



# GUINEA

## SELECTED ISSUES

July 2021

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## SELECTED ISSUES

June 3, 2021

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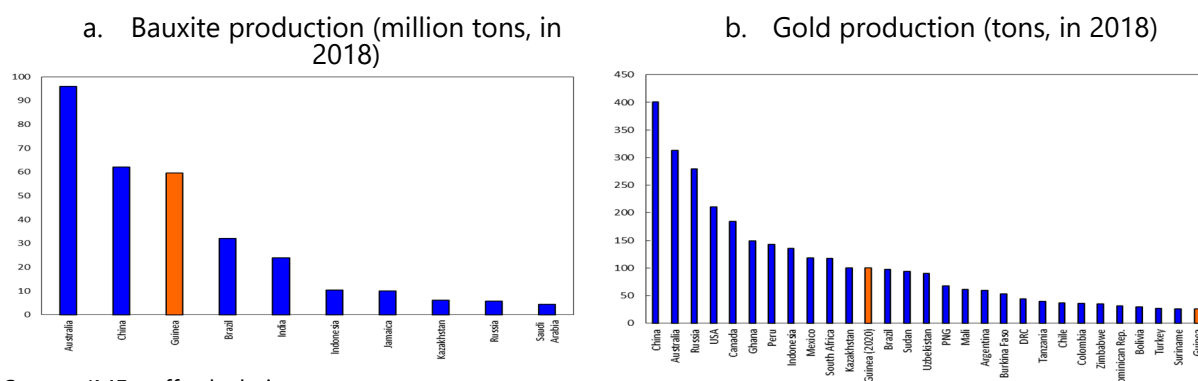
# MOBILIZING MINING REVENUE IN GUINEA<sup>1</sup>

## A. Mining Revenues in Guinea: An Overview

### The mining sector in Guinea

**1. Mining constitutes 90 percent of Guinea’s total exports and 22 percent of its GDP, and the potential for growth is enormous.** Guinea is the largest bauxite exporter in the world and the third-largest producer after Australia and China (Figure 1). Bauxite represented about 63 percent of the total mineral production in 2019, with the two largest mining companies—*Société Minière de Boké* (SMB) and *Compagnie des Bauxites de Guinée* (CBG)—accounting for 60 percent of total bauxite production. The current production of about 87 million tons in 2020 is only a small fraction of the country’s substantial reserves of bauxite; estimated at 7 to 9 billion tons, Guinea is home to one-third of the world’s known bauxite reserves (IFC, 2020). Gold made up 34 percent of mining production in 2019. Guinea is also the 16th-largest exporter and the 13th-largest producer of diamonds. Furthermore, Guinea holds the world’s largest known unexploited reserves of iron ore at the Simandou mountains. Once construction to exploit the iron ore starts (expected by 2027), Guinea could become the second-largest exporter and fifth-largest producer of iron ore in the world, with around 110 million tons expected annually.

**Figure 1. The Role of Guinea’s Mining in its Economy and the World**



Source: IMF staff calculations.

