Tax Preferences of Resource Regions and the Risk to the Federal Budget

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ABSTRACT

Introduction. Sustainable development of the Russian economy is largely determined by the oil and gas industry. Since the 2000s oil and gas revenues contributed to covering the federal budget deficit, paying off foreign debt, increasing international reserves, created the Stabilization, Reserve Funds and the National Welfare Fund and pursued a sustainable social policy through indexation of household incomes. At the same time, the development trend of the Russian oil and gas industry in recent decades is a deterioration in the structure and quality of the raw material base of hydrocarbon raw materials, a shift in production centers to regions with harsh climatic conditions. By means of providing reduction factors, the state stimulates the extraction of minerals. Over the past years, reforms have been repeatedly carried out, new coefficients have been introduced, used in calculating the final severance tax rate, tax holidays for mining regions, etc. Therefore, the relevance of the study is due not only to the high role of oil and gas revenues in the country's economy, but also to a sharp discussion about the fairness of the distribution of tax preferences in the oil and gas industry of Russia.

Thus, the purpose of this article is to conduct a comprehensive study of the regional differentiation of taxation of oil producing territories and assess the impact of certain factors on oil and gas revenues of the federal budget. The hypothesis is being tested that with an increase in oil production taxed at zero or at a reduced rate, there is a systematic shortfall in revenue from the oil industry. At the same time, the assumption is being checked that in the short and medium term, changes in the dynamics of oil and gas revenues are influenced more by such market factors as the price of oil and the exchange rate.

Data and methods. The main tax levied on oil companies in Russia is the mineral extraction tax (MET). It was introduced into the tax system of the Russian Federation in 2002 for oil, and later for other types of minerals (natural gas, gas condensate). Currently, the tax rate for oil production is calculated by multiplying the base rate by a number of factors. The share of MET for oil in federal budget revenues increased from 14.8% in 2005 to 26.9% in 2018, which demonstrates the high value of this tax for the budget.

Tax incentives for mineral extraction tax are presented in the form of applying decreasing factors characterizing various properties of oil and the place of its extraction: K_v, K_z, K_d, K_{dv}, less than one, K_{can} equal to 0, applying a rate of 0 rubles, applying a coefficient of 0,7 for deposits that were developed at the expense of taxpayers own funds and in the provision of tax deductions.

The authors used factor analysis as the main method for analyzing the structure of changes in mineral extraction tax. Factor analysis refers to a combination of statistical methods that allow us to establish relationships between variables and to quantify the mutual influence. Methods of factor analysis allow us to identify and evaluate the degree of influence of individual indicators on the resulting indicator of accrued tax. Thus, conclusions can be drawn about the effectiveness of the introduction or regulation through individual coefficients.

The total mineral extraction tax on oil produced in region i in year t can be represented as the product of the mineral extraction tax on oil extracted in region i in year t (Nit), the tax base, i.e. the amount of oil extracted in region i in year t (Bit), the base rate of MET for oil (Tt), the price coefficient in year t, which characterizes the dynamics of world oil prices (Kpt) and the coefficient summarizing the applied benefits for MET for oil in region i in year t (KLit). To assess the influence of the identified factors on income, you can use the logarithmic method, according to which the total change in revenues from mineral extraction tax can be divided into the effects of changes in each of the identified factors.

Results. Analysis of the dynamics and structure of tax benefits in the oil and gas complex of Russia showed that the period 2006-2016 characterized by a constant increase in oil production. The absolute increase amounted to 44.4 million tons of oil, which corresponds to a relative increase of 9.8%. However, in 2017-2018 the amount decreased to 494.3 million tons.

Based on statistics from the Federal Tax Service, the dynamics of the amount of preferential oil by type of benefit was investigated. The calculated structure of the share of tax benefits by type in the total amount of tax benefits showed that in this context for 2016-2017 the privilege associated with the coefficient Kv, reflecting the degree of development of subsoil use objects, is in the lead.

Using the method of factor analysis, the structure of changes in mineral extraction tax on oil in the budget in 2007-2017 is estimated. It turned out that the main determining factor is the average Urals price for the period. It had the maximum positive effect in 2011, increasing revenues by 49.3% and the maximum negative in 2015, reducing revenues by 87.6%. Also, a relationship was found between the average price of oil and the average dollar exchange rate for the tax period, expressed in the hedging effect. The tax base and the factor of benefits had a negligible effect on revenues.

According to the results of the factor analysis, we can talk about a significant dependence of budget revenues on the situation on the oil market. With the growth of oil production taxed at zero or at a reduced rate, there is a systematic shortfall in revenue from the federal budget. There is also a shortfall and increased tax burden in traditional regions of oil production, which in turn inhibits full production and leads to an increase in residual reserves in the fields. At the same time, in the short and medium term, changes in the dynamics of oil and gas revenues are influenced more by environmental factors (oil price and exchange rate).