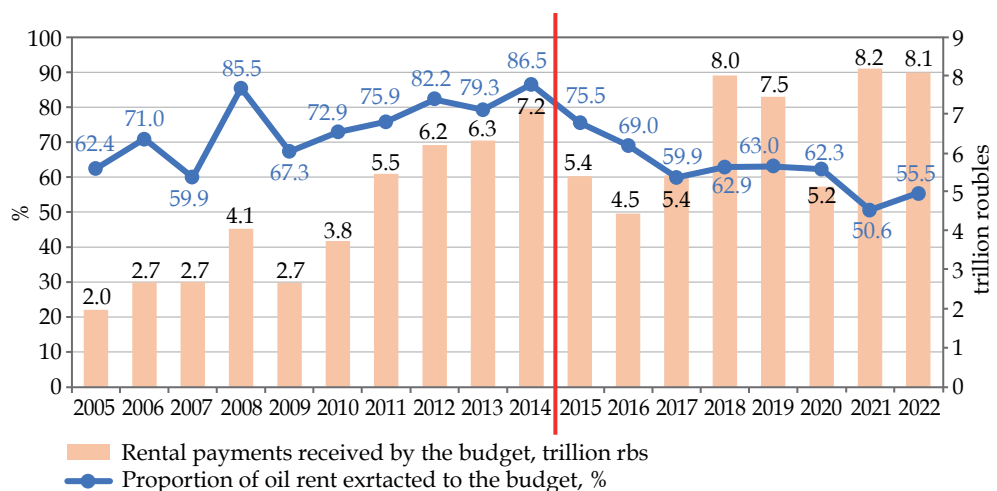
The analysis of payments from oil rent into the consolidated budget of Russia is presented in Table 1.

The country's tax system cannot be expected to fully capture all generated oil rent and, what is more, such a scenario is undesirable. As discussed earlier, the prospect of obtaining a share of natural rent is a key motivator for entrepreneurs in specific sectors of the economy, stimulating investment inflow into these industries. It is also essential to preserve the differential rent II, generated through innovation and technological advancements, for the benefit of subsoil users as it encourages modernization in production and enhances investments in fixed capital.

If the reduction in the degree of oil rent extraction is accompanied by higher rates of real investment growth, such trends can be considered positive. However, further analysis will show that the picture is quite the opposite.

The majority of researchers agree that absolute rent and differential rent I should primarily contribute to the state's income. Absolute rent arises during the extraction, processing, and sale of oil obtained from any deposit due to the rarity and value of this valuable resource. Subsoil users receive differential rent I from the exploitation of more productive and economically advantageous deposits.

At the same time, a significant reduction in the share of oil rent extraction into the budget in recent years (less than 2/3 of its volume) points to the fact that the current model of subsoil use taxation in the country is inefficient. A large portion of oil rent should be directed to the state budget because this income arises from exploiting mineral resources owned by the government. This share of oil rent is acquired by oil companies not through superior business organization, enhanced management skills, or a more capable workforce, but primarily due to their privileged position granted when awarded the right to exploit these resources. When it comes to rent-based revenues, this situation is quite common.



**Figure 3.** Rent payments to the consolidated budget and the share of oil rent extraction from 2005 to 2022

Note: Compiled by the authors based on data from Rosstat and the Treasury of Russia

**Table 1. The inflow of payments from oil rent into the consolidated budget of Russia in 2005–2022, billion rubles**

Payment type	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Mineral extraction tax on crude oil	761.3	986.5	1017.3	1493.0	887.6	1266.8	1845.8	2132.6	2190.2	2463.6	2703.5	2343.1	3352.2	5232.3	5175.5	3198.3	6295.7	8391.5
Excise taxes on petroleum products produced in the country	123.3	124.6	130.3	138.4	144.6	166.5	277.4	359.9	413.3	368.6	280.0	448.2	524.0	332.2	258.4	791.4	-537.6	-3248.9
Income generated through agreements on the allocation of production during oil extraction (corporate income tax, regular payments for mineral extraction (royalties), and the state's share of profitable production)	2.6	4.7	23.2	42.3	21.0	26.5	47.0	70.3	91.4	170.2	220.9	139.7	127.7	233.4	310.6	277.4	263.5	350.4
Tax on additional income from the extraction of hydrocarbons	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	101.1	149.0	1008.7	1 685.0
One-time payments for the license for subsoil use	26.4	61.1	46.6	91.8	39.7	18.0	47.2	44.8	108.7	55.9	40.1	53.5	66.3	25.7	44.9	48.6	67.8	38.9
Export customs duties on crude oil	871.4	1201.9	1151.5	1784.8	1203.0	1672.4	2332.4	2489.7	2333.6	2620.0	1431.2	1030.8	976.2	1550.0	1115.5	436.0	707.8	606.8
Export customs duties on petroleum products	197.5	314.4	330.5	522.6	378.8	603.8	936.5	1130.3	1206.8	1489.4	748.5	446.8	397.9	648.7	464.9	256.4	391.4	269.5
Total rental payments received	1982.5	2693.2	2699.4	4072.9	2674.7	3754.0	5486.3	6227.6	6344.0	7167.7	5424.2	4462.1	5444.3	8022.3	7470.9	5157.1	8197.3	8093.2

