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DISTRIBUTION OF MINERAL EXTRACTION REVENUE: OVERVIEW OF INTERNATIONAL PRACTICE

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ABSTRACT

Purpose. To study basic principles and conditions of the efficiency of the system to redistribute mineral extraction revenue including the countries with lower levels of welfare.

Methods. The research applies a method of qualitative and quantitative analysis of the scientific literature, data by the Natural Resource Governance Institute, national reports according to the Extractive Industries Transparency Initiative, and open Internet sources. Taxation schemes for mineral extraction revenue as well as the most important tendencies in the schemes changes over the recent years were considered. Distributions of the resource taxes in terms of the state administration levels as well as vertical distribution of budget receipts from the development of natural resources were analyzed. The countries distributing tax receipts from the mineral extraction in favour of the local authorities were selected as the object of the research.

Findings. It has been determined that in the majority of countries, payments from mineral extraction are sent to the national-level institutions being distributed back to the mining areas or neighbouring territories. It has been pointed out that certain countries send a share of the mining income to the local budgets automatically using the formulas based on the objective indicators such as amount of population, amount of budget receipts from the area, poverty rate or geographical position. It has been identified that the basic principle of the system of resource use taxation to provide social welfare is represented by the optimal taxation scheme stimulating the production and maximizing the income which share is redistributed in favour of the society to cover all the local administration levels.

Originality. The comparative analysis and determination of the recent data of distribution of budget receipts from mineral resources in terms of the developing countries.

Practical implications. The obtained results may favour the scientific substantiation of the strategy to distribute mineral extraction revenue, planning of the development of mineral and raw material complex of the Central Asian countries; moreover, they may be useful while assessing the efficiency of investment projects of the field development.

Keywords: mineral resources, taxation, extractive industries transparency, distribution of taxes, budget receipts

1. INTRODUCTION

In the majority of countries where leaders in the development of natural resources are represented by state companies (Saudi Aramco, Saudi Arabia; ADNOC, UAE; Equinor/Statoil, Norway etc.), land and its minerals belong to the state (they are publicly owned). Certain political forces (state government, ruling political parties) and business-groups (co-owners of mining companies) use that fact as the key argument of the issue that the natural resource revenue is distributed in the interests of the country and the whole society. However, even lea-

ding role of the state in redistribution of that revenue does not protect it from its privatization by specific social groups. Nevertheless, some countries have managed to solve the problem successfully. For instance, state oil companies of Kuwait and Yemen are owned by the ruling dynasties; however, as a result of natural resources redistribution, the countries could provide high living standards and social protection for their population and develop sustainable infrastructure (Couttenier & Sangnier, 2015). Norway, the United Kingdom, the USA and other countries accumulate and redistribute consid-

able amount of the revenue not only for the national needs but also for the development of social sphere and internal investments (Hinojosa, Bebbington, Barrientos, & Addison, 2010). Though, in Venezuela, state monopoly for oil extraction has not eliminated overall poverty yet.

Natural resources play a dominating social, economic, and political role in 81 countries which cover a quarter of the world gross domestic product (GDP) and half of the world population (The World Bank Group, 2019). Taking into consideration that fact, transparency of the operations in mining industries is of special importance in the context of reporting to state agencies, high administration standards, and sustainable economic development (Piwniak, Bondarenko, Salli, Pavlenko, & Dychkovskiy, 2007).

Extractive Industries Transparency Initiative (EITI) is one of the mechanisms favouring the transparency increase (Moses, Houque, & van Zijl, 2018). The countries, which have undertaken obligations to implement EITI standard, issue reports on the payments by mining companies to the state as well as on the payments declared by the state as the ones sent to the state budget. Thus, the process may be controlled by different interested parties – state agencies, civil society, and company representatives.

According to the Initiative standard, citizens have an access to the information on tax and non-tax payments of the mining companies; that helps control their activity. Along with that, it favours positive investment climate taking into account the fact that transparency of that sector of economy allows investors reducing their risks to be sure in clear regulations while making decisions concerning the start of investments (Corrigan, 2017).

Mineral extraction revenue is distributed at the expense of taxation. Schemes for the taxation of extracted mineral resources depend upon the industry where a subsoil user operates, volume of the prospected minerals, and additional (specific) risks (Saik, Petlovanyi, Lozynskiy, Sai, & Merzlikin, 2018). While determining the amount of natural and resource rent, we should take into account the volume of revenue and costs for the development and extraction as well as the index of normal profit of an investor considering reasonably estimated risks (Daniel, Keen, & McPherson, 2010).

