



# TAXING ZAMBIA'S MINING SECTOR FOR THE ENERGY TRANSITION: OPPORTUNITIES AND CHALLENGES



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# EXECUTIVE SUMMARY

The energy transition is inevitable as the world moves quickly to mitigate the effects of climate change. Minerals such as copper are critical to building energy technologies required for the energy transition. Moreover, this metal is essential for the electrification of products ranging from solar cells and cables to Electric Vehicle charging points. To take advantage of this emerging opportunity, the Zambian Government recently announced its plans to increase the country's copper production capacity from 800,000 metric a year to 3 million metric tonnes a year over the next decade. This would require increased production at existing mines as well as the establishment of new mines, which can only be achieved through increased Foreign Direct Investment (FDI) inflows into the country.

In view of the above, this study reviewed and assessed Zambia's preparedness for the increased demand for copper due to the energy transition by taking a closer look at the mining fiscal regime. The following findings are noteworthy:

- (i) Zambia's mining fiscal regime has not been stable.** Over the period 2000 to 2019, the 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 privatisations were concluded. In 2019, the Government made a change to the mining fiscal regime, which included the following: (a) increased mineral royalty rates by 1.5 percentage points at all levels of the sliding scale; (b) introduced a fourth tier rate at 10 percent on the sliding scale mineral royalty regime which would apply when copper prices rise beyond US\$7,500 per metric tonne; (c) mineral royalty tax now non-deductible for income tax purposes; (d) introduction of an import duty at the rate of 5 percent on copper and cobalt concentrates; (e) introduction of an export duty on precious metals (which included gold, precious stones and gemstones) at the rate of 15 percent; and (f) lifted the suspension of the export duty on manganese ores and concentrates which was put in place in 2012 and increase this duty from 10 to 15 percent. However, in 2022, the Government amended the mining fiscal regime and introduced deductibility of mineral royalty for income tax purposes.
- (ii) The mining fiscal regime applies a sliding-scale mineral royalty regime for copper.** Prior to 2023, the calculation of mineral royalty for copper was based on the stepwise application of the rate to the aggregate value as opposed to the marginal value, and this increased payment distortions.

Small differences in copper prices had significant threshold effect on revenue payments. For instance, a minor change in the price of commodity, say US\$1 change from US\$7,499 to US\$7,500 would consequently lead to an increase in the effective tax rate from 7.5% to 8.5%. In order to minimise distortions, the 2023 National Budget restructured the mineral royalty regime with respect to copper, as the tax will now apply on the incremental value each adjusted price band

- (iii) VAT is applied to the mining sector at 16 percent.** The VAT generally applies to transactions in the mining sector. Mining production is predominantly exported, and therefore, based on the destination principle of VAT, it is zero-rated. Despite its intrinsic self-enforcement capacity, the Zambia Revenue Authority has found it challenging to refund excess input credits, which is critical to a well-functioning VAT system. The VAT refund system is marred by delays in paying VAT refund claims, resulting in large VAT refund arrears problem. This problem prompted the Government to reintroduce the “VAT Rule 18” in 2014 requiring the VAT taxpayer to submit documentation that a supply is an export of goods to claim this as a zero-rated supply.
- (iv) Zambia has a differentiated Corporate Income Tax Rate.** Zambia has a multiplicity of tax rates that make corporate income tax productivity low. Many sectors (agriculture, manufacturing of fertilizer, agro-processing, non-traditional exports and more recently tourism) enjoy rates below the standard 35 percent (now reduced to 30 percent from 2022). Additionally, components such as capital gains are excluded from the base. Further, the multiplicity of tax rates creates room for tax evasion. In addition, vertically integrated firms with multiple economic activities, are bound to be classified in the activity with lower tax brackets instead of the activity that brings in the most income as per national accounts classification of economic activity
- (v) The mining sector has an array of incentives.** Through the Income Tax Act and the Zambia Development Agency (ZDA), a number of tax incentives are given to specific classes of investors in order to attract investment into the economy. However, several studies have shown that the incentives may not have the intended effects. Some incentives may also be given based on the lobbying prowess of the intended beneficiary. With limited monitoring capacity by the ZDA, maintaining incentives which appear to disproportionately favour a particular sector at the expense of tax revenue deters tax morality in the rest of the sectors and therefore may encourage

tax evasion.

**(vi) Zambia has signed a number of double taxation treaties.** Incentives in double taxation agreements includes tax conventions entered into with other jurisdictions. But some of these double tax agreements tend to work to the disadvantage of Zambia due to the preference that these agreements have to the residency as opposed to the source.

Based on the above findings, this study recommends the following:

- (i) The Government needs to urgently deal with the VAT refund problem:** The Government needs to manage the VAT refunds more especially with the mines. This can be done by firstly reviewing the legal framework to ensure that VAT refunds requirements, procedures and documentation are as simple as possible. Secondly, there is need to prepare a strategy to combat VAT refund fraud, including automated risk analysis procedures for assessing claims in real time and information exchange among relevant institutions to establish profiles of high-risk taxpayers. Thirdly, the treasury should maintain a zero-balance subaccount within the Treasury Single Account (TSA), where the amounts needed to pay the VAT refunds are transferred based on tax administration information.
- (ii) Government should harmonise the Corporate Income Tax Rates.** The corporate income tax rates need to be harmonized, by raising rates on low-tax sectors. This will reduce the prospects for tax evasion and profit shifting. Further, the multiplicity of tax rates erodes the tax base, adds to the complexity of administering the taxes, and undermines the sense of fairness as disproportionately heavier tax burden is placed on the non-priority sectors to collect the same revenue.
- (iii) The Government should constantly review the tax incentives.** Tax incentives should be reviewed continuously to ensure those which no longer serve or have served their purpose are phased out. Given the short time period for the holiday (5 years), the effectiveness of these incentives is questionable. It also increases monitoring costs for the already resource-constrained Zambia Development Agency unnecessarily. It also causes serious distortions and inequities in corporate taxation
- (iv) Government should renegotiate the Double Taxation Treaties.** Double taxation agreements are usually signed to give reciprocal treatment for business and transactions between countries usually crafted on the principle

of residence or source of the business. Where the agreements seem lopsided and in favour of other countries, they need to be renegotiated. In order to limit the deductibility of certain cross-border payments, in 2019, Zambia amended the Income Tax Act to provide for the limitation of the deductibility of gross interest on borrowings to 30 percent of Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA). The 2021 amendment clarifies that the limitation applies to gross interest arising from loans that are both revenue and capital in nature. It is recommended that a similar provision is extended to management and consultancy fees, and branch profit transfers.

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## LIST OF ACRONYMS

AETR	Average Effective Tax Rates
BOZ	Bank of Zambia
CIT	Corporate Income Tax
CSO	Central Statistical Office
DA	Development Agreements
DTA	Double Taxation Agreements
FOB	Free on Board
GDP	Gross Domestic Product
IDC	Industrial Development Corporation
LME	London Metal Exchange
TSA	Treasury Single Account
VAT	Value Added Tax
WHT	Withholding Tax
ZCM	Zambia Chamber of Mines
ZCCM-IH	Zambia Copper Consolidated Mined Investment Holdings
ZDA	Zambia Development Agency
ZRA	Zambia Revenue Authority

# 1. INTRODUCTION

## 1.1. BACKGROUND TO THE STUDY

The World is witnessing an “energy transition” brought about by the transformation of the global energy sector from fossil-based systems of energy production and consumption to renewable energy sources, driven by both technological advancements and a societal push toward sustainability. Renewable energy technologies are growing remarkably as a result and now account for about 17% of global energy consumption. The energy transition also aims to reduce energy-related greenhouse gas emissions through various forms of decarbonization (Hund, et al., 2020).