Note: The table is based on the data from the Treasury of the Russian Federation ([www.roskazna.ru](http://www.roskazna.ru)) and the report on the execution of the federal budget for the year 2022 from the legal reference system "Consultant+".

The year 2015 marked a turning point in oil rent extraction as it started decreasing due to various factors. We believe that the decisive factor triggering this process was the launch of the tax maneuver.

Since 2015, there has been a steady decline in export customs duties on oil and oil products, accompanied by an increase in the mineral extraction tax rates for oil extraction. The decrease in revenue from export customs duties, according to the reformers' plans, should be offset by an increase in the revenue from this tax.

Since 2024, zero-rates of export customs duties on crude oil and petroleum products have been implemented. According to the Russian Ministry of Finance, "this maneuver not only diminishes the budget's reliance on oil prices but also alleviates the effects of their decline on the oil industry"<sup>2</sup>.

Before the tax maneuver began, it had been expected to reduce the budget's reliance on the fluctuating trends in oil prices. The Russian Ministry of Finance considers the MET to be a more stable source of income than export customs duties. Additionally, the Ministry of Finance anticipated an increase in budget revenues from oil extraction and processing, as well as a reduction in the tax burden on the oil industry amid low oil prices.

During the tax reform in the oil industry, in 2005–2022, the share of the MET in oil rent taxation increased from 38% to 74% of the total oil revenues. This shift resulted from the shrinking share of export customs duties on crude oil – from 44% to 5%.

The proportion of export customs duties on petroleum products decreased from 10% to 2%, despite having reached 21% in 2014. Annual variations are observed in the revenues from excise taxes on petroleum products, which in certain periods contributed up to 10–15% to the country's overall tax income.

Since 2021, the tax on additional income from the extraction of hydrocarbon raw materials has played a substantial role in the taxation of oil rent, reaching

a share of 15%. The role of other sources of income in capturing oil rent is less significant.

As the structure of oil-related tax revenues in the Russian budget evolved, the proportion of oil rent extraction in Russia fluctuated across various tax instruments, including export customs duties.

The highest proportion of oil rent extraction for the MET was observed in 2022, reaching 57.6%, while for export customs duties on crude oil, this figure peaked in 2008 at 37.5%.

The MET and export customs duties are the two main alternatives of capturing oil rent in the state budget, and the growth of one revenue source occurs at the expense of the other.

The dynamics of the share of oil rent extraction in Russia by specific types of tax instruments in 2005–2022 are presented in Figure 4.

The state possesses a substantial toolbox of instruments for taxing oil rent (see Figure 4). To evaluate how effectively they capture oil rent, we analyzed the correlation between the amount of oil rent and the revenue generated from specific mandatory payments flowing into Russia's consolidated budget. The calculated linear correlation coefficients are presented in Table 2.

Throughout the entire period, we observed a strong correlation between the generated rent and its extraction through rent payments to the budget – the correlation coefficient is 0.9225. This figure remains high regardless of the tax maneuver. The MET for crude oil has a high correlation with the rent throughout the entire period, with the correlation coefficient approaching 1.

Customs duties on crude oil and petroleum products had a close correlation with the rent before the start of the tax maneuver. After the start of the tax maneuver, due to the annual reduction in customs tariff rates, their correlation coefficients became negative and have low values:  $-0.2155$  and  $-0.2528$ , respectively. Thus, we see a decrease in the stability of the correlation with the tax base of these two income sources, which previously

<sup>2</sup> [https://minfin.gov.ru/ru/press-center/?id\\_4=33077](https://minfin.gov.ru/ru/press-center/?id_4=33077)

played a key role in regulating Russia’s external trade.