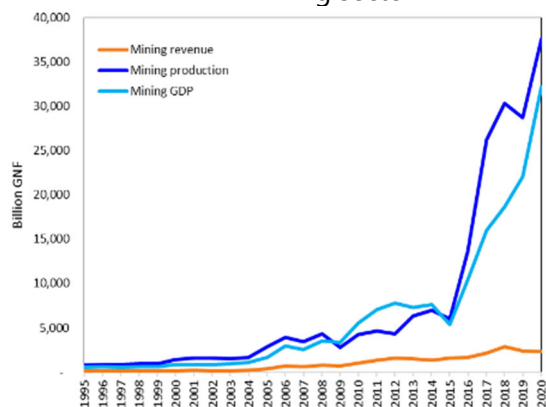
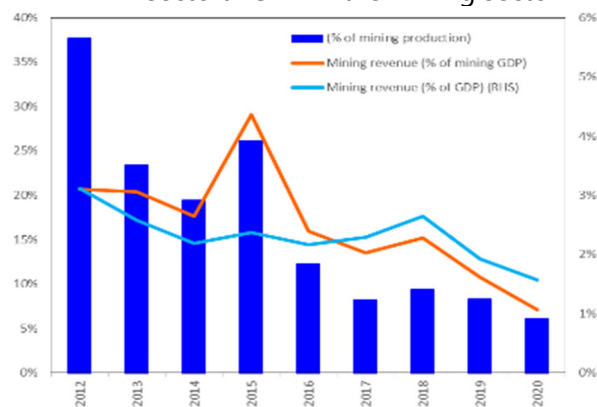
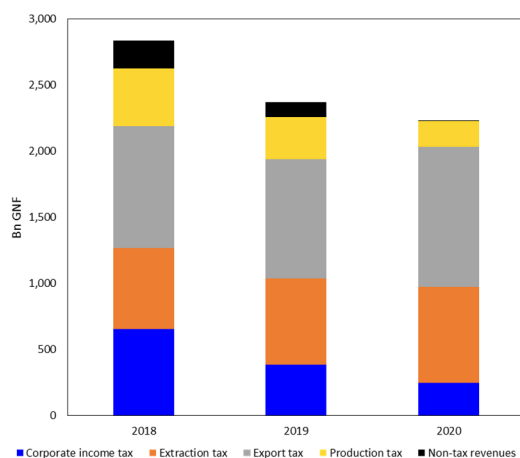
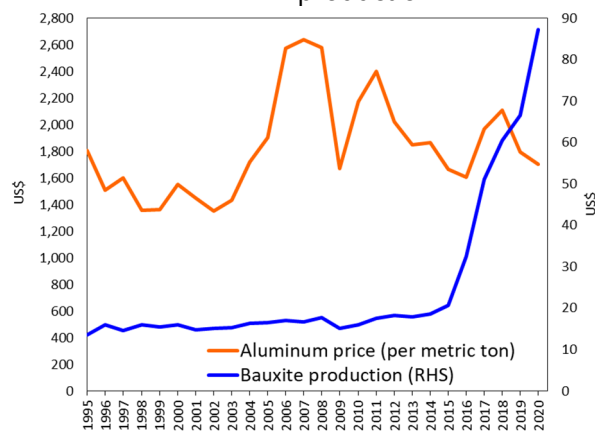
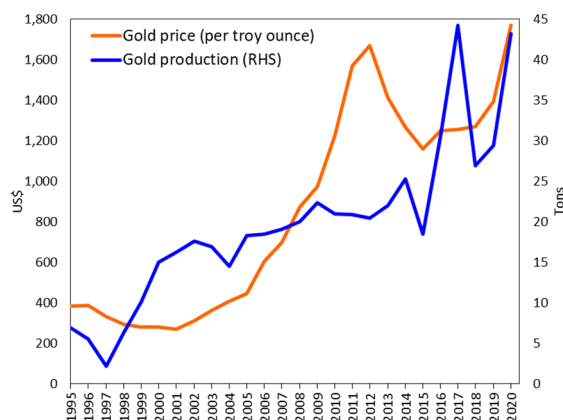
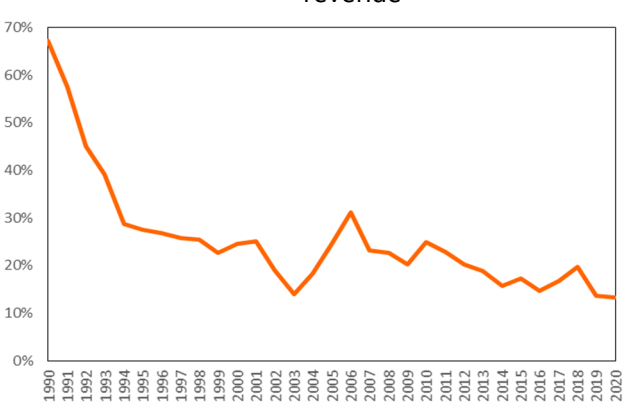
<sup>1</sup> Thanks go to various colleagues who provided valuable input to this paper and who designed tools that it draws on: Patrick Petit, Pierre Kerjean, Dan Devlin, Yves de Santis, Jan Loeprick (all FAD), Alexander Massara, and Ornella Kaze (both AFR). The paper also benefited from discussions with the authorities during the Article IV mission.

**2. Despite the weight of the industrial mining sector in the economy, its potential for improving Guinean citizens' welfare is inherently limited beyond the government revenues it could generate.** Industrial mining only makes up about 6.5 percent of formal employment, and it is mostly locally concentrated. On the other hand, about 220,000 thousand people work in the artisanal gold sector. While the infrastructure built in the course of mining operations has the potential to be shared-use (i.e. for mining and non-mining activities) and to support the creation of growth poles, in SSA countries like Guinea, the infrastructure operations often remain under the exclusive control of the mining company. Furthermore, these investments (the location and type of infrastructure) are generally optimized for mining extraction and exports, not for broader utilization. This optimization strategy is not surprising, since the cost of investment in rail, port and other infrastructure is often multiples of other mining-related costs such as construction of mineral extraction facilities. Due to this, development experts have called for putting in place open-access regulatory frameworks (Collier and Ireland, 2015), and Guinea is planning to move in this direction, with the railway and port to be built to serve the Simandou project. Adequate taxation in the sector is required to ensure that Guinea's exhaustible natural resources benefit the population, by using these revenues to invest in health, education, agriculture, infrastructure and other areas that are critical to inclusive growth.

### Trends in Mining Revenues

**3. Despite steady growth in mining-sector GDP and production, mining revenues grew only slowly or were stagnant over the past quarter-century (Figure 3a).** In the past decade, mining revenues saw a rapid decline relative to production and to value-added in the sector (Figure 3b), with the decrease in recent years driven by falling corporate income tax revenues (Figure 3c). The value of mining production experienced a meteoric rise as of 2015, driven primarily by a sharp acceleration in bauxite volumes produced.<sup>2</sup> Mining revenues in 2020 were as low as 1.6 percent of GDP and reached their lowest point as a share of both production and sectoral value added—at 6 percent and 7 percent respectively—since the earliest year for which data is available (1990). The weakening of mining revenues over time does not simply trace a similar overall revenue trend: Mining revenues have seen a long-term decline even as a share of total revenues—and this share reaches its lowest level in 2020 (Figure 3f).

<sup>2</sup> This increase was not directly driven by changes in the price of the commodity for which all of Guinea's bauxite is an ingredient: aluminum (Figure 3d). In contrast, volumes of production of the second most important mineral in Guinea, gold, were broadly correlated with prices (Figure 3e).

