MINISTRY OF NATURAL RESOURCES
CO-OPERATIVE REPUBLIC OF GUYANA

POLICY BRIEF #4

Fiscal incentives for bauxite mining: how effective and efficient?

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A. SCOPE

This policy brief is the fourth in a series of seven documents on the future development of the local bauxite sector. Specifically, the brief

1) describes the fiscal regime for bauxite mining in Guyana in terms of its revenue tools and tax incentives;
2) assesses the strengths and weaknesses of these incentives based on guidelines published by such institutions as IGF, the IMF and the OECD.[1]
3) recommends measures to improve the effectiveness and efficiency of the fiscal incentive package for bauxite mining.

B. BACKGROUND

Policy context: The fiscal regime is the set of tools that determine how project revenues are shared between the state and private investors. Many emerging

[1] Publications include (i) National Resource Governance Institute (2015) – "Fiscal Regime Design: what Revenues the Government will be Entitled to Collect."

(ii) IGF-OECD (2018) – "Tax Incentives In Mining: Minimising risks to revenues."

(iii) International Monetary Fund (2015) – "Options For Low Income Countries' Effective And Efficient Use Of Tax Incentives For Investment."

(iv) IGF-OECD (2018) – "Monitoring The Value Of Mineral Exports: Policy options for governments."

economies, including Guyana, modify their fiscal regimes by including tax incentives in the hope of attracting domestic and foreign investment.

The scope of this brief lies at the intersection of two policy positions within the draft National Mineral Sector Policy Framework and Actions (NMSPFA), prepared for the Ministry of National Resources in December 2018. Policy position #3 speaks to the need for "Expanding mining's contribution to national and sub-national economic development." One of the policy's main applications lies in increasing government revenues from mining operations. On the other hand, Policy position #4 is geared to "Raising the attractiveness and competitiveness of Guyana's mineral sector for large investments." This position forces the government to offer generous fiscal concessions and, therefore, to forego some of the very revenues Policy #3 seeks to accrue.

Under Policy #3, strategic goal #8 (SG 8) recognizes this tension by setting out to "increase tax revenues from mining operations without adversely affecting the investment climate and the cost of doing business in Guyana."

How could this be achieved for the bauxite industry is one core question in this policy brief.

C. CURRENT REVENUE TOOLS IN THE FISCAL REGIME FOR BAUXITE

Based on the mineral agreements with current bauxite companies, the revenue tools in the fiscal regime for bauxite are:

- Royalties based on product value.
- Corporate income tax.
- Equity participation in the mining operation.
- Land rentals.
- Withholding taxes.
- Import duties.
- Capital gains taxes.
- Stability provisions.

Typically absent from the Guyana fiscal regime for mining are:

- Signing bonuses and milestone payments.
- Excess or windfall profit taxes.
- Resource rent taxes.
- Production sharing.

The equilibrium between government's need to generate revenue and, on the other hand, the need to attract mining investors is determined by (i) the number and type of revenue tools in a mineral agreement, and (ii) how these tools are modified to create incentives to investors. In this brief, the focus is more on the second aspect (tax incentives), as this is the source of significant actual and potential revenue losses for the nation.

D. TAX INCENTIVES IN THE FISCAL REGIME FOR BAUXITE[2]

A tax or fiscal incentive is a deviation from the general tax code a government believes is necessary to attract investors (Table 1). These incentives work through the non-application, delayed application, or reduced application of the standard revenue tools. They are mainly enshrined in project-specific mineral agreements and in the general income tax code. For local bauxite, the tax incentives are:

1) Tax holidays for:
    - Royalty payments = five years[3]
    - Corporate income tax (CIT) = five years
    - Property tax = five years.
    - Rental payments = one year.
2) Waiver of all withholding taxes for the life of the mine.
3) Waiver on import duties on equipment, supplies and material necessary for the mining operation.
4) Accelerated depreciation for CIT purposes (20% per year).
5) Zero free equity for new projects.[4]
6) Stability provisions.
7) Opt-in provision for any future lower rates enacted generally.
8) Offset of corporate taxes by royalty payments.

[2] Based on (i) the Mineral Agreement among the Guyana government, Cambior Inc, and Omai Mining Inc. and (ii) reports of First Bauxite Corp.

[3] For Rusal and Bosai operations. For FBX at Bonasika, however, royalty is payable during the corporate income tax holiday.

[4] Government's equity in Bosai Linden operations is however 30%, and for Rusal Berbice operations, 10%.