Excise taxes on petroleum products had a close correlation with the oil rent before the start of the tax maneuver. After the beginning of the tax maneuver, the correlation relationship became inverse, which can be explained by the introduc-

tion of a tax cushion, which provides compensation from the budget for excise amounts to companies supplying petroleum products to the domestic market.

Our analysis indicates that the MET and export customs duties, which are the key rent payments, can effectively capture oil rent in accordance with its fluctuations.

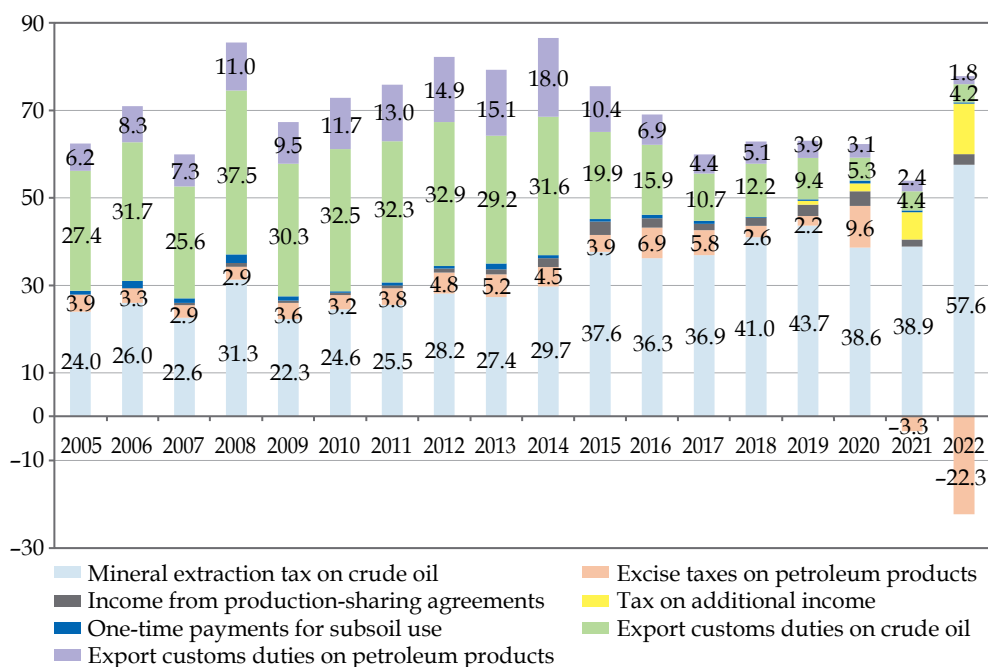


Figure 4. The proportion of oil rent extraction in Russia by specific types of tax instruments in 2005–2022, %.

Note: Compiled by the authors based on data from Rosstat and the Treasury of Russia

Table 2. Coefficient of correlation of oil rent with individual rent payments from 2005 to 2022

Comparable indicator	For the entire period	In 2005–2014 (before the start of the tax maneuver)	Since 2015 (during the tax maneuver)
Rent payments received	0.9225	0.9846	0.9539
Mineral extraction tax on crude oil	0.9518	0.9773	0.9161
Export customs duties on crude oil	-0.2175	0.9702	-0.2155
Export customs duties on petroleum products	0.0257	0.9797	-0.2528
One-time payments for the license for subsoil use	0.0295	0.3686	-0.0068
Income from production-sharing agreements in oil extraction	0.8551	0.8518	0.6211
Excise taxes on petroleum products	-0.4795	0.9594	-0.6122

However, due to the fact that since the beginning of the tax maneuver, the increase in the tax burden created by the MET did not fully compensate for the reduction in the tax burden created by export customs duties, there was a decline in oil companies' rent payments.

The average annual extraction of oil rent to the budget after the beginning of the tax maneuver decreased by 31.0 percentage points. In the given period, by the end of 2022, the export customs duty rate on crude oil had decreased by 10 times compared to 2011 (when the highest rate was in effect), and the export customs duty on gasoline had fallen by 17 times.

In the same period, the rate of the MET for crude oil increased by only 2.2 times (from 419 rubles per ton to 919 rubles). However, it should be noted that there is a significant difference in the calculation methods of the MET and export customs duties, which impedes a full-fledged comparison of the changes in the tax burden of these rent payments to the budget.

#### 4.3. The level of neutrality in the Russian oil extraction tax system

It is important to ensure the neutrality of the natural resource rent taxation system so that it does not discourage investments in the extraction and processing of natural resources.