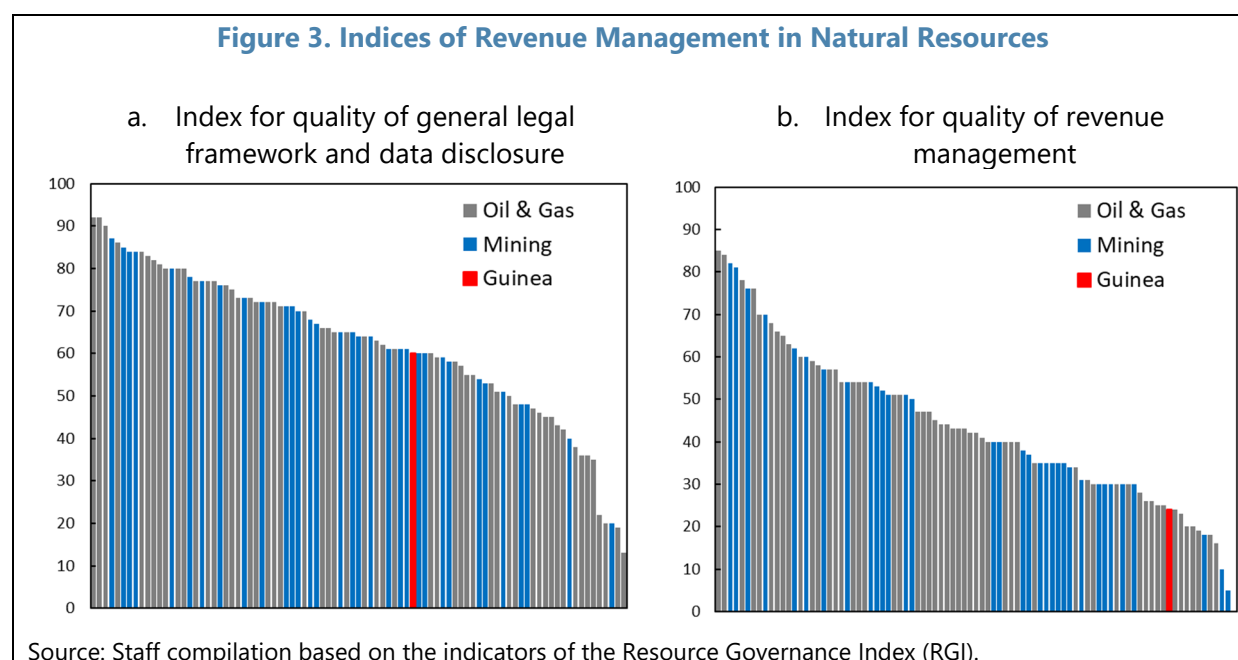
**Figure 2. Long-Term and Recent Trends in Guinea's Mining Revenues****a. Revenue, production, and GDP in the mining sector****b. Revenue as a share of production and sectoral GDP in the mining sector****c. Composition of mining revenues****d. Aluminum prices and bauxite volume production****e. Gold: Prices and volume production****f. Mining revenue as a percent of total revenue**

Sources: IMF staff estimates based on WEO, ICTD (2020), WB (2021), and Guinea country team data.

Notes: All long-term trends display the full date-range for which data are available.

## Guinea's Mining Revenue Governance—an International Comparison

**4. Guinea's general legal framework for the mining sector (in particular, the Mining Code) is sound.** The Resource Governance Index (RGI) on the clarity of countries' general legal frameworks and on data disclosure with respect to natural resources places Guinea slightly below the median among resource-reliant countries, as 54<sup>th</sup> out of 90 countries (Figure 4a).<sup>3</sup> However, relative performance is significantly poorer for the quality of revenue management (Figure 4b), suggesting that indicators concerning the country's provision of information on actual and projected resource revenues, transparency on the interjurisdictional distribution of extractive resource revenues, and the prospects that resource revenues will be well managed nationally and subnationally, place Guinea below most countries. In addition to the anemic revenue mobilization, Guinea's weak performance on revenue management should serve as an alert that more work is needed to improve the ways that the collected revenues are transformed into public goods that benefit citizens.



<sup>3</sup> The RGI produces indexes on various facets of natural resource governance, based on 133 questions in a questionnaire administered to experts in the field. The broad RGI displayed in Figure 4a shows resource-reliant countries' performance on the aggregation of a set of 21 questions that capture the quality of countries' data disclosure (e.g. on mining production, exports, etc.) and the clarity of the broad legal framework (e.g. how well mining tax rates are specified in the relevant legal codes). Figure 4b shows the aggregation of 43 questions that reflect countries' provision of information on actual and projected resource revenues, interjurisdictional distribution of extractive resource revenues, and the prospects that resource revenues will be well managed nationally and subnationally.

## B. Mining Revenues and the Fiscal Regime

### Taxes and Charges in the Mining Sector

**5. A number of taxes and non-tax levies are applied to mining.** Some are specific to the sector, such as taxes on extraction/production of mining substances, taxes on mining exports, contributions to local development, and required dividends. Others are applicable to businesses in general including those in the sector, such as the corporate income tax, value-added tax, and the single land tax. Table 1 summarizes the main features of a selected key set of taxes and other forms of contributions to revenue.

**6. The Mining Code allows for appropriate exemptions for mining companies.** For example, the Mining Code amended in 2013 exempts mining companies from paying (i) VAT on imports of various types of equipment and supplies in an authorized mining list, (ii) customs duties on import of various equipment/supplies in the mining list during the research and construction phase (and reduces customs duties on these goods during the operational phase), (iii) the single land tax and minimum lumpsum tax during the research and construction phases and the first three years of the operational phase, and (iv) the apprenticeship tax, vocational training contribution and patent license during the research and construction phases. The Mining Code also provides advantages specific to mining companies, for example, the corporate income tax rate for mining companies is 30 percent, while it is 35 percent for non-mining companies.

| Type                       | Rate       | Base for rate               | Commodity              | Details / Remarks                                                                                                                                                                                                            | Source <sup>4</sup>                       |
|----------------------------|------------|-----------------------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| Corporate income tax (CIT) | 30 percent | Profits                     | Not commodity-specific | Tax on industrial and commercial profits, applicable during the operating phase. Companies are exempt from the minimum CIT (Impôt Minimum Forfaitaire) for three years from production start                                 | Art. 176                                  |
| Value added tax (VAT)      | 18 percent | Imports, goods and services | Not commodity-specific | During the exploration phase, exempt from VAT on imports of products in the mining list. During the exploitation (operating) phase, exempt from VAT on the import of capital goods appearing on a pre-authorized mining list | Art. 167, 171, 176 of CM; Art. 373 of CGI |

<sup>4</sup> Articles of the 2013 amended Mining Code unless indicated otherwise. CGI = General Tax Code. Reference here is to the revised draft CGI, which has not yet been adopted. This is further discussed in this paper.