TABLE 1: Typical bauxite fiscal instruments and tax incentives	
FISCAL INSTRUMENTS	CORRESPONDING TAX INCENTIVES
Taxes on income (e.g., corporate income tax, withholding tax)	- Income tax holiday - Property tax holiday - Accelerated depreciation - Long loss carry forward - Withholding tax relief on interest payments, dividends, services (e.g., management fees). - Deduction of royalty payments.
Taxes on production (e.g., royalty)	- Royalty holiday
Tariffs on imports and exports (e.g., tariffs on import of capital inputs)	- Import duty relief
Others	- Stabilization of fiscal terms - Opt-in provision for favorable changes to the general tax regime.

E. ASSESSMENT OF FISCAL INCENTIVES FOR BAUXITE

Effectiveness and efficiency of tax incentives: Assessment of tax or fiscal incentives collectively or singly is normally based on two criteria: their effectiveness (the extent to which the incentives realize stated objectives or benefits) and their efficiency (the costs to meet the objectives). Cost-benefit analysis is a useful way to tie together the two measures. The benefits of the tax incentives (effectiveness) must outweigh the their costs (efficiency) to deliver a net gain to the country.

Table 2 presents the elements of benefits and costs in relation to tax incentives in the bauxite industry.

TABLE 2: Cost-benefit analysis of tax incentives for local bauxite operations		
SOCIAL BENEFITS		
ELEMENTS	**EXPLANATIONS**	**BAUXITE INDUSTRY'S CASE**
Size of the net investment effect or net increase.	The net increase in capital due to the incentive must factor out redundancy effects (investments that would have occurred without the incentive) and displacement effects (the reduction in any other investments).	NET GAIN. Based on a general assessment, the investments by UC Rusal and Bosai Minerals Group in local bauxite mining were influenced by tax incentives (these companies had other investment options worldwide) and did not undercut investments elsewhere in the country (the companies are bauxite-

		based and bauxite is location-specific).
Net impact of higher investment on jobs and wages.	New jobs can yield significant social gains if they reduce unemployment. However, if new jobs displace existing jobs, the social benefits depend on the productivity (and wage) differential between the new and old jobs.	NET GAIN. The investments came at a time when the industry faced existential threat. Jobs were therefore saved. Bosai, for example, employs 500 persons.
Productivity spillovers.	To the extent that new investment boosts productivity elsewhere in the domestic economy, such as in supplying or competing firms (often seen as a particular benefit from inward FDI), this magnifies social benefits by raising income levels more widely.	NET GAIN. The bauxite companies use local third-party services, such as heavy-duty machine firms.
SOCIAL COSTS		
Net public revenue losses	These revenue losses occur along three routes: - direct revenue losses (such as through tax holidays and waivers). - potential revenue losses through gaming and other tax avoidance strategies by companies to exploit the loopholes created by the tax incentives. - weak tax administration and compliance monitoring. Investment and jobs can, however, recover some of the revenue loss.	Direct revenue losses: HIGH. Revenue losses through gaming: POTENTIALLY HIGH. Revenue losses through weak tax administration: POTENTIALLY HIGH.
Administrative and compliance costs	These can rise due to tax incentives, especially if they are complex or create opportunities for rent seeking and corruption.	LOW. GGMC and GRA rely mostly on self-reporting by companies and make only intermittent checks.
Distorted resource allocation.	Discrimination in favor of some and against other investment implies that taxes, rather than productivity differences, determine resource allocation. This distortion reduces average productivity and lowers income per capita.	NONE. The investments relate to bauxite companies investing in bauxite mines.

The qualitative and subjective cost-benefit analysis undertaken in Table 1 does not allow a supportable conclusion, one way or the other, on whether the net effect is positive or negative, much less to what extent. The relevant government agencies should undertake a quantitative analysis using financial modeling.

Design features of tax incentives for bauxite: Here, we look at whether the fiscal incentives for the bauxite industry adhere to good design principles and practices and thus able to optimize on effectiveness and efficiency.

Following the IMF advisories, tax incentive policies involve three core design issues:

- Choice of tax instrument to incentivize investment. Instruments here could be (i) cost-based (involving instruments that seek to lower the cost of capital and so make a greater number of investment projects more profitable at the margin—that is, may generate investments that would not otherwise have been made, or (ii) Profit-based (those that reduce the tax rate applicable to taxable income; examples include tax holidays, preferential tax rates or income exemptions).
- Eligibility criteria used in the selection of qualified investments;
- Reporting and monitoring requirements during different stages of the tax incentive's life cycle, as well as sunset and recapture provisions.