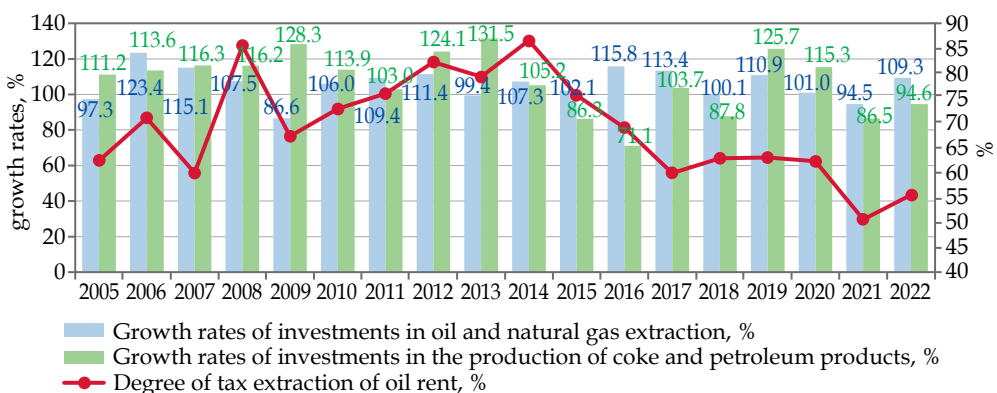
Figure 5 shows data on the dynamics of investments in the oil industry in Rus-

sia from 2005 to 2022, in comparison with the extent of oil rent extraction.

The tax maneuver has led to a reduction in the investment growth rates for extracting and processing enterprises. While for oil extraction companies, after 2014, the average annual growth rates of investments in fixed capital decreased by only 0.4 percentage points, for oil refining companies, this decline was 19.9 percentage points. This happened despite the fact that in this period, oil companies saved significant funds due to the substantial reduction in export customs duties on petroleum products.

We can suppose that there are accompanying factors that have influenced the decrease in investments. The shift from export customs duties to the mineral extraction tax did not prompt taxpayers to increase investments in expansion or modernization of their production, despite the reduced tax burden on oil rent.

It can be assumed that after the start of the tax maneuver, the investment attractiveness of the oil refining industry decreased. In 2005–2014 the average annual profitability of oil refining enterprises was 18.0%, and after 2015 it fell to 9.0%. With the onset of the tax maneuver, enterprises in this industry are compelled to purchase raw materials (crude oil) at a higher price due to the increased rate of the mineral extraction tax, which is embedded into the price of the oil they acquire.



**Figure 5. Comparison of the growth rates of investments in the oil industry with the extent of oil rent extraction in Russia from 2005 to 2022**

Note: Compiled by the authors based on data from Rosstat and the Treasury of Russia

Our analysis shows that the taxation model for oil rent emerging as a result of the tax maneuver is less efficient compared to the previous model that was in force before 2015. Fiscal and regulatory functions in rent taxation are enhanced by extracting oil rent through export customs duties on oil and petroleum products (the latter accounted for more than half of the rent payments). Under a taxation system that is primarily focused on natural rent, both overall budgetary rent revenues and investments tend to decrease.

Unlike the MET, export customs duties do not have a distorting influence on the production process. They are paid by the taxpayers not at the stage of extracting natural resources. Customs duties are not linked to the production costs of extracting and processing oil; instead, they primarily depend on the price dynamics in the global markets for crude oil.

Payers of export customs duties receive practically no benefits from the reduction in the amount of their payments, as the burden of payment is effectively shifted to foreign consumers. They must pay this surcharge on top of the base price of the exported goods, as is always the case with indirect taxes. Therefore, payers of export customs duties are largely unwilling to seek legal or illegal ways to reduce these rent payments to the budget. The funds saved by taxpayers as unpaid customs duties, calculated during the export of goods from the country, cannot be spent on their own needs, unlike the unpaid amounts of the MET, which companies retain for their own use.

An advantage of customs duties is that they are more difficult to conceal from regulatory authorities (such as the Federal Customs Service). Since the exporter settles customs duties when the goods cross the country's customs border, it becomes more challenging for them to conceal any part of the exported products from supervisory authorities to evade customs duty payments. Meanwhile, in the case of the MET, taxpayers have more opportunities and motives not to report to regulatory authorities (such as the federal tax service) the full volume of extracted oil.

## 5. Discussion

Our research findings show that a substantial amount of oil rent, reaching 16 trillion rubles annually, is generated in Russia during the extraction of natural resources.

