ECONOMIC CONSIDERATIONS ON MINERAL RESOURCES - THE NATURE OF METALLIFEROUS DEPOSITS - IN EUROPEAN CONTEXT

The EU imports annually over 200 mil. tons of metallic ores, the financial burden exceeding 12 billion Euro. The non-ferrous metals market witnessed a tremendous growth lately, given that the EU countries are unable to provide more than 30 mil. tons of metallic minerals (15 % of the imports). It is expected that, given the closing of more and more mines and the resource depletion, the import dependence of the EU Member States will increase significantly in the coming period [1]. Romania holds considerable mineral resources [2], consisting of varied ore deposits – gold, silver, copper (reserves estimated at 7 000 tons of gold, 2 000 tons of silver and approx. 250 mil. tons of potentially exploitable copper, ranking 2nd in Europe [3]), lead, zinc, manganese, iron, as well as coal, granite, limestone, etc.

Concerning the ferrous and the non-ferrous ores, the main data are [4]:
- ferrous ores (reserves: 58 mil. tons):
  - iron ores: 39 deposits, with 57 mil. tons of possible reserves to be exploited;
  - manganese ores: 2 operational deposits, with reserves of 1 mil. tons.
- Possible reserves to be exploited, with deposits where the activity ceased: 17 mil. tons;
- non-ferrous ores (reserves: 510 mil. tons):
  - polymetallic ores: 145 deposits, with 28 mil. tons of possible reserves to be exploited;
  - copper ores: 75 deposits, with 98 mil. tons of possible reserves to be exploited;
  - copper ores with low content: 2 operational deposits, with reserves of 157 mil. tons and 7 blocks, with an exploitation potential of 187 mil. tons.

These resources are being exploited, in a significant proportion, while 200 companies are currently active in the sector, administering an annual turnover that equals approximately 0.8 % of the GDP. In its turn, as owner/sovereign of natural resources [5], the state earns an income from remittances, taking over approximately 0.8 % of the GDP [3] that goes to the consolidated public budget (this is total remittances, not only mining ones).

The variety of mineral resources - the nature of metalliferous deposits, that are exclusively in the property of the state, are geographically distributed, in the western half of the country (see the map in Figure 1).

The particular regime of the mining resources entails the development and the implementation of special policies and strategies in the field of exploration, mining, capitalizing and preserving these resources, in compliance with the European regulations and with the international practices in the field of mineral resources. Under these circumstances, the present concerns are focused on the following issues [7]:
- furthering the knowledge concerning the geological peculiarities of Romania’s mineral resources;
- sustainable development and the rational and regulated mining of the resources, as most of them are non-renewable;
- preservation of resources/reserves for which the mining has been stopped in order to enable a possible reopening of the activities in the future;

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• using the geological capital in order to diminish future research costs;
• promoting mining technologies that are appropriate for the type of mined substances, with economic efficiency and a minimum environmental impact.

Clearly, an important public issue directly related to the mining sector is the remittance system [8]. Therefore, our further appreciations concern the regulatory framework applied to remittances and their financial and budget related consequences.

The debated issue takes on a special significance, the more so as, at European and global levels, the mining royalties are treated with the utmost rigor by the law of most states. However, we noticed that there is a heterogeneous system of royalties/taxation at all levels. For example, the level of the royalties for mineral resources is as follows [4]:

• Speaking of the European countries, Finland and Sweden, the main European manufacturers of gold, do not charge royalties (level: 0 %). Austria, Germany, Greenland, Norway, and the UK also do not require royalties, preferring to obtain budgetary revenues from the income tax, VAT, etc. Instead, Spain applies a royalty of 2 % relative to the gold coming out of the foundry.