Under **instrument choice**, tax incentives that lower the cost of investment (cost-based tax incentives) are often to be preferred over profit-based tax incentives. This is especially the case for the local bauxite industry where profit margins could be low due to high mining and shipping costs and where the industry is location-specific. The current tax scheme for bauxite contains elements of both cost-based incentives (in the form of tax holiday on royalty payments, waivers on import duties and property taxes, and accelerated depreciation) and profit-based incentive (in the form of a tax holiday on corporate income tax and withholding tax). In this context, the question arises as to how necessary were/are the holidays on corporate and withholding taxes. Were/are the cost-based incentives alone adequate to induce investments in the industry?

Under **eligibility criteria**, tax incentives could be designed to reflect the size of investment, particular sectors of the economy, and particular regions of the country. The local mining sector as a whole enjoys special sector-based incentives, such as waivers of duty on imported mining equipment and fuel. But for both the mining industry and its bauxite subsector, there exist no targeted incentives based on investment size and local destination.

Under the **life cycle** design criterion, the government conducts minimal monitoring of bauxite mining and financial operations. Sunset clauses do exist in the form of a fixed five-year duration on tax holidays for the payment of royalty and corporate taxes.

F. BEHAVIOUR RESPONSES AND UNINTENDED CONSEQUENCES

Behavioral responses (how mining operators change their behavior in response to tax incentives to maximize the tax benefit beyond what government intended) and unintended consequences of tax incentives constitute significant sources of revenue losses for the country. In 2014, the issue gained national attention when the then parliamentary opposition publicly accused one of the mining companies of evading royalty payments and "robbing the country" of tens of millions of US dollars.[5] The allegations were further fueled when the GGMC, the regulatory body, seemed unable to provide suitable answers. As it was subsequently explained, the mineral agreement with the company allowed it to deduct post-tax-holiday royalty payments from its corporate income taxes (CIT). In other words, as a tax incentive, the company was paying only CIT, but which was adjusted downwards by the amount of royalty due. Under-exposed in the debate was whether the company could game the system by ensuring that its net royalty-adjusted CIT would always be less than the royalty it would have had to pay absent the incentive.

The entire matter also demonstrated the necessity of transparency and public access to mining contracts signed by the government.

While no study has been made on the impact of behavioral responses and unintended consequences in the bauxite sector, Guyana is highly vulnerable in this regard because of its weak tax administration and generous tax incentives, such as the waiver of withholding taxes and import duties for the life of the mine.

G. RECOMMENDED FISCAL INCENTIVES FOR BAUXITE MINING

The recommendations on fiscal incentives are made against the backdrop that they:

- are commonplace worldwide. Hence their absence or weakness in Guyana puts it at a comparative disadvantage for attracting investments;
- contribute only a small part of a country's total investment climate;
- may, therefore, be less required if good transportation facilities, cheap energy and skilled labour, and other such favorable conditions exist;
- may lead to excessive or unavoidable loss of revenues for government;
- are necessary to create comparative advantages as bauxite deposits are found in a number of countries across the globe, a fact that provides investors with a range of choices.

[5] See, for example, article in Kaieteur News "Hundreds of millions owed in bauxite royalty by Bosai" - https://www.kaieteurnewsonline.com/2014/07/16/hundreds-of-millions-owed-in-bauxite-royalty-by-bosai/

- require trade-offs that sometimes have to be based on judgment.

Government should therefore:

- build its capacity with respect to mining tax policy and administration. Particular attention should be paid to developing financial modelling skills to aid the decision-making process.
- use financial modelling to find the satisficing balance between government take and investor take.
- emphasize cost-based tax incentives over profit-based incentives.
- introduce more sunset clauses on concessions, to provide opportunities to re-evaluate the effectiveness and efficiency of these provisions.
- adopt a whole picture approach to attracting FID by, for instance, investing in infrastructure and modernizing legislation. It is recognized, however, that tax incentives are easier for a government to deliver than, say, a deep-water port.

Investment decisions by companies are not only based on fiscal incentives but on the total investment climate in the country -- *OECD-IGF (2018).*

- better monitor bauxite production and exports (see Policy Brief #5).
- tighten incentives to reduce potential for manipulation.
- introduce more flexibility (for example, a sliding royalty scale) to capture more revenues in times of market booms.
- holistically measure the social benefits and costs of fiscal incentives (environmental degradation and man-induced geohazards should be added to the equation as costs) .
- approach mining investments as part of a strategy for meeting the development needs of mining regions and communities. From 2020, as oil revenues gradually reduce the relative significance of bauxite mining to the national economy, promoting mining as part of a regional development strategy development becomes concomitantly more important. As such, sustaining local economies through, for example, employment creation should become a primary goal of the fiscal incentive scheme for bauxite mining.
- make all mineral agreements available for public scrutiny.