Summary Brief

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Mining Taxation in Africa: What Recent Evolution in 2018?

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Introduction

The extractive sector is of primary importance to African states. Of the 54 countries on the continent, 20 are considered by the International Monetary Fund (IMF) to be rich in natural resources. These are countries whose natural resources account for more than 25 per cent of total exports. All are sub-Saharan African countries: seven export mainly oil and gas, and 13 export mainly minerals: mostly gold, diamonds and precious stones. The significant weight of the extractive sector in these states raises the question of the taxation of these natural resources, which are non-renewable.

An innovative database on the taxation of mining industries in Africa[1] has been put online on the Ferdi website, in partnership with Cerdi and ICTD.[2] This database covers 21 sub-Saharan African countries[3] over a period that varies according to the availability of information in each country but can go back to the 1980s. It was created based on the tax legislation and regulations of each country, essentially the income tax acts, finance acts and mining acts.[4] It separates the general regime (applicable to all companies) from the mining regime (applicable only to holders of mineral rights for prospecting or exploitation on an industrial scale). It focuses on a single ore: gold.

[1] The Ferdi database on mining taxation in Africa is available at https://fiscalite-miniere.ferdi.fr/en

[2] The authors would like to thank the Fondation pour les Etudes et Recherches sur le Développement International (Ferdi), the Centre d'Etudes et de Recherches sur le Développement International (Cerdi), the International Centre for Tax and Development (ICTD) and the Ecole Normale Supérieure de Lyon (ENS Lyon) for their technical and financial support.

[3] The 21 countries covered by the database are Benin, Burkina Faso, Cameroon, Chad, Republic of the Congo, Democratic Republic of the Congo, Cote d'Ivoire, Gabon, Ghana, Guinea, Kenya, Madagascar, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, South Africa, Tanzania and Zimbabwe.

[4] The database currently lists more than 1,200 national legal texts.

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The database covers the 12 main levies due by the holders of mineral rights who prospect for or exploit gold on an industrial scale: fixed fees, surface fees, mining royalties, mineral resource rent tax, corporate income tax (CIT), minimum tax, capital gains tax (CGT), withholding taxes on dividends, interest and services, free equity for the State, value added tax (VAT) and customs duties on imports. The database contains the information necessary to understand each of these levies: definition of the tax base, tax rates, exemption periods, etc. It allows a detailed analysis of African mining tax systems and their historical evolution over a long period.

The database has been updated by the authors of this summary brief, which presents tax evolutions between 2016 and 2018.

i) Mining royalty rates have continued to increase since 2010.

ii) Mineral resource rent taxes have been introduced in several countries.

iii) Corporate income tax rates and minimum tax rates remained stable.

iv) Free equity for the State is becoming more and more frequent.

v) Average effective tax rates are increasing.

Mining royalty

The mining royalty is an ad valorem tax that taxes the value of the ore when it is sold or exported. In principle, the mining royalty is the counterpart of the exploitation of the resource. Indeed, in most countries, substances present in the soil and subsoil, including under territorial waters, are by law the property of the State. The State therefore only grants exploitation to a

> “The mining sector accounts for a significant share of tax revenues in many sub-Saharan African countries, and so mining tax systems must both attract investors and ensure sufficient revenues for governments.”

mining company, granting it a mining right that is valid for a limited period of time, over a defined area and for a defined mineral. Legally, the mining royalty then appears as the counterpart of the private appropriation of a public resource. For the State, it is an important and relatively secure source of revenue, since it affects production, regardless of the profitability of the mine.

Mining royalty rates can be fixed, variable or progressive. Fixed rates are the most common. According to the information available on our sample (21 countries), legislation in more than three-quarters of the countries (16) had only fixed rates in 2018. However, there are more and more variable rates which depend on mineral prices (Burkina Faso since 2011, Mauritania since 2012 and Côte d’Ivoire since 2014). They mainly concern gold, with rates between 3 and 6.5 per cent. Progressive rates based on the mine’s profitability also exist. In South Africa, a formula is used to calculate a mining royalty rate of between 0.5 and 5 per cent for refined ores and between 0.5 and 7 per cent for non-refined ores. In Niger, the law provides for three rates of 5.5, 9 and 12 per cent depending on operating income. In practice, however, it seems that only the minimum rate of 5.5 per cent is applied.

