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HR EXCELLENCE IN RESEARCH

THE MODEL FOR ASSESSING THE TREND IN THE PRESENTATION OF INFORMATION ON THE STATE OF MINERAL RESOURCES IN BUSINESS REPORTING FOR SUSTAINABLE DEVELOPMENT GOALS

PATENT, PATENT APPLICATION: Certificate regarding the registration of copyright objects and related rights. Seria OŞ Nr.7556 from 16.06.2023

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APPLICATION FIELDS: Compartimentul II„Proiecte de inovare și transfer tehnologic. Proiecte de cercetare. Monografii”

II

AIM: Designing a model for assessing the trend of information on the state of mineral resources (MRs) in business reporting and demonstrating its effectiveness in relation to the monitoring system of the Republic of Moldova

SOLUTION: developed an algorithm for assessing the trend in the presentation of information on the state of MRs in business reporting and proposed indicators that qualify the monitoring system for sustainable development purposes

Figure 1. Diagram of segmentation and comparison of sectors of the economy of the Republic of Moldova related to the use of MRs

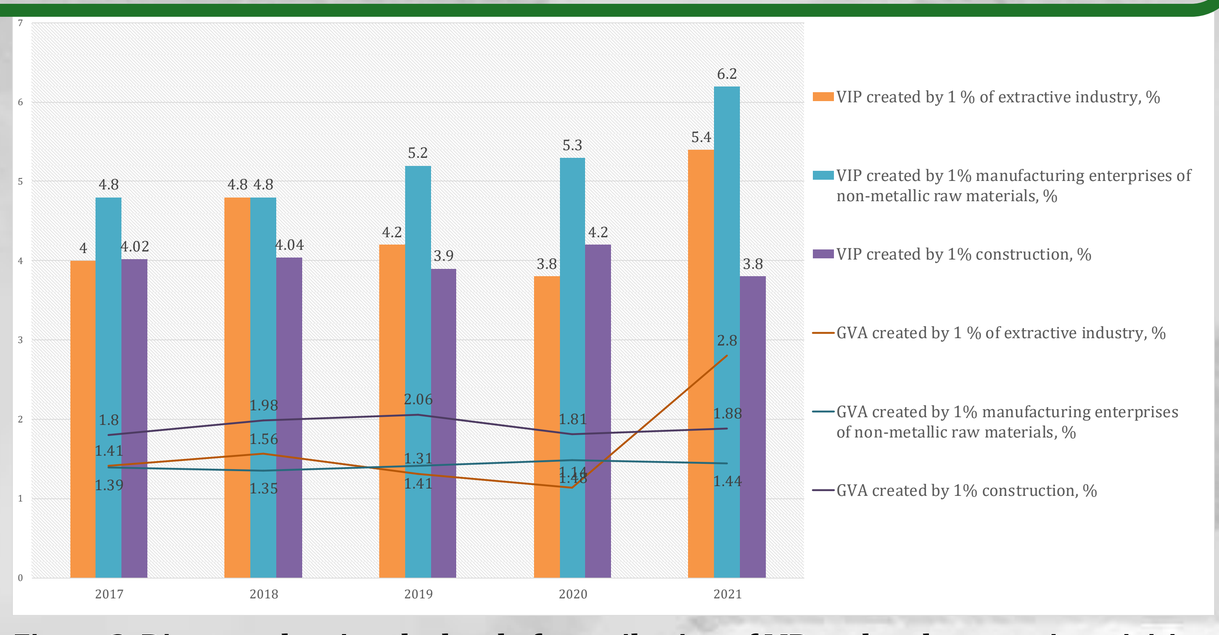

Figure 2. Diagram showing the level of contribution of MRs-related economic activities to VIP and GVA

Originality

1	Formula for estimating the share of contribution of economic activity to the formation of Value Industrial Product (VIP - K') and Gross Value Added (GVA - K"): $K'_i = \frac{V_i}{V_r}(t) \times 100\%$; $K''_i = \frac{G_i}{G_r}(t) \times 100\%$, (1) where: i -index of identified economic activity; r – indicator for the economy as a whole.
2	Formula for estimating the contribution of a conditional 1% of economic activity to VIP and GVA: $\beta'_i = \frac{K'_i}{\Delta_i}(t) \times 1\%$; $\beta''_i = \frac{K''_i}{\Delta_i}(t) \times 1\%$, (2) where Δ_i - share of identified industry(Fig. 1).
3	Axiomatic boundaries of the ratio of contributions of the extractive industry and its dependent activities: $1,0 \le \alpha < 1,5$

1	Actual boundaries of the contribution share (in %): • $1,00 \le K'_{Ex} \le 1,37$ $3,34 \le K'_M \le 3,86$ $24,41 \le K'_c \le 29,23$ • $0,35 \le K''_{Ex} \le 0,65$ $0,90 \le K''_M \le 1,01$ $11,41 \le K''_c \le 15,10$
2	Coefficients β'_i, β''_i (see Fig. 2)
3	Range of actual contribution coefficient values: • $0,40 < \alpha' \le 0,54$ • $0,37 < \alpha'' \le 0,78$

ADVANTAGES: Demonstrates the fact of dominance in the national economy of the contribution of non-metallic raw materials processing enterprises to the VIP, and construction - to GVA (Fig. 2), which contradicts the essence of their activity - secondary in relation to the extractive industry. Justifies the asymmetric nature of the national approach to assessing the contribution of MRs to VIP and GVA. Argues for the transition to the MRs valuation model recommended by SEEA and IFRS. Aims to reliably measure a business's contribution to maintaining natural capital for the sustainability of its business-model.

IMPLEMENTATION STAGE: at the level of research by a functioning enterprise in the Republic of Moldova and drawing up an act of implementation.

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