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Rethinking Tax Incentives in the Mining Sector in Africa

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Rethinking Tax Incentives in the Mining Sector in Africa

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Executive Summary

Due to various global crises and their subsequent socio-economic implications, governments across Africa face unprecedented challenges to mobilize the resources required to support economic recovery across all sectors of the economy, including the mining sector. While mineral resources represent a significant opportunity for domestic resource mobilization, most African countries have failed to fully realize the expected revenues from the sector due to several external and internal factors, including poorly designed and overly generous tax incentives.

This paper analyzes tax incentives in the mining sector in Africa, establishes their ineffectiveness in contributing to a more inclusive and transformative use of mineral resources, and highlights the need for rethinking them altogether.

This paper reaches the following conclusions:

Tax incentives have led to the loss of substantial mining revenues in Africa. While there is no comprehensive assessment of the cost of tax incentives in Africa's mining sector (or globally), available evidence does provide examples of the extent to which tax incentives can be detrimental for government revenues. For example, Sierra Leone's revenue losses to incentives given to the mining sector between 2014 and 2016 were equivalent to the country's budget deficit for 2024.

Tax incentives are less relevant to attracting mining investment. While one of the main arguments for giving incentives is that it attracts foreign direct investment, creates jobs and has positive spillovers to other sectors, there is limited empirical literature on the efficiency and effectiveness of mining tax incentives. Evidence suggests that sectors that are more mobile tend to benefit more from tax incentives than less mobile sectors, such as mining. From a mining investor perspective, other factors are more important in influencing investment decisions than tax incentives, including the location, amount, and quality of the mineral resources, existing skilled labour, the quality of infrastructure, and political stability and security.

Tax incentives in the mining sector are greater avenues for illicit financial flows. Multiple factors make the mining sector conducive to illicit financial flows. These include the predominance of multinational enterprises, which makes taxation of the sector very challenging due to aggressive tax planning. Further, African countries tend to lack adequate laws and human and financial resources to apply international tax norms. As a result, the mining sector is increasingly subject to tax base erosion and profit shifting. Other factors include over-reliance on profit-based tax regimes (especially corporate income tax) which are prone to profit shifting, overly generous and poorly designed tax incentives, and limited industry knowledge and expertise within Africa's tax authorities. This paper argues that for Africa to realize the transformative potential of the mining sector, there is an urgent need to rethink tax incentives in the sector.

Prudent management of natural and financial resources requires countries to end the use of harmful tax incentives to prevent further loss of revenue, and they should think carefully about what tax incentives they still offer, if any.

Any revenue foregone by countries in the name of attracting investment should be backed by a cost–benefit analysis. This has rarely been the case for mining tax incentives. Considering all the direct and indirect cost implications that come with giving incentives, the government should rethink introducing tax incentives in the first place. International and regional organizations should do more to equip government officials with the tools to assess the effectiveness and efficiency of mining tax incentives. This paper highlights the promises and challenges of using mining financial models, in particular.

Notwithstanding, there may be some instances where countries can benefit from offering tax incentives. In such cases, countries should opt for smartly designed incentives that they monitor closely. Incentives should be time-bound, targeted at achieving a specific objective, and structured to prevent abuse, which would otherwise increase revenue losses.

There is limited room for African countries to compete against each other for investment. Tax competition has only benefited the investors who have enjoyed long years of lower fiscal burden while the resource owners have collected lower-than-optimal taxes. African countries should take advantage of economies of scale and rally regional cooperation to maximize the benefits from their mineral wealth. It is time for Africa to review, strengthen and operationalize regional tax harmonization policies to realize its collective goal as outlined in the Africa Mining Vision.

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1.0 Introduction

The mining sector can contribute substantially to a country's economic development. Many African countries, however, have yet to realize the transformative potential of the mining sector. Indeed, as mineral booms have come and gone, most African mineral-rich countries remain dependent on the export of raw, unprocessed minerals, earning only a fraction of the eventual value these products are transformed abroad. The attention of policy-makers, mining communities, and other stakeholders has increasingly turned to how these minerals can catalyze industrialization and inclusive development, for example, as enshrined in the 2009 Africa Mining Vision (African Union, 2009).

Several barriers to this transformative use of the continent's resources exist. This paper addresses one major issue—the poorly designed fiscal regimes that often offer overly generous tax incentives that rarely contribute to a more inclusive and transformative use of mineral resources. A pro-investment narrative, encouraged by foreign investors, emerged in the 1990s and argues that there is a limited pool of capital available to develop certain minerals, and it will go to the very best investment opportunities, the mines with the best ore, and the lowest tax take. That narrative does not reflect the world of 2025, in which there is a vast amount of underused global capital, an undersupply of critical minerals, and the realization that Africa holds some of the best grades of ores yet to be extracted or even discovered.

Many African countries have reduced corporate income tax (CIT) rates to attract FDI, particularly in the mining sector. However, recent evidence suggests that lower tax rates have minimal impact on FDI inflows for resource-based projects. Instead, factors like quality infrastructure, political stability, and the availability of natural resources play a more significant role in attracting investment (Seydou & Camara, 2022). Therefore, African governments might achieve greater benefits by focusing on improving socio-economic infrastructure, providing comprehensive geological data, and fostering political and economic stability rather than relying solely on tax incentives.

Despite their questionable effectiveness, tax incentives remain widespread across Africa. Many countries offer measures such as CIT holidays and fiscal stabilization clauses through either legislation or specific mining contracts. These incentives are particularly prevalent in Africa's mining sector compared to other regions, often constituting some of the most problematic forms of tax relief. This highlights the need for a balanced tax policy approach that prioritizes structural reforms over blanket incentives.

Tax incentives reduce an investor's tax obligation and represent a tax expenditure or revenue loss for governments. Unfortunately, such incentives are rarely justified by evidence of their effectiveness or efficiency. Ideally, incentives should only be granted when their benefits outweigh the associated costs. Without this analysis, incentives risk resulting in significant revenue losses for governments. In the mining sector, some African countries attribute a substantial portion of revenue loss to these incentives, which could otherwise reduce budget deficits or fund essential public services. Moreover, these losses may be exacerbated by the encouragement of aggressive tax avoidance strategies among investors, leading to unintended additional revenue losses. Tax incentives can also facilitate illicit financial flows, especially in the mining sector, due to limited capacity in many African nations to detect and counter harmful tax practices. Additionally, a lack of transparent and coordinated processes for negotiating and granting tax incentives increases the risk of corruption and revenue leakage.

Countries often compete for mining investment by offering incentives, assuming that attracting more investment to one country diminishes opportunities for neighbouring countries. However, this assumption is questionable. Mineral discoveries and mining developments often make entire geological regions more attractive due to enhanced geological knowledge, improved mining infrastructure, and a more skilled workforce. For example, new gold mines in Senegal, Mali, Burkina Faso, Guinea, and Côte d'Ivoire have increased the region's overall appeal to gold miners. Consequently, lowering taxes may only deprive governments of funds that could have been used for vital public expenditures.

This paper argues that the time for overly generous, unbalanced tax incentives in the mining sector is over. Part 1 starts by describing the incentives commonly found in the mining sector. It shows that tax incentives, particularly those that are most harmful to revenue collection, are more widespread in Africa than any other region. Part 2 summarizes the experience of mining tax incentives in Africa— the revenue foregone from tax incentives; the lack of cost–benefit analysis when determining whether to grant incentives; instances of manipulation of tax incentives by investors; the impact on host communities; and governance issues. Part 3 introduces important emerging issues in the mining sector and society, which add further impetus to the need to reform tax incentives, particularly in a world where the current global consensus is to limit tax competition. Part 4 proposes opportunities for greater tax policy harmonization and regional integration in limiting mining tax incentives. Finally, the paper concludes by setting out a vision for an Africa mining sector that realizes the aims of the Africa Mining Vision and the continent's urgent domestic resource mobilization needs without using generous and potentially wasteful tax incentives.

