

# Russian Specificity of Mining Companies' Influence on Regions' Sustainability

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**Abstract.** The article describes the results of the study on determining the influence of mining companies on the level of social development of the regions in which they are functioning. The analysis of formation and distribution structure of taxes, the dynamics of average wages, the quality of life, social satisfaction and entrepreneurial confidence allow the authors to make the conclusions about the need for changing the financial policies of the regions in relation to companies in the industry. In particular, it is proposed to use the mechanism of deferred tax payments which will lead to an increase in the efficiency of the activities of both the mining companies themselves and the regions afterward.

## 1 Introduction

In modern management conditions there are active processes of innovative technologies development aimed at increasing the efficiency of mining companies. The increase in the efficiency of activities affects the amount of the financial result, which ultimately leads to an increase in tax and social charges. However, it should be borne in mind that technological development should be accompanied by the introduction of new systems of nature-saving and socially-providing measures that contribute to the development of mining regions. The study of these processes in the interrelationship is of particular relevance, including in the scale of the state, since the analyzed sphere of activity forms the largest part of Russia's GDP, and also affects the amount of funding for social activities.

## 2 Materials and Methods

The theoretical basis of the study is presented in the works of Russian authors considering the optimization of the tax burden of mining companies: Bloshenko T.A., Pozdnyaev A.S. [1], Bystrushkin A.Yu. [2], Denisov M.N., Komarov M.A. [3], Lazarev V.N. [3]. Also, the authors took into account the position of researchers generalizing the experience of the development of individual mining regions: Zhukova I.V. [5], Kapustenko I.S. [6], Pochinkov I.V., Myaskov A.V. [7]). During the research particular attention was paid to the works showing the degree of participation of mining companies in the formation of the

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social-and-economic situation (Masloboev A.V., Putilov V.A., Yakovlev S.Y. [8], Oydup T.M., Adadimova L.Yu., Oidup Ch.K. [9], Pastyuk A.V. [10], Soloviev V.B., Andreev R.E. [11], Frolova V.B., Borisov O.V., Merzlikina [12-13], Dotsenko E., Ezdina N. [14].

Today there are more than 10 thousand mining organizations in Russia. Of these, 24 can be referred to large ones. The largest number of them is in Siberia, the Urals and the Volga region. Consequently, it can be argued that they have an impact on the social-and-economic development of all regions of Russia and affect the environmental situation. Until 2014, these companies brought 60-70% of the country's GDP. Today, due to the significant transformation of demand and the introduction of sanctions by many countries, their share has become smaller.

It should be noted that in recent years the environment in which mining companies were functioning has been significantly transformed. In particular, today they operate under the conditions of a sharp fluctuation in prices for raw materials, a rapid transition to digital technologies, stimulating the formation of a new business model for their functioning, changing the principles of personnel work, relations with stakeholders. At the same time, while carrying out their activities, they take into account both the positive aspects associated with business development and a number of acute problems that have become even more urgent today, in particular, with the increase in water consumption due to the change of technology and equipment, the need to increase transparency of business for potential investors and shareholders, fast changes in supply and demand for products. These major trends significantly changed the amount of cash flows of companies, which could not but affect the taxes coming to the budgets of various levels. It should be noted that most mining companies use a common taxation system, and therefore pay taxes such as VAT, profit tax, water tax, mineral extraction tax, property tax, transport tax, and insurance premiums. In a number of cases, the taxation regime is used in the form of a production sharing agreement. These taxes are paid both to the federal and regional budgets. The volume of tax revenues depends significantly on the volume of activity of mining companies (see Table 1).

**Table 1.** Taxes paid by mining companies and their distribution in budgets of definite level.

<b>Tax</b>	<b>Tax rate, %</b>	<b>Tax rate paid to the regional budget, %</b>
VAT	18	-
Income Taxes	20	17
Water tax	depending on the water bodies	-
The tax on extraction of minerals (excepting the minerals in the form of hydrocarbon raw materials, natural diamonds and common mineral resources)	depending on the type of minerals	60% of the amount of tax paid
Payments for the extraction of minerals (royalties) under the implementation of production sharing agreements for hydrocarbon raw materials (excepting natural gas)	depending on the type of minerals	5% of the amount of tax paid
Property tax	2	2
Transport tax	depending on engine power	100% of the amount of tax paid

As can be seen, most of the tax revenues of mining companies are directed to the federal budget. However, a certain part remains at the disposal of regional authorities. Our analysis

of receipts by types of taxes in the consolidated budget of the Russian Federation for 2012 - 2017 (Fig. 1) showed that the most significant budget revenues are related to revenues from MET, income tax and personal income tax. It should be noted that for the regions in which mining companies operate, the growth of the last two taxes will be directly related to the increase in production and sales of minerals.



**Fig.1.** Revenues by types of taxes in the consolidated budget of the Russian Federation in 2012 -2017, billion rubles.