• When discussing about other areas of the world, it is revealed that the US is one of the developed countries with the lowest fees charged for mineral resources: between 2 % and 5 %. Then, other countries practice some quotas ranging from 1 % to 20 % for gold resources (Brazil: 1 %, Australia: 2 %, Chile and Argentina: 3 %, Indonesia: 3.75 %, China: 4 %, Russia: 6 %, Poland: 10 %, Canada: 15-20%). Other examples relate to copper, which is subject to royalties of up to 5 %: Chile and China - 2 %, Poland - 3 %, Indonesia - 4 %, Australia - 5 %.

In the following lines, our approaches are conducted by making reference to the Romanian legislative rules.

REGULATORY FRAMEWORK APPLIED TO MINING REMITTANCES

The main law in the mining sector is the Mine law nr. 85/2003 and the methodological standards to apply this law [9], in compliance with the European standards [10]. The above mentioned law, together with the other Romanian regulations applied in this sector [11-17], makes reference to the procedure concerned with the approval and issuing of prospecting permits and licenses, exploration and exploitation permits, authorization of the specific activities, etc. [18], as well as the regulations related to mining taxation, tariffs and remittances. If we should focus particularly on this last issue – the financial one – we would argue that, since the mining resources located within Romanian territory and its underground are exclusively owned by the state, as the above mentioned regulations impose a legal obligation to pay remittances to the state budget on any company (holding a license/permit) that exploits these resources through mining activities. The mining remittance level (Art. 45 of the Mine law sets the quota shares from the value of the mining output, depending on the extracted resources) is set when the licence or the exploitation permit is issued, calculated either as a quota share applied to the value of the mining output (Table 1), or as a fixed sum in Euro (the equivalent in Lei) applied to the production unit (Table 2).

In terms of taxation regulations, companies holding exploitation licenses/permits, are obligated to register as remittance payers with revenue service authorities [19] and to be recorded at the area control authorities for mineral resources of the National Agency for Mineral Resources (ANRM) in their respective areas [9, 17]. At the same time, companies in question must send the Agency quarterly reports for each perimeter, providing data on the excavated quantities or the mining out-
put and its value. Mining remittance payments – quota shares from the value of the mining output during that particular quarter – are made every three months, due by the 20th of the first month of the quarter following the reporting period. Failure to pay by that date will result in interest rates and deferral penalties, in compliance with the Revenue procedure code [20].

### REVENUES OF THE STATE BUDGET FROM MINING REMITTANCES

The monthly control and updating of mining remittances, quarterly reporting and payment control is conducted with the help of the ANRM sub-units [18]. The receipts to the state budget from the revenues generated exclusively by mining remittances show that, in 2014, these revenue sources have generated cca. 41 mil. Euro [7]. The back payments of mining remittances recorded by the companies registered with the Ministry of Economy amount to 33,78 % of the defaults on remittance payments. These are subject to the Revenue procedure code [20], but the debtor to the consolidated budget is the state itself. Actually, an analysis of the payments made in mining remittances for five previous years shows that there is a significant variation between [21], 33 mil. Euro in 2011 and 41 mil. Euro in 2014 (preliminary reporting).

Our findings concerning the said fluctuations include the fact that the mining sector output, taken as computation basis for mining remittances, visibly fluctuates from one year to the next and that is mainly due to the demand on the market. On the other hand, the compliance of the payments in question depends on the settlements between suppliers-customers and the level of overdue debts (economic and financial blockages).

### CONCLUSIONS

The total revenues to the state budget levied in 2014 from extraction remittances, taxes and tariffs, amounted to about 320 mil. Euro, but the receipts from mining remittances exclusively amounted to only about 41 mil. Euro (12,81 %). In order to increase this latter category of payments to the state, the entire remittance system must be reviewed, but one should not overstate the issue due to the obligation to maintain the budget deficit at the level set by international bodies. In our opinion, sustainable development concerns/ criteria are more important in this respect, since natural resources are generally non-renewable and their exploitation entails a careful consideration of national interests, as social-economic development and increased quality of life should be encouraged.

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**Note:** The responsible for English language is Maria-Silvia Bila, Iași, Romania