2.0 Overview of Mining Tax Incentives in Africa

The mining sector's characteristics make its tax system different from other sectors. It involves finite and location-specific resources. It is capital intensive, with most costs incurred at the start of the project. Geological uncertainty varies across regions with resource extraction, sometimes requiring highly specialized technology. Further, volatility in world commodity prices means that the sector's revenues are cyclical. In times of commodity booms, both investors and governments have a claim on large mineral rents. While these characteristics may be found in other sectors, the order of magnitude of difference in extractive industries sets the sector apart.

In nearly all countries, governments manage these resources on behalf of their citizens. The government is, therefore, in charge of enforcing a fiscal regime that captures optimal revenues for its people. While there may be many gains to host countries from resource extraction, revenue generation is the core benefit (World Bank Group, 2013).

Governments use different combinations of fiscal instruments to capture revenues from the sector. Production royalties, resource rent taxes, and bonuses are some of the tax instruments used exclusively in the mining sector. In addition, there are taxes such as CITs, VATs, and withholding taxes that are common to other industries.

Fiscal incentives are prevalent in the mining sector. A tax incentive is any special tax provision granted to mining investors that provides a favourable deviation from the general tax treatment that applies to all corporate entities (Readhead, 2018). While they reduce or postpone an investor's tax obligation, they result in a tax expenditure for the government. Different legal instruments, such as the general tax code, mining law, and mining contracts, create tax incentives. Double taxation agreements and national investment laws may also contain tax incentives. They could be specific to the mining sector or applicable to other sectors.

Table 1 summarizes the different types of incentives according to the fiscal instrument commonly found in the mining sector. The first column outlines the main fiscal instruments, while the second column lists the corresponding tax incentives (see Appendix A for a detailed description of the different types of tax incentives).

TABLE 1. Tax incentives commonly used in the mining sector

Mining fiscal instruments	Corresponding tax incentives
Taxes on income (e.g., CIT, resource rent taxes, withholding taxes)	• Income tax holiday • Accelerated depreciation • Investment allowance and tax credit • Longer or unlimited loss carry forward • Withholding tax relief on interest expense, dividends, services (e.g., management fees)
Taxes on production (e.g., mineral royalties)	• Reduced royalties • Royalty holidays • Sliding-scale royalties
Tariffs on imports and exports (e.g., tariffs on import of capital inputs)	• Import duty relief • Export processing zones (EPZs)
Others	• Stabilization of fiscal terms

Source: Readhead, 2018.

2.1 Cost-Based vs. Profit-Based Incentives

Because the mining sector is capital intensive and has long lead times before revenues start to flow, governments may give tax incentives that allow taxpayers to recoup their investment faster, i.e., cost-based incentives. The other category of tax incentives increases the returns on investment for profitable projects by reducing the amount of taxes on profits payable by an investor, i.e., profit-based incentives.

2.1.1 Profit-Based Incentives

Profit-based incentives reduce the amount of taxes on profits payable by an investor. Examples include exemptions from income taxes, withholding taxes, or a combination of incentives within EPZs. These have no impact on the cost of investment since they are relevant once a mine is profitable and in a tax-paying position, which may be years after the decision to invest. Profitable mines will benefit more than the marginal mines if a tax holiday is granted, e.g., if a mine's gross profit is USD 200 and its operating costs are USD 50, a tax holiday means it keeps USD 150 in revenue; whereas for a mine that has the same costs but only USD 100 in profits, it keeps just USD 50 in revenue. Since prices are volatile, the profits are uncertain. This means that when the prices are high, the government loses more revenues than when the prices are low, making the loss uncertain.

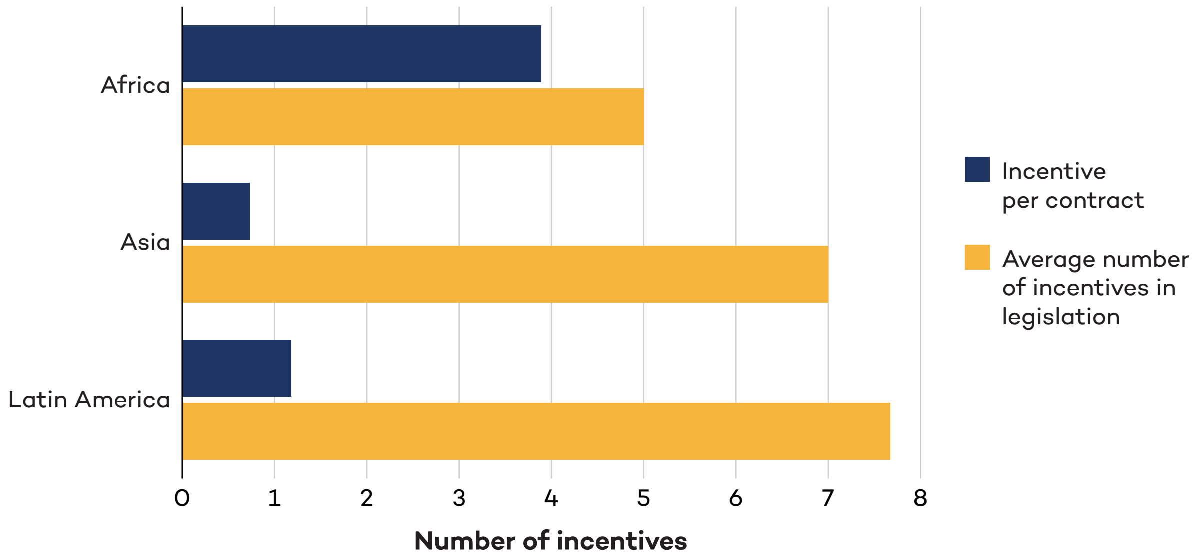
2.1.2 Cost-Based Incentives

Cost-based incentives decrease the cost of capital by allowing taxpayers to recoup their investment through appropriate deductions from their taxable income or directly from their tax bill. Examples include investment allowance/credit, customs duty exemptions, VAT exemptions on imports, accelerated depreciation, loss carry forward, and royalty-based incentives. They defer tax to a later stage in the life of a project, and thus do not reduce the cash flows in the initial years when capital is needed. It is also easier to anticipate and monitor the direct revenue cost of the incentive because it is based on the investment amount.

2.2 Prevalence of Mining Tax Incentives by Region

In 2019, the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) compiled tax incentives used in 21 developing countries to attract mining investment (IGF, 2019).[1] The incentives included are the most common in the mining sector in law and mining agreements. While the average number of incentives granted through law is higher than those granted through contracts, as shown in Figure 1, Africa stands out from other regions in offering comparatively more tax incentives in contracts. Granting tax incentives through individual contracts tends to increase the bargaining power of companies during negotiations and, eventually, the administrative burden for government officials in monitoring these incentives. It also increases the risk of corruption, as this paper highlights.

