Natural resource factor of value formation of mining companies (on the example of logging enterprises of the Komi Republic)

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Abstract. The modern stage of social development is characterized by a revision of the attitude of business and society to natural resources involved in economic activities. For logging companies, the reflection in the financial statements of the value of a forest plot and the result of the process of using standing timber are becoming a key factor shaping the market value of organizations. However, the study revealed that the financial statements were not informative in terms of the information provided on the controlled reserves of natural resources. The use of methods of comparison, analysis, synthesis and generalization made it possible to develop proposals for the creation of a reliable information base for users who estimate the value of a logging company according to the data of traditional financial statements.

Keywords: mining companies, logging, business value, accounting for reserves of natural resources, financial statements.

The value of business in modern economic conditions, when the vector of economic growth at all levels of management is set by ensuring sustainable development, should be determined on the basis of an assessment of the company not only as a complex of its own accumulated monetary, industrial and intellectual capital, but also as an economic entity that responsibly functions in conjunction with natural environment. This statement is a synthesized result of the analysis of the work of many researchers who study the issues of interaction between the economy and the environment, as well as their influence on each other, from various positions.

So, M.V. Melnik and V.G. Kogdenko, in their study, reveal that natural capital, being a combination of natural resources and land areas, and being an area of intersection of economic and environmental subsystems, has a significant impact on the value of a business, and propose a methodology for its comprehensive analysis based on integrated reporting data [10]. A.G. Kharin notes both the essential role of natural capital for most types of business and the problem of the methodology of its valuation [17]. S.E. Rozin, Ya.M. Shchelokov and V.G. Lisienko develops the energy theory of value [12], the postulates of which, according to A.I. Lapteva, are reflected in the post-industrial

concept of value, complementing and expanding the range of knowledge of its phenomenon, since they consider not only the labor, but also the natural component [9]. It should be noted, however, that the very term "post-industrial society" is currently beginning to lose ground, being subjected to harsh criticism from Russian scientists. S.S. Gubanov clearly proves that industrial production has not ceased to be the locomotive of the economy, it only acquires other features and requires a new attitude towards itself, therefore, it is more correct to call the modern stage of development "neo-industrialization" [3]. The concept put forward by S.S. Gubanov, are shared by many leading economists and novice researchers (I.A.Sushkova, D.V. Firsov, V.G. Naimushin, V.L. Inozemtsev, A.I. overcoming obstacles in the Russian economy on the way to new industrialization. All authors are unanimous that this stage of social development requires the embodiment of new views on the interaction of the state, business and society, bringing their interests under a common denominator and developing a single vector of development aimed at combining planning and management at the macro and micro levels, to increase investment attractiveness, competitiveness and efficiency of domestic production, a change in its focus on raw materials to create products with high added value with the obligatory sparing impact on nature and the implementation of social guarantees.

Thus, it can be argued that the requirement of neo-industrialization is the positioning of natural resources not as a free given, endless for use, but as a value that requires careful and minimal exploitation. Therefore, they become a common object of close attention of public, corporate and state interests, in connection with which they acquire the role of a key factor intended to form the market value of companies both in terms of the volume of nature reserves entrusted to them in management, and in the assessment of the quality of implementation by the state and the public. undertaken obligations to preserve the environment. M.V. Melnik and V.G. Kogdenko note that at present, natural capital is considered as the basis of the entire economic system, and its role, as the scarcity of natural resources increases, becomes more and more significant [10].

Natural resources, in principle, can participate in the economic activity of any enterprise, but their functional contribution will be different. As a rule, for the bulk of production organizations, they act as the operational basis of production, i.e. represent the immediate territory on which the production facilities are located. In agriculture, they are objects of production activity. In the mining industry, natural resources have always been a source of raw materials, which constituted the material basis of finished products.

As many ongoing studies show, in accounting for such assets as land resources and reserves of natural raw materials in the implementation of absolutely all types of activities, there are currently unresolved methodological problems regarding the methods of their assessment, recognition and use.