To calculate the oil rent generated in Russia, we developed a methodology based on the correlation between the income of the oil industry and the total expenses incurred by enterprises in the oil sector. This way we were able to achieve the research goal – measuring the extent of oil rent extraction into the state budget.

A significant portion of the oil rent generated in the country is transferred to the state budget through rent payments – in this process a key role is played by the MET and export customs duties on crude oil and petroleum products. Under the national rent taxation system, a significant 87% of the generated oil rent is directed into the budget.

Since 2015, Russia has implemented a tax maneuver, involving the gradual replacement of export customs duties by an increasing share of the MET. As a result, the tax maneuver has consistently reduced the level of oil rent extraction into the state revenue. As of 2022, the share of oil rent extraction into the budget fell to 56%.

Oil extraction and processing companies, despite gaining additional income from the reduction in export customs duties, are unwilling to channel the remaining portion of oil rent into the development of their own enterprises. After the start of the tax maneuver, investments in fixed capital in these sectors of the economy have declined.

The oil rent generated in the country depends on the global market conditions for oil and petroleum products. Considering that a substantial amount of the country's oil is exported, the most effective method to capture this rent is through export customs duties. In this case, the amount of export customs duties is determined depending on the global market price of oil. The tax base of the natural resource rent tax is a physical quantity – the amount of extracted oil, measured in tons. As for the adjustment coefficient applied

to calculate the rate of the natural resource rent tax based on the measurement of global prices for Urals crude oil, it can only to some extent capture the dynamics of price trends in the global commodity markets.

As a result, the oil differential rent I, governed by market mechanisms, cannot be entirely captured in the budget through MET, as its calculation prioritizes natural elements over price factors. Therefore, in contrast to customs duties, the MET can only partially capture the excess profit arising from the difference between oil prices in external markets and the costs of its extraction through a price-adjustment coefficient.

The tax maneuver in Russia was not entirely harmonized with the economic and political factors related to the integration of the Russian economy with other EAEU countries. Establishing a unified customs space is intended to facilitate smoother trade between EAEU members by removing customs and tariff regulation measures. Therefore, export customs duties should not be applied to deliveries of crude oil from Russia to other EAEU countries. These countries, in turn, import this oil from Russia, process it in their oil refineries, and export it to other countries. As a result, some portion of the oil rent generated in Russia is extracted as income in the other EAEU countries.

However, the transition from export customs duties to the MET has been detrimental to the quality of rent taxation, resulting in decreased budget revenues.

In these conditions, in our view, it is more practical to abandon the tax maneuver and reintroduce export customs duties on oil and petroleum products. At the same time, it is necessary to adjust the previously applied taxation model, based on the parity between export customs duties and the MET, to the customs regulations within the Eurasian Economic Union.

For exports of oil products to non-EAEU countries, it is recommended to apply export customs duties at rates that were in effect before the start of the tax maneuver. However, these rates should be adjusted to align with the current oil prices in the global markets. It is also ad-

visable to decrease the MET rates to the pre-2015 level. To reduce the outflow of Russian oil rent to the EAEU countries, it would make sense to introduce additional rent payments for the supply of crude oil from Russia to EAEU countries, such as a special licensing fee or royalty payment. In our view, these changes will help enhance the quality of oil rent extraction in Russia and, in general, taxation of the country's oil industry.

Our analysis confirmed the initial research hypothesis about the inefficiency of the tax maneuver implemented in Russia, aimed at reducing export customs duties on crude oil and petroleum products. In recent years, the fiscal role of rent payments has been decreasing, and their regulatory potential to encourage taxpayers to make investment contributions is also weakening.

The lower efficiency of the MET in capturing oil rent compared to export customs duties is explained by the difference in the nature of taxation through direct and indirect taxes on the same object (oil). In the case of the direct tax (mineral extraction tax), taxpayers are inclined to seek ways to reduce mandatory payments. This inclination is lower among indirect taxpayers (that is, those who pay export customs duties) as export customs duties shift the tax burden onto consumers of these goods.

Even though the MET and export customs duties share the same taxable object, there are certain differences in the tax base of these two tax instruments. For the MET, the tax base is the quantity of extracted minerals, i.e., a natural indicator, whereas for the export customs duty, the tax base is the value of the exported oil. Oil rent resulting from disparities in price levels and production costs in domestic and global markets is best captured through export customs duties.

Our findings agree with the previous research, which has identified similar drawbacks of the MET in taxing oil extraction. For example, Alexeev & Chernyavsky [34] found that after this tax was introduced in Russia in 2002, it failed to contribute to economic growth in oil-pro-



ducing regions. Shatalov et al. [35] also highlighted the drawbacks of this measure in taxing oil rent.