**Table 1. Guinea: Selected Taxes and Other Contributions to Revenue Applied to the Mining Sector** (continued)

| Type                              | Rate          | Base for rate                  | Commodity                                                     | Details / Remarks                                                                                                                                                                                               | Source <sup>1</sup>                 |
|-----------------------------------|---------------|--------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| State participation               | 15 percent    | Equity (capital)               | Bauxite, iron, (also gold, diamonds, radioactive substances)  | State participation (share) in the capital (equity) of mining companies. Government can acquire additional shareholding in cash, up to a maximum of 20 percent. Other shares apply for alumina, aluminum, steel | Art. 150                            |
| Single property tax               | 10 percent    | Rental value                   | Not commodity-specific                                        | Due by entities owning built-up land. Rate applies to the rental value for owner-occupied business premises. Mining companies entering the operating phase are exempt for 3 years from start of production      | Art. 175 of CM; Art. 265 of the CGI |
| Withholding tax                   | 10 percent    | Dividends and interest         | Not commodity-specific                                        | Withholding tax applied on dividends and interest paid to foreign beneficiaries                                                                                                                                 | Art. 187 of the CGI                 |
| Payroll tax                       | 6 percent     | Salaries                       | Not commodity-specific                                        | 6 percent of salaries, wages, allowances and emoluments, including benefits in kind, after deduction of contributions for family benefits                                                                       | Art. 201 of CGI                     |
| Contribution to local development | 0.5 percent   | Turnover                       | Bauxite, iron                                                 | Percentage of the turnover made by the holder of a mining title                                                                                                                                                 | Art. 130                            |
|                                   | 1 percent     |                                | Other minerals                                                |                                                                                                                                                                                                                 |                                     |
| Extraction tax <sup>2</sup>       | 0.075 percent | Value of the mineral extracted | Bauxite                                                       | The base of this tax is the value of the mineral substance extracted, determined based on its grade and weight, and the 3-month LME seller price of primary aluminum <sup>3</sup>                               | Art. 161                            |
|                                   | 3 percent     |                                | Iron, copper, tin, nickel, zinc, cobalt, titanium, molybdenum | The base of this tax is the value of the mineral substance extracted (for iron, based on the Platts China index), determined based on its FOB (free on board) price                                             |                                     |
|                                   | 5 percent     |                                | Silver, gold, platinum group metals, palladium, rhodium       | The base of this tax is the value of the mineral substance extracted, determined based on the London PM fix price index                                                                                         | Art. 161-I                          |

<sup>1</sup> Articles of the 2013 amended Mining Code unless indicated otherwise. CGI = General Tax Code. Reference here is to the revised draft CGI, which has not yet been adopted. This is further discussed in this paper.

<sup>2</sup> In the case of precious metals, it is often referred to as "production tax".

<sup>3</sup> The London Metal Exchange (LME) is the major futures exchange for metals. The 3-month LME price refers to prices contracted on for delivery of the product in three months' time.

| <b>Table 1. Guinea: Selected Taxes and Other Contributions to Revenue Applied to the Mining Sector (concluded)</b> |               |                               |                                                               |                      |          |
|--------------------------------------------------------------------------------------------------------------------|---------------|-------------------------------|---------------------------------------------------------------|----------------------|----------|
| Export tax                                                                                                         | 0.075 percent | Value of the mineral exported | Bauxite                                                       | (see extraction tax) | Art. 163 |
|                                                                                                                    | 2 percent     |                               | Iron, copper, tin, nickel, zinc, cobalt, titanium, molybdenum | (see extraction tax) |          |

## Mining Contracts' Deviations from the Broad Legal Framework

**7. Despite the exemptions in the mining code, deviations from the Code are quite prevalent in various mining agreements, including those signed after the adoption of the Mining Code in 2013.** These derogations pertain to multiple statutes, are found in contracts for different mineral commodities, and vary in gravity—however, always providing a more generous regime for the company than does the Mining Code. The following examples give an illustration of the diverse ways in which contracts fail to conform with the Code, and are only a small sample based on two companies (each of which is also inconsistent with the Mining Code in additional ways not listed here).<sup>5</sup>

- *Alufer/Bel Air* signed a contract for bauxite production in February 2016, three years after the amended Mining Code was in effect, thus the latter should have fully applied to this contract. However, the agreement and practices contravened the Mining Code in various ways, including but not limited to the following:
  - *Reduced customs duties:* The equipment that Alufer/Bel Air imported benefits during the operational phase (i.e. the period of bauxite extraction) from the relatively favorable customs regime that was intended to only apply to the construction phase (i.e. the period during which roads, processing facilities, employee housing, etc. are built).
  - *VAT avoidance:* The company set up an ad-hoc “VAT group” between the company, its subcontractors and suppliers, which enables all group members to charge each other for goods and services from one to another group member without paying VAT. Yet there is no explicit provision for such a VAT group in existing law, and the goods and services rendered are not recorded as VAT-exempt in the Code.
  - *New and extended exemptions:* The mining contract provides for an exemption from the corporate income tax for 6 years, and from the minimum corporate income tax (referred to as lumpsum tax) for five years, from production begin, while the Mining

<sup>5</sup> See Charlet et al. (2018), who provide a more extensive analysis of mining contracts' deviations from the Mining Code.