FIGURE 1. Tax incentives by region

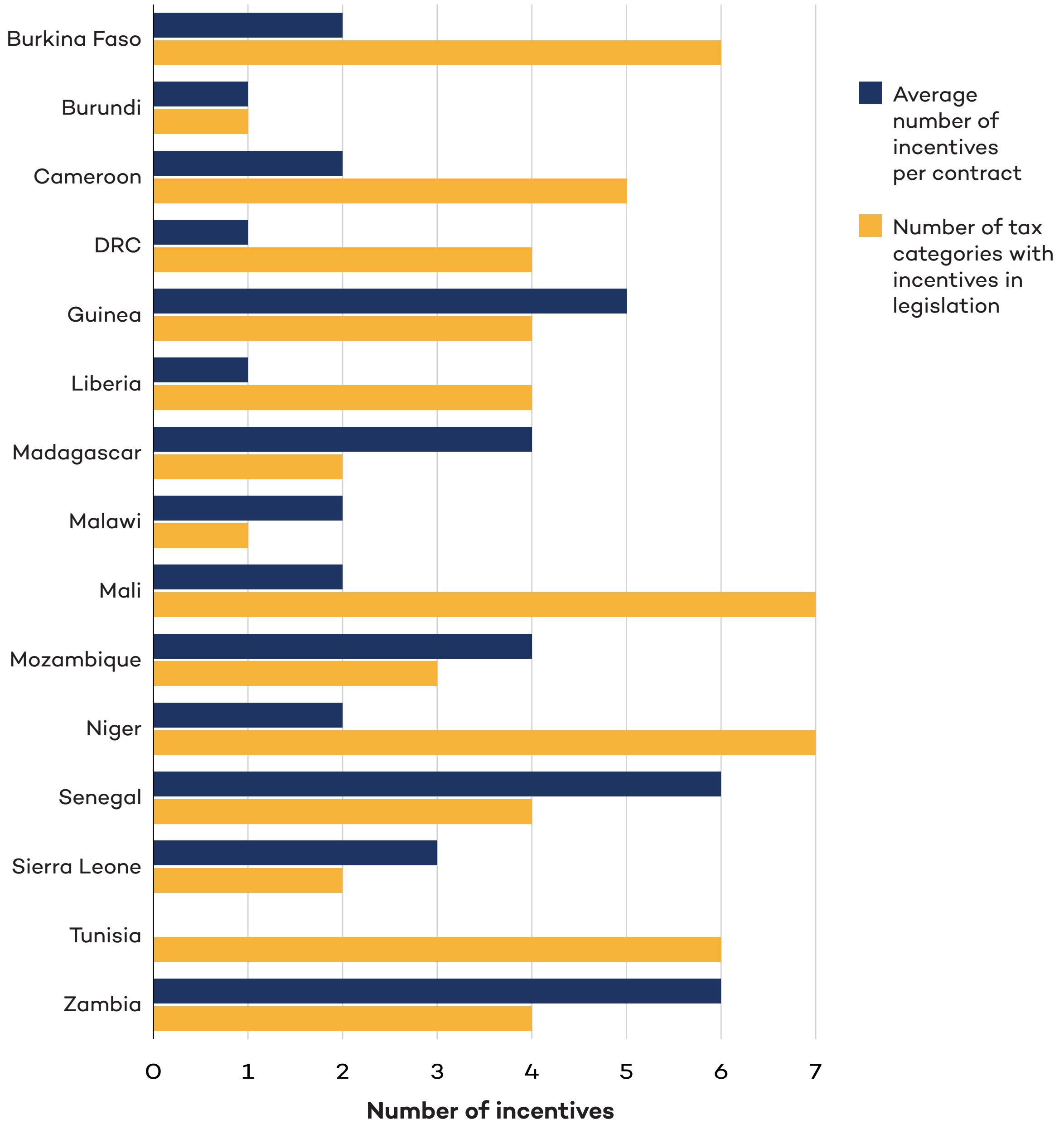


Source: Readhead, 2018.

Figure 2 shows the prevalence of incentives among African countries in mining contracts and laws. With the exception of Tunisia, where incentives are exclusively found in legislation, all African countries in the database have incentives in both contracts and in law.

[1] The IGF Mining Tax Incentives Database is a collection of files that compare the fiscal regimes for 104 mining contracts across 21 countries. The fiscal regime was analyzed by comparing different types of law: tax code and mining code, as well as mining contracts. The 21 countries were selected because of the availability of published contracts on resourcecontracts.org. The incentives captured in the database are not exhaustive but include the more typical mining tax incentives.

FIGURE 2. Tax incentives in selected countries



Source: Readhead, 2018.

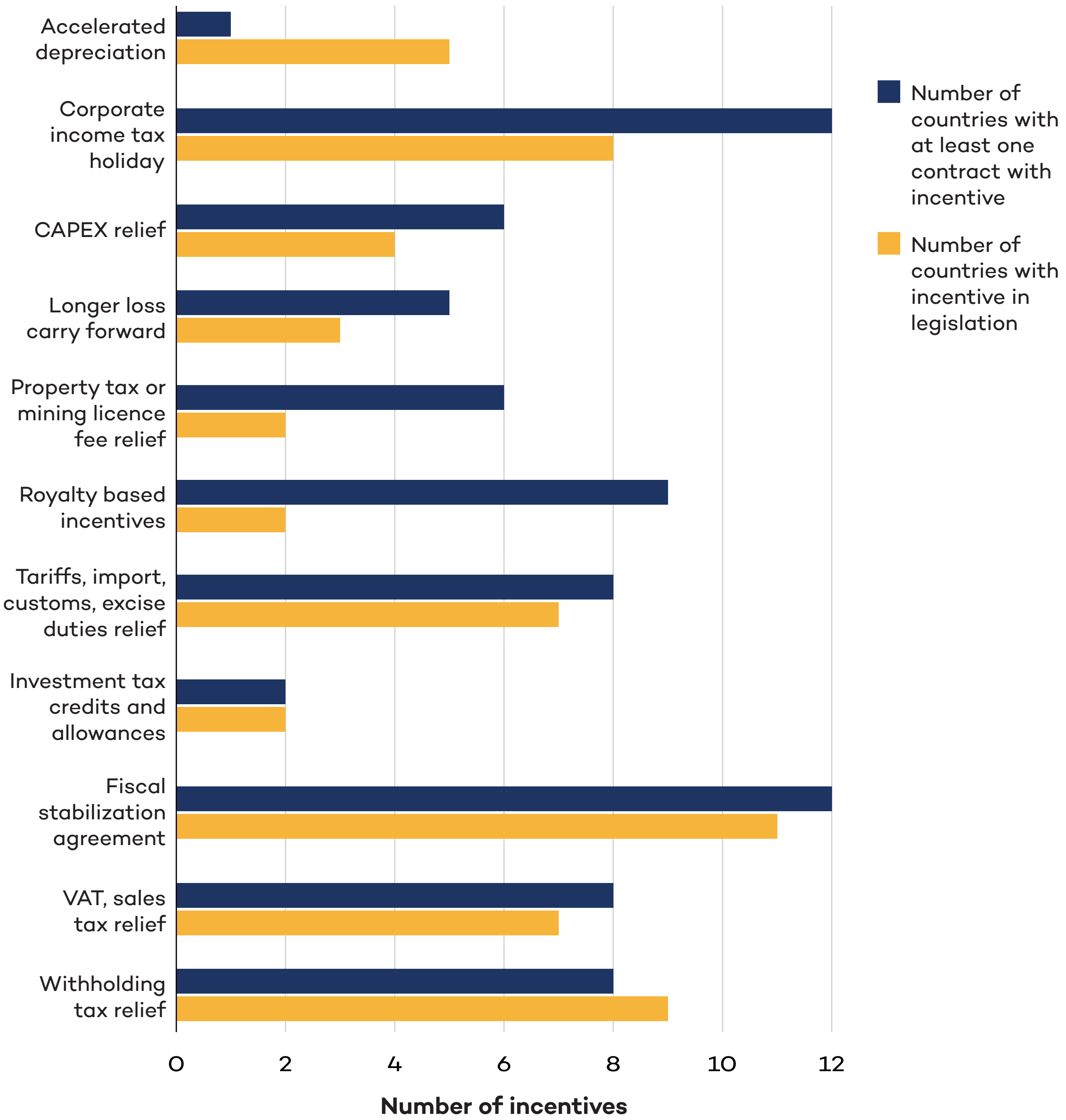
Countries offer different combinations of tax incentives. Figure 3 shows commonly used incentives in the mining sector in Africa.