Our research has the following limitation: when it comes to taxing extractive industries, including oil, primarily oriented towards export, the MET falls short in capturing natural rent for the budget compared to export customs duties. However, if we look at the system of taxing minerals that are mostly consumed inside the country, there is no viable alternative to the MET in capturing natural rent.

## 6. Conclusion

Countries, such as Russia, endowed with substantial oil reserves, have the opportunity to gain oil rent through the extraction and processing of this valuable resource. It is advisable to withdraw a significant portion of the oil rent generated in the country into the budget and redistribute it for the needs of the entire state.

Importantly, tax instruments for extracting oil rent should be neutral to the production process; they should not discourage production development and investment.

The existing tax instruments vary in their ability to withdraw oil rent into the state budget.

The purpose of this study is to identify the most effective method of extrac-

ting oil rent in Russia. We developed a methodology based on calculating the difference between the income generated by the Russian oil industry and the sum of expenses incurred by oil companies to achieve this goal.

We conducted a thorough analysis of all tax instruments employed in Russia for extracting oil rent from 2005 to 2022, with a focus on key elements such as the mineral extraction tax applied to oil production and export customs duties on crude oil and petroleum products.

Our results confirmed the initial hypothesis that export customs duties are a more effective tool for extracting oil rent compared to the MET. Export customs duties increase the extent of oil rent extraction into the budget while exerting less distorting influence on the production activities of companies and their willingness to make investments.

Our research holds practical significance for tax policy-makers while its theoretical significance lies in the development of a methodology for measuring oil rent and the analysis of tax instruments used for its extraction into the budget.

Subsequent research will be directed towards finding ways to further improve the taxation of oil rent and developing new approaches to taxing the supply of crude oil from Russia to the EAEU countries.

## References

1. Shi J., Liu Y., Sadowski B.M., Alemzero D., Dou S., Sun H., Naseem S. The role of economic growth and governance on mineral rents in main critical minerals countries. *Resources Policy*. 2023;83:103718. <https://doi.org/10.1016/j.resourpol.2023.103718>
2. Hoang D.P., Chu L.K., To T.T. How do economic policy uncertainty, geopolitical risk, and natural resources rents affect economic complexity? Evidence from advanced and emerging market economies. *Resources Policy*. 2023;85:103856. <https://doi.org/10.1016/j.resourpol.2023.103856>
3. Alsagr N. Revisiting the natural resources rent and financial development nexus: Does geopolitical risk and corruption really matters? *Resources Policy*. 2024;89:104638. <https://doi.org/10.1016/j.resourpol.2024.104638>
4. Nkoa B.E.O., Song J.S., Bikoula B.M. Natural resource rents in developing countries: Is the positive influence on the fragilities real? *Resources Policy*. 2024;89:104541. <https://doi.org/10.1016/j.resourpol.2023.104541>
5. Masi T., Savoia A., Sen K. Is there a fiscal resource curse? Resource rents, fiscal capacity and political institutions in developing economies. *World Development*. 2024;177:106532. <https://doi.org/10.1016/j.worlddev.2024.106532>
6. Canh N.P., Schinckus C., Thanh S.D. The natural resources rents: Is economic complexity a solution for resource curse? *Resources Policy*. 2020;69:101800. <https://doi.org/10.1016/j.resourpol.2020.101800>