Between 2016 and 2018, five countries changed their mining royalty rates. Rates are mostly on the rise. In the Democratic Republic of the Congo, a major reform of the Mining Act was undertaken in 2018. Rates have increased from 0.5 to 1 per cent for ferrous metals, from 2 to 3.5 per cent for non-ferrous metals, from 2.5 to 3.5 per cent for precious metals and from 4 to 6 per cent for precious stones. In Sierra Leone, the Extractive Industries Revenue Act, 2018, reintroduced a fourth group of minerals: gemstones with a commercial value of more than US$500,000 are now taxed at 8 per cent. In Tanzania, some royalty rates were modified in 2017. For example, concerning gold, the rate rose from 4 to 6 per cent. In Senegal, a new mining act was adopted in 2016. The ad valorem royalty has abandoned its single rate of 3 per cent in favour of a multitude of rates differentiated according to minerals and their degree of refining. For gold, the rates are now 3.5 per cent for refined ore in Senegal compared to 5 per cent for crude or refined ore abroad. In Cameroon, ad valorem tax rates fell in 2017, but this decrease follows a significant increase two years earlier. Despite the decline in 2017, the rates are still relatively high compared to rates currently applied in the other countries in the sample (which themselves have been rising for several years): 8 per cent for precious stones, 5 per cent for precious metals, 10 per cent for radioactive substances and their derivatives and 5 per cent for base metals and other mineral substances.

Mineral resource rent tax

The purpose of the mineral resource rent tax, as its name suggests, is to directly tax the rent, i.e. the net cash flow. In theory, this tax would be ideal because it would be economically neutral, i.e. it would not change either the decision to go into production or the production choice. Thanks to such a tax, it would even become possible to tax up to 100 per cent of the rent. In practice, however, there are many uncertainties about the future operating conditions of a mine. It is therefore difficult to estimate ex ante the value of the rent accurately. A tax on pure rent is therefore almost impossible to implement.

> “Following the increase in commodity prices in the 2000s, most African countries reformed their mining acts to increase the tax burden on mining companies. This trend is continuing, with mining royalty rates rising, mineral resource rent taxes reappearing and free equity for the State increasing.”

Some countries are trying or have tried to introduce levies similar to a mineral resource rent tax. According to the information available on our sample (21 countries), in 2016, fewer than one fifth of the states (four countries) had or had used such a levy in their legislation: Cote d’Ivoire, Ghana, Guinea and Zimbabwe. Also called additional profit tax, these levies specific to the mining sector are mainly aimed at capturing a larger share of the rent. These levies vary greatly from one country to another, and often pose significant practical difficulties.

Until 2017, mineral resource rent taxes were gradually disappearing. Ghana repealed its additional profit tax in 2001, when it introduced its new Internal Revenue Act. Guinea waived its additional profit tax in 2011, with the entry into force of its new Mining Act. Cote d'Ivoire did the same with its additional profit tax in 2014, when it adopted its new Mining Act. According to the information available on our sample (21 countries), Zimbabwe was therefore the last country in 2017 to retain an additional profits tax in its Income Tax Act. However, 2018 saw a resurgence of rent taxes.

In 2018, three new countries introduced levies into their legislation that could be similar to a mineral resource rent tax. The Democratic Republic of the Congo has created a special tax on excess profits. The tax, the rate of which is 50 per cent, is only due when the prices are 25 per cent higher than those provided for in the feasibility study. Sierra Leone has introduced a mineral resource rent tax that is similar to the additional profits tax in Zimbabwe. The tax rate is determined by the formula: (40 – income tax rate) / (100 – income tax rate), where 'income tax rate' refers to the corporate income tax rate on mining companies. Chad has also introduced a rent tax. Very simple in its calculation, it is, however, far from the principle of a rent tax as it applies to mining companies whose turnover significantly exceeds the deductible corporate tax expenses. The tax rate is set at 50 per cent and the base defined as the 'difference between turnover, on the one hand, and operating expenses, including royalties, increased by 50 per cent, on the other hand'.

Corporate income tax and minimum tax

Corporate income tax is an income tax that taxes the profits of companies. Its base corresponds to the difference between revenues and deductible expenses. Deductible expenses include actual expenses (operating costs, financial expenses, deductible taxes) and fictitious expenses (depreciation, loss carryforwards). Corporate income tax rates have declined in recent decades. According to the information available on our sample (21 countries), all states currently apply corporate income tax rates between 25 and 35 per cent for their general regime, with the exception of Madagascar whose rate is 20 per cent. In contrast, for the mining regime, the laws of three countries may result in rates that fall outside this range. South Africa proposes a formula to calculate a progressive rate between 0 and 34 per cent. Madagascar has three rates of 25, 35 and 40 per cent that increase with the internal rate of return (IRR) of industrial gold mines only. Finally, Zimbabwe is reducing its rate to only 15 per cent for holders of mining leases.