Fundamentally the energy transition will be built on three pillars namely: renewable energy supply; electrification of end use; and efficient use of energy. The penetration of renewable energy in the energy sector will be crucial to achieve a low-carbon future. Current statistics show that the energy sector accounts for at least 41% of global emissions, and this number is expected to rise as the global population rises (Gielen, 2021). However, the combined effect of renewable energy and energy efficiency alone can provide over 90% of the energy related CO<sub>2</sub> emission reductions that are required, using technologies that are safe, reliable, affordable, and widely available (Ibid). The energy transition will also see a major increase in power generation using solar and wind power leading to an estimated increase in the share of renewable energy in the power sector from 25% in 2017 to 85% by 2050.

A 2017 World Bank Study has observed that a low-carbon future will be very mineral intensive because clean energy technologies need more materials than fossil-fuel-based electricity generation technologies. The study further observes that technology and sub technology choice, material substitution, and technological improvements will shift the demand for individual minerals under different low-carbon scenarios. Still, any lower-carbon pathway will increase the overall demand of minerals. While the recycling and reuse of minerals can play a key role in reducing emissions, mining will still be required to supply the critical minerals needed to produce these low-carbon technologies, even with large future increases in recycling rates.

The study groups the minerals and metals needed for the energy transition into either cross-cutting minerals (needed across a range of low-carbon technologies) and concentrated (needed in one specific technology). Cross-cutting minerals include copper, chromium, nickel, manganese, molybdenum, and lead. These minerals are used in more than eight clean energy generation and storage technologies. For them demand will continue to be high relative to what it is today. Concentrated minerals, such as lithium, graphite, and cobalt, are needed only for one or two

technologies and therefore possess higher demand uncertainty as technological disruption and deployment could significantly impact their demand. Overall, these too will experience higher demand compared to current levels.

To take advantage of this emerging opportunity, the Government recently announced its plans to increase the country's copper production from 800,000 metric tonnes to 3 million metric tonnes over the next decade. This would require increased production at existing mines and the establishment of new mines, which can only be achieved by attracting foreign investment back into the country. Green energy technologies require an enormous quantity of minerals to construct, including copper and cobalt. At this juncture, there is a two-thirds gap between current production rates and future demand for minerals needed for the green energy transition. Therefore, rapid growth in the Zambian mining sector cannot be achieved unless it is underpinned by a fair, predictable, and stable regulatory framework which is implemented and administered by competent government officials in an open and transparent manner.

Zambia has seen changes to its mining fiscal regime at least every 18 months (Saasa & Nalishebo, 2019). This has been criticised by several players in the past, and has shown that it does not attract the required investment in mining sector. However, the Government has been making efforts to have a stable fiscal mining regime since 2022, as it aims to achieve its copper production of 3 million metric tonnes in the next decade. For example, it reduced the corporate tax rate for all companies from 35% to 30% and it reintroduced the tax-deductibility of mineral royalties against corporate income tax. Other significant changes include the operationalisation of the Mining Appeals Tribunal, which aims to enhance transparency and provide governance in dispute resolution.

In light of the above, this study aims to assess whether Zambia's current mining fiscal regime is fit for purpose for optimal tax revenue collection in the energy transition era. This assessment is aimed at analysing the country's tax policy preparedness in view of the critical role copper will play with the energy transition process in the coming years.

## 1.2. ORGANISATION OF THE REPORT

The report is arranged as follows: Section 2 provides a synopsis of Zambia's macroeconomic environment. Section 3 provides an analysis of the performance of the mining sector. Section 4 discusses the mining sector policy and regulatory regimes. Section 5 analyses the adequacy of the legal framework for optimal revenue collection. Section 6 then provides the tax treaties and tax incentives that exist in the mining sector in Zambia. Section 7 discusses the effects of the mining sector on the larger economy. Section 8 concludes the study and provides recommendations.

## 2. THE MACROECONOMIC ENVIRONMENT

In just over a decade, Zambia went from being a considered as the poster child in Africa to a debt-ridden country. During this period, the country's economic policies were characterised by a number of structural imbalances which were triggered by the fiscal measures under taken by the government. In addition, the country was also hit by the COVID-19 pandemic which further worsened the socio-economic conditions.

In 2011, a new Government was ushered into office, and it embarked on implementing an expansionary fiscal policy. Among them was a high and expensive infrastructure drive; increasing the salaries of over the 200,000 civil service workers, which led to the civil service wage bill to gobbling at least 50 percent of domestic revenues in 2014 from 35 percent in 2011; Other measures included; protecting the poor and vulnerable through social programs; the creation of an additional of 20 districts; and an increase in the allocation of agriculture and energy subsidies.

Despite this sudden increase in expenditure, there was no corresponding increase in revenues as they stagnant. While domestic revenues hovered around 16-18 percent during 2011-2014, expenditures increased from 20 percent of Gross Domestic Product (GDP) in 2011 to 23 percent of GDP by 2014. By 2014, the fiscal deficit on a cash basis had risen to 5.2 percent of GDP from 2.6 percent in 2011. More concerning was the rise in the primary deficit in 2013 and 2014, which was much higher than the interest payments in those years.

In order to meet the increase in expenditure, the Government turned to the external markets and accessed expensive loans. In 2012, 2014 and 2015, the country borrowed US\$750 million, US\$1.0 billion and US\$1.25 billion, respectively, rapidly raking up a total (commercial) Eurobond debt of US\$3.0 billion in less than 5 years. Other commercial loans were also contracted.. As the proportion of commercial debt in the total debt profile grew, debt service costs went high. This borrowing pattern led to a change in the debt profile, as it moved from concessional to non-concessional. As a result, the stock of public debt grew from 20.8 percent of GDP in 2011 to over 120 percent of GDP in 2021.

In 2015, the country experienced a drought, which led to a drop in agricultural output and low electricity generation due to its dependence on hydro for energy generation. This led to a fall in economic output from 4.7 percent in 2014 to 2.9 percent in 2015. Further, the Kwacha had also depreciated against major tradable currencies such as the US dollar in 2015, which led to an increase in debt servicing costs as they needed to be paid in US dollars. Debt servicing costs increased from 3.1 percent

of GDP in 2014 to 3.9 percent of GDP in 2015. Tight monetary policy instituted in the fourth quarter of 2015 to rein-in the run-away inflation and exchange rate volatility also contributed to constrained economic growth. The Zambian economy nominally declined by about US\$6 billion from US\$27.1 billion in 2014 to US\$21.2 billion in 2015. Growth plunged to 2.9 percent in 2015. As a result of these shocks, the implementation of the 2015 national budget was constrained. With below target revenues and higher than planned expenditure, the fiscal deficit on a cash basis soared to 10 percent of GDP from 5.2 percent of GDP in 2014. The stock of public debt increased to 65.6 percent of GDP in 2015 from 36.1 percent in 2014. Domestic arrears more than doubled from K1.2 billion in 2014 to K2.8 billion in 2015.

The above fiscal pattern was the order of the day, and by the time the COVID-19 pandemic struck in 2020, the country was already susceptible. As a result of the pandemic, the economy grew by -2.8 percent of GDP in 2020 from 1.4 percent of GDP in 2019. The fiscal deficit grew from 9.1 percent of GDP in 2019 to 14.5 percent in 2020. The widening fiscal deficit led to Zambia's debt becoming unsustainable, doubling from 60 percent of GDP to over 120 percent of GDP in 2020.