At the same time, we found out that it is precisely in mining activities, for the functioning of which natural capital is of paramount importance, that there is a serious problem with the qualitative

reflection in the accounting and use of accounting data for the management of those natural resources that are allocated by the state for the purpose of their commercial use in the form withdrawals. The fact is that at present, by and large, it is possible to assess the natural component of the capital used by a business only according to the data of reporting in the field of sustainable development and integrated reporting, the responsibility for the preparation of which lies not with all enterprises.

- S.E. Egorova and O. Yu. Maidetskaya, conducting a comparative analysis of both types of reporting, note their following features [4]:
- reporting in the field of sustainable development implies the disclosure of not only financial indicators, but also environmental and social information in order to improve business on the way to a sustainable global economy, in which long-term profitability is combined with social responsibility and concern for environmental protection;
- the formation of integrated reporting allows you to visually represent the transformation of the organization's resources, taking into account the use of human, intellectual, social, industrial and natural capital, demonstrating the organization's ability to create and maintain its value in the short, medium and long term. Such reporting allows providers of the financial capital of an organization to form a comprehensive view of the key factors that are significant for assessing the value it creates in the present and in the future.

Thus, it can be seen that these types of reporting contain a much larger, structured and detailed-interrelated amount of information in comparison with traditional accounting, which is completely incomparable with its created indicators. Nevertheless, in the work of E.A. Kandrashina, E.P. Troshina and D.A. Shvets revealed that it is the financial and economic indicators as a factor that form the potential of the firm's value, occupy the first place in terms of their importance and contribution [6]. The positions of the authors regarding those data from the financial statements that are presented directly in it or calculated on its basis and can be used in assessing the value of a business are presented in the table. The information presented in the table clearly makes it clear that it is the assets that are the basis on which they rely when assessing the potential for profitability of the enterprise. A.G. Kharin in his work directly points out that "the basis of cash flows are assets - the company's capital", skillfully using which it generates its income [17].

Table - Financial and economic indicators that determine the value of a business

Authors	Indicators
A.S. Volkov,	Turnover, structure and liquidity of assets
M.M. Kulikov, A.A. Marchenko [1]	
V.E. Esipov [5]	Scale and quality of assets
M.A. Fedotova, A.G. Gryaznova [2]	Asset liquidity

However, during numerous studies, it was found that the application of the rules of the current international and Russian accounting standards of a general nature in the framework of mandatory accounting and filling out forms of financial statements does not allow to reliably reflect as assets the reserves of natural resources involved in the extractive industry, characterizing it specificity. At the same time, for example, O. V. Sukhareva notes that "the market capitalization of a mining company may very much depend on proven reserves of minerals, therefore, financial statements that do not contain information about potentially recoverable reserves of minerals do not fully reflect the real picture of the business." [13, p.34].

According to A.V. Kornilova, who studied the problems of normative regulation of accounting for subsoil use in the coal mining industry, there is also a discrepancy in the norms of the current legislation. On the one hand, the ownership of the subsoil belongs to the state and they are excluded from circulation, and on the other hand, in PBU 6/01 "Fixed Assets", the subsoil is referred to as fixed assets. In her research, she points out that from the point of view of the economic essence of the subsoil, it is generally impossible to recognize the asset, and, consequently, the capital of the enterprise. Consequently, they cannot be fixed assets either. This is due to the fact that the enterprise does not have the ability to control the subsoil as a used resource either from a legal or economic standpoint. A.V. Kornilova argues that only what is contained in the subsoil, that is, directly minerals, can be recognized as an asset. However, this asset cannot be recognized as the main means either, since minerals are raw materials (reserves) for a mining company [7].

O.V. Sukhareva, on the contrary, believes that for the recognition of the geological reserves of minerals themselves as assets, firstly, there are also insufficient grounds due to the lack of their control in the subsoil, and, secondly, classical accounting does not contain mechanisms for reflecting these reserves in financial statements. organizations. The only possible, in her opinion, approach to presenting information on geological reserves in the subsoil and allocated to the enterprise for development in financial statements does not disclose information on the mineral reserves as intangible assets. Indeed, the option when intangible assets should be initially measured at cost, and depreciation and impairment losses should be deducted from their cost for subsequent balance sheet valuation, is not suitable for correct presentation of natural resource reserves [13].