The structure of receipts is shown in Fig.1 from which it can be seen that it is not changing significantly. During the analyzed period, the share of mineral extraction tax in the total amount of tax revenues increased by 3.8%, which is primarily due to changes in tax legislation. At the same time, tax funds from income tax, personal income tax and property taxes decreased.

It should be noted that the social condition of the region directly depends on the efficiency of the business, since the solution of many social issues requires funding, which is carried out from the regional budget. Today, mining companies are located almost in all regions of Russia, so tax revenues from their activities are available practically in every region.

### 3 Results and discussion

The analysis of payments' distribution received in the consolidated budget of the Russian Federation for basic taxes showed that mining companies mainly pay federal taxes. For different companies, they range from 88% (for non-ferrous metal mining companies) to 96% (for companies engaged in the extraction of fuel and energy minerals). The share of regional revenues from taxes in the industry varies from 1.77% in the extraction of fuel and energy minerals to 11.41% in the extraction of non-ferrous metal ores. The share of local taxes and fees in total revenues is not significant. Its maximum size is observed in companies engaged in mining of metal ore (1.62%). With a more detailed study of the tax structure in the industry, it is clear that the most significant revenues to the federal budget come from a mineral extraction tax, a little lower than the profit tax and VAT. Regional budgets receive the largest amount of tax revenue from the property tax paid by industry organizations (more than 95% in the industry). The transport tax is less than 1% of the total tax revenue of the consolidated budget of the Russian Federation. It should also be noted

that some federal taxes replenish the regional budget (Table 1), therefore, any region is directly interested in supporting mining companies and increasing their efficiency, which will subsequently affect the revenues of the regional budget.

A study of the number of employed population in this area showed that the most demanded personnel in the mining sector is in the Urals (31.7%), Siberian (21.4%) and Volga (17.33%) federal districts. They account for almost 71% of employees in this area. Consequently, the largest volumes of production are also concentrated in these three districts.

Currently, many companies make ratings, including a rating of social well-being. It takes into account: racial, political, religious persecution, criminality, the arbitrariness of officials, environmental disasters, etc. So, the 2013 research showed that the Yamalo-Nenets Autonomous District, the Tyumen Region, the Belgorod Region, the Republics of Bashkortostan and Tatarstan were the five in top of the list. Analysis of these regions indicates that in four out of five areas minerals are mined. A significant part of the tax revenues from the extraction of minerals forms the budgets of these regions. Comparison of these data with the population employment in the sector under review shows that the largest number of employees is observed in the Tyumen region (27.18%), the Yamalo-Nenets Autonomous District (7.11%) Belgorod Region (2.4%), the Republic of Bashkortazan 3.32%) and Tatarstan (4.36%), which confirms the authors' conclusions about the social development of most regions, which are based on tax revenues from companies that extract natural resources, including from mining companies.

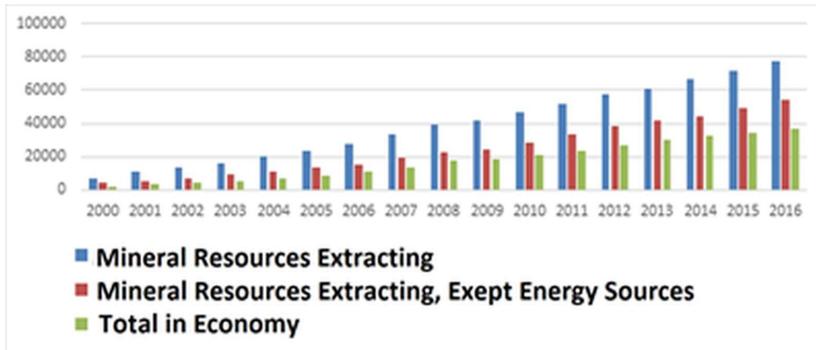
The study of the relationship between the quality of life rating of regions in 2017 and the presence of mining companies in the respective region and the volumes of their activities showed little connection. Leaders in the rating are the following regions: Moscow, St. Petersburg, Moscow Region, Republic of Tatarstan, Belgorod Region. In three of these regions, out of five, mining companies are not represented at all. Accordingly, companies in this industry have no decisive impact on the quality of life of the population in the regions of their presence. A similar situation is in the rating of investment attractiveness of Russian regions. Most of the regions that account for the largest production in the mining industry are in the middle of the rating. They have a moderate risk and middle (Khanty-Mansi Autonomous Area, Kemerovo, Irkutsk regions) or lowered potential (Orenburg, Tyumen Region, Yamalo-Nenets Autonomous District).

Further study made by the authors showed that the stability of the structure of paid taxes is observed against the background of a regular increase in the average wage in the industry. The average wage in the industry by 2016 was more than 77,000 rubles, while in the country as a whole its average level was less than 37,000 rubles.