In 2021, a new Government was ushered into office, and it took on strict economic policies that were meant to reverse the misfortunes of the past. Key among them were fiscal consolidation measures, which led to clinching an International Monetary Fund (IMF) deal, and debt restructuring process with the official creditors.

The first quarter estimates of 2022, show that the economy grew by 2.4%. The growth was on account of positive performance from industries which are: Public Administration (1.9%); Education (1.9%); Information and Communication (0.7%); Electricity generation (0.2%); Accommodation (0.1%) and Real estate (0.1%). However, other sectors recorded negative growth and these include: the mining and quarrying (-0.9%); construction (-0.9%), agriculture, forestry and fishing (-0.5%); and manufacturing (-0.2%) recorded negative growth rates. Table 1 shows the Gross Value-Added percentage growth rates and contribution to growth for the first quarter of 2022.

**Table 1: Gross Value-Added Percentage Growth Rates and Contribution to Growth, Q1 2022**

	2020 Growth Rate				2021 Growth Rate				2022	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1 growth rate	Q1 Contribution to growth
Agriculture, forestry and fishing	27.3	24.5	20.4	1.5	5.5	5.8	6.8	9.7	-5.1	-0.5
Mining and quarrying	-2.0	14.2	13.5	7.0	-2.2	-7.6	-9.3	-5.7	-8.4	-0.9
Manufacturing	5.6	-0.1	0.2	-1.3	-3.1	9.2	5.6	4.1	-2.8	-0.2
Electricity, gas, steam and airconditioning supply	-9.0	-0.1	6.9	16.2	14.1	12.2	9.9	14.7	9.7	0.2
Water supply; sewerage, wastemanagement and remediation activities	-0.9	-0.9	4.0	6.4	4.6	2.9	1.6	1.4	4.0	0.0
Construction	-5.6	-15.1	-2.8	2.4	15.9	22.6	9.6	11.3	-8.8	-0.9
Wholesale and retail trade; repair of motor vehicles and motorcycles	-9.6	-18.3	-10.7	-11.9	3.9	9.2	-3.0	0.5	-0.3	-0.1
Transportation and storage	6.7	18.9	12.4	18.0	3.5	1.0	11.0	19.4	3.8	0.2
Accommodation and foodservice activities	-6.6	-18.1	-31.8	-28.2	-3.4	10.4	13.4	7.7	6.3	0.1
Information and communication	4.5	17.0	17.7	13.7	23.6	21.6	17.5	18.3	17.7	0.7
Financial and insurance activities	8.9	17.5	11.4	14.5	20.2	5.0	6.9	-5.7	-0.2	0.0
Real estate activities	3.5	3.5	3.6	3.6	3.6	3.6	3.6	3.7	3.7	0.1
Professional, scientific and technical activities	5.4	8.6	8.4	5.1	1.7	6.0	-0.9	1.3	-5.7	-0.1
Administrative and support service activities	2.8	2.9	4.7	2.8	1.6	11.3	1.7	1.4	-4.1	0.0
Public administration and defense; compulsory social security	0.2	-19.7	-22.5	-21.4	-20.9	0.1	11.6	12.1	43.6	1.9
Education	1.1	-33.1	-23.1	-22.1	-21.5	20.5	4.2	3.6	29.5	1.9
Human health and social work activities	7.4	8.8	8.5	5.1	5.0	3.0	1.6	0.5	-0.4	0.0
Arts, entertainment and recreation	-29.7	-77.0	-84.9	-63.4	-44.2	45.7	85.1	40.1	41.4	0.0
Other service activities	3.5	3.5	3.6	3.6	3.6	3.6	3.6	3.7	3.7	0.0
Total Gross Value Added for the economy	0.8	-4.4	-2.5	-2.6	1.7	8.3	3.7	5.2	2.5	2.4
Taxes less subsidies	-9.6	-18.3	-10.7	-11.9	3.9	9.2	-3.0	0.5	-0.3	0.0
Total for the economy, at market prices	0.3	-5.1	-3.0	-3.1	1.8	8.4	3.3	5.0	2.4	2.4

Source: ZamStats

## 3. PERFORMANCE OF THE MINING SECTOR IN ZAMBIA

The mining sector in Zambia could be segmented into two broad sectors, that is, the copper mining sector which is dominated by multinational corporations, and the non-copper mining sector which has a mixture of big companies as well as artisanal and small-scale mining players.

While the sector is predominantly known for copper mining, the non-copper mining, artisanal and small-scale mining sub-sector has increasingly become a significant contributor to Zambia's economy. In 2021, the mining sector as a whole contributed around 79.5% to Zambia's exports and 31.4% towards the nation's total budget. This makes mining a significant sector of the Zambian economy. Therefore, it is imperative to understand nuances of the sector, especially the non-copper sector which somewhat has for a long time been left out of the hawkish eye of the tax system due to its informal operations.

### 3.1. MINERAL OUTPUT PRODUCTION

Zambia has abundant mineral resources some of which remain unexploited. Current statistics from the Ministry of Mines show that only 55% of the country has been mapped. Some of the country's mineral wealth is tabulated below with production volumes for the years 2019 to 2022. While the production figures are captured here, the informality that is imbedded in the sector may imply that some of the production volumes especially from artisanal and small-scale mining, mainly those involved in non-copper activities may not have been captured.

**Table 2: Mining Sector Production Volumes 2019-2021**

Commodity	2019	2020	2021
Gold (Kilograms)	3,913	3,672	3,536
Manganese (tonnes)	15,903	46,515	132,241
Emeralds (Kilograms)	23,705	9,783	12,871
Nickel (tonnes)	2,499.64	3,226.1	3,843.3
Coal (tonnes)	361,647.8	448,821.4	663,345.1
Cobalt(tonnes)	379	316	246.8
Copper(tonnes)	787,699	837,997	800,696

Source: MOFNP Annual Economic Reports



Table 2 shows that mining sector production for the period 2019 – 2022. Copper production declined from 787,699 metric tonnes in 2019 to 837,997 metric tonnes in 2020 on account of increased demand from major economies like China and the upsurge in the price of copper. However, there was a decline in 2021 to 800,696 and to 763,550 in 2022 due to operational challenges at some major mining houses as well as a drop in ore grade. Gold production had also declined from 3,672 kgs in 2020 to 3,536 kgs in 2021 and 2,773 and this was largely as a result of the continued drop in ore grade at the major gold producing mines and the suspension of operations of gold mines (MOF, 2022).