CIT holidays and fiscal stabilization clauses are the most popular in law and contracts (see Figure 3, below). They are also high-risk incentives as described later in this paper. Nearly all countries include a tax stability clause that lasts an average of 20 years. A predictable investment environment is important to ensure the bankability of projects. However, where the period extends well past the financing stages, for example, 30–34 years on average (as in Guinea, Burkina Faso, Burundi, Madagascar, and Mali), stabilization clauses become more akin to rent-seeking tools than necessary financial assurances.

Tax relief on withholding taxes and on imports and sales taxes is also common in the sector. If countries reduce or exempt withholding taxes on interest expenses, management fees, or royalties for intellectual property, investors are tempted to increase these payments to strip profits out of the mines, transferring them to a foreign affiliate constituting illicit financial flows (IFFs). Cost-based incentives, in particular investment allowances and tax credits, are uncommon, despite being better suited for mining investments than profit-based incentives.

CIT holidays, relief on mineral royalties, and licence fees are often negotiated in contracts on a case-by-case basis. Royalty-based incentives may take the form of reduced or deferred royalties or variable rate royalties where the benchmark is a flat rate.

FIGURE 3. Commonly used tax incentives in Africa



Source: Readhead, 2018.

3.0 Tax Incentives in Mining in Africa: What have we learned?

This section takes stock of what we have learned about using tax incentives in the mining sector in Africa—how the sector generally responds to incentives, what has been their impact on countries through IFFs, how to evaluate tax incentives, and the complexities that arise when trying to measure their indirect costs and benefits. It reviews how fiscal stabilization, a common type of incentive, can result in more revenue loss when it locks in other incentives in the sector. Finally, it focuses on the negative impact of foregoing mining revenue on local communities and vulnerable populations.

3.1 Tax Incentives Have Led to the Loss of Substantial Mining Revenues

There is no comprehensive assessment of the cost of tax incentives in the mining sector in Africa or globally. Some countries have begun to capture information on revenue foregone through tax expenditure reports, but it is limited and not always regular (Kassim & Mansour, 2018; Republic of Kenya National Treasury and Planning, 2021). Nevertheless, many examples show just how detrimental tax incentives can be for government revenue. For some countries, these examples represent significant sums of money foregone, often unnecessarily—money that would otherwise fund the delivery of vital public services or public investments. Some of these examples are discussed below.

In a country where more than half of the population live below the national poverty line, Sierra Leone attributes the bulk of its revenue loss to incentives given to the mining sector. In the period 2014–16, the country lost USD 131 million through a CIT holiday given to only two firms, African Minerals and London Mining (Curtis, 2014). The revenue loss is equivalent to the country's budget deficit for 2024 (Budgit, 2024).

Malawi, where half of its citizens are poor (World Bank Group, 2022), lost USD 15.6 million in 6 years (2009–2014) because of a royalty reduction for a company mining uranium. The royalty was reduced from 5% of sales to 1.5% of sales in the first 3 years and then 3% in the remaining years. Adding withholding tax exemptions on payment of interest and management fees, the total revenue foregone rose to USD 43.16 million in the same period. For context, the revenue lost could have financed 431,000 annual HIV/AIDS treatments or 8,500 annual doctors' salaries for the country (ActionAid, 2015).

In Guinea, tax expenditures from the mining sector stood at 24.4% of the total tax expenditure (World Bank Group, 2019). Similar to Sierra Leone, this amount is the largest when compared to other sectors' contributions and has been increasing. The International Monetary Fund's (IMF's) simulations show that modest reforms on the tax privileges for mining companies could contribute four times the size of the agriculture budget for the country (IMF, 2021).

This evidence shows that there is an urgent need for a comprehensive assessment of tax incentives in the mining sector. This is critical to understanding the scale of the problem and shaping solutions. In the interim, there are enough examples to suggest that tax incentives are a significant source of potential revenue loss for African governments.

3.2 Tax Incentives Are Less Relevant to Attracting Mining Investment

One of the main arguments for giving incentives is that it attracts FDI, creates jobs, and has positive spillovers to other sectors. However, the evidence for this is mixed (James, 2015). There is limited empirical literature on the efficiency and effectiveness of mining tax incentives. A tax incentive is effective if it achieves its policy objective and is efficient if the policy goal is met at the minimum cost to government revenue (IMF, Organisation for Economic Co-operation and Development [OECD], United Nations, & World Bank, 2015; Readhead, 2018).

Tax incentives are not a key driver for investments in all sectors. More mobile sectors tend to benefit more from tax incentives. For example, textile manufacturing is very sensitive to production cost. A factory may locate in a jurisdiction with lower tax rates to reduce its costs and make its products more competitive in the global market. However, the mining sector seems to be less responsive to incentives. For example, a study in South Africa showed that tax incentives increased investment in the agriculture, construction, and manufacturing sectors, not mining (International Bank for Reconstruction and Development, 2017). This makes sense from a mining investor perspective; the main consideration is the location, amount, and quality of the mineral resources, so tax incentives are less likely to influence their decision to undertake a project.

Other factors that drive investments include existing skilled labour, the quality of infrastructure, political stability, and security. In fact, investors "will discount regimes and incentives that are 'too good to be true' in their investment decision process" (Readhead, 2018, p. 12). This is because overly generous tax incentives are often inversely related to the stability of a fiscal regime. In subsequent years, there may be political pressure to reverse them (International Council on Mining and Metals, 2009).

If countries do choose to offer incentives, they should ensure that the benefits outweigh the costs—not just the direct costs and benefits of a tax incentive, but also the indirect costs and benefits as well as the resulting externalities (IISD, 2019). See Table 2 for examples of the costs and benefits of tax incentives in the mining sector.

TABLE 2. Costs and benefits of tax incentives in the mining sector

Costs	Benefits
• Immediate revenue loss. • Additional revenue loss due to behavioural/unintended responses. • Administrative costs of implementing and monitoring incentives. • Economic distortions introduced due to differential treatment of certain investments (e.g., import duty exemptions for foreign mining equipment suppliers make it harder for local manufacturers to compete, potentially undermining local content goals).	• GDP or gross value added: the amount of economic value the mining operation brings to the economy. • Employment: the number of jobs created by the mining operation. • Government revenues: the amount of revenue generated for the mining country government by the mining operation.

Source: Readhead, 2018.

Financial models can be a powerful tool to measure the effectiveness and efficiency of incentives. The example below shows how models could help policy-makers put an end to redundant and overly generous tax incentives. However, financial models are scarcely used by resource-rich countries (African Development Bank & OpenOil, 2017), whose officials cite the lack of data on capital and operating costs, limited modelling capacity, and model updates as the main challenges.

Importantly, as outdated or inefficient tax incentives are phased out, fiscal space will open up to apply these incentives elsewhere, namely in higher-value manufactures and services sectors linked with mining that will create more jobs and generate more revenue. This transformation has been crucial in emerging economies worldwide, and history has shown the importance of proactive government policies to incentivize such activities that would not be possible without collective action.

This analysis emphasizes the need for carefully formulated incentives and not blanket incentives. This would save the government from unnecessary revenue loss and help incentivize mineral-based value addition that will play an important transformative role in Africa.