Code does not have any exemption of the CIT—and has an exemption of only three years of the minimum lumpsum tax—from the begin of the production phase.

- *Société des Mines de Mandiana (SMM)/Avocet Mining/Managem* signed an agreement in December 2016 for gold production.
  - The contract includes an exemption from corporate income taxes for six years from the start of production. This runs counter to the Mining Code, which does not provide any corporate income tax exemption during the production phase.
  - The contract established a tiered rate for the tax on production, which declines when the price of an ounce of gold is lower. According to the Mining Code, the tax on production is set at 5 percent of the value of the gold.

Charlet et al. (2018) found that of five selected contracts examined that were signed after the adoption of the Mining Code, all breached the Code, and each did so on average on over nine different aspects.

**8. Guinea’s tax regime is sufficiently competitive on the international stage.** Numerous examples show that several of Guinea’s regulatory provisions relevant to mining revenues are on par with those of other countries producing the same commodities. Therefore, it should not be necessary to sign contracts that contravene the Mining Code in order to attract companies to Guinea. For example, several peers have a well-articulated transfer pricing rule in force, along with documentation requirements, which Guinea does not have. Therefore, the adoption of the draft revised General Tax Code (which elaborates a detailed transfer pricing rule) is crucial to bring the country on par with its peers in this respect. Peers’—e.g. Côte d’Ivoire’s and Burkina Faso’s—recent mining contracts do not generally depart from their mining codes. Other countries have similar provisions on corporate income tax exemptions in their respective legal codes. For instance, as Guinea’s, peers’ mining legislation generally grant CIT exemption during the exploration phase. Neither Mali nor Burkina Faso have a corporate income tax holiday in their mining codes during the exploitation phase. Côte d’Ivoire used to have a 5-year CIT exemption, but this was changed in 2018 for a rebate of 75 percent in the first year of production and 50 percent in the second year. As the two first years of exploitation are generally not profitable, this would generally not result in a large tax benefit for investors. Peer countries such as Mali, Côte d’Ivoire, and Burkina Faso apply withholding tax on interest paid abroad, as does Guinea’s legal code. This reduces the risk and/or the impact of artificial financial arrangements. Finally, while Guinea does not tax artisanal gold, other countries in the region do so. For example, Zambia imposes various types of taxes on the sector (Banda and Chanda, 2021).

**9. Using overly generous tax incentives to attract mining companies is unlikely to be necessary given the quality of Guinea’s bauxite and other considerations.** While the closer proximity of Asia-Pacific exporters to China may appear to put Guinea at a disadvantage, a survey indicated that mining companies prioritize the quality of the mineral when making decisions on where to invest (OECD-IGF, 2018). Guinea’s bauxite is generally of higher physical quality compared

to that of Australia—Guinea’s main export competitor—India, and Indonesia (Nandi and Yamoussa, 2020), which gives Guinea an advantage in attracting companies as it is cheaper to process higher-quality bauxite into alumina (see also discussion in Section C on physical characteristics). China’s own bauxite deposits are both declining and of relatively lower quality (Aljanabi and Wang, 2020), implying that it will rely ever more heavily on imports, especially from Guinea. In addition, while a quantification of other production costs to companies may be complex, it is to be expected that certain costs may be higher in advanced economies than in fragile LIDCs, including costs to adhere to environmental standards and labor costs. Furthermore, recent restrictive policies among other major bauxite exporters to China also raise Guinea’s competitiveness: Indonesia imposed a bauxite export ban to support domestic refining of the commodity into alumina, relaxed it in 2017, but plans to reinstate it in 2022; and Malaysia also enacted a similar ban in 2016 and lifted it last year. These export restrictions in competitors, even where partially reversed, enhance Guinea’s relative attractiveness for investment without the need to resort to large tax holidays.<sup>9</sup>

**10. Lastly, tax incentives are of course not without cost to the country.** The next section analyses the potential cost to Guinea—in terms of foregone revenues that could support inclusive growth and welfare improvement for Guineans—of the generous tax incentives that prevail.