7. Sun X., Ren J., Wang Y. The impact of resource taxation on resource curse: Evidence from Chinese resource tax policy. *Resources Policy*. 2022;78:102883. <https://doi.org/10.1016/j.resourpol.2022.102883>
8. Mehlum H., Moene K., Torvik R. Institutions and the Resource Curse. *The Economic Journal*. 2006;116:1–20. <https://www.sci-hub.ru/10.1111/j.1468-0297.2006.01045.x>
9. Robinson J.A., Torvik R., Verdier T. Political Foundations of the Resource Curse. *Journal of Development Economics*. 2006;79:447–468. <https://doi.org/10.1016/j.jdeveco.2006.01.008>
10. Pitelin A.K. Assessment of the oil rent of the Russian Federation. *Economic Science of Modern Russia*. 2021;4(95):97–109. (In Russ.) [https://doi.org/10.33293/1609-1442-2021-4\(95\)-97-109](https://doi.org/10.33293/1609-1442-2021-4(95)-97-109)
11. Costa C.J., Garcia-Cintado A.C. Rent-seeking in an emerging market: A DSGE approach. *Economic Systems*. 2021;45:100775. <https://doi.org/10.1016/j.ecosys.2020.100775>
12. Jović S., Maksimović G., Jovović D. Appraisal of natural resources rents and economic development. *Resources Policy*. 2016;50:289–291. <https://doi.org/10.1016/j.resourpol.2016.10.012>
13. Leiva B. Natural resource rent allocation, government quality, and concession design: The case of copper in Chile. *Resources Policy*. 2020;68:101748. <https://doi.org/10.1016/j.resourpol.2020.101748>
14. Yuva D.S., Filimonova I.V. Improvement of a methodology of assessment and forecasting of an oil rent. *Sibirskaya Finansovaya Shkola*. 2017;(6):3–11. (In Russ.)
15. Osmundsen P., Lovas K. Trends and Trade-Offs in Petroleum Tax Design International. *Journal of Global Energy Issues*. 2009;36(1):42–60. <https://doi.org/10.1504/IJGEI.2013.055940>
16. Tordo S. Fiscal Systems for Hydrocarbons. *World Bank Working Papers*. 2007;123:1–74. <https://doi.org/10.1596/978-0-8213-7266-1>
17. Yang J., Rizvi S.K.A., Tan Z., Umar M., Koondhar M.A. The competing role of natural gas and oil as fossil fuel and the non-linear dynamics of resource curse in Russia. *Resources Policy*. 2021;72:102100. <https://doi.org/10.1016/j.resourpol.2021.102100>
18. Korkmaz Ö. Do oil, coal, and natural gas consumption and rents impact economic growth? An empirical analysis of the Russian Federation. *Resources Policy*. 2022;77:102739. <https://doi.org/10.1016/j.resourpol.2022.102739>
19. Hasanov F.J., Aliyev R., Taskin D., Suleymanov E. Oil rents and non-oil economic growth in CIS oil exporters. The role of financial development. *Resources Policy*. 2023;82:103523. <https://doi.org/10.1016/j.resourpol.2023.103523>
20. Zakharov N. Asymmetric oil price shocks, tax revenues, and the resource curse. *Economics Letters*. 2020;186:108515. <https://doi.org/10.1016/j.econlet.2019.06.021>
21. Daubanes J.X., Lasserre P. How should the use of nonrenewables be taxed under a public budget constraint? *Resource and Energy Economics*. 2023;73:101375. <https://doi.org/10.1016/j.reseneeco.2023.101375>
22. Balde M.T. A brief history of time: Taxation and mineral production in developing countries. *Resources Policy*. 2020;68:101687. <https://doi.org/10.1016/j.resourpol.2020.101687>
23. Beer S., Loepnick J. Taxing income in the oil and gas sector – Challenges of international and domestic profit shifting. *Energy Economics*. 2017;61:186–198. <https://doi.org/10.1016/j.eneco.2016.11.013>
24. Kjær A.M., Therikildsen O., Buur L., Hansen M.W. When “Pockets of effectiveness” matter politically: Extractive industry regulation and taxation in Uganda and Tanzania. *The Extractive Industries and Society*. 2021;8(1):294–302. <https://doi.org/10.1016/j.exis.2020.12.010>
25. Keller M. Oil revenues vs domestic taxation: Deeper insights into the crowding-out effect. *Resources Policy*. 2022;76:102560. <https://doi.org/10.1016/j.resourpol.2022.102560>
26. Cordella T., Onder H. Sharing oil rents and political violence. *European Journal of Political Economy*. 2020;63:101882. <https://doi.org/10.1016/j.ejpoleco.2020.101882>
27. Ishak P.W., Farzanegan M.R. The impact of declining oil rents on tax revenues: Does the shadow economy matter? *Energy Economics*. 2020;92:104925. <https://doi.org/10.1016/j.eneco.2020.104925>
28. Brown J.P., Maniloff P., Manning D.T. Spatially variable taxation and resource extraction: The impact of state oil taxes on drilling in the US. *Journal of Environmental Economics and Management*. 2020;103:102354. <https://doi.org/10.1016/j.jeem.2020.102354>
29. Wolfson D.J., Koopmans C.C. Regulatory taxation of fossil fuels: Theory and policy. *Ecological Economics*. 1996;19(1):55–65. [https://doi.org/10.1016/0921-8009\(96\)00040-7](https://doi.org/10.1016/0921-8009(96)00040-7)
30. Smith J.L. Issues in extractive resource taxation: A review of research methods and models. *Resources Policy*. 2013;38(3):320–331. <https://doi.org/10.1016/j.resourpol.2013.06.004>
31. Lund D. Rent taxation when cost monitoring is imperfect. *Resource and Energy Economics*. 2002;24(3):211–228. [https://doi.org/10.1016/S0928-7655\(01\)00053-7](https://doi.org/10.1016/S0928-7655(01)00053-7)