### 3.2. CONTRIBUTION TO NATIONAL ECONOMY

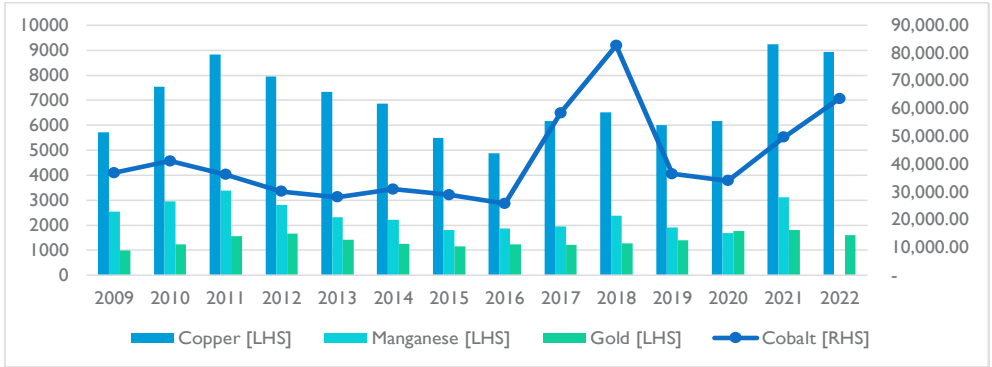
The mining sector as a whole contributes immensely to the country's economy. As a share of Gross Domestic Product (GDP) the sector has contributed on average 14% over the period 2015 – 2021. In terms of employment, the mining sector as a whole, employs about 59,371 people representing 2% of the total employed persons. Besides being a huge source of employment, the non-copper mining sector is a source forex for the country. In 2019 and 2020, the sector constituted 10.2% and 8.4% of the total mining exports respectively.

### 3.3. TRENDS IN MINERAL PRICES

Zambia has an endowment of mineral resources. Since 2009, the international market price of these metals has risen and the current prices of copper and gold are at a record high. Figure 1 shows the prices of copper, manganese, gold and cobalt over the period 2009 – 2021. During this period, the price of cobalt has fetched the highest, peaking at US\$82,687.95 per tonne in 2018. The increase in the price of cobalt has been largely on account of an increase in the demand for cobalt that is being used in the manufacturing of electric vehicles in China and Europe, as governments are moving towards cutting carbon emissions. However, there was a precipitous collapse in the price of copper in 2019, and this was attributed reduced demand of electric cars and the stockpiling in China of the metal (International Banker , 2019). Further, the average annual price of copper is at its highest since 2009, and breached the US\$10,000 per metric tonne in 2021, and this due to increased demand from China, as the metal has been used across industries and consumer applications, from plumbing and refrigeration to smart phones and solar panels (Durkin , 2021).

However, in 2022 the price of copper had declined to an average of US\$8,822.4 per metric tonne from US\$9,295 per metric tonne which was recorded in 2021, and this reduction was primarily attributed to weak global demand due to slower growth in China, which is the major consumer of copper (MOF, 2022).

**Figure 1: Prices of Selected Base and Precious Metals (US\$), 2009 - 2021**



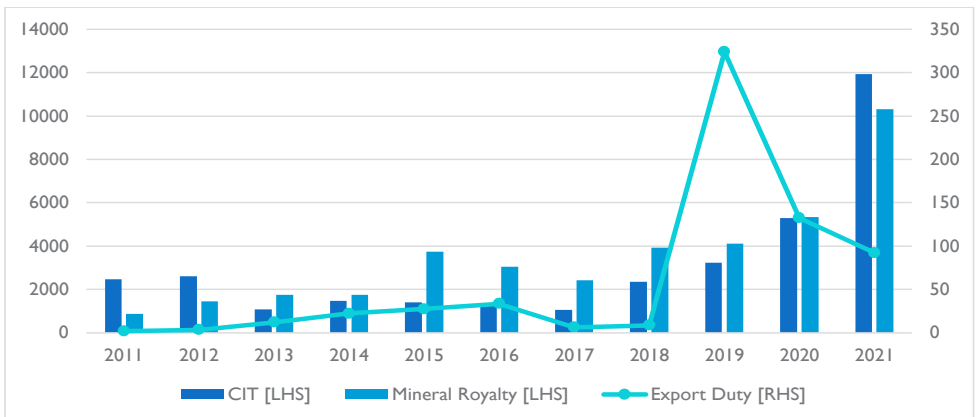
SOURCE: MOFNP Annual Economic Reports

NOTES: 2022 Manganese prices are not available

### 3.4. MINING TAX REVENUE

The mining sector contributes massively to the revenue base through taxes and royalties. On the surface, mining sector contribution to Government has increased, and this has been largely on account of favourable copper prices on the international market, the depreciation of the Kwacha against major convertible currencies and enhanced compliance management efforts. Revenue contribution from corporate income tax and mineral royalties combined, the mining sector, which hovered around US\$600m during 2018-2020, has nearly doubled to US\$1.1 billion in 2021 since 2019. As at December 2021, mining revenue accounted for 26 percent of total domestic revenues and 5.9 percent of GDP in 2021 (see Figure 2).

**Figure 2: Mining Tax Revenue, 2011 to 2021 (K'Million)**



Source: Zambia Revenue Authority

## 4. THE MINING SECTOR POLICY AND REGULATORY REGIMES

### 4.1. LEGISLATIVE AND REGULATORY REGIMES

Zambia's mining industry is principally regulated by the Government through the Mines and Minerals Development Act No. 11 of 2015. The Act provides for the administration of the mining sector and includes the establishment of the offices of the Director of Mines, who is the chief administrator responsible for securing proper development of mines and conduct of mining operations in accordance with the provisions of the Act. The Act also provides for the office of the Director of Geological Survey, who is responsible for undertaking the geological mapping of Zambia and the exploration operations on behalf of the Republic, advising the Minister on geological matters and providing data concerning the geology and mineral resources of Zambia. The Director of Mines Safety supervises matters relating to the environment, public health and safety in exploration, mineral processing and mining operations. There is also the Director of Mining Cadastre who is responsible for the administration of mining rights and mineral processing licenses. Further, the Act also establishes a Mining Licensing Committee, which considers applications for mining and non-mining rights and all matters related to the administration of mining and non-mining rights (e.g. suspension, termination or amendment of the licenses). The primary regulatory body for the mining sector is the Ministry of Mines and Minerals Development.

Beyond the Ministry of Mines and Minerals Development, are several other Government institutions that play different roles in the mining sector according to their varying mandates. These include the Zambia Development Agency (ZDA), the Zambia Consolidated Copper Mines Investment Holdings (ZCCM-IH), Industrial Development Corporation (IDC) and the Bank of Zambia (BOZ) for gold purchases. In terms of the institutional architecture, the Mines and Minerals Development Act of 2015 has provided for a comprehensive list of institutions to govern the sector.

### 4.2. Mining Tax Regime

#### 4.2.1. Historical Mining Tax Regime

Zambia's mining tax regime has undergone several changes over the years with the most notable changes coming after privatisation in the early 1990's. While these changes have largely affected copper mining, they have also had an impact on the non-copper mining subsector. Some of the most notable changes to the country's mining fiscal regime are listed below:

- (a) Post-Privatization Regime: 2000-2008 (The Development Agreements (DAs) negotiated with individual mines at privatization)
- (b) The 2008 Regime (the tax regime used between April 2008 and March 2009)
- (c) The 2009 Regime (the tax regime used between April and March 2012)
- (d) The 2012 Regime (the tax regime that was in effect up to April 2012)
- (e) The 2015 Mineral Royalty Regime
- (f) The 2016 Regime
- (g) 2019-2022 Reforms

#### 4.1.2. Current Policy Regime

In September 2018, the country was faced with large fiscal deficits and external borrowing that led the International Monetary Fund (IMF) to warn that Zambia that it is at high risk of debt distress, the Government, once again, turned to copper producers to boost revenue. When presenting the 2019 National Budget, the Government introduced the latest policy changes to the mining fiscal regime. Until then, the mineral royalty rates ranged from 4 percent to 6 percent depending on the copper price. The new tax changes, effective 2019, included the following:

- (a) Increased mineral royalty rates by 1.5 percentage points at all levels of the sliding scale.
- (b) Introduced a fourth tier at 10 percent on the sliding scale mineral royalty regime which would apply when copper prices rise beyond US\$7,500 per metric tonne.
- (c) Made mineral royalty tax non-deductible for income tax purposes.
- (d) Introduced an import duty at the rate of 5 percent on copper and cobalt concentrates.
- (e) Introduced an export duty on precious metals (which included gold, precious stones and gemstones) at the rate of 15 percent.
- (f) Lifted the suspension of the export duty on manganese ores and concentrates which was put in place in 2012 and increase this duty from 10 to 15 percent.