## C. Potential Gains in Mining Revenue, and Policy Options

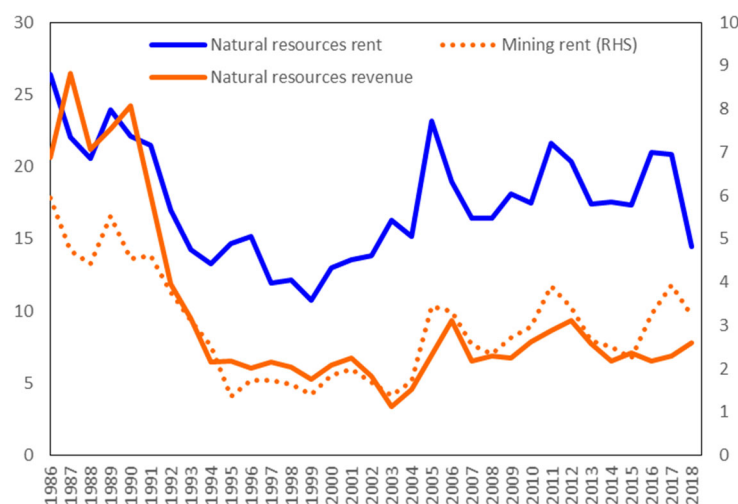
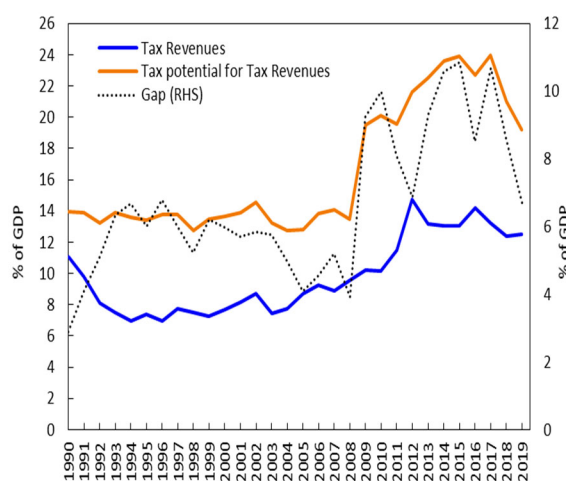
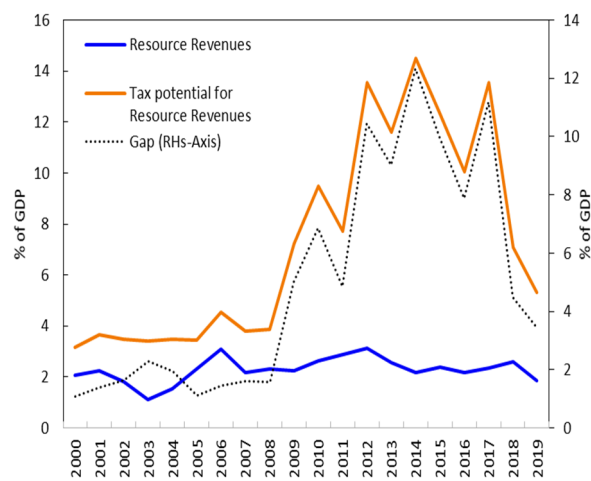
### Capturing Resource Rents Through Revenues, Tax Potential Analysis, and Simulation of Potential Revenue Gains from Removing Selected Tax Privileges

#### 11. Guinea’s mining revenues are not reaching their potential:

- An assessment of Guinea’s natural resource revenues against the natural resource rents—the latter defined as the difference between the value of production for a stock of natural resources at world prices, and their total estimated costs of production—shows that Guinea’s rents were generally captured by revenues during the mid-1980s, but the gap between rents and revenues rapidly widened starting from the 1990s (Figure 4a).
- Guinea’s tax potential analysis shows that overall tax revenues and resource revenues are estimated at an average of about 7.3 and 5.0 percent of GDP higher, respectively, than they were in the course of the last decade (Figure 4b and 4c). The regression analysis uses panel data of low-income and developing countries; revenues (as percent of GDP) are regressed on a number of variables that the tax potential literature considers as relevant determinants, including GDP per capita, development aid, government investment and consumption, external debt stocks, industrial value-added, and inflation.<sup>10</sup> The regressions also include country fixed effects. Data are available starting from 1990 for tax revenues, and for resource revenues as of 2000.

<sup>9</sup> <https://www.hellenicshippingnews.com/2021-dry-bulk-outlook-bauxite/>

<sup>10</sup> These are also explanatory variables utilized in the SIP on tax potential associated with the most recent (2016) Article IV report on Guinea (Charry et al. 2016).

**Figure 4. Natural Resource Rents and Revenues, and Tax Potential****a. Natural resource rents and revenues****b. Tax potential in total tax revenues****c. Tax potential in resource revenues**

Sources: IMF staff estimates based on WEO, ICTD (2020), WB (2021), and Guinea country team data.

Notes: All trends display the full date-range for which data are available.

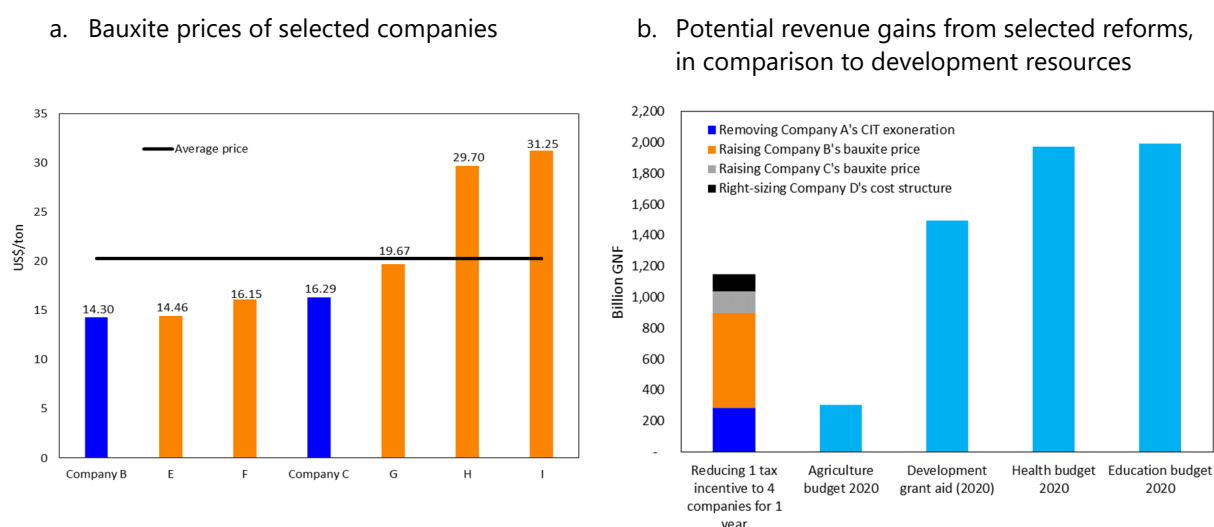
- Third and finally, we use an IMF mining forecasting FARI-like model built for Guinea to conduct a simulation that assesses the potential revenue gains from carrying out three modest hypothetical reforms applied for one year and to selected mining companies.<sup>6</sup> The reforms include the following:<sup>7</sup>
  - *An increase of bauxite prices for two companies to the average of seven companies for which the model has adequate data on prices* (Figure 5a), with this increase applied for one year. This could be considered a first-order approximation of a move toward arms-length transfer pricing (see more discussion on transfer pricing in subsequent sections).
  - *A more standard cost structure for one company*, with more typical limits on what can be reported as deductible interest. This adjusted cost structure would still leave the company with unit-costs that are 20 percent above that of a key competitor, which suggests that that simulated unit-costs have not been pushed down to unrealistic levels. We then derive the average single-year revenue gain associated with this cost adjustment.
  - *The removal of a corporate income tax exemption for one mining producer*, for one year. The company's contract, which was signed well after the adoption of the Mining Code, stipulates a 5-year corporate income tax exemption from the start of commercial production, in violation of the Mining Code.