Specific risks of the mining industry involve: long-term period of geological prospecting and other exploratory operations; considerable volume of the initial irreversible investments into the deposit (since specific equipment aimed for the deposit will never be used again); uncertainty as for the future positive monetary flow from the raw material sell due to high volatility and unpredictability of prices; long-term period of operation below the breakeven point; possible negative effect of changes in political or environmental media; and considerable costs during the deposit development closure (Otto et al., 2006).

Taxation schemes vary considerably in the context of national risk components (political, sovereign, and legislative). Since the rate of normal profitability for some deposit investment project is higher for the country with high assessed risks, taxation scheme should offer additional tax benefits or reductions to compensate excess risks. At the same time, it is a widely used practice to

apply increased royalty or tax rates for highly profitable deposits (Christmann & Stolojan, 2001).

Optimal ratio of fiscal tools depends upon the possibilities and preferences offered by a specific country. Thus, taxation tools oriented to the extraction volume are convenient in terms of administration and provide stable budget receipts (Arabian countries, Mexico, some USA states). At the same time, they transfer key risks of the project implementation onto a subsoil user; as a response to that action, government reduces overall tax burden (Corporate income taxes..., 2012).

Other countries (Norway, France, Great Britain) apply more progressive taxation scheme (being oriented to the amount of income) by shifting the burden of risks to the state; in this case, comparatively high tax rate acts as a compensator (Land, 2010).

Apart from the general approach to the applied taxation scheme, certain external factors influence the selection of fiscal tools: overall economic dynamics (increase, recession, stagnation); extraordinary events changing ecological balance (natural disasters, technogenic accidents, catastrophes). Taking into consideration a multivariance of the approaches to the selection of certain taxation scheme, it is essential to analyze the evolution of approaches and schemes of mineral extraction taxation.

2. TENDENCIES IN THE INTERNATIONAL PRACTICE IN TERMS OF MINERAL EXTRACTION TAXATION

While generalizing international practice in the sphere of mineral extraction taxation, important tendencies being observed for the recent years should be analyzed:

1. Intensification of the international competitiveness (including tax one): gradual unbalanced recovery of the world economy after the 2008 – 2009 crisis has resumed the competitiveness for the potential investors between the developed countries and the ones with developing markets. Systematic decrease in the corporate income tax rate is one of the manifestations of that process. In terms of the countries rich in natural resources (Indonesia, Malaysia, Nigeria etc.), the mentioned tendency is accompanied by the reconsideration of the rates by means of special fiscal tools: royalty and rent taxes towards their growth which makes it possible to keep the budget in relatively balanced conditions (Issabayev & Rizvanoghlu, 2019).

2. Price rise in the world commodity markets in post-crisis period has allowed numerous countries (Columbia, Gabon etc.) increasing ad valorem rates as royalty as well as the royalty for the volume of the extracted raw material. Unequal price rise stipulates further differentiation of the tax rates and royalty depending upon the mineral type (Hogan, 2008).

3. Under conditions of the economic growth and increased demand for mineral resources, countries with the developing markets (Brazil, Ghana, Indonesia etc.) use special fiscal tools as a key source of income. In this context, amount of tax incomes outstrips the economy-wide dynamics (Parcero & Papyrakis, 2016).

Developed countries (the USA, Canada) try to reduce negative impact of the taxation of mineral extraction revenue by intensifying stimulating functions of universal fiscal tools (i.e. income tax), increasing neutrality of

special fiscal tools (excess profit tax, royalty for income), and intensifying transparency of the process of tax payment by subsoil users and their administration by the authorized taxation bodies.

4. Beginning from 2010, popularity of the mixed taxation scheme (taking into account the extracted raw material and project profitability) is growing that makes it possible to minimize risks of state fiscal losses and risks of project attractiveness decrease due to the excessive taxation for an investor (Denmark, Norway, the Netherlands). Moreover, in federative countries (the USA, Canada), rent taxes become increasingly the revenue source not for central government but for local communities; thus, those payments become target ones (Van Alstine & Barkemeyer, 2014).

