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Executive summary

For many years, dusty red cargos of bauxite have left the port of Conakry in Guinea for the industrial city of Nikolaïev in Ukraine, where it is refined into alumina. The company that operates the mine in Kindia and the port of Conakry, as well as the refinery in Nikolaïev is Rusal, the Russian conglomerate that produces seven percent of the world's aluminum production.¹ In 2014, the average value of Guinea's bauxite exports to Ukraine was just above USD 13/tonne², but the average value of Guinea's bauxite exports to other trading partners including Canada, the United States, Germany, Spain, China and India was USD 32/tonne. Tax and regulatory authorities in Guinea are not sure if the USD 19/tonne discrepancy is really justified by differences in the quality of the ore. Guinea may be missing millions of dollars in tax revenue and Guineans have complained vocally about how little revenue Rusal pays to their government. The Guinean government, along with other mineral producing countries in Africa, is struggling to generate enough revenue to finance public services such as health care and education and investments in infrastructure to support its economic growth.

In Addis Ababa in July 2015, representatives from 174 countries met at the third Financing for Development conference and set the goal of increasing domestic revenue mobilization in order to fund investment in developing economies, and reduce poverty and reliance on foreign aid. A central part of revenue mobilization is taxation of the private sector. For many African countries, mineral resources present an unparalleled economic opportunity to increase revenue through effective taxation of mining companies. With the end of the commodity super cycle, projects are delayed, operations have slowed, and mining company margins and government budgets are tight. The current situation makes it even more important to ensure that existing mining projects contribute their full share to government budgets. The commodity downturn represents an opportunity to invest in good practices that will help countries break from a legacy of inadequate governance and legal structures, weak enforcement of tax legislation and imprudent revenue management. Improvements now in establishing and enforcing strong governance and fiscal frameworks to capture resource rents will also pay off when mineral prices rise again.

A critical area of reform is to counter aggressive tax planning and tax evasion. Tax planning, or tax avoidance, is the use of legal methods to minimize the amount of income tax owed by multinational enterprises (MNEs). In the absence of rigorous controls, some MNEs also employ illegal ways to reduce their taxable income, by knowingly and illegally misrepresenting their transactions. This is called tax evasion.

The Africa Progress Panel has identified cross-border transactions between related parties as a major threat to the tax base of African countries (Africa Progress Panel 2013, 65). One of the principal vectors of losses in these transactions is transfer pricing, which occurs when one company sells a good or service to another related company. Because these transactions are internal, they are not subject to ordinary market pricing and can be used by MNEs to shift profits to low-tax jurisdictions.

Establishing and enforcing strong governance and fiscal frameworks to capture resource rents will pay off when mineral prices rise again.

[&]quot;Rusal Facts and Figures," last modified 2014, http://www.rusal.ru/en/about/facts/

^{2 &}quot;Comtrade data", official trade statistics, accessed May 2016, http://comtrade.un.org/data/

Many African countries have begun to put in place legal rules on the taxation of cross-border transactions. Most of these rules require taxpayers to price transactions between related parties as if they were taking place between unrelated parties. This "arm's length principle" is at the core of most global standards on controlling transfer pricing, led by the Organization for Economic Cooperation and Development (OECD). However, compliance with the letter and the spirit of these rules depends on the administrative capacity of countries to actively enforce legislation. Preliminary results from research by the Institute for Mining for Development (IM4DC) suggests that out of 26 countries surveyed in Africa, most do not have the requisite capacity to implement effective transfer pricing rules (IM4DC 2014, 6).

This study assesses the development and implementation of rules to monitor transfer pricing in the mining sector in countries with varied experiences. As illustrated in the accompanying case studies, Ghana, Guinea, Sierra Leone, Tanzania and Zambia face several major challenges in implementing transfer pricing rules:

- Introducing the concept of the arm's length principle in the income tax law is
 only a first step. Few countries have followed up with regulations, administrative
 guidance or company-specific advance pricing agreements to clarify
 documentation requirements and methods for determining an acceptable transfer
 price based on the arm's length principle.
- Laws or contracts that impose taxes on the mining sector do not always refer to generally applicable transfer pricing rules, leaving an ambiguity that could be exploited by, or lead to disputes with, mining companies.
- Assessing transfer pricing in a way that is consistent with the arm's length
 principle requires data on comparable independent transactions. Data specific to
 Africa's mining sector does not yet exist. Consequently, authorities have had to
 adjust comparable data for other regions, which may be expensive, complex, and
 yield unsatisfying results.
- The administrative structures of revenue authorities are rarely adapted to the efficient implementation of transfer pricing rules. A dedicated transfer pricing unit, the common approach recommended by international organizations, may not be appropriate in developing countries with limited resources, a small number of MNEs and internal coordination challenges.
- Information and expertise exist in silos, preventing revenue authorities and
 the agencies responsible for mining sector regulation from developing a
 comprehensive picture of transfer pricing risks created by the mining industry
 and deciding which risks warrant an audit.
- Revenue authorities have difficulty accessing taxpayer information from
 other jurisdictions. Consequently, they are unable to develop a full picture of a
 company's global operations for the purpose of investigating transfer pricing risks.
 At times they are also lax at enforcing domestic reporting obligations, leaving
 themselves ill equipped to review complex expenditure.