3.3 Tax Incentives Have Been a Source of Illicit Financial Flows from Africa

IFFs in Africa from the extractives sector stood at USD 220 billion annually between 2010 and 2018 (United Nations Conference on Trade and Development, 2021), five times their level between 2000 and 2009.[2] The sector remains vulnerable to IFFs, and the amount of lost revenue is increasing. There are four broad categories of IFFs: tax and commercial practices (both illegal, i.e., tax evasion, competition offences, and market manipulation or legal, i.e., tax avoidance), illegal markets, corruption and exploitation-type activities, and financing

[2] The figures could be understated due to lack of consistent statistics on IFFs causes uncertainty about the size of and trends in illicit flows, how and where they originate and their impact on development.

of crime and terrorism (United Nations Office on Drugs and Crime, 2020). The mining sector is especially prone to IFFs resulting from corruption, revenues from illegal resource exploitation and illegal tax and commercial practices (United Nations Conference on Trade and Development, 2020; United Nations Economic Commission for Africa, 2021). This section shows how tax incentives can exacerbate these problems.

3.3.1 Tax Incentives and Tax Avoidance

Tax incentives can encourage investors to adopt more aggressive tax avoidance strategies, resulting in additional revenue loss than initially envisioned from the incentive. These are called "behavioural responses" to tax incentives. For example, during the period when Glencore and First Quantum Minerals enjoyed exemptions on customs duties, reduced royalty and corporate tax rates, and a 20-year stability clause on their Mopani copper mine in Zambia, a tax audit revealed that they overestimated operating costs, underestimated production volumes, and manipulated transfer-pricing rules (OECD Watch, 2011).[3] This section highlights potential behavioural responses to tax incentives commonly used in the region, as evidenced by the incentives database.

CIT Holidays

When an investor is granted a time-limited CIT exemption, there is an added motivation to shift profits forward into the tax-free period. Investors could increase the rate of extraction or prioritize the extraction of high-grade ore compared to what they would extract without the tax holiday, also known as "high grading." The result is that the amount of tax relief is well above that originally envisioned by the government. The risk of high grading could be limited by pegging the holiday to the time anticipated for a specified tonnage to be extracted. For example, the 2012 Mali Mining Code states that, if production exceeds the levels approved annually by the company's board of directors by 10%, the generally applicable CIT rate is applied to the excess.

Additionally, if an investor is operating several mines with tax holidays that start and end at different periods, the investor may try to shift profits as soon as a mine's tax holiday ends to another mine still benefiting from the exemption. To shift profit, the older mine could purchase technical services from the newer mine at an above-market rate. The investor could even physically move mineral production from the older to the newer mine so it is counted as part of the newer mine's production, thereby minimizing the group's overall tax bill.

In addition, when a tax holiday is not attached to a specific project or licence and the period of tax exemption is ending, investors could transfer the mining licence to another related entity, thus restarting the tax holiday (Albertin et al., 2021).

Cost-Based Incentives

While cost-based incentives are more adapted to the mining sector than profit-based incentives, they could also encourage tax avoidance. Investors may add costs that are not eligible for incentives to the costs that are. This could be resolved by clearly defining and monitoring the assets and asset categories to which the cost-based incentive applies. For the costs eligible for incentives, investors may also increase the rate of capital spend or inflate

[3] According to the OECD watch revenue database, the case was not resolved.

the costs of items, also known as "gold plating," in order to claim a greater share of project revenues through, for example, accelerated depreciation.

When investors are exempted from paying import duties, they could artificially inflate prices by paying a higher markup on the cost of equipment and machinery purchased through a corporate services hub located in a low-tax jurisdiction to reduce their taxable income in the mining country. Alternatively, they could pay the original price for older equipment and machinery that have been used by an affiliate company in operations elsewhere. The customs regulations could enforce strict monitoring rules for such imports, like requiring taxpayers to apply for an import permit for equipment and machinery on the mining list. This allows customs officials to verify the documentation prior to approval and adjust the taxpayer's taxable income if an asset is transferred between related parties at a non-market price.

Royalty relief is a common cost-based incentive in the region and susceptible to tax avoidance strategies. If the royalty is exempted for a period or deferred to a later time, it creates a motivation to increase the rate of extraction or prioritize the extraction of high-grade ore compared to what they would extract without the tax incentive. The royalty amount exempted becomes more than what was envisioned.

Sliding-scale royalties vary with some measure of profitability. When prices are high, an investor pays a higher royalty than when prices are low. A sliding-scale royalty may encourage tax-planning strategies to avoid falling into a higher royalty bracket. When market prices are near the boundary, both buyer and seller can have an incentive to price below the boundary and "share the benefits" of avoiding the higher royalty rate. This incentive to underprice exists even when buyer and seller are unrelated parties. The seller pays less in royalties, and the buyer gets a cheaper product.

Withholding Tax Relief

Withholding tax (WHT) is paid on dividends, interest, and management or technical fees. If an investor is exempted from paying WHT on interest payments, this may encourage the use of debt from the parent company to shift profits through the interest expense, also known as "thin capitalization."

Exemptions on WHT on management fees could encourage the investor to inflate the management fees to shift profit to foreign affiliates. When WHT is applicable, companies incur additional costs by inflating management fees. For example, if the WHT rate is 15%, and a company raises the fee from USD 100 to USD 200, the tax expense also rises from USD 15 to USD 30, which could reduce the amount of dividends paid and raise financing expenses. On the other hand, if the WHT rate is reduced or exempted, the protection against profit shifting is removed, making it more likely that management fees will be inflated (Readhead, 2018). Countries may need to increase their administrative capacity to monitor transactions between related parties, especially if they have incentives.

Behavioural responses to incentives can result in revenue loss over and above what is envisioned by governments because of incentives. For example, Mozambique lost EUR 20 million per annum when a mining investor operating in the country used a loan arrangement to shift income in the form of interest payments to a zero-rated company granted EPZ status (Albertin et al., 2021). Managing the behavioural responses may require additional administrative measures, which would also be costly. Countries will need to consider this when giving incentives.

3.3.2 Tax Incentives and Corruption

The potential for high revenues combined with high discretionary power provides fertile ground for political interference and corrupt practices in extractive industries. According to the OECD's Foreign Bribery Report (2014), one in five of the foreign bribery cases that occurred between 1999 and 2014 involved the extractives sector.[4] Corruption occurs throughout the extractive value chain. The risk is high during the award of the licences where public officials can manipulate the licensing phase by colluding with potential investors to get kickbacks or even by registering shell companies to participate in the bid rounds. Discretion and opacity in the design of tax incentives heighten corruption risks in the mining sector.

When the law does not provide clear eligibility criteria for awarding incentives, government officials have considerable discretion in determining which projects receive favourable treatment. As a result, government officials can use tax incentives in the mining sector as tools for political backing and maintaining political popularity. They can easily be used as compensation for loyalty or a return for favours.

The opportunity for corruption is much greater for tax incentives when they are provided through bespoke mining contracts, where they escape public oversight and are prone to undue influence. This is especially relevant for Africa, given that most of the incentives are granted through contracts compared to other regions. Even when these contracts are eventually disclosed, they are already finalized, leaving no room for public debate regarding their terms and conditions.

Transparency has been widely promoted by the international community and African civil society organizations as a vehicle to reduce corruption. To prevent corruption, transparency should not only cover the contract but also focus on disclosures of the sales agreement and beneficial ownership (Pitman, 2020). The impact of the COVID-19 pandemic and the war in Ukraine on domestic resource mobilization and energy transition calls for additional scrutiny of corrupt practices in awarding tax incentives in the sector.