5. For the recent decade, a divergence between the developed countries and the countries with the develop-

ping markets has been intensified as for objectives of mineral extraction taxation. Necessity in the additional financial resources for the budget of the countries with developing markets is the main problem of the “short-sightedness” of taxation policy and cause of using up mineral extraction profit that explains fiscal orientation of the mining taxation system in such countries (Vagonova & Volosheniuk, 2012).

Enforcement of the rights for future generations as the main long-term non-fiscal taxation objective in the developed countries explains target nature of the mineral extraction revenue sent to so-called “wealth funds” (Hil-son, 2012). Table 1 represents a list of the most important funds of that kind.

Thus, in terms of modern economic processes, a problem of fair and efficient distribution of mineral extraction revenue is of special importance.

Table 1. International stabilization funds formed at the expense of financial deductions from mineral extraction, at the end of 2016 (in the order of assets decreasing) (Sovereign wealth fund, 2019)

Country	Fund name	Assets, bln USD	Resource
State			
Norway	State Pension Fund – Global	1002.0	Oil
Kuweit	Kuwait Investment Authority	642.0	Oil
Saudi Arabia	SAMA Foreign Holdings	514.0	Oil
Qatar	Qatar Investment Authority	320.0	Oil
Saudi Arabia	Public Investment Fund	183.0	Oil
Iran	National Development Fund	91.0	Oil
Russia	Russian National Wealth Fund	76.3	Oil
Kazakhstan	Kazakhstan National Fund	64.7	Oil
Brunei	Brunei Investment Agency	40.0	Oil
the UAE (federal)	Investment Fund	34.0	Oil
Azerbaijan	State Oil Fund of the Republic of Azerbaijan	33.1	Oil
Oman	State General Reserve Fund	18.0	Gas
Eastern Timor	Petroleum Fund of Timor-Leste	16.6	Gas
Chile	Economic and Social Stabilization Fund	14.7	Copper
Algeria	Revenue Regulation Fund	7.6	Oil
Oman	Oman Investment Fund	6.0	Oil
Mexico	Oil Revenues Stabilization Fund of Mexico	6.0	Oil
Botswana	Pula Fund	5.7	Diamonds and minerals
Angola	Fundo Soberano de Angola	4.6	Oil
Columbia	Colombia Savings and Stabilization Fund	3.5	Oil and ore
Kazakhstan	National Investment Corporation	2.0	Oil
Nigeria	Nigeria Sovereign Investment Authority	1.4	Oil
Iraq	Development Fund for Iraq	0.9	Oil
Venezuela	FEM – Macroeconomic Stabilization Fund	0.8	Oil
Ghana	Ghana Petroleum Funds	0.45	Oil
Gabon	Sovereign Fund of the Gabonese Republic	0.4	Oil
Mongolia	Fiscal Stability Fund	0.3	All minerals
Mauritania	National Fund for Hydrocarbon Reserves	0.3	Gas
Regional			
The UAE, Abu-Dhabi	Abu-Dhabi Investment Authority	828.0	Oil
The UAE, Dubai	Investment Corporation of Dubai	209.5	Oil
The UAE, Abu-Dhabi	Mubadala Investment Company	125.0	Oil
The UAE, Abu-Dhabi	Abu-Dhabi Investment Council	110.0	Oil
The USA, Alaska	Alaska Permanent Fund	64.9	Oil
Canada, Alberta	Alberta Heritage Savings Trust Fund	13.4	Oil
The USA, Wyoming	Permanent Wyoming Mineral Trust Fund	7.3	All minerals
The USA, Northern Dakota	North Dakota Legacy Fund	4.3	Gas
The USA, Alabama	Alabama Trust Fund	2.7	Gas
The USA, Utah	Utah-SITFO	2.0	Minerals
The USA, Idaho	Idaho Endowment Fund Investment Board	2.0	Minerals
The USA, Louisiana	Louisiana Education Quality Trust Fund	1.3	Gas
Australia, Western Australia	Western Australian Future Fund	0.3	All minerals

3. MODEL OF VERTICAL DISTRIBUTION OF TAX RECEIPTS FROM THE MINING INDUSTRIES

Speaking about the distribution of tax receipts from the mining industries, it should be noted that despite different fiscal systems, many countries with high resource potential have developed methods to distribute local tax revenues. In the majority of cases, they mean lowered level of the government interference into the local budget administration and empowerment of the local authorities with the possibility to use rent payment and other revenues in the most efficient way – to satisfy the needs of local communities. Similar model of budget income distribution among all the levels of administration is known as a model of vertical distribution.

