

# NATURAL RESOURCE TAXATION FROM THE SUSTAINABLE ECONOMIC PERSPECTIVE

Răzvan BĂLĂȘESCU<sup>88</sup>

## Abstract

In a narrow sense, taxation of natural resources is related to royalties that reveal the fiscal advantage of a concrete and rapid cash public revenues.

In a large sense, the present paper takes into account both an legal, technological and fiscal management of natural resources to encourage the inter-temporal investments in the field of exploration and exploitation as well as the ideological map of neoclassic and institutional socio economic determinism.

In this respect ,the topic proposed is related to the resource curse problem meaning the two sides of a same coin: natural resource taxation is not only a simple political problem of rentier corruption but also an obligation to manage the question of negative externalities on economic capital portofolio structure generated by the illusion of mineral sector booming leadership.

**Keywords :** natural resurce taxation,resource curse,socio economic determinism

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From a narrow point of view, taxation of natural resources could be only a profit maximization objective policy tool both for public authorities and private investors interests related to exploration and exploitation of national soil and sub soil resources through one of the elements of fiscal system- royalties (lat. Rebedere or fr. Redevoir)- as a payment owned to public budget in a fixed amount at a convenient date, as a right of using an other legal or natural person property.

In a large sense, natural resources taxation is connected to sustainable development prerequisites of the triple bottom line strategy in so called Mineral Sustainable Development approach (MSD),a fiscal partnership construction for sustainable use of natural resources.

That implies both a quantitative and qualitative approach, as a space of an efficient fiscal action for the first one, and as a space of ideological thinking for the other, taking into account its economic, social, environmental, political, and cultural burden of choosing between an apparent curse of natural resources or the chance to develop the free will exercise oriented to a society with a stronger values system compatible with human dignity, raising the material and spiritual standard of living.

Thus in short, natural resource taxation takes into account the following aspects:

- non-regenerable material and compositional geologic characteristics of natural resource deposits and reserves and their utility on the supply chain flow ;
- the mineral property rights and contractual issues between the owner of natural resources and the exploration investor in the way from possession to property;
- the mineral project risk management that affects the exploration and exploitation decisions and their financial consequences ;
- the state authority intervention within a fiscal partnership respecting the fundamental principles of public government ownership, competitive return for private investors, efficiency, stability and simplicity of the fiscal framework;
- the necessity of a realistic approach of a mineral sustainable development related to resource curse theory incorporated into market failure or institutional political determinism to promote socio

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<sup>88</sup> "Victor Slăvescu" Centre for Financial and Monetary Researches, Romanian Academy

cultural and political values of fair completion, poverty reduction, promoting educational scholarships and a moral public interest transparency;

In conclusion, the MSD approach of natural resource taxation is an intergenerational one, both technical and ideological, to encourage the human spirit to become a realist optimist for a sustainable use of natural resources as well as to become more careful to its surrounding environmental social and economic environment.

In this framework, the first step of a mineral sustainable development concept (MSD) was stated at the World Summit on Sustainable Development in Johannesburg (2002) and in its paragraph 46 of the Johannesburg Plan of Implementation (JPOI), that in course of time promoted a natural resource project management perspective in the field of mining, minerals and metals sector.

The MSD perspective takes into account the importance of a network containing the relationships between natural, legal, techno-managerial and financial factors implied in the construction of a fiscal partnership for a sustainable use of natural resources.

In this framework, geologic factors are of first-order importance to illustrate the impact of deposit and reserve definitions both at spatial and temporal level related to:

- specific matter characteristics of natural resources-its typology (solid or fluid), volume (as spatial and temporal dispersion), composition (as pure or complex minerals);
- the economic utility of minerals, the capacity to apply and discover adequate technologies on the way from extraction to intermediary and final stage of production for obtaining desired goods and services;
- globalization problems in the field of resource controls war;
- volatility issues related to risky investments due higher technological costs, changing consumer market pattern, or public regulations.

Secondly, the fiscal mining partnership is influenced by the constitutional mineral property rights in the way from possession to property.

As mentioned by some authors like Rolf Steppacher (2006), Ana Elizabeth Bastida (2004) or Eva Liedholm Johnson (2010), the mineral rights illustrates a combination matrix that tries to protect both the public and private interests through an automatic adjustment system, a state intervention or an limited contractual agreement between parties, inspired by the fundamental constitutional legal systems of natural resources :

- Minerals belong to the Landowner (the principle that that minerals belong to the owner of the land);
- Regalian System (a sort of public private partnership in the exploration and exploitation of natural resources);
- Dominial System (the absolute power and authority of state over the natural resources);
- Minerals as *res nullius* (that mines belong to the first person who discovered the deposit or the reserve of natural resources).

Thirdly, the natural resource taxation is influenced by project management features related both to evaluation and optimization of mineral investment projects risks and benefits within a so called Minerals Resource Management (MRM).

As it mentioned by Debasish Mohapatra (2009) or Carel Pieter de Jager (2005) or Philip Daniel et al. (2010) the MRM factor takes into account the possibility of an optimal exploitation of natural resources ensuring optimal means and possible positive outcomes.