3.4 Tax Incentives Have Often Been Locked in Through Fiscal Stabilization

Fiscal stabilization clauses may lock in overly generous tax incentives. A stabilization clause can freeze fiscal terms applicable to an investor or provide some compensation to the investor when the stabilized law is amended (Daniel & Sunley, 2010). Stabilizing legal and fiscal terms in domestic law, investment contracts, or bilateral treaties has been a widespread practice in Africa over the last few decades, especially in the mining sector. It represents an investment incentive in itself: governments agree to limit their legislative power concerning a particular project to give legal certainty to its investors. Legal stabilization has evolved over time, and governments now tend to avoid "freezing clauses" in favour of more balanced provisions (OECD, 2020).

[4] The extractives sector includes mining, quarrying, petroleum and gas extraction, and mining support services activities.

BOX 1. FREQUENT CHANGES IN MINING TAX REGIMES AND INCENTIVE POLICIES CAN SIGNIFICANTLY IMPACT REVENUE GENERATION IN AFRICA: ZAMBIA'S CASE

Over the period 2000 to 2019, Zambia's mining fiscal regime remained seriously unstable, with changes coming in quick succession, a phenomenon that offered little stability in this strategic sector. On average, Zambia has had one tax change every 18 months since 2001, when major privatizations were concluded. This revealed that the country ranks second in Africa in terms of the frequency of changing measures.

Key phases of this regime include the Post-Privatization Regime (2000–2008), characterized by development agreements negotiated during privatization; the 2008 Regime, a tax framework from April 2008 to March 2009; and the 2009–2012 Regime, which introduced further adjustments to the tax structure. The 2012 Regime continued to evolve the fiscal framework, followed by the 2015 Mineral Royalty Regime and the 2016 Regime, ultimately leading to the 2019–2022 Reforms prompted by fiscal deficits and warnings from the IMF about debt risks.

In 2019, the government introduced several tax changes aimed at increasing revenue. These included raising mineral royalty rates across the board, introducing a new 10% tier for high copper prices, and making mineral royalty taxes non-deductible for income tax purposes. Additionally, import duties on copper and cobalt concentrates were enacted, as well as export duties on precious metals and manganese ores (Kalikeka & Nsenduluka, 2023).

While these reforms are designed to enhance revenue, the frequent policy shifts may undermine investor confidence, potentially leading to a decline in new investments in the mining sector. This instability can also adversely affect FDI in other sectors due to a loss of trust in the government. Excessive and frequently changing tax incentives may create an unstable and unpredictable environment for both investors and tax collectors.

To enhance a more stable investment climate, African countries should conduct a comprehensive assessment of their tax regimes within the African context while drawing on global best practices. Implementing a well-structured and stable tax system, accompanied by optimal incentives, can improve the investment climate, and ultimately boost revenue generation from the mining sector.

Stabilization clauses can be problematic, especially regarding fiscal terms and when they cover harmful tax incentives. For example, as early as 1997, Zambia gave its investors mining incentives that included a reduction of royalty and income tax rate and privileges on withholding taxes and customs duties to encourage privatization of the sector. This period coincided with low mineral prices, so investments were hard to attract, and the revenues foregone seemed low. But in 2008, powered by high mineral prices, investment in the sector increased, and the government amended the Mines and Minerals Act to invalidate all previous agreements, including those with tax incentives (Daniel & Sunley, 2010). Investors resisted the change. Even though it did not result in arbitration cases, it eroded investors' trust in the government (Zambia Institute for Policy Analysis and Research, 2013).

Tanzania also offered fiscal incentives to encourage mining development. One such incentive was the capital allowance uplift for mining expenditures, which was poorly structured. It defined the "allowance base" for calculating the uplift to include the uplift earned in the previous year. This meant that the incentive was compounded. As a result, the date on which the first tax was due from a mining operation could be deferred for a long time. While the number of mining investments grew, the incentives did not result in more revenues for the government. A repeal of the incentives in 2001 and the amendment of the Income Tax Act in 2004 did not affect existing mining contracts because of stabilization provisions. It was only in 2007, under political pressure, that investors agreed to forego some tax incentives (Daniel & Sunley, 2010).

Stabilization provisions may also hinder the full application of the OECD/G20 led global minimum tax reforms. Pillar 2 of the reform aims to reduce tax competition on CIT. For countries to benefit from the rule, it will require them to eliminate some incentives in the mining sector. However, if these incentives are stabilized, governments may encounter legal challenges that may resort to expensive arbitration to get rid of these incentives. The OECD/G20 may need to intervene as it draws up the implementation guidelines for the adoption of pillar 2.

3.5 Tax Incentives Have Negatively Impacted Communities

Mining activities are often located in remote areas surrounded by communities living in extreme poverty. To add to their vulnerability, host communities endure most of the negative effects of mining activities. The negative effects can be economic (e.g., loss of land used to derive livelihood), social (e.g., rise of social problems because of a rapid population influx), or environmental (e.g., environmental degradation and associated health risks). At the same time, these communities often feel excluded from the benefits and the wealth that mining activities generate. While there are other forms of benefits like shared infrastructure, employment and local procurement, revenues remain the prime benefit. When an investor receives tax incentives, it reduces the revenue that ultimately gets to the communities. An imbalance between benefits and the negative effects of a mining project on the communities may result in social tensions and conflict, ultimately affecting the investor's social licence to operate.

Mining fiscal regimes should promote positive impacts on communities while limiting negative impacts. Like environmental pollution and community displacement, the impact of tax incentives should be carefully considered against the direct benefits to the communities before a project is sanctioned. If tax incentives deprive local actors of opportunities, limit local revenue collection, or encourage companies' tax avoidance behaviour (high grading, repatriation of profits instead of reinvestment, etc.), they should be removed.

In some countries, the national government receives mining revenues through its national treasury. In this case, tax incentives reduce revenues that would otherwise fund national priorities like health care, education, and long-term development goals. In other jurisdictions,[5] specific taxes are channelled directly to subnational governments where the mine is located or to local communities through a local development fund. In such cases, the revenue foregone from tax incentives directly affects the communities. In Tanzania, for example, mining investors are incentivized by capping local government taxes at USD 200,000 per annum. This amount is lower than the applicable rate of 0.3% of turnover (Curtis & Lissu, 2008).

Tax incentives have the potential to create imbalanced and unfair tax burdens. Domestic companies may be fully taxed, while foreign firms (or domestic firms pretending to be foreign)

[5] For example Angola, Cameroon, Chad, DRC, Ethiopia, Ghana and Guinea. For more examples, see Natural Resource Governance Institute (2016).

may receive tax benefits that lower their effective tax rates (Schlenther, 2018). This may be a barrier to domestic investment in the mining sector, including artisanal and small-scale mining, which has the potential to directly benefit local communities.

Nevertheless, tax incentives can positively impact local communities if they are targeted and linked to specific outcomes. They could be designed to encourage local hiring, training, technology sharing, and procurement, or to facilitate the switch to equipment used to reduce pollution around the mine site. Government can also use tax incentives to make investors adopt gender-responsive programs like supporting women-owned business, technical training, and creation of a safe working environment for women, e.g., having a daycare and nursing room on the mine site (Tekinbas & Deonandan, 2021).

4.0 Times Are Changing: Why African countries must rethink mining tax incentives

Long seen as a mandatory tool to attract foreign investments, mining tax incentives have lost their allure. The international economic community agrees over the relative ineffectiveness and inefficiency of many tax incentives. As the world agrees on international tax cooperation and companies are under public scrutiny for their tax contributions, it is only a matter of time before harmful tax incentives are removed from mining fiscal regimes everywhere. If anything, African countries are late in doing so. Changes in the mining sector make it all the more relevant. Digitalization and new value chains for critical minerals call on government to protect their revenue base and only use tax incentives to further valuable economic goals, such as technological transfer and domestic industrialization.