Following countries are among the ones which distribute tax revenues from the mining industries for the account of local authorities: Brazil, Ghana, Indonesia, Kazakhstan, Kyrgyzstan, China, Mongolia, the Philippines etc. Governments of those countries distribute budget revenues among all the local administration levels (vertical distribution) (Otto, 2000). Table 2 represents distribution of mineral taxes according to the levels of state administration. In Table 2 other sources of income, such as sales tax, dividends, and license payments are not included into the table.

Table 3 represents vertical distribution of budget revenues from the natural resources in the developing countries which distribute tax revenues from the mining industries for the account of local authorities.

Data of the tables show that in terms of the most countries, payments from mineral mining comes to the national-level institutions; however, they are distributed back to the mining areas and neighbouring territories. In this context, some countries (Brazil, Indonesia, the Philippines, Mongolia, Kyrgyzstan) send a share of revenues from mining to local budgets automatically using formulas based upon the objective indicators such as the amount of population, amount of budget receipts from the territories, poverty rate or geographical position.

Table 3. Vertical distribution of budget revenues from natural resources in the developing countries (Natural resource revenue sharing, 2016)

Country	Resource	Revenue stream	National government	Governing bodies in the mining territories	Municipal/district governments	
					producing	non-producing
Brazil	Oil (apart from off-shore)	Rent	12.6%	52.5%	26.2%	8.7%
	Oil (apart from off-shore)	Special participation (some fields)	50.0%	40.0%	10%	0%
Ghana	Minerals	Royalties	91.0%	—	9%	0%
	Oil	All	84.5%	3.1%	6.2%	6.2%
Indonesia	Gas	All	69.5%	6.1%	12.2%	12.2%
	Minerals	Royalties	20.0%	16.0%	32%	32%
The Philippines	Minerals	All	60.0%	8.0%	18% municipality; 14% barangay	0%

In 2016, the Local Development Fund (LDF) was established there; the Fund received royalty from the mining industry as well as the payments for issuing mining licenses from the corresponding regions. At the same time, at the level with the representatives of administrative units, the LDF is responsible for making decisions concerning the funds administration.

Table 2. Distribution of mineral taxes according to the levels of state administration (Natural resource revenue sharing, 2016)

Country	State structure	Corporate income tax		Royalty		Property/land tax	
		N	S	N	S	N	S
Argentina	Federal	×		×		×	
Australia	Federal	×		×	×	×	
Brazil	Federal	×		×		×	
Canada	Federal	×	×	×	×	×	
Chile	Unitary	×				×	
China	Regionalized unitary	×		×		×	
Congo	Unitary	×		×			×
Ghana	Unitary	×		×		×	
India	Federal	×		×			×
Indonesia	Regionalized unitary	×		×		×	×
Kazakhstan	Unitary	×			×		×
Kyrgyzstan	Unitary	×		×			×
Mexico	Federal	×		×		×	
Mongolia	Unitary	×			×		×
Myanmar	Unitary	×		×		×	×
Peru	Unitary	×		×	×		×
the Philippines	Regionalized unitary	×	×	×	×		×
Russia	Federal	×	×	×			×
Southern Africa	Unitary	×		×			×
Tanzania	Regionalized unitary	×		×			×
the UAE	Federal		×		×		×
Great Britain	Regionalized unitary	×					
the USA	Federal	×	×	×	×		×

Note:

N – national government;
S – sub-national administration (state, province, regional or municipal);

* – applied only within the territory of federal administration;

** – royalty are charged and excised only by the groups of indigenous community and some local authorities.

For instance, in Mongolia, most revenues from mining and oil sector are centralized; however, separate development funds operate for each city, town or region.

Slightly different situation is observed in Kazakhstan where tax revenue from oil sector is administered by the National Fund while tax payments from the mining industry are controlled by national and local state institutions without any special procedures.

Kyrgyzstan also distributes financial revenues from the mining industries between national and local budgets.

However, apart from standard taxes from mining activity, local authorities also obtain a package of social benefits; in some cases, company may offer local communities additional compensations including monetary payments.

Alaska has managed to harmonize versatile interests of the center and regions as well as business-structures and regional community. The experience is considered to be unique since a particular region of the country has managed to provide rather high level of common wealth mostly owing to the well-balanced and reasonable social and economic rent policy.

Corresponding system of the mineral use taxation is the important constituent of the mechanism to provide social welfare as a result of income redistribution.