Corporate income tax may be accompanied by a minimum tax. The minimum tax is based on a company's turnover. It concerns mainly French-speaking African countries, although similar provisions may exist in English-speaking African countries. Its objective is to secure the State's revenue. It is due annually, at the same time as corporate income tax. However, it is often paid in quarterly instalments. If the corporate income tax is lower than the minimum tax, the company only pays the minimum tax. Otherwise, it pays the balance, i.e. the difference between the corporate income tax and the minimum tax. According to the information available on our sample

(21 countries), concerning large companies, states are applying minimum tax rates between 0.5 per cent and 2.5 per cent in 2018.

Guinea is the only country to have recently changed its rates. The Finance Act, 2018, reduced the corporate income tax rate from 35 to 25 per cent for the general regime. However, telephone companies, banks and insurance companies, as well as companies importing, storing and distributing petroleum products remain taxed at 35 per cent of their profits. Holders of mineral rights were already subject to a rate of 30 per cent, which remains unchanged. The Finance Act, 2018, also halved the minimum tax rate from 3 to 1.5 per cent. However, this last measure will be cancelled by the Finance Act, 2019.

Free equity for the State

States may require equity investment in mining companies. Generally, mining acts provide that the holder of the mining right must create a company under national law in which the State participates, free of charge, usually to 10 per cent. This free shareholding may not be diluted, even in the event of a capital increase. Additional participation of the State is possible, but this is then acquired under normal conditions, i.e. in cash. Where this additional participation is provided for, however, it may not exceed a percentage of the capital set by law.

Becoming a shareholder not only allows the State to have access to information but also to receive dividends. It is a way to increase the part of the rent it receives on a mining project. However, unlike the payment of taxes, which

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is mandatory, the payment of dividends is a discretionary decision taken by the company's general meeting. In order to secure its income, some countries therefore provide for the payment of priority dividends.

More and more states are demanding to enter into the capital of mining companies. According to the information available on our sample (21 countries), less than half of the states (10 countries[5]) planned free participation in 2008, specifying a rate in the law. Chad also mentioned the possibility of participation, but no rate was set. The Chadian Mining Act only stipulated that, in the event of participation, the nature and modalities of this participation should be determined in the mining agreement. By 2018, more than three-quarters of the states in the sample (16 countries[6]) required such non-contributory participation.

In addition, the required rates of non-contributory participation are increasing. The free equity for the State in the company's capital is generally 10 per cent. Until 2016, only two countries were exceptions: the Democratic

[5] In 2008, the 10 countries requiring free equity for the State were Benin, Burkina Faso, Republic of the Congo, Democratic Republic of the Congo, Cote d'Ivoire, Ghana, Guinea, Mali, Niger and Senegal.

[6] In 2018, the 16 countries requiring free equity for the State are Benin, Burkina Faso, Cameroon, Chad, Republic of the Congo, Democratic Republic of the Congo, Cote d'Ivoire, Gabon, Ghana, Guinea, Kenya, Mali, Mauritania, Niger, Senegal and Tanzania.

> "The advantage of the AETR is that it allows a tax burden to be synthesised, well beyond nominal tax rates alone. It therefore makes it possible to compare tax systems, even very different ones, both spatially (between countries) and temporally (within the same country)."

Republic of the Congo asked for only 5 per cent, while Guinea set differentiated rates of up to 15 per cent for different minerals. In recent years, several countries that have inserted or modified their participation have set rates above 10 per cent. In Tanzania, the amendment of the Mining Act in 2017 introduced a 16 per cent free equity. In Chad, the new Mining Act that came into force in 2018 requires a non-contributory participation of 12.5 per cent. Finally, in the Democratic Republic of the Congo, the major reform of the Mining Act in 2018 created a progressive participation: the mining company must first transfer 10 per cent of its shares to the State when it grants its mining right, to which is then added an additional 5 per cent each time the right is renewed. In addition, at least 10 per cent of the capital must be held by persons of Congolese nationality.

Conclusion

Recent legislative evolutions are leading to an increase in the taxes payable by industrial mining companies. Indeed, most of the tax measures adopted between 2016 and 2018 are in this direction. Mining royalty rates have been increased in the Democratic Republic of the Congo, Senegal, Sierra Leone and Tanzania. Levies similar to a mineral resource rent tax have been introduced in Chad, the Democratic Republic of the Congo and Sierra Leone. Free equity for the State is more numerous and its rates are rising in Chad, the Democratic Republic of the Congo and Tanzania. The only significant decrease is from the previously extremely high ad valorem royalty rates that Cameroon introduced in 2015.