For a long time, the advice given to countries was to provide economic stimuli to compete for investment and to boost the economy. That narrative has since changed. Currently, there is a developing global consensus on the need to limit tax competition. After decades of intense tax competition between countries, the international community through the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting, is finally addressing the race to the bottom by introducing a global minimum tax of 15% (OECD, 2021). This set of rules will ensure that multinational companies are liable for a minimum effective tax rate of 15% no matter where they operate. Multinational companies headquartered in jurisdictions that will implement the global minimum tax and have an effective tax rate of less than 15% will have to pay the difference to the tax authority in the headquarter country. Because some forms of tax incentives serve to reduce the applicable effective tax rates of multinational companies to below the prescribed minimum rate of 15%, the revision and withdrawal of some tax incentives will be one way African countries can retain their primary taxing rights. The global minimum tax has already come into effect in South Africa and Mauritius while several other countries on the continent are contemplating their adaptation approach. The global minimum tax takes the pressure off developing countries to offer some of the most harmful incentives and to cushion their tax base. If countries continue to give incentives that will reduce the effective tax rate of companies below 15%, these incentives will serve no investment promotion purpose, as the multinational enterprise will have to pay an additional tax to its country headquarters and as such, deny the resource-rich country citizens their public funds. By continuing to grant these types of incentives, African countries will also forego revenue that will be collected by other countries.

The formulation of the global minimum tax, however, takes into consideration the sector-specific conditions of some industries, such as the mining industry, that legitimize the use of some types of incentives. In particular, to accommodate the capital-intensive nature of setting up new projects and high employment volumes, the rules thus allow for a substance-based carve-out that will allow countries to continue to extend tax incentives linked to tangible assets and payroll. African countries can thus continue to extend tax incentives of this nature to multinational companies without reducing their effective tax rates.

The mining sector is evolving, and several reasons to rethink the use of incentives are thus emerging. Powered by the fourth industrial revolution, there will be an increase in the use of technology in the mining sector. Technology makes it possible to operate mines remotely, reducing the need for a large labour force in the mine site. Governments may lose tax revenue in the form of payroll taxes (PricewaterhouseCooper, 2010)[6] from the jobs replaced by technology. Use of technology will also reduce local procurement of employee-related goods and services such as food, housing, etc. (Ramdoo et al., 2021). In addition, technology may give rise to the proportion of intangibles in the sector, which in the past have been a challenge for revenue collection. Revenue from the sector will likely fall. Government may have to compensate for the shortfall by revising the level of taxation to make up for the loss of jobs and local procurement but also to strengthen the administration of the intangible assets. Use of tax incentives further drains revenues collected. Government will have to be prudent in its use of tax incentives to prevent additional losses.

In addition, a low-carbon future will be mineral intensive. Clean energy technologies will require more materials than fossil fuel-based energy generation technologies (Addison, 2018). The mining boom will guarantee an increase in investor interest in the mining sector, and governments will not need incentives to spur investor interest.

Africa is rich in these resources. Congo for example, produces 70% of the world's cobalt (Statista, 2024). Zambia, Guinea, and Zimbabwe have abundant deposits of copper, bauxite, and lithium, respectively. Large parts of the continent remain unexplored. African countries should take advantage of this interest by designing mining policies that offer a stable and clear environment for investment and design fiscal regimes that guarantee a fair and sustainable source of public revenue, with a more limited use of tax incentives.

In the future of the mining sector, performance-based incentives may still be relevant. For example, African countries could leverage the abundance of mineral resources to incentivize investors to develop the intermediate stages of mineral processing closer to the mines. Revenue from value addition is more than revenue from exporting raw materials; it is also a key ingredient/stimulator of industrialization.

Additionally, incentives such as import duty relief may encourage the importation and use of clean energy technology in the mines. This would reduce the adverse environmental impacts as well as improve the health and safety of mineworkers and surrounding communities. These incentives ought to be properly designed and monitored to be effective and efficient.

[6] Payroll taxes still represent the second largest share of taxes collected on average in the mining sector after corporate income tax (PWC, 2010).

5.0 A United Approach Toward Realizing the Revenue Potential of Mining in Africa

African countries, especially those with similar minerals, often perceive themselves as competing with each other for investment opportunities. Division has encouraged tax competition to attract foreign investment and led to the proliferation of tax incentives that were often ineffective, and sometimes harmful, as described in the previous sections. Therefore, the regional response to the challenge should be more coordination. African countries can coordinate at the sub-regional, regional, or continental level to harmonize their tax practices and their approach to foreign investment. This section describes the phenomenon of tax competition, practical regional responses, and the specific role that African institutions can play.

Tax competition rests on the premise that each country acts independently and selfishly—a "prisoner's dilemma" (Picardo, 2024). Countries lower the fiscal burden on investors, for example by lowering tax rates or granting exemptions and tax incentives. As a result, they enjoy foreign investment at the expense of other countries with higher tax burdens. But every country has the same rationale. The ultimate result of open tax competition would be countries trying to undercut each other by lowering taxes, a concept analyzed in game theory and popularized as the "race to the bottom." Tax competition between neighbouring countries is a losing proposition for governments: it can result in lower revenues for resource-rich countries, among other adverse effects.

Tax harmonization between countries can reduce the pressure to compete for investment, and lead to a better outcome for all of them: the same level of foreign investment, at a harmonized and higher level of taxation. Tax harmonization could be a way to limit or eliminate tax incentives used by countries to win over investors in the mining sector. In practice, tax harmonization means that instead of individual jurisdictions setting different tax rates applicable to the mining sector, or to individual projects, countries can standardize their tax system at the regional level to ensure that no country has a comparative advantage over the other based on tax. For example, a basic regional tax regime could set a floor on CIT and mineral royalty rates and eliminate the most harmful tax incentives.

African countries have taken steps toward regional harmonization. Heads of state of the African Union and the United Nations Economic Commission for Africa have backed initiatives to harmonize taxes in the mining sector (United Nations Economic Commission for Africa & African Union, 2011). Regional blocs have made headway; some more than others, in terms of harmonizing trade, tax, and investment laws. A good example is the harmonization of export tax in West Africa, which reduced the amount of illicit trade between Mali, Burkina Faso, and Ivory Coast (Assassa, 2021).

BOX 2. REGIONAL EFFORTS TOWARD HARMONIZING MINING POLICIES AND TAXATION IN AFRICA

In 2006, the Southern African Development Community (SADC) adopted a framework for the harmonization of mining policies, standards and regulatory frameworks (United Nations Economic Commission for Africa, 2009). This initiative aims to standardize and align policies and activities within the mining sector among SADC member states. The Economic Community of West African States produced a document entitled *Harmonization of Guiding Principles and Policies in the Mining Sector* in 2009, and adopted the Common Mining Code, which harmonizes national mining legislation (Oxfam, 2009). The East African Community has a Draft Code of Conduct against Harmful Tax Competition (ActionAid, 2016), while the Economic and Monetary Union of West Africa Common Mining Code outlines the applicable tax system for minerals.

There are still challenges that hinder the full realization of regional integration. To begin with, not all tax harmonization policies have been adopted by member countries. For example, the East African Community has in place a Code of Conduct against Harmful Tax Competition applicable to all sectors that not only limits the addition of tax incentives but also provides for transparency of tax exemptions in place. However, this code of conduct has yet to be adopted by all countries (Oguttu, 2019). Secondly, tax harmonization policies allow for competition outside the main tax laws. As such, it is common for the mining sector to introduce special taxes through ministerial or presidential decrees not covered under the harmonization policies. For example, Mali reduced its CIT to 30% to align with the regional directive but instead introduced a 3% export tax that mirrors an additional royalty.