There are following taxes at the territory of the state (Alaska's oil and gas..., 2012):

- mineral extraction tax – net profit from the extraction is subject to tax at the rate of 15% (in 2014, the tax reached 75% according to the progressive scale). The tax provides about 88% of the state income from the oil and gas extraction;

- royalty (compensation payment of the state for the right of natural resources ownership) – in the majority of cases, there is the rate of 12.5%;

- property tax is 2% from the value of the property required for the field development; corporate tax is 9.4%; environmental pollution charge during oil extraction is USD 0.05 for each barrel.

Major share of the tax payments is sent to the state budget (Common fund) to cover government expenditures. At the same time, 25 – 50% of the funds received owing to the resources taxation are sent to the specially established fund (Alaska Permanent Fund).

Basic principle of the taxation policy in terms of the income of the resource sectors of the economy is in the establishment of optimal rent climate which both stimulates the production and maximizes the income paid to the government (in the form of taxes).

In general, practice of the redistribution of rent income in the state of Alaska has its advantages and disadvantages (Bazaleva & Kaznacheev, 2015).

Advantages include the establishment and efficient functioning of the special fund – Alaska Permanent Fund and the Constitutional Budget Reserve Fund. It was the establishment of those two Funds that made it possible to solve the problem of surplus profit redistribution (i.e. natural resource rent), accumulation of funds, and efficient management of the accrued capital.

Disadvantages of the practice demonstrated by Alaska are in the development of maximally favourable tax scheme for enterprises (mostly, oil ones) which are tightly connected with the government. As a result, there are certain agreements between legislative power of the state and oil industry in favour of the latter.

Thus, the state of Alaska demonstrates economic and social efficiency of the system of natural resource rent receipt and use along with the unclear specification of the ownership rights with the following rent diffusion.

Below, there are examples of the developing countries when budget receipts obtained at the central level may be received locally within the areas they originate from or the neighbouring territories.

4. DISTRIBUTION OF THE MINERAL EXTRACTION REVENUE IN TERMS OF THE DEVELOPING COUNTRIES

4.1. Kazakhstan

In Kazakhstan, different institutions are responsible for tax administration. Kazakhstan National Fund regulates budget receipts from oil and gas sectors. In fact, that institution accumulates direct tax payments from the oil and gas sector; the payments account for 72.6% of the total state budget receipts (Natsional'nyy otchet..., 2017). In particular, the National Fund is established to ensure oil-selling revenues and balance national and regional budgets. Both the government and executive municipal bodies administrate budget receipts from the mining industry.

Reports on the expenditures of the National Fund as well as national and local budgets are published by the Ministry of Finances in statistic bulletins. Despite the fact that the government publishes the information on those financial operations, details concerning the formulas to calculate budget receipts distribution are not revealed. Moreover, changes are being constantly introduced into the tax rates. For instance, in 2011, mineral extraction tax was 7%; however, in 2014, it was reduced down to 5%. Basic local taxes paid by the subsoil users are as follows: emission tax, tax for the corporate vehicles, property tax, social tax, and land tax.

According to the report by the EITI of Kazakhstan (Natsional'nyy otchet..., 2017), in 2017, KZT 38.7 bln (USD 283 mln) were allocated for social and economic development of the regions by the subsoil users from oil and gas as well as mining industries; in this context, only oil and gas enterprises paid KZT 27.4 bln being almost USD 151 mln (71% of the total amount). For instance, in 2017, Tengizchevroil – joint venture of Chevron, ExxonMobil, KazMunayGas, and LukArco paid out more than USD 372 mln to the local budgets.

4.2. Kyrgyzstan

According to the report by the EITI of Kyrgyzstan (Otchet Kyrgyzskoy Respubliki..., 2015), in 2014, mining industry covered 8.4% of GDP. Moreover, in 2014, 40% of total export and 17% of total tax budget receipts accounted for mining industry.

According to the changes stipulated by the local government reform in 2012, authority and independence of local government bodies have increased considerably. In addition, new legislation on the distribution of budget receipts from the natural resources, adopted in 2013, has resulted in greater local financial receipts from the activities of mining enterprises. In 2014, the Regional Development Fund was established to develop local infrastructure and support different social and economic programmes.

Kyrgyzstan is divided into the regions consisting of districts; the districts are subdivided into communities (auls-aimaks). State budget functions at two levels: at the national level and at the level of auls-aimaks; due to that fact, they have their considerable responsibilities in terms of the expenses.