In 2022, the Government amended the Mining Fiscal Regime by introducing the deductibility of mineral royalty for corporate income tax assessment purposes. The proposed measure is in line with international best practice, and is also aimed at attracting investment and boosting production in the mining sector. Further, in 2023, the calculation of mineral royalty for copper was also amended from the stepwise calculation to incremental value calculation.

## 5. ASSESSMENT OF THE MINING FISCAL REGIME

As seen from the above section, Zambia's mining taxation has been dominated by frequent policy changes and reversals. To this effect, the Zambia Chamber of Mines (ZCM) reported that, on average, Zambia has had one tax change every 18 months since 2001. Further, ZCM has noted that this is too frequent even by Sub-Saharan standards, and the Average Effective Tax Rates (AETR) applicable to the mineral sector in several resource rich Sub-Saharan African countries over the period 2000 to 2015 reveal that Zambia ranks second after Ghana in terms of the frequency in changing measures. In this regard, we attempt to evaluate the current mining fiscal regime in Zambia.

### 5.1. MINERAL ROYALTY

In Zambia, the estimation of mineral royalty is based on gross value or norm value of the minerals. Based on the Income Tax Act, gross value is defined as the realised price for sale Free on Board (FOB) at the point of export in Zambia or point of delivery within Zambia. On the other hand, Norm Value means: the monthly average London Metal Exchange (LME) cash price per tonne multiplied by the quantity of the metal of recoverable metal sold to the extent that the metal price is not quoted on the London Metal Exchange; or the monthly average cash price per tonne, at any other exchange market approved by the Commissioner General, multiplied by the quantity of the metal sold or recoverable metal sold to the extent that the metal price is not quoted on the London Metal Exchange or in the Metal Bulletin.

The gross value is applicable on industrial metals, energy minerals and gemstones, while norm values are applicable on base metals (including copper) and precious metals. For tax purposes, minerals are classified into the following broad categories:

- ❖ Copper
- ❖ Base metals other than copper: Iron, nickel, lead, zinc, cobalt, titanium, tin, aluminium, etc.
- ❖ Precious metals: gold, platinum, silver, palladium, selenium, etc.
- ❖ Energy minerals: Coal, uranium, oil, natural gas, etc.
- ❖ Gemstones: amethyst, aquamarine, beryl, corundum, diamond, emerald, etc.
- ❖ Industrial minerals: Limestone, sand, gravel, gypsum, talc, etc

Based on the above classification, Mineral royalties are paid at the rate of percent on base metals (except copper; 8 percent for cobalt) and energy and industrial minerals; and 6 percent for gemstones and precious metals. Holders of large-scale, small-scale and artisanal mining licences and rights are liable to pay mineral royalties as shown in Table 3. All persons carrying out quarrying of industrial minerals, including the quarrying of gravel, clay and sand, are liable to mineral royalty (Part VI of the Mines and Minerals Development Act).

**Table 3: Applicable Mineral royalty rates**

Type of mineral	Valuation	Applicable royalty rate
Base metals (other than Copper)	Norm value	5%; Cobalt (8%)
Precious metals	Norm value	6%
Energy minerals	Gross value	5%
Gemstones	Gross value	6%
Industrial minerals	Gross value	5%

In its 2023 National Budget, the Government amended the calculation of Mineral Royalty for copper. This arose from various stakeholders who stressed that the mineral royalties were not sensitive to operational costs. The stepwise application of the rate to the aggregate value as opposed to the marginal value in each band increased payment distortions. Small differences in copper prices had significant threshold effect on revenue payments. For instance, a minor change in the price of commodity, say US\$1 change from US\$7,499 to US\$7,500 would consequently lead to an increase in the effective tax rate from 7.5% to 8.5%.

In order to minimise distortions, the 2023 National Budget restructured the mineral royalty regime with respect to copper, as the tax will now apply on the incremental value each adjusted price band, and this is shown in Table 4.

**Table 4: Mineral royalty sliding scale for Copper**

Price Range	Taxable Amount	Rate (%)
Less than US\$4,000 per tonne	The first US\$4,000	4.0
US\$4,001 per tonne or more but less than US\$5,000 per tonne	The next US\$1,000	6.5
US\$5,001 per tonne or more but less than US\$7,000 per tonne	The next US\$2,000	8.5
US\$ 7,001 per tonne or more	The balance	10

Source: Zambia Revenue Authority

## 5.2. CORPORATE INCOME TAX

Corporate Income Tax (CIT) is levied by ZRA on the registered firm's profits. Commonly known as company income tax, mining CIT is segregated from other CITs. In the Zambian tax system, CIT is calculated on accrual basis, where all the taxable income is derived by the accumulation of all income from different sources less the allowable deductions.

In this case, all firms that are registered for income tax and have a turnover of K800,000. Including those carrying out mining operations are subject to CIT. Zambia has a differentiated CIT structure rate, in which the standard rate is 35 percent, while companies in the telecommunications with annual incomes exceeding K250,000.00 are taxed at 40 percent as shown Table 5. Further, small and artisanal mining firms are also part of the large taxpayers and are all subject to pay CIT.

From Table 5 above, it can be seen that income from mineral processing is charged at the standard rate of 30 percent while income from manufacturing of products made from copper cathodes is charged at 15 percent. The lower CIT rates on manufacturing of products made from copper cathodes, are aimed at promoting value addition on copper cathodes and promote the growth of local industries such as ZAMEFA.

With differentiated CIT rates, there is scope to have huge distortions, avoidance and revenue leakages in the tax collection system. This is because, the lower CIT rates will function as a tax holiday, but are permanent, a distorting activity, eroding the overall tax base, and making already profitable companies even more so. The multiple rates, narrow tax bases, avoidance opportunities, and large informal sector have led to low CIT revenue productivity.

**Table 5: Company Income Tax rate structure**

Source of income	CIT rate (%)
Standard rate	30
Electronic communications networks or service licensees (income in excess of ZMW 250,000)	40
Mineral processing	30
Mining	30
Manufacturing of products using copper cathodes	15
Approved Public Benefit Organisations (on income from business)	15
Agro-processing	10
Farming	10
Non-traditional exports – agro-processing and farming	10
Non-traditional exports – other	15
Chemical manufacture of fertilizer	15
Organic manufacture of fertilizer	15
Trusts, deceased's or bankrupt's estates	30
Manufacturing and other companies	35

Source: Zambia Revenue Authority Practice Notes

### 5.3. VALUE ADDED TAX

Value Added Tax (VAT) is charged at 16 percent and applies to several sectors including the mining sector. However, mining products in Zambia are mostly exported, and therefore, based on the destination principle of VAT, the goods are zero rated. In this case, VAT is charged in the importing country, as this avoids double taxation of goods and ensures that exported goods and services compete on a level playing field with goods and services sold in their home market. However, the mines are mostly capital intensive and import a large number of machinery and equipment, this consequently leaves them in a VAT refund situation, Therefore, exporters of mining products are still allowed to reclaim the VAT paid on their inputs, a root problem of which rests in the definition of inputs.