The success of global initiatives like the OECD/G20-led Inclusive Framework on Base Erosion and Profit Shifting (IF) and the African Continental Free Trade Area (AfCFTA) negotiations depend heavily on effective regional and internation coordination. In the same way, stronger tax coordination across countries presents a valuable opportunity to enhance the financial returns from the mining sector.

African countries have abundant critical minerals. The emergence of viable value chains may depend on carefully formulated tax policies and strategies to spur both national and regional development. These countries may have to coordinate their mining regimes, including their incentive policies, to maximize the benefits as envisioned in the Africa Mining Vision.

6.0 Conclusion

If devised and implemented carefully, tax policy is one crucial area that can help facilitate a more transformative use of mineral resources. Setting the right incentives is central to the ability to build new industries, crowd-in investment, and bring about meaningful change that would not arise from market forces alone.

In addition to this incentive role, the mining sector has the potential to generate substantial revenues for resource-rich countries.

The Africa Mining Vision sets out the aspirations of the African continent for its mining sector. It outlines how the mining sector can be a catalyst for economic growth and development for countries and the region. One and a half decades later, the opportunity to bring to fruition this vision document has arrived with the emerging mining boom and investor interest in minerals needed for the energy transition. Government, on behalf of its citizens, should collect optimal revenues from this finite resource. This means sealing any potential sources of revenue leakage, and for which tax incentives are a big one.

Tax incentives have resulted in significant revenue loss for resource-rich countries. They have fallen short of meeting their intended objective: to attract investment. Tax incentives are not among the top drivers for investment in the sector. The primary reason is that the sector is location specific—that is, mineral deposits cannot be moved to jurisdictions that offer lower taxes. Evidence tends to show that most mining investments would have taken place with or without tax incentives. When governments continue to give tax incentives, they primarily fail in their mandate to deliver optimal revenues to the real owners of the resource, i.e., the citizens. They also become the biggest hindrance to achieving the Africa Mining Vision.

The world is moving away from tax competition and the use of tax incentives with global reforms, such as the new global minimum tax approved by over 140 countries in October 2021. Given the urgent need to maximize domestic resource mobilization, African countries should seize the momentum to get rid of overly generous incentives in the mining sector.

Prudent management of natural and financial resources requires countries to put an end to the use of harmful tax incentives to prevent further loss of revenue. Countries should think carefully about what tax incentives they still offer, if any. Despite tax holidays and the stabilization clauses being the most harmful incentives, they are prevalent within the continent. The latter, in addition to being an incentive, also locks in other ineffective and inefficient incentives for potentially the entire life-of-mine.

Any revenue foregone by countries in the name of attracting investment should be backed by a cost–benefit analysis. This has rarely been the case for mining tax incentives. Considering all the direct and indirect cost implications that come with giving incentives, which include the administrative expense for implementing and monitoring incentives, as well as the additional loss when investors take advantage of the design of the incentives, to reap more benefits; the government should rethink introducing tax incentives in the first place. More should be done by international and regional organizations to equip government officials with tools to assess the effectiveness and efficiency of mining tax incentives. This paper highlights the promises and challenges of using mining financial models, in particular.

Notwithstanding, there may be some instances where countries would benefit from offering tax incentives. For example, Africa is endowed with the critical minerals needed for energy transition. Resource-based industrialization, as envisioned in the Africa Mining Vision, is now possible. Value addition of critical minerals will require large capital investments in infrastructure, improved technology, and research and development. In such cases, countries should use tax incentives that are based on commercial necessity, meaning that companies requesting tax incentives should, for example, be mandated to prove the commercial need for an incentive through financial models that simulate the investment circumstances, including the impact of incentives on investor returns and government revenues. Incentives should be time-bound, targeted at alleviating specific barriers to investment and structured to prevent abuse, which would otherwise increase revenue losses. Governments are encouraged to carefully monitor incentives to measure if they are achieving their intended results and reforming those that do not perform. One way to ensure that the data necessary to make this evaluation is available is through tax expenditure analysis. The assessment of tax incentives should be carried out regularly, in a transparent manner that covers individual incentives.

Moreover, incentives have often been granted behind closed doors with little public oversight and scrutiny. This gives more discretion to individual negotiators and may benefit better-resourced investors. Contracts are also less transparent: even when they are disclosed, they are released after fiscal terms, including tax incentives, have been finalized. Governments that choose to offer incentives should do so through the law rather than contracts for accountability.

There is limited room for African countries to compete against each other for investment. Tax competition has only benefited investors, who have enjoyed long years of lower fiscal burden while the resource owners have gotten less-than-optimal taxes. African countries should take advantage of economies of scale and rally regional cooperation to maximize the benefits from their mineral wealth. It is time for Africa to review, strengthen, and operationalize regional tax harmonization policies in place to realize its collective goal as outlined in the Africa Mining Vision.

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Appendix A. Details of Incentives

TABLE A1. Description of the incentives

Incentive	Definition
Income tax holiday	Corporate Income Tax (CIT), common in other sectors, is a tax levied on net income. In the extractives sector, CIT is often charged at the project or licence level. An income tax holiday is a period during which a mine pays no CIT, the rate is reduced, or a combination of both. The period may vary from 1 year to the entire project duration.
Withholding tax relief	Withholding taxes (WHTs) are charged by source countries on payments to non-residents. These payments include dividends, payment for services, and interest to shareholders or lenders. WHTs are important for resource-rich developing countries because of the significant size of foreign multinationals in the sector and the resulting outbound payments. They also limit the risk of tax avoidance through excessive payments to non-residents through use of related-party debt and payment of contractors for services at non-market prices. They are easy to collect. A WHT relief is a full or part exemption of withholding tax on payments to non-residents.
Accelerated depreciation	For capital expenditure, the typical accounting system is to spread the cost of the asset over its useful life rather than a full deduction when the expenditure is incurred. Countries provide an incentive for the deduction of capital expenditure in a shorter period than would otherwise be allowed. This results in an early payback of the investment.
Investment allowances and credits	An investment allowance gives the investor the right to offset a percentage of the capital expenditure against the taxable income in addition to depreciation allowance. Note, however, the total deduction of the investment and depreciation allowance may exceed the cost of the original expenditure. An investment credit is similar to the investment allowance in that it gives the investor the right to offset a percentage of the capital expenditure in addition to depreciation allowance. However, it is deducted from the tax payable. The investment credit is more generous than the investment allowance.

Incentive	Definition
Longer loss carry forward	The general tax code usually allows operating losses to be carried forward to offset taxable income in a future year, with a limit on the loss carry forward period. Mining activities often benefit from a longer loss carry forward that allows for losses that would have otherwise expired to continue being carried forward to reduce taxable income.
Export processing zones/special economic zones	Export processing zones provide special incentives for investments in specific economic activities in a specific geographical area. Incentives may include tax holidays, duty-free export and import, and free repatriation of profits. Governments may grant export processing zone status to a company's mineral processing operations, to encourage value addition in the mining country.
Import duty relief	These are part, temporary, or full exemptions on taxes applicable on imported goods. Import duty relief is a common feature of the mining fiscal regime as it reduces input costs especially during the exploration and construction phases of mining projects.
Royalty-based incentives	Royalties can be waived, reduced or varied depending on the profitability of a project.
Fiscal stabilization	Fiscal stabilization clauses are a legally binding commitment between a host state and an investor that prevents changes in fiscal terms from applying to the investment. There are different types of stabilization clauses. Some freeze certain terms of the law or contract for a project while others require economic compensation whenever a stabilized provision is changed.

Source: Otto, 2017; Readhead, 2018.

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