National budget receives income tax, VAT, rent payment, bonuses, excises, customs duties, administra-

tive fines, and state capital dividends. Taxes being sent automatically to the local territories include land and property taxes, administrative fines, and budget receipts from the municipal property administration. All the auls-aimaks receive 50% of the income tax from the selling in terms of inter-budgetary transfers. In addition, auls-aimaks, within which territory mining enterprises operate, receive 50% of rent payment from the mineral extraction (except gold, oil, and gas), 3% of the licensure payment, and 3% of the auction payments (Otchet Kyr-gyzskoy Respubliki..., 2015).

In addition, companies operating within the regions with rich resources, pay 2% rent payment known as the “payment for the development and support of local infra-structures”. That payment is distributed among certain auls-aimaks (20%) and national budget (80%) for further distribution among other auls-aimaks through the Regional Development Fund. In its turn, corresponding fund is divided into smaller funds in terms of regions and districts to support projects aimed at the development of communities. As a rule, objectives of those payments are to help the communities with economic progress and development of local infrastructure. Auls-aimaks rich in mineral resources and located within the territory of mining regions are given certain social support; in some cases, companies may offer local communities additional compensations including monetary benefits.

4.3. Mongolia

Mongolia is considered a significant world producer of gold, copper, and coal. 16.7% of GDP is accounted for the mining industry. Major share of the revenues from mining and oil sector is centralized. In particular, government of the country receives rent payments from the mineral extraction and company income tax. Authorities of the regions and districts (aimaks) receive funds through the Common Local Development Fund (CLDF). The CLDF gets financing owing to the redistribution of the share of state budget income to support and provide sustainable local development. According to the report by the EITI of Mongolia, the Fund has several sources of income, i.e.:

- 5% of total VAT amount for goods and services (except the import);
- 5% of rent payment from the mineral extraction;
- grants and financial foreign aid to support local development;
- transfers from the lower-level budgets to the upper-level budgets as well as 30% of rent payment from the oil sector (Mongolia twelfth EITI Report, 2018).

Besides, there are certain funds for the development of each town, city, region etc. It should be noted that local development funds receive finances allocated from the CLDF, additional revenues (accumulated at the expense of tax increase and cost saving), grants and donations from foreign funders, 10% of the fund balance after rent payments transferring from the entities dealing with state projects implementation, and 50% of the payment for the licensure for exploration and development of mineral resources. Moreover, local authorities are involved in issuing the licensure – they are consulted with while issuing the licenses for mining activity.

According to the EITI of Mongolia in 2017, local development funds received the income of MNT 105.9 bln (USD 53 mln) including 70.4% of VAT (rate of 25%), 18.2% of the payment for mineral extraction licensure (rate of 5%), and 5.9% of VAT for oil extraction (rate of 30%) (Mongolia twelfth EITI Report, 2018).

Nevertheless, the approach is characterized by several disadvantages. In particular, the available system of distribution basing upon the amount of population has resulted in much higher level of funds allocation for the capital which is also considered to be the richest region.

In addition, the country has the Fund of Human Potential Development aimed at the accumulation of savings and additional reserves from the mining sector. The Fund has following sources of income (Mongolia twelfth EITI Report, 2018):

- dividends from the sale of the government stock of entities which have mining licenses;
- 65% of rent payments from the entities which extract mineral resources;
- net profit from the investments into the Fund.

4.4. China

Resource tax being a part of Chinese tax system and being collected from the subsoil users (Kuklina, Chzhu Syaotsin, Sun’ Yuysyu, & Se Tyan’chen, 2014) was introduced into the tax system of the People’s Republic of China in 1984. Both business entities and individuals dealing with mineral extraction within the territory of the country (including the offshore zone of China) pay that tax. Initially, resource tax was collected only in case of coal, oil, and natural gas extraction. In 1988, the tax began to be collected from the iron ore extraction and, further, from the extraction of salt, non-ferrous metal ores, non-metal ores, rare earth elements etc. Cost (in case of oil and natural gas) or amount (for other minerals) is the taxation basis (Kuklina & Gao Tsze, 2005).

Major share of the resource tax in the PRC is sent to regional budgets except the tax receipts from oil and natural gas extracted in the offshore zone of China – they are sent to the central budget. All the organizations and sole proprietors involved in mineral extraction and salt production within the territory of China are to pay resource tax (Sun’ Yuy, 2010).