In principle, VAT refunds are paid through tax offsets, with all non-VAT fiscal payments to the central government to be used as an offset. Further, under the Second Schedule of the VAT Act, there is a list of capital goods and equipment



supplied to large-scale mining companies which are zero-rated. In its current form, the VAT system is characterised by huge VAT refund claims, resulting in large VAT refund arrears problem.

In 2021, ZRA announced that 67% of VAT refunds were owed to the mining sector, and this has severely affected the cash flow of the mining houses. The weak refund management promoted the Government to reintroduce the VAT Rule 18 in 2014 requiring the VAT taxpayer to submit documentation that a supply is an export of goods to claim this is a zero-rated supply. The additional administrative requirements led to further increases in VAT refund arrears.<sup>1</sup> The delay in the repayment of VAT refunds adversely impact on mining sector cash flows and could result in significant direct cost particularly when the amount due is not indexed to inflation or attracting interest.

## 5.4. OTHER TAX TYPES

The mining sector also charges other type of taxes besides, mineral royalty, CIT and Value Added Tax. Such include: withholding taxes; import and export duties; and property transfer tax.

### 5.4.1. WITHHOLDING TAX

In principle, Withholding Tax (WHT) is not a tax but a means of collecting that tax. WHT is deductible from a payment by the person who is liable to make the payment (the payer) at the point of payment or at the time the person to whom it is due to be made (the payee) becomes legally entitled to it (date of accrual). In the Zambian mining sector, there is no dividend WHT, but there is an interest, management, and service WHT of 20 percent paid to non-residents. However, since Zambia has signed many tax treaties, these rates differ and are effectively lower.

### 5.4.2. IMPORT DUTIES

The Government also levies some import duties on the importation of all capital goods and equipment that are used in mining operations. The rate for import duties range from 0 – 40 percent.

### 5.4.3. EXPORT DUTIES

Export duty is charged on a few selected items. In the mining sector, these items include: copper ore and concentrate, gold and gemstones, and are levied at 10, 15 and 15 percent respectively. However, Zambia has a huge volume of artisanal and

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<sup>1</sup> <https://www.reuters.com/article/uk-zambia-debt-idUSKBN29I1BT>

small-scale miners, and with such high export, there is a huge incentive to smuggle by small-scale miners and under-declaration by large-scale mining companies. In addition, small scale miners suffer from huge administrative tax burdens, given the unorganised nature of the artisanal and small-scale mining.

## **5.5. DEPRECIATION RULES**

In the Zambian tax system, depreciation is a non-allowable deduction. But, the taxpayer can claim “capital allowances” on non-current assets. Firms carrying on electricity generation, mineral processing, manufacturing and tourism can claim wear and tear allowance at 50 percent.

## **5.6. TRANSFER PRICING**

The Income Tax Act has specific provisions on transfer pricing under Section 97. In addition, Statutory Instrument No. 24 of 2018 also has provisions for transfer pricing. The Transfer Pricing Rules provide for the application of the arm’s length principle to controlled transactions. This means that the results of a controlled transaction should be consistent with the results that would have been realised in comparable transaction between independent persons dealing under comparable conditions. Section 97A of the Income Tax Act and the Transfer Pricing Regulations require that assessable (taxable) income of a person is calculated on the basis that the arm’s length principle is applied in relation to all controlled transactions.

## **5.7. SMALL SCALE AND ARTISANAL MINING**

In the 2023 National Budget, the Government introduced a presumptive tax for small scale and artisanal miners. Therefore, income earned by a holder of a mining licence permitted to carry out artisanal mining or small-scale mining with an annual turnover of K800,00 or less will be subject to turnover tax at the rate of 4 percent.

## 6. INCENTIVES IN THE MINING SECTOR

The Zambian Government through the Direct Taxes Division of the ZRA offers a number of incentives to both local and international investors. The incentives include: Zambia Development Agency (ZDA) incentives; Income Tax Act exemptions/ reliefs; and Double Taxations Agreements.

### 6.1. TAX INCENTIVES IN THE MINING SECTOR

The Zambian mining sector enjoys an array of incentives: profit based incentives; and cost-based incentives;

#### 6.1.1. PROFIT BASED INCENTIVES

- **Multiplicity of Tax Rates:** The mining sector is charged CIT at 30 percent on income from mining operations and 15 percent on income from manufacturing products from copper cathodes.
- **Losses Carry Over:** The Income Tax Act provides that losses can be carried forward to offset profits of the same source. A firm carrying out operations in the mining or energy sector, can carry over a loss forward for ten subsequent charge years after the charge year in which the loss is incurred. In other sectors, the loss can be carried up to five subsequent years after the charge year in which the loss was incurred. The reason for having a longer period in the mining or energy sector, is on the premise that projects in these two sectors have longer investment recovery periods and huge tax losses.
- **Withholding Tax Rates:** Withholding tax on interest, rent, consultancy, royalties and dividends is only 15 percent and applies to residents only.
- **EBITDA system:** The mining sector helps in preventing losses through interest deductions. In addition, by setting the allowable deductible interest limit at 30%, the new tax system encourages long-term investment behaviour and discourages rent-seeking behaviour which was incentivised under the Thin-Capitalisation Rules system.

#### 6.1.2. COST BASED INCENTIVES

- **Accelerated Depreciation:** Accelerated depreciation is applicable to farming, agro-processing and businesses holding a ZDA licence can claim wear and tear allowance at 100 percent. Businesses carrying on electricity generation, mineral processing, manufacturing and tourism can claim wear and tear allowance at 50 percent.

## 6.2. ZAMBIA DEVELOPMENT AGENCY

ZDA offers a range of incentives in the form of allowances, exemptions and concessions for companies through the Zambia Development Agency (ZDA) Act of 2006 and amended in 2014. The Act provides for investment thresholds to qualify for fiscal and non-fiscal incentives. For the purpose of this report, only fiscal incentives are outlined. Therefore, investments that US\$500,000 and above in a Multi Facility Economic Zone (MFEZ), an Industrial Park, a Priority Sector and investment in a Rural Enterprise under the ZDA Act are entitled to the following:

- (i) Zero percent import duty rate on capital equipment and machinery including trucks and specialised motor vehicles for five years.
- (ii) Tax shall be charged at zero percent for a period of five years starting from the year of commencement of operations of the approved investment.
- (iii) Tax to be deducted from any dividend declared by a business enterprise shall be at the rate of zero percent for a period of five years starting from the year of commencement of operations of the approved investment.
- (iv) Accelerated depreciation on capital and machinery including trucks and specialised motor vehicles for five years.
- (v) Zero percent tax on dividends declared on profits made on exports by companies operating in for a period of 10 years from first year of commencement of works.
- (vi) Zero percent tax on profits made on exports by companies for a period of 10 years from the first year of commencement of works.

Despite having a number of incentives under ZDA, several quarters have argued that these incentives are not very beneficial for Zambia and may not have the intended effects. Suffice to say, a number of incentives are given to specific classes of investors who have much lobbying power. Further, the limited capacity of the ZDA, has the potential to favour a particular sector at the expense of tax revenue deterring and tax mortality in the rest of the sectors and therefore, may encourage tax evasion.