**12. Results show that these limited reductions in tax privileges would raise revenues that would be able to provide substantial development benefits to the country.** For example, the gains amount to nearly 4 times the country's agriculture budget, more than three-quarters the totality of international development grants, and over half of the health or education budget (Figure 5b). This simulation-based estimate is in fact likely a lower bound as it does not reflect the behavioral response of mining companies to tax incentives (Readhead, 2018).

<sup>6</sup> Confidentiality of corporate data do not enable stating the names of the companies used in the simulation exercise, but the information including companies' identity has been presented to the authorities during the Article IV mission.

<sup>7</sup> It should be stressed that these hypothetical reforms are not necessarily implementable at this stage, since stability clauses prevent reversing any provisions in mining contracts that violate Guinea's Mining Code or General Tax Code. Rather, the simulation serves to show the potential revenue gains that were to be had if these derogatory exemptions were instead modestly scaled back.

**Figure 5. Potential Revenue Gains from Modest Reforms on Bauxite Prices, Company Cost Structure, and Tax Exemptions**



Source: IMF staff estimates.

## Limiting Profit-Shifting Arising from Transfer Pricing Schemes—Establishing National Pricing Guidelines

**13. Transfer pricing refers to the practice of setting a price for the purchase of a good or service between two parties affiliated with one another.** Since most taxes and levies directly or indirectly depend on the value of extracted or exported minerals, it is important that the value of the minerals is accurately determined based on their physical quality and market conditions. Transfer pricing is considered abusive when the parties put in place a price level so as to reduce their combined taxable income. An example would be a mining company *A* operating in Guinea that receives consulting services from a related entity *B* based in another country that has relatively low taxes. *A* compensates *B* for the services. *A* and *B* agree to inflate the charge for these services, which reduces *A*'s profits accrued in Guinea and transfers these profits to *B*. This in turn reduces *A*'s corporate income tax levied on profits while raising *B*'s by much less given its location in a low-tax jurisdiction.

**14. Profit shifting risks through transfer pricing are particularly acute in the bauxite sector.** Many bauxite-producing companies have affiliation with aluminum producers abroad to which they sell the extracted bauxite. This integration between buyer and seller raises opportunities of profit-shifting through the strategic design of transfer pricing mechanisms. Specifically, the bauxite sold may be underpriced, and given that corporate income taxes are based on invoiced prices, this would reduce the taxable profits of the bauxite producers and raise profits of the affiliated purchaser. (It is worth noting that mining royalties are not directly affected by this practice, as they are not based on invoiced prices but on a publicly available price index (Table 1)). The

resultant reduction in the combined income tax bill of both (affiliated) companies incentivizes this practice, as the buyers are often based in jurisdictions with more favorable tax regimes than Guinea's. The practice has the effect of undercutting the amount of revenues the Guinean government can collect.

**15. The regulatory framework seeks to obviate profit shifting through transfer mispricing.**

The Mining Code (Article 138-III) and the General Tax Code (CGI) (Article 117) include the obligation to sell mineral commodities at arm's length prices to any buyer (whether affiliated with the seller or not). Specifically, the CGI stipulates that profits indirectly transferred to related companies abroad (or to companies in jurisdictions with a privileged tax regime) by making price adjustments or using other means must be added back to income for the purposes of calculating the tax on profits. The CGI also identifies the presence of profit transfers by the existence of a discrepancy between the prices actually employed, and prices that would be deemed arm's-length under similar market conditions. Finally, it lays down documentation requirements on companies regarding transfer pricing policy. A revised draft General Tax Code, which has received substantial IMF TA in the course of 2019 and 2020, has not yet been submitted to the National Assembly and thus not been adopted. This new Code notably reinforces, and details transfer pricing documentation requirements. Its adoption is an important foundation for any policy to reduce transfer mispricing. Notwithstanding the explicit provisions in the general legal framework, tax authorities do not have the technical capacity, time, and resources to systematically verify whether the multitude of pricing methods used by the mining title holders are consistent with arm's length prices.

**16. An approach proposed by IMF CD in this context of constrained capacity is to establish *a priori* what would be considered an arm's-length price for bauxite, rather than trying to assess after-the-fact the appropriateness of the prices that companies set themselves.**<sup>13</sup>

Bauxite prices—along with the formulae and methodology to derive them—could be set based on a regulatory framework underpinned by a decree by the Minister of Budget, possibly jointly with Minister of Mines. It would then be incumbent on the companies who wish to depart from these prices to provide detailed justification, along with all relevant documentation, for the method they would seek to follow. These firms would then face more rigorous verification procedures by the authorities than those that apply the national pricing guideline.