The tax rate is set for the weight/volume of the extracted minerals; it varies depending upon the type and development method (Table 4).

Table 4. Resource tax rates in the PRC (Tax on the use..., 2019)

Taxation object	Tax rate
Crude oil	8.0 – 30.0 CNY/t
Natural gas	2.0 – 15.0 CNY/1000 m ³
Coal	0.3 – 5.0 CNY/t
Ferrous metal ores	2.0 – 30.0 CNY/t
Non-ferrous metal ores	0.4 – 30.0 CNY/t
Other non-metal ores	0.5 – 20.0 CNY/t/ 1000 m ³
Hard salt	10.0 – 60.0 CNY/t
Liquid salt	2.0 – 10.0 CNY/t

In 2010, China initiated reforms in the sphere of mining taxation stipulating gradual refuse to use tax rates from the extraction amount and introduction of ad valorem rates (ad valorem tax). Since November 1, 2011,

ad valorem rates for oil and natural gas extraction has been introduced over the whole territory of China along with the abolishment of the specific excise collected while developing oil within the continental shelf (Shira, 2016). Within the structure of Chinese tax revenue, resource tax accounts for less than 1% being rather low index taking into account considerable resource potential of the PRC (Zhang, 2014).

However, Chinese practice as for the resource tax distribution to the different-level budgets may be applied in Russia. In terms of China, almost all the sum of tax in terms of hard minerals and carbohydrates extracted within the mainland is sent to regional budgets being additional source for territorial development. As for Russia, 100% of MET from widespread mineral deposits, 100% of MET from diamonds, 60% of MET from other types of minerals are sent to regional budgets. At the same time, federal budget receives 100% of MET from carbohydrates including natural gas and 100% of MET from the minerals of Russian continental shelf, exclusive economic zone beyond the RF territory. Thus, the majority (in money terms) of MET share is sent to the federal budget leaving rather small sums of tax receipts for the regions.

5. CONCLUSIONS

Comparison of the taxation practices of both developed and developing countries demonstrates that if in the USA tax receipts into regional budgets bypass federal center, in case of the developing countries (Mongolia, Kazakhstan, Kyrgyzstan) major share of the mineral extraction receipts is centralized being distributed immediately from the center. In our opinion, state budget receipts from the mineral extraction should be sent to the local budgets. Finally, financial resources go back to the mining regions; however, it is hard to say whether those funds correlate to the payments made by the companies operating in those regions. Simply stated, there is no direct correlation between the payments by a certain company into the state budget and final amount of funds received by the budget of a region, district or community within which territory that company operates.

Thus, analysis of the international practices to apply a mechanism of redistribution of mineral extraction income aimed at the improved social welfare allows drawing certain conclusions.

There are following principles of the efficiency of the system of mineral extraction revenue redistribution: specification of the ownership right of all the parties of economic relations within the civil (social) form of ownership for natural resources; support of the balance in the interests of the involved parties along with the prevention of domination of certain groups (if necessary, they may be even forced to operate for the purpose of social welfare); possibility of social control of the operation of all the institutions and elements of the system, access to the information on the results of their functioning.

Appropriate resource-use taxation system is the important component of the mechanism aimed at provision of social welfare as a result of redistribution of the mineral extraction revenues. Establishment of optimal tax climate, stimulating the production and maximizing the

income which share is redistributed in favour of the society to cover all the local administration levels, is the basic principle of that system.

Government acts as a leader in the formation of the mechanism to distribute mineral extraction revenue. Specialized funds are the efficient tool of state policy, especially while solving the problem of funds accumulation and efficient administration of the accrued capital aimed at social welfare. Their detailed analysis may be rather prospective issue for further studies.

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РОЗПОДІЛ ДОХОДІВ ВІД ВИДОБУТКУ КОРИСНИХ КОПАЛИН: ОГЛЯД МІЖНАРОДНОГО ДОСВІДУ

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Мета. Вивчення основних принципів та умов ефективності системи перерозподілу доходів від видобутку корисних копалин, у тому числі в країнах з невисоким рівнем добробуту.