## 6.3. DOUBLE TAXATION AGREEMENTS

A Double-Taxation Agreement (DTA) of Treaty is generally defined as a contract signed by two countries to avoid or alleviate (minimise) territorial double taxation of the same income by the two countries. In this case, the agreements, are meant to spur international trade and investment without double taxation (PMRC, 2015). Zambia has signed a number of Double Taxation Agreements which are summarised in Table 6.

**Table 6: Zambia's Double Taxation Agreements**

	Country	Applicable withholding tax rates			
		Dividends	Interest	Royalties	Technical fees
1	Botswana	5% or 7%	10%	10%	10%
2	Canada	15%	15%	15%	0%
3	China	5%	10%	5%	0%
4	Denmark	15%	10%	15%	0%
5	Finland	5% or 15%	15%	5% or 15%	0%
6	France	20%	20%	0%	0%
7	Germany	5% or 15%	10%	10%	0%
8	India	5% or 15%	10%	10%	10%
9	Ireland	8%	10%	10%	0%
10	Ireland	0%	0%	0%	0%
11	Italy	5% or 15%	10%	10%	0%
12	Japan	0%	10%	10%	0%
13	Kenya	20%	20%	20%	0%
14	Mauritius	5% or 15%	10%	5%	0%
15	Netherlands	5% or 15%	10%	8%	0%
16	Norway	15%	10%	15%	0%
17	South Africa	20%	20%	20%	20%
18	Seychelles	5% or 10%	5%	10%	0%
19	Sweden	5% or 15%	10%	10%	0%
20	Switzerland	0%	0%	0%	0%
21	Tanzania	20%	20%	20%	0%
22	Uganda	20%	20%	20%	0%
23	United Kingdom	5% or 15%	10%	10%	0%
24	United Kingdom	5% or 15%	10%	5%	0%

Source: Zambia Revenue Authority

An evaluation of Zambia's DTAs shows that they disadvantage Zambia due to the preference that these agreements have to the residency as opposed to the source. For instance, Table 11 shows that from all the DTAs that Zambia has signed, only the Botswana, India and South Africa treaties allow for withholding tax on technical fees. Another observation is that Ireland and Switzerland are given exemptions on dividends, interest and royalties.

## 7. THE EFFECTS OF MINING SECTOR ON THE LARGER ECONOMY

The mining sector's contribution goes beyond its direct contribution for it has linkages to, and relationships with, other sectors of the economy, which makes its total contribution to the broader economy much bigger than it is often assumed. Consequently, what transpires in - and to - the mining sector has far-reaching implications on other sectors as well. This Evaluation analysed the Zambian economy focusing on the CSO's 2010 input-output tables (supply-use tables) with the aim of demonstrating the relationship between mining and other sectors of the economy such as agriculture, manufacturing, energy, water, construction and services.

The CSO's 2010 input-output (supply-use) tables were divided into backward and forward linkages. The backward linkages have been both direct and indirect. The mining sector's strong *direct* backward linkages are indicative of the close relationships within the mining sector in which mines buy mining goods. The backward linkages analysis revealed that there is a significant degree of linkages of the mining sector to the other sectors that contribute input to it. This has involved not only the employment of local people but also the procurement of goods and services from local companies. Mining also has strong backward linkages (coefficient > 1).

The backward linkages have been both direct and indirect. The mining sector's strong *direct* backward linkages are indicative of the close relationships within the mining sector in which products and services from each other such as the purchase of sulphuric acid and the use of smelting services. The mining sector also possesses strong *indirect* linkages to manufacturing, business services, electricity, wholesale and retail trade, and transport and storage services, in that order. It will be noticed, for example, that mines bought mining products from other mines averaging US\$2.2 billion during 2020 - 2021 while purchases of goods and services from other sectors amounted to an average of US\$1.4 billion.

The forward linkages, which are the row sums of direct input-output coefficients, determine the degree of linkages between a sector that produces output, to be used as input for other sectors. Forward linkages involve boosting the broader economy by processing the natural resources extracted and using them to produce finished goods or more refined intermediate commodities, rather than just exporting them in their raw or semi-raw state. Relative to backward linkages, mining has weak forward linkages (0.308). This is because most of the output from mining is exported as intermediate goods as there is very little uptake of mining outputs (mostly metals) by other industries. Mining's forward linkages are mainly concentrated in manufacturing and construction sectors. During 2020 - 2021 mines supplied goods and services

worth US\$300 million to each other and US\$589 million to other domestic sectors. Table 6 shows the backward and forward linkages and values for 2020 and 2021.

**Table 7: Mining Sector Backward and Forward Linkages, 2020 - 2021**

	Coefficients		2020		2021	
	Backward	Forward	Backward	Forward	Backward	Forward
	(In millions of Zambia Kwacha, unless otherwise stated)					
Agriculture	0.041	-	793	-	802	-
Mining and Quarrying	1.141	0.104	22,018	2,907	22,273	3,105
Manufacturing	0.241	0.148	4,643	4,122	4,697	4,402
Electricity	0.067	-	1,296	-	1,311	-
Construction	0.035	0.044	667	1,215	674	1,298
Other industry	0.019	-	366	-	370	-
Wholesale and Retail Trade	0.056	-	1080	-	1,093	-
Transport and storage	0.053	-	1,027	-	1,039	-
Business Services	0.129	-	2,491	-	2,520	-
Other services	0.098	0.013	1,893	352	1,915	376
Total	1.879	0.308	36,275	8,595	36,695	9,181
Total (US\$ million)			3,806	902	3,511	879
	(In millions of US\$, unless otherwise stated)					
Direct linkages	1.141	0,104	2,310	305	2,131	297
Indirect linkages	0.738	0.204	1,496	597	1,380	581
Total (US\$ million)			3,806	902	3,511	879

In the light of the demonstrated forward and backward linkages, the intimate link between the mining sector and the other sectors is clearly revealed. For example, the backward linkage coefficient of 1.141 means that if intermediate purchases of these mining sub-sectors were hypothetically removed, the total output of the Zambian economy would fall by 1.141 times this particular sector's actual output. A policy targeted at the mining sector will, thus, directly affect other industries too and has repercussions on other mining companies and contractors' output, employment and incomes.

## 8. CONCLUSIONS AND RECOMMENDATIONS

This report attempted to review the mining fiscal regime in Zambia, and gauge its preparedness for the energy transition era. It reviewed the macroeconomic environment in which Zambia is operating. Further, the report looked at the mining fiscal regime, and the tax incentives that are provided for in the mining sector. In addition, the report also provided some country lessons from which Zambia can learn from.