Nevertheless, in her dissertation research, E.V. Morozova insists that natural resource reserves must be qualified, since domestic financial statements do not provide interested users with information on their availability and use [11]. She notes that in the Russian Federation, accounting for traditional natural resources (land, forest, water, minerals) is regulated by PBU 6/01 "Accounting for fixed assets", however, accounting for the reserves of natural resources themselves (oil, gas, coal, ore, forest plantations, etc. etc.) is still outside the scope of regulation of the current provisions, therefore, the

application of the established rules does not allow the accountant to form and submit data on the availability, movement and value of natural resources. In her opinion, for example, stocks of forest resources can be recognized as an independent type of non-current assets with the property of depletion.

However, when we carried out research on the example of logging enterprises of the Komi Republic [14], it was found that the seized natural resources to a greater extent meet the criteria for their recognition as an inventories, rather than as fixed assets or other non-current assets. But the direct qualification of natural resources provided to the logger for the withdrawal of reserves of natural resources as material - production reserves of the organization, their corresponding assessment and accounting is also not possible. This situation is due to the fact that, unlike ordinary material resources created by human labor and stored in the warehouse of an enterprise, natural resources are raw materials created by nature and stored in natural conditions.

A generalization of the positive and negative results of previous scientific research with an emphasis on disclosing the essence of a business operation for the receipt of forest resources at the disposal of a logging enterprise and using the principle of the dominance of economic content over the legal form made it possible to develop an author's approach to reflecting the main asset that generates income to logging in accounting [15], [16]. It is proposed that the logging fund allocated for logging and intended for seizure should be qualified in accounting as specific reserves. Initially, they should be assessed at the minimum rates per unit of the volume of timber possible for harvesting, which are the same throughout the territory of the Russian Federation. It is advisable to reflect the current value of natural raw materials on the active account 12, currently available in the Chart of Accounts, with the assignment of the name "Stocks of natural raw materials" to it in order to separate it from stocks created by human labor. It is proposed to open 4 subaccounts to this account for the formation of analytical data:

- subaccount 1 "Cost of raw materials at minimum rates" to reflect the initial assessment of the forest resources used:
- subaccount 2 "Revaluation of the cost of raw materials" to reflect the change in the value of the growing stock as a result of the indexation of the minimum rates for standing timber;
 - subaccount 3 "Industrial waste" to account for wood waste;
- subaccount 4 "Reserve for reforestation" to account for the amounts planned for the reproduction of the forest.

This approach to the development of accounting for forest resources will allow the forest, written off from the state balance sheet, to fall on the logger's balance sheet, forming a natural component of the capital used in business. This will create for all users a reliable and most relevant to reality information base on the cost of forest resources involved in the economic process and its change, on

the amount of waste received as an additional object of management and the amount of the organization's planned costs for the renewal of forest plantations. The proposed measure will make it possible to establish a transparent exchange of reliable information between the state and business and will have a positive effect on the satisfaction of the environmental demands of society.

Ultimately, this will help users who estimate the value of a logging company according to traditional financial statements to have more reliable information that fully and qualitatively characterizes the comparable natural resource potential from which the organization plans to derive economic benefits in the future, as well as compliance with the rules of sustainable forest management. and the introduction of innovative forestry production.

In addition, this step will become the recognition of the relationship between the state and the logger as a partnership, and the lease agreement concluded, according to which the value is transferred for temporary use (forest plots), will become a tool connecting partners who, from the moment of its conclusion, are jointly and severally responsible for the conservation of forests as common domain.

The balance sheet of a logging organization, the asset of which will contain the value of forest raw materials obtained under a lease from the state, should be recognized as a partner, since it will reflect assets that are common resources of nature and transferred for use, restoration and return to the owner as a result of public-private partnerships.

The above situation and the developed proposals cause an urgent need to develop uniform principles for accounting for the activities of extractive organizations, enshrined in a special document, which should also include a methodology for accounting for natural resources.