This requires a planning and effective management control of team working responsibilities taking into account a broad and systematized data base containing geologic, legal, and economic informations, the specific optimization methods of geological and financial mineral risks-the so called Basic Mining Equation (BME), Cigarette Box Optimizer (CBO), or Macro Grid Optimizer (MGO) on one hand and the impact of subjective or objective time based estimations of risks and profits as in the case of subjective Payback Period or realistic Net Present Value (NPV) or Internal Rate of Return (IRR).

All these factors above mentioned are useful to approach the fiscal essence of MSD giving some possible ideas .

In a general perspective, the natural taxation policy takes into account a distinction between a “predetermined” and a “determinant” fiscal revenue category inspired by classic Ricardian or Hotelling rents, some fundamental concepts(mineral propriety and project management),related to a main objective(raising mineral revenues attractiveness) through some fiscal and regulation stimulus(adopting a progressive, regressive or neutral fiscal attitude; promoting international fiscal competition to attract technology, expertise and investments; possibilities to contract renegotiations or to stimulate the pace of mining working and regularity tax paying(ring-fencing);simplicity, stability and predictability of tax administration.

The specific fiscal framework of the MSD is related to the factors above mentioned, in terms of geological, legal, and managerial terms taking into account :

- mineral externalities on the supply chain (first extraction tax, intermediary material tax, and material intensity consumption tax);

- mineral right problems a comparison between the concessionary royalty/tax system, the production sharing agreements or the fee contractual systems)

- the fiscal risk problem of ex ante and ex post discount rates impact on future allocation of production factor sand configuration of fiscal system(a comparison between effective fiscal rate of the present raising of company income with its marginal distortionary value due to the fiscal system as well as the political preferences and not the market realities that leads the mineral tax policies).

At this stage,mineral tax policy has principles, objectives and instruments that conduct to obtaining mineral revenues, systematic organized in the form of so called Saving Reserve Funds or Hedging Stabilization Funds, necessary to resolve some pressing present problems(external debt payment).

That leads us to the qualitative approach of MSD problems related to the Resource Curse problem.

Generally speaking, the resource curse is related to so called Paradox of Plenty related to the idea that mineral revenues or other “easy” taxes from other types of “extractive” industries like agricultural production, foreign aid, remittances, or international borrowing are the most reliable source for sustainable development. But in this case the simple natural resource power advantage is a necessary but not a sufficient condition for economic development because it appears that many countries with large endowments of different types of resources(natural economic or institutional) have performed worse than those with smaller endowments—quite the opposite.

Apparently this is a curse a bad destiny situation.

Taking into account the literature of curse resource and its relationship with economic sustainable development we can illustrate the following aspects:

- the booming economic sector explanations from the so called linkage theory to the case of Dutch Disease and its consequence-deindustrialization effect- weakening in quantity, structure, spatial and time dimensions the human working force education as well as financial markets instruments;

- the institutional and psychological explanations to explain the consequences of public government overconfidence in easy mineral revenues(weakening the social contract with citizens due to a “stronger partnership” with investors, leading to a risk of possible soft or hard dictatorship to promote a social values system based on corruption and not on honest and intelligent business, working and living.

Due to the multiplicity of economic, psychological and institutional factors the resource curse problem cannot be directly or in a definitive approach.

Briefly speaking, one possibility could be to take into account the relationship between three very known types of analysis:

- the basics of MSD perspective on sustainable development to illustrate the differences between the ex post liberal policy management of Dutch Disease externalities and legal property rights regulations versus the ex-ante conservative policy management based on fixed autarchic rules like fiscal discipline and political transparency in the so called “Washington Consensus Treaty” values ;

-the philosophical and psychological explanations of natural resources analysis to emphasize the importance of Aristotle Reason Perspective(the matter that is seeking a concrete organized shape to become a visible reality subordinated to a final efficient objective),the influence of Platonism Intelligible Perspective (as an idea of Good and Beautifulness for Nature that comes from a Superior Sensible World of Ideas),as well as the Psychological Energy Center Perspective(the relationship between the human character-that endogenous energy center of intelligence, sensibility and metaphysic faith externality analysis – and its exogenous visible face of personality acting in an adaptive world of social conformism rules);

- the Christian religious problem of Absolute Good and Bad, to avoid the so called Manichaeism trap- the fact that Matter is an Evil, a Curse for the salvation of human spirit, as in the thinking of Roman philosopher Augustine in his book “On the Nature of Good- Against the Manichaeism”.

He stated the importance of intelligible perception but also the fact that nature is not a curse because on one hand is created with reason and love from nothing (creatio ex nihilo) by the Trinitarian Christian God, but also because the human person is also a God creation gifted with intelligence, sensibility and conscience, human qualities that in course of time worsened.

Augustine encouraged the free choosing exercise in the sense of consideration of two Polis (States)- the Human Polis and the Heavenly Polis, to encourage step by step the Christian healthy optimism in the process of material and spiritual development, “to give to the Caesar what belongs to the Caesar and to the God what belongs to the God”(Jesus Christ),because “this rock is not cursed but is an angel that is waiting for me to present him”(Michelangelo), but also because “the great ideas win not because they are easy but because they are hard”(John F. Kennedy).

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