**17. The pricing methodology should take into consideration the physical characteristics and quality of the bauxite mined, market circumstances and other transaction costs.** The physical characteristics includes the extent of moisture in the bauxite (too much of which increases the weight and thus transportation cost of the commodity and complicates refining); the alumina content of the bauxite (a higher content reduces the cost of aluminum production and thus should raise the bauxite price); and the presence of physical impurities and contaminants such as iron oxide and silica (which increase the cost of bauxite-to-alumina conversion and thus reduce the price). The national pricing methodology would also account for the market circumstances, such as global supply of and demand for bauxite. Transactions costs also play a significant role in the value of

<sup>13</sup> This methodology was developed in the context of IMF TA and is aligned with recommendations received from other TA providers (namely, the OECD and IGF).

bauxite; practically all of Guinea's bauxite is refined abroad, requiring shipment by sea to its destination, in most cases China. The associated transportation and insurance costs reduce the price of the commodity to arrive at an FOB price. Several international services estimate the cost of freight and insurance between different source and destination points.

**18. Already available indexes could provide useful guidance.** The demand of bauxite is closely linked to that of aluminum, as practically all bauxite is used to make aluminum.<sup>14</sup> Thus, equilibrium prices of aluminum—for example, as recorded on the London Metal Exchange (LME)—could serve as useful information on how bauxite should be priced. As Table 1 shows, the LME price of aluminum is already used as the basis for extraction and export taxes, as per the Mining Code. Furthermore, there are various bauxite price indices formulated on the basis of both physical and economic characteristics of the commodity. Bauxite indices are produced by various entities (such as CRU, Asian Metal, and CBIX), accessible with a subscription fee. The Guinean authorities could consider one or a combination of these indices as a key ingredient in the government's national arm's length price guideline. A limitation of reliance on any of these indices is that they are potentially substantively influenced by policy decisions of major bauxite-purchasing countries. Nonetheless, they may serve as a basis for a reasonable approximation of an arm's-length price of bauxite. Transparency vis-à-vis both companies and Guinea's citizens would warrant that the government publish the final methodology underlying the national pricing guideline, and the resultant bauxite prices, on a on a frequent as well as timely basis.

### Potential Timing and Modality of Implementation of National Pricing Guidelines

**19. A two-step approach could be considered for the implementation of the national pricing guideline.** In a first step, the national pricing guideline would function as a form of "safe harbor": companies that adhere to it are automatically considered compliant with government regulations that prohibit profit shifting through transfer prices. But they can also choose to depart from the standard, in which case they face the burden of proof to show that (a) the government's methodology is not appropriate in their case, and (b) their preferred pricing scheme is consistent with the arm's length principle. This option would allow the authorities to see increases in the short term, as i) This option would be fully consistent with the stabilization of the fiscal and customs regime (Article 182 of the Mining Code), which stipulates that taxes and levies are not to be changed for existing contracts for 15 years, and ii) the method could inform the on-going tax audit programme.

**20. A second step would entail the determination of a mandatory administrative price for bauxite exports.** This would require prior studies of different pricing options and potential impact. A transition period would give time for the authorities to make needed adjustments after taking into account any legitimate input on the methodology from stakeholders (domestic and international technical experts, civil society, and mining companies themselves). The transition would provide an

<sup>14</sup> The light-weighted metal aluminum (sometimes also spelled 'aluminium') is made by electrolyzing a substance referred to as alumina. In turn, alumina is made by crushing the mined commodity bauxite and mixing it at high temperature with sodium hydroxide.

opportunity to more thoroughly prepare the administrative arrangements in the tax and custom agencies so that they can appropriately implement and enforce tax collection on the basis of the new regime. However, full compliance with the national pricing standard would not be expected before the end of about a three-year period.

## D. Conclusions

- 21. The mining sector is central to Guinea's economy.** However, its potential to benefit the population is severely constrained due to mining revenues that are anemic and weakening relative to production and value-added in the sector.
- 22. Guinea has a sound general legal framework for mining revenues.** This is reflected in the 2013 amended Mining Code, and in a revised draft General Tax Code that has received IMF TA in 2019 and 2020 but still remains to be adopted. Its adoption is critical as a foundation of good tax policy for the mining sector.
- 23. However, the Mining Code is often undermined by mining contracts that violate its articles and by poor implementation and enforcement.** The generous tax privileges for mining companies carry a high cost for Guinea's development and its citizens' welfare. A modest reform could mobilize nearly 4 times the size of the agriculture budget of the country.
- 24. Various options exist to stem the mining revenue losses.** Addressing profit-shifting practices implemented through transfer pricing mechanisms is a critical one, as it can be applied to both new and existing contracts and can generate a significant amount of resources. Establishing a national pricing guideline to function as a safe harbor could be a pragmatic way to ensure companies sell their bauxite at arms' length price, while providing flexibility to companies who want to depart from the principle if they can justify it, thus reversing the burden of the proof.
- 25. A study is also warranted of the options, tradeoffs, and experience of peer countries with generating revenue from artisanal gold.** Artisanal gold exports have skyrocketed in 2020 and yet this subsector is untaxed in Guinea (while it is taxed in other peer countries).
- 26. Ultimately, a necessary condition for any success in the proposed reforms is the willingness on the part of the authorities at the highest levels to usher in robust mining revenue mobilization.**

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