The main findings of the report are as follows:

- (i) Zambia's mining fiscal regime has not been stable:** Over the period 2000 to 2019, the new 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 privatisations were concluded.
- (ii) The Government had made a change to the 2019 mining regime:** The 2019 mining fiscal regime have included the following: (a) increased mineral royalty rates by 1.5 percentage points at all levels of the sliding scale; (b) introduced a fourth tier rate at 10 percent on the sliding scale mineral royalty regime which would apply when copper prices rise beyond US\$7,500 per metric tonne; (c) mineral royalty tax now non-deductible for income tax purposes; (d) introduction of an import duty at the rate of 5 percent on copper and cobalt concentrates; (e) introduction of an export duty on precious metals (which included gold, precious stones and gemstones) at the rate of 15 percent; and (f) lifted the suspension of the export duty on manganese ores and concentrates which was put in place in 2012 and increase this duty from 10 to 15 percent. However, in 2022, the Government amended the mining fiscal regime and introduced deductibility of mineral royalty for income tax purposes.
- (iii) Zambia applies a sliding-scale mineral royalty regime for copper.** Prior to 2023, the calculation of mineral royalty for copper was based on the stepwise application of the rate to the aggregate value as opposed to the marginal value, and this increased payment distortions. Small differences in copper prices had significant threshold effect on revenue payments. For instance, a minor change in the price of commodity, say US\$1 change from US\$7,499 to US\$7,500 would consequently lead to an increase in the effective tax rate from 7.5% to 8.5%. In order to minimise distortions, the 2023 National Budget restructured the mineral royalty regime with respect to copper, as the tax will now apply on the incremental value each adjusted price band



- (iv) VAT is applied to the mining sector at 16 percent.** The VAT generally applies to transactions in the mining sector. Mining production is predominantly exported, and therefore, based on the destination principle of VAT, zero-rated. Despite its intrinsic self-enforcement capacity, ZRA has found it challenging to refund excess input credits, which is critical to a well-functioning VAT system. The VAT refund system is marred by delays in paying VAT refund claims, resulting in large VAT refund arrears problem. This problem prompted the Government to reintroduce the “VAT Rule 18” in 2014 requiring the VAT taxpayer to submit documentation that a supply is an export of goods to claim this as a zero-rated supply.
- (v) Zambia has a differentiated Corporate Income Tax Rate.** Zambia has a multiplicity of tax rates that make corporate income tax productivity low. Many sectors (agriculture, manufacturing of fertilizer, agro-processing, non-traditional exports and more recently tourism) enjoy rates below the standard 35 percent (now reduced to 30 percent from 2022). Additionally, components such as capital gains are excluded from the base. Further, the multiplicity of tax rates creates room for tax evasion. In addition, vertically integrated firms with multiple economic activities, they are bound to be classified in the activity with lower tax brackets instead of the activity that brings in the most income as per national accounts classification of economic activity.
- (vi) The mining sector has an array of incentives.** Through the Income Tax Act and the Zambia Development Agency (ZDA), a number of tax incentives are given to specific classes of investors in order to attract investment into the economy. However, several studies have shown that the incentives may not have the intended effects. Some incentives may also be given based on the lobbying prowess of the intended beneficiary. With limited monitoring capacity by the ZDA, maintaining incentives which appear to disproportionately favour a particular sector at the expense of tax revenue deters tax morality in the rest of the sectors and therefore may encourage tax evasion.
- (vii) Zambia has signed a number of double taxation treaties.** Incentives in the double taxation agreements includes tax conventions entered into with other jurisdictions. But some of these double tax agreements tend to work to the disadvantage of Zambia due to the preference that these agreements have to the residency as opposed to the source.

Based on the above findings, this study recommends the following:

- (i) The Government needs to urgently deal with the VAT refund problem:** The Government needs to manage the VAT refunds more especially with the

mines. This can be done by firstly reviewing the legal framework to ensure that VAT refunds requirements, procedures and documentation are as simple as possible. Secondly, there is need to prepare strategy to combat VAT refund fraud, including automated risk analysis procedures for assessing claims in real time and information exchange among relevant institutions to establish profiles of high-risk taxpayers. Thirdly, the treasury should maintain a zero-balance subaccount within the Treasury Single Account (TSA), where the amounts needed to pay the VAT refunds are transferred based on tax administration information.

- (ii) Harmonise the Corporate Income Tax Rates.** The corporate income tax rates need to be harmonized, by raising rates on low-tax sectors. This will reduce the prospects for tax evasion and profit shifting. Further, the multiplicity of tax rates erodes the tax base, adds to the complexity of administering the taxes, and undermines the sense of fairness as disproportionately heavier tax burden is placed on the non-priority sectors to collect the same revenue.
- (iii) The Government should constantly review the tax incentives.** Tax incentives should be reviewed continuously to ensure those which no longer serve or have served their purpose are phased out. Given the short time period for the holiday (5 years), the effectiveness of these incentives is questionable. It also increases monitoring costs for the already resource-constrained Zambia Development Agency unnecessarily. It also causes serious distortions and inequities in corporate taxation
- (iv) Renegotiate the Double Taxation Treaties.** Double taxation agreements are usually signed to give reciprocal treatment for business and transactions between countries usually crafted on the principle of residence or source of the business. Where the agreements seem lopsided and in favour of other countries, they need to be renegotiated. In order to limit the deductibility of certain cross-border payments, in 2019, Zambia amended the Income Tax Act to provide for the limitation of the deductibility of gross interest on borrowings to 30 percent of Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA). The 2021 amendment clarifies that the limitation applies to gross interest arising from loans that are both revenue and capital in nature. It is recommended that a similar provision is extended to management and consultancy fees, and branch profit transfers.

The current Government is making efforts to reposition the mining tax regime for the energy transition with the recent adjustments made to the mining fiscal regime on for example making mineral royalties deductible for corporate income tax purposes. However, more needs to be done to leverage the opportunity that

the energy transition presents. Existing challenges highlighted in this report on tax policy and administration with a focus on tax avoidance, VAT refunds, tax incentives and DTAs in Zambia's mining sector must be urgently dealt with to ensure that the mining tax regime is stable, predictable, competitive, and progressive. More importantly, addressing the factors in the mining sector that perpetuate tax revenue leakages and ultimately, tax injustice will result in optimal tax revenue collection for enhanced domestic revenue mobilization. This will go a long way in expanding Zambia current limited fiscal space as resources will be available for social spending, debt servicing and investment in a green and eco-friendly industrialization agenda that benefits both the present and future generations.

# BIBLIOGRAPHY

BOZ, 2022. Fortnightly Series. Lusaka: Bank of Zambia.

Durkin , A., 2021. <https://www.hinrichfoundation.com/>. [Online]  
Available at: <https://www.hinrichfoundation.com/research/article/sustainable/rising-copper-prices-sign-of-economic-recovery-or-market-distortion/>  
[Accessed 24 March 2022].

Gielen , D., 2021. Critical minerals for the energy transition, Abu Dhabi: International Renewable Energy Agency .

Hund, K. et al., 2020. Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition , Washington: World Bank.

ICMM, 2014. Enhancing Mining's Contribution to the Zambian Economy and Society , s.l.: London International council on Mining and Metals .

International Banker , 2019. <https://internationalbanker.com/>. [Online]  
Available at: <https://internationalbanker.com/brokerage/why-have-cobalt-prices-crashed/>  
[Accessed 24 March 2022].

MOF, 2021. Annual Economic Report 2020, Lusaka : GRZ.

Mwaba , A. & Mugerwa, S. K., 2021. Boosting mineral revenues in Zambia, s.l.: UNU-WIDER.

PMRC, 2015. Zambia's Double Taxation Agreements: Towards Optimised Tax Revenue Collection, Lusaka : PMRC.

Ralbovsky, S. F., 2012. Corporate Income Taxes, Mining Royalties and other Mining Taxes: A Summary of Rates and Rules in Selected Countries, Global Mining Industry Update , s.l.: PwC.

Saasa, O. S. & Nalishebo, S., 2019. Assessment of Mining Tax Regime in Zambia: 2000 - 2019, Lusaka : Premier Consult Limited .

World Bank , 2016. Zambia Mining and Investment Governance Review , s.l.: World Bank .

World Bank Group , 2017. The Growing Role of Minerals and Metals for a Low Carbon Future, Washington : World Bank.

World Bank, 2016. Zambia Mining and Investment Governance Review, s.l.: World Bank.

Yunis, J. & Aliakbari, E., 2020. Survey of Mining Companies , s.l.: Fraser Institute .









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