In our opinion, since the methodology of accounting for the process of attracting and using all resources without exception affects the financial performance of organizations, which can make adjustments to the actions of interested users to assess the investment attractiveness of a company and the success of using available resources, the regulation of industry accounting should not be limited by any it is specific objects, but it is advisable to carry out in a comprehensive manner, covering the entire production process in unity, taking into account the factor of its specific use of natural resources in order to present to users a reliable picture of the implementation of mining activities at each of its stages. This is possible in the following ways:

- by developing a single standard for application in the extractive sector of the economy, taking into account industry specifics, with the parallel publication of new or amendment of the existing industry instructions, the purpose of which is to take into account the peculiarities of the technology of each direction of the extractive industry with the simultaneous application of PBUs, clarified with the transition to IFRS and excluding regulation of situations not typical for classical accounting by reference to industry documents (standards);

- by developing accounting standards for each area of the extractive business, taking into account both industry and technological features of the activity with the simultaneous application of the current general purpose PBU;
- by clarifying the currently applied RAS of general action at the time of the possibility of their application in all sectors of the economy with the simultaneous development of special standards aimed at solving issues that are not subject to regulatory documents governing accounting issues, which are the same for all types of economic activity.

The presence of uniform industry regulation will create an understandable and transparent environment for potential investors to assess the cost and development prospects of the mining business.

References

- 1. Volkov A.S., Kulikov M.M., Marchenko A.A. Creation of market value and investment attractiveness. M.: Vershina, 2007. 304 P.
- 2. Gryaznova A.G., Fedotova M.A. Business Appraisal: Textbook. 2nd ed., rev. and add. Moscow: Finance and Statistics, 2006. 736 P.
- 3. Gubanov S.S. Neoindustrialization plus vertical integration (on the formula for the development of Russia) // The Economist. 2008. № 9. P. 3-27.
- 4. Egorova S.E., Maidetskaya O.Yu. Comparative analysis of reporting in the field of sustainable development and integrated reporting // Bulletin of the Pskov State University. Series: Economics. Law. Management. 2017. № 5. P. 10 13.
- 5. Esipov V.E., Makhovikova G.A., Terekhova V.V. Business valuation. 2nd ed. SPb.: Peter, 2008. 464 P.
- 6. Kandrashina E.A., Troshina E.P., Shvets D.A. Analysis of key factors of the company's value // Bulletin of the University. 2014. № 13. P. 113-118.
- 7. Kornilova A.V. Problems of normative regulation of accounting in the coal mining industry // Young scientist.2013. № 7. P. 183 187.
- 8. Kosenko I.V. Identification and typology of factors of formation of the company's market value // TERRA ECONOMICUS. V. 10. Part 2. 2012. P. 24 27.
- 9. Lapteva A.I. Transformation of value in the postindustrial economy // Bulletin of St. Petersburg University. Economy. 2008. № 2. P. 150 154.
- 10. Melnik M.V., Kogdenko V.G. Analysis of integrated reporting: natural capital // Economic analysis: theory and practice. 2016. № 4 (451). P. 72-84.

- Morozova E.V. Accounting for nature management in logging: dissertation ... Candidate of Economic Sciences: 08.00.12; [Place of presentation: St. Petersburg State University] St. Petersburg, 2009. 164 P.
- 12. Rozin S.E., Shchelokov Ya.M., Lisienko V.G. An introduction to the energy theory of value. 3rd ed., add. Ekaterinburg: A.M. Prokhorov AES. 2019. 67 P.
- 13. Sukhareva O.V. Specific problems of accounting in the extractive industries and their regulation in IFRS // International accounting. 2009. №10. P. 33-37.
- 14. Ulyasheva L.G. Problems of accounting for forest resources in logging // Accounting.2019. № 2. P. 104-112.
- 15. Ulyasheva L.G. Classification of natural resources in accounting for costs by economic elements in logging // Accounting. 2019. № 7. P. 113-122.
- 16. Ulyasheva L.G. Accounting of the economic content and the legal form of lease relations in logging // Uchet. Analysis. Audit. 2020. № 1. P. 58 -68.
- 17. Kharin A.G. Methodological problems of accounting for natural capital in business value management // Finance and Credit. 2012. №36 (516). P. 51-57.