Методика. У дослідженні використаний метод якісного та кількісного аналізу наукової літератури, даних Інституту управління природними ресурсами (Natural Resource Governance Institute (NRGI)), національних звітів за стандартом Ініціативи прозорості видобувних галузей (Extractive Industries Transparency Initiative, ІПДО), відкритих джерел у мережі Інтернет. Розглядалися режими оподаткування доходів від видобутку корисних копалин і найбільш їх важливі тенденції протягом останніх років. Досліджувався розподіл податків на корисні копалини за рівнями державного управління, а також вертикального розподілу бюджетних надходжень від природних ресурсів. Як об'єкт дослідження обрані країни, що розподіляють податкові надходження від видобувних галузей на користь органів місцевого самоврядування.

Результати. Встановлено, що для більшості країн платежі від видобутку корисних копалин надходять до інститутів загальнонаціонального рівня, однак розподіляються назад на місця видобутку або в довколишні райони. Відзначено, що деякі країни передають частину з доходів від видобувних галузей до місцевих бюджетів автоматично, використовуючи формули, що базуються на об'єктивних індикаторах, таких як кількість населення, обсяги бюджетних надходжень з території, рівень бідності або географічне положення. Виявлено, що основним принципом системи оподаткування використання ресурсів для забезпечення суспільного добробуту є встановлення оптимального режиму оподаткування, що залишає стимули до виробництва і, в той же час, максимізує дохід, частина якого перерозподіляється на користь суспільства між усіма місцевими рівнями управління.

Наукова новизна полягає у порівняльному аналізі та виявленні особливостей новітніх даних розподілу бюджетних надходжень від природних ресурсів на прикладі країн, що розвиваються.

Практична значимість. Результати можуть сприяти науковому обґрунтуванню стратегії розподілу доходів від видобутку корисних копалин, плануванню розвитку мінерально-сировинного комплексу країн Серед-

ньої Азії, а також можуть бути корисними при оцінці ефективності інвестиційних проектів освоєння родовищ корисних копалин.

Ключові слова: корисні копалини, оподаткування, прозорість видобувних галузей, розподіл податків, бюджетні надходження

РАСПРЕДЕЛЕНИЕ ДОХОДОВ ОТ ДОБЫЧИ ПОЛЕЗНЫХ ИСКОПАЕМЫХ: ОБЗОР МЕЖДУНАРОДНОГО ОПЫТА

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Цель. Изучение основных принципов и условий эффективности системы перераспределения доходов от добычи полезных ископаемых, в том числе в странах с невысоким уровнем благосостояния.

Методика. В исследовании использован метод качественного и количественного анализа научной литературы, данных Института управления природными ресурсами (Natural Resource Governance Institute (NRGI)), национальных отчетов по стандарту Инициативы прозрачности добывающих отраслей (Extractive Industries Transparency Initiative (ИПДО)), открытых источников в сети Интернет. Рассматривались режимы налогообложения доходов от добычи полезных ископаемых и наиболее их важные тенденции на протяжении последних лет. Исследовалось распределение налогов на полезные ископаемые по уровням государственного управления, а также вертикального распределения бюджетных поступлений от природных ресурсов. В качестве объекта исследования выбраны страны, которые распределяют налоговые поступления от добывающих отраслей в пользу органов местного самоуправления.

Результаты. Установлено, что для большинства стран платежи от добычи полезных ископаемых поступают в институты общенационального уровня, однако распределяются обратно на места добычи или в близлежащие районы. Отмечено, что некоторые страны передают часть с доходов от добывающих отраслей в местные бюджеты автоматически, используя формулы, которые базируются на объективных индикаторах, таких как количество населения, объемы бюджетных поступлений с территории, уровень бедности или географическое положение. Выявлено, что основным принципом системы налогообложения использования ресурсов для обеспечения общественного благосостояния является установление оптимального режима налогообложения, что оставляет стимулы к производству и, в то же время, максимизирует доход, часть которого перераспределяется в пользу общества между всеми местными уровнями управления.

Научная новизна заключается в сравнительном анализе и выявлении особенностей новейших данных распределения бюджетных поступлений от природных ресурсов на примере развивающихся стран.

Практическая значимость. Результаты могут способствовать научному обоснованию стратегии распределения доходов от добычи полезных ископаемых, планированию развития минерально-сырьевого комплекса стран Средней Азии, а также могут быть полезны при оценке эффективности инвестиционных проектов освоения месторождений полезных ископаемых.

Ключевые слова: полезные ископаемые, налогообложение, прозрачность добывающих отраслей, распределение налогов, бюджетные поступления

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