However, it is difficult to compare tax systems solely on the basis of their tax rates. The total tax burden of a company is measured by the sum of several taxes, some of which are interdependent. For example, mining royalties, surface royalties and fixed fees are generally deducted from the corporate income tax base. The payment of dividends to shareholders, including the State, depends on the remaining after-tax profit. Finally, the amount of taxes payable only makes sense in relation to the amount of investments made and profits made. In order to consider all these factors, it is relevant to calculate an average effective tax rate.

The average effective tax rate (AETR) of a mining project is the government's share of the mineral resource rent. It is calculated as the discounted sum of government levies divided by the discounted sum of net cash flows before taxes. The level of the AETR depends, of course, on the tax system, but also on the economic conditions of the mine, such as production costs and ore prices. Indeed, under identical economic conditions, a viable mine in one country may not be viable in another country with a heavier tax system. Similarly, an economically viable mine for a

given ore price may become loss-making if prices fall. The advantage of the AETR is that it allows a tax burden to be synthesised, well beyond nominal tax rates alone. It therefore makes it possible to compare tax systems, even very different ones, both spatially (between countries) and temporally (within the same country).

The cash flow model used to obtain these results is the mineral resource rent sharing model developed by Ferdi.[7] It models a mine representative of African open-pit gold mines with an average grade (3g/t). This mine roduces 1.6 million ounces of gold over a 13-year mine lifetime. The tax system applied to this mine is the one in force under each country's legislation in 2018 and for a fixed gold price of US$1,400/oz. It is composed of eight levies: fixed fees, surface fees, mining royalty, corporate income tax, minimum taxes, withholding tax on interest, withholding tax on dividends and free equity for the State. Due to the difficulties they create, mineral resource rent taxes are not taken into account, which is a limitation to the comparison of the AETRs.

The calculation of AETRs confirms the increase in the tax burden on mining companies between 2016 and 2018. According to the information available on our sample (21 countries), the AETRs in 2018 are between 27.0 and 52.2 per cent. Between 2016 and 2018, the average of the AETRs increased from 42.7 to 43.8 per cent and the median from 41.5 to 46.2 per cent. More than half of the states (11 countries[8]) experienced an increase in their AETR, while decreases were rare (three countries[9]). By removing small variations (between plus or minus 1 point of AETR), the AETRs of five states were truly marked by a significant increase. And only Cameroon's AETR experienced a significant decline. Since 2015, the country has had by far the highest AETR (63.0 per cent, compared to 51.1 per cent for Guinea). By reducing the excessive rate of its ad valorem royalty, which fell from 15 per cent to 5 per cent for gold in 2016, Cameroon is no longer the country that taxes mining companies the most in 2018.

The largest increases in AETRs are in Tanzania, Chad, Kenya, the Democratic Republic of the Congo and Senegal. These five countries all reformed their mining acts between 2016 and 2018. Senegal's AETR was already among the highest in 2016 (47.8 per cent in 2016 and 50.4 per cent in 2018), while the AETRs of the other four countries were below the sample average in 2016. For the Democratic Republic of the Congo and Kenya, the increase in the AETR can be seen as a simple catch-up. These countries are in the average of the AETRs in 2018. In contrast, Chad and Tanzania are now the two countries that tax mining companies the most (with AETRs of 52.2 and 51.7 per cent respectively). In the case of Chad, by applying the mineral resource rent tax as provided for in the new Mining Act, the AETR would even rise to 76 per cent.

[7] The results of the simulations carried out using Ferdi's mineral resource rent sharing model are available at https://fiscalite-miniere.ferdi.fr/simulations.

[8] Between 2016 and 2018, the 11 countries whose simulations led to an increase in their AETR are Tanzania (+11.3 percentage points), Chad (+9.6 points), Kenya (+6.3 points), the Democratic Republic of the Congo (+4.8 points), Senegal (+2.6 points), South Africa (+0.8 point), Niger (+0.2 points), Guinea (+0.1 point), Cote d'Ivoire (+0.07 point), Gabon (+0.02 point) and Madagascar (+0.01 point).

[9] Between 2016 and 2018, the three countries whose simulations led to a decrease in their AETR are Cameroon (-12.1 percentage points), Burkina Faso (-0.02 point) and Sierra Leone (-0.01 point).

Further reading

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Credits

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