32. Nakhle C. Do high oil prices justify an increase in taxation in a mature oil province? The case of the UK continental shelf. *Energy Policy*. 2007;35(8):4305–4318. <https://doi.org/10.1016/j.enpol.2007.02.021>

33. Lund D. State participation and taxation in Norwegian petroleum: Lessons for others? *Energy Strategy Reviews*. 2014;3:49–54. <https://doi.org/10.1016/j.esr.2014.02.001>

34. Alexeev M., Chernyavskiy A. Taxation of natural resources and economic growth in Russia's regions. *Economic Systems*. 2015;39(2):317–338. <https://doi.org/10.1016/j.ecosys.2014.10.007>

35. Shatalov S.D., Pinskaya M.R., Prokaev V.A., Tsagan-Mandzshieva K.N. The Rent Taxation Concept for Solid Minerals Extraction and Recovery. *Financial Journal*. 2023;15(3):9–24. (In Russ.) <https://doi.org/10.31107/2075-1990-2023-3-9-24>

### Acknowledgements

The research was funded through the state assignment of the Financial University under the Government of the Russian Federation.

### Information about the authors

*Dmitry Yu. Fedotov* – Dr. Sci. (Econ.), Associate Professor, Professor of the Department of International Relations and Customs Affairs, Baikal State University (11 Lenin St., Irkutsk, 664003, Russian Federation); Main Researcher at the Institute for Research on Socio-Economic Transformations and Financial Policy, Financial University under the Government of the Russian Federation (49/2 Leningradsky Ave., Moscow, 125167, Russian Federation); ORCID: <https://orcid.org/0000-0001-9908-802X>; e-mail: [fdy@inbox.ru](mailto:fdy@inbox.ru)

*Vitaly Yu. Burov* – Dr. Sci. (Econ.), Associate Professor, Head of the Department of Economic Theory and World Economy of Zabaikalsky State University (30 Alexandro-Zavodskaya Str., Chita, 672039, Russian Federation); <https://orcid.org/0000-0001-8061-1749>; e-mail: [burovschool1956@yandex.ru](mailto:burovschool1956@yandex.ru)

### For citation

Fedotov D.Yu., Burov V.Yu. Taxes and Customs Duties as Instruments for Extracting Oil Rent into the State Budget: The Case of Russia. *Journal of Tax Reform*. 2024;10(1):19–37. <https://doi.org/10.15826/jtr.2024.10.1.154>

### Article info

Received January 10, 2024; Revised February 22, 2024; Accepted March 8, 2024

### Благодарности

Статья подготовлена по результатам исследований, выполненных за счет бюджетных средств по государственному заданию Финансовому университету при Правительстве РФ.

### Информация об авторах

*Федотов Дмитрий Юрьевич* – доктор экономических наук, доцент, профессор кафедры международных отношений и таможенного дела, Байкальский государственный университет (664003, г. Иркутск, ул. Ленина, 11); главный научный сотрудник Института исследований социально-экономических трансформаций и финансовой политики, Финансовый университет при Правительстве РФ (125167, г. Москва, пр-т Ленинградский, 49/2); <https://orcid.org/0000-0001-9908-802X>; e-mail: [fdy@inbox.ru](mailto:fdy@inbox.ru)

*Буров Виталий Юрьевич* – доктор экономических наук, доцент, зав. кафедрой экономической теории и мировой экономики Забайкальского государственного университета (672039, г. Чита, ул. Александрo-Заводская 30); <https://orcid.org/0000-0001-8061-1749>, e-mail: [burovschool1956@yandex.ru](mailto:burovschool1956@yandex.ru)

### Для цитирования

Fedotov D.Yu., Burov V.Yu. Taxes and Customs Duties as Instruments for Extracting Oil Rent into the State Budget: The Case of Russia. *Journal of Tax Reform*. 2024;10(1):19–37. <https://doi.org/10.15826/jtr.2024.10.1.154>

### Информация о статье

Дата поступления 10 января 2024 г.; дата поступления после рецензирования 22 февраля 2024 г.; дата принятия к печати 8 марта 2024 г.