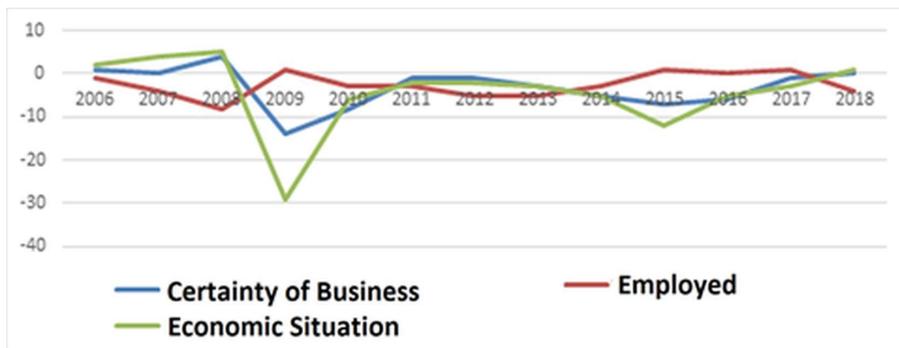
At the same time, it should be noted that the highest growth rate of wages, almost 160%, relative to 134% in the economy as a whole, was observed in 2001, and in the period from 2012 to the present, growth rates are maintained practically at the general economic level.

The study of qualitative parameters of the social position of companies in the regions revealed that on the background of stable growth of wages in the mining industry, the dynamics of employment, in terms of the difference in opinion of respondents in the "adequacy" and "failure", and the index of business confidence did not show stable dynamics.

In general, in the industry, the economic situation was changing from the criterion of "improvement" and "deterioration" in proportion to the general economic situation. The years of deterioration of the economic situation coincide with the periods of financial crises and their consequences (see Figures 2 and 3).



**Fig. 2.** The dynamics of the average wage.



**Fig. 3.** The dynamics of indices of entrepreneurial confidence, satisfaction with employment, economic situation.

Figure 3 shows a general trend in the dynamics of entrepreneurial confidence, with a sharper deterioration of the economic situation, entrepreneurial confidence is reduced in less extent, while the impression of employment against the general background become more positive, and, vice versa.

At the same time, per capita income of the population in the regions with extractive companies is not above the average level, and the development of regional infrastructure, landscaping, including housing construction, is carried out not by budgetary funds, but by means of large extractive companies. The revealed dynamic trends show that, within continuing instability of development forecasts in the mining industry, overall development has a positive trend. Companies are trying to increase their production potential, increasing the efficiency of their operations, optimizing costs, expanding environmental measures, carrying out social security measures not only for their employees, but also for their territories.

Thus, the social state of regions largely depends on the size of tax revenues. To improve the social status of the regions in which mining companies are actively operating and increasing their investment attractiveness among entrepreneurs engaged in various activities, active implementation of the mechanism of deferred tax payments is needed at this stage. This mechanism will allow mining companies to make substantial financial investments in upgrading their own production facilities, which will lead to a change in the ecological situation in the regions, and will reduce the amount of pollutant emissions into the atmosphere and water bodies. In the end, it will allow passing to the model of “mine of

future”, in which not people but robots and mechanisms work, reducing the traumatism in the production.

For that, we propose to use in the regional practice the TIF mechanism, connected with fixing a tax on real estate at a certain level. This mechanism is especially suitable for actively developing companies. So the organization can apply to the regional branch of the Central Bank of Russia for permission to issue TIF-bonds with guaranteed support of regional authorities. Their essence will consist in obtaining funds at the expense of which the region's budget will subsequently be formed and the mining company will be modernized. Reducing the tax for the mining company will allow spending the free funds for the development of business through the acquisition of technologies, machinery and equipment. At the same time, part of the funds will go to form a regional budget. Payment of coupon yield on bonds and subsequent repayment should be assigned to the company. Thus, it will attract funds for the modernization of large infrastructure projects, minimize the risks of investors and subsequently increase tax revenues from the activities of the mining company in the region. Consequently, the social status of the region will change for the better.

## 4 Conclusions

The problems of social well-being of the regions remain relevant for a long period, and to this day require certain solutions. The study conducted by the authors in the context of identifying the dynamic processes of the formation and distribution of resources in the regions, as well as large companies in the extractive industry, led to a number of conclusions.

1. The share of participation of extractive companies in the country's GDP tends to decrease.
2. The development of digital technologies leads to the transformation of technological processes of production.
3. Changes in market conditions, the development of new economic and inter-budgetary relations affect the incoming and outgoing cash flows of companies.
4. The system of tax distribution between different levels of the budget system plays a key role in ensuring the social well-being of the regions.
5. The presence of a mining company in the region is not a guarantee of the prosperity of the region, although it provides a large-scale assistance in solving social problems of the regions. The level of social well-being, according to the ratings, has a high degree of volatility.
6. Regardless the economic situation in the whole country and in individual regions, the growth rate of salaries showed increasing stability.
7. The level of entrepreneurial confidence is in direct connection with the economic situation, but has a less active reaction to changes.
8. Companies participate in the social sphere not only through the financial system of the state, but also through direct financing.
9. The use of deferred tax payment schemes will allow companies to gain an additional opportunity for participation in the development of the companies, regions, and the formation of the country's GDP as a whole.

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