A dedicated transfer pricing unit may not be appropriate in developing countries with limited resources, a small number of MNEs and internal coordination challenges.

The political economy of many resource-rich countries undermines the implementation of transfer pricing rules. The relationship between the mining industry and the political leadership can prevent the systematic implementation of transfer pricing rules, adequate funding of revenue authorities and better governmental organization. Civil society organizations and members of parliaments often lack sufficient understanding of transfer pricing and mineral taxation to demand systemic improvements and accountability.

Based on analysis of these recurring challenges, this publication contains a number of recommendations that would help Ghana, Guinea, Sierra Leone, Tanzania, Zambia and other countries in similar contexts to better address transfer pricing risks in the mining sector through the application of the arm's length principle.

Recommendation 1: Put in place detailed rules that enable revenue authorities to determine the tax value of intra-company transactions in a rigorous and consistent way, including by spelling out the procedures by which the system is to be administered.

Recommendation 2: Establish administrative structures that promote a concentration of well-trained, highly skilled officials sufficiently empowered to implement transfer pricing rules effectively.

Recommendation 3: Improve inter-agency coordination on mining revenue collection by clarifying division of audit responsibilities, encouraging joint audits, and establishing overarching coordination mechanisms.

Recommendation 4: Equip revenue authorities with transfer pricing expertise and technical sector knowledge to identify and evaluate transfer pricing risks in the mining sector.

Recommendation 5: Take proactive steps to narrow the information gap and obtain more regular and precise information from mining companies.

Recommendation 6: Civil society and parliaments should hold the political leadership accountable for implementation of transfer pricing rules in the mining sector.

The challenges described above point to a fundamental difficulty in successfully applying the arm's length principle in countries that do not have the capabilities and resources available to tax administrations in OECD countries. This points to a final recommendation, which relates not to strategies for implementing the arm's length principle, but rather to alternatives to the principle for at least some categories of transactions, such as commodity sales, interest payments or management fees.

Recommendation 7: Examine the feasibility of adopting specific tax policy rules—such as the separate treatment of hedging, the use of reference prices, capping management service charges or interest deductibility—to limit the reliance on the arm's length principle and the difficulty of finding comparable data for controlled transactions.

All recommendations are detailed in the report, and mirror country-specific recommendations in the accompanying case studies. It is hoped that these reflections contribute to an increased awareness in mineral-rich countries of the acute problem of transfer mispricing and the development of tools to address it.

There are fundamental difficulties to successfully applying the arm's length principle in countries that do not have the capabilities and resources available to tax administrations in OECD countries.

Introduction

This publication presents the results of a study on transfer pricing and the mining industry in Africa, with specific focus on the challenges to implementation of transfer pricing rules in five representative countries: Guinea, Ghana, Sierra Leone, Tanzania and Zambia. The study was undertaken in 2015 by Oxford University researcher Alexandra Readhead, in partnership with the Natural Resource Governance Institute (NRGI). It builds on NRGI's existing work in extractive industry fiscal regime design by responding to concerns from many African countries that government revenues have not kept up with the development of extractive activities, particularly during the commodity super cycle.

NEEDS IDENTIFICATION

Increasing domestic revenue is an important priority for all developing countries. This was underscored by the 174 countries represented at the Third Financing for Development Conference held in July 2015 in the Addis Ababa Action Agenda: "We recognize that significant additional domestic public resources, supplemented by international assistance as appropriate, will be critical to realizing sustainable development and achieving the sustainable development goals." Not only is domestic revenue critical to developing countries' responsiveness to immediate public needs, as outlined in the Sustainable Development Goals of the 2030 Sustainable Development Agenda, but it also has the potential to "advance democratic accountability" by rebuilding the social contract between citizen and state, according to the Tax Justice Network (Tax Justice Network 2011, 2).

As the recent leaks from Panamanian law firm Mossack Fonseca illustrate, implementing the ambitious agenda agreed in Addis Ababa will be challenging: MNEs can avoid taxes on a global scale, transferring profits to tax havens with the help of sophisticated legal and financial experts from the world's major economic centers. Figure 1 illustrates how complex the global corporate structures of multinational mining companies can be, and how many subsidiaries they have in tax havens.³ African countries stand to lose the most from international tax avoidance given their outsized reliance on corporate income tax (OECD 2014, 8-9). According to the United Nations Economic Commission for Africa (UNECA), trade misinvoicing by MNEs in Africa represents a large proportion of the approximately USD 50 billion per year of illicit financial flows that escape any form of taxation (UNECA 2014, 2). The African Development Bank (AfDB) attributes major losses of public revenue to the "inefficient taxation of extractive activities and the inability to fight abuses of transfer pricing by MNEs."

African countries stand to lose the most from international tax avoidance given their outsized reliance on corporate income tax.

³ This illustrative graph is based on the definition of tax havens in Action Aid, *Addicted to tax havens:* secrete life of the FTSE 100 (Action Aid, 2011), 5.

Global corporate structures of mining companies Number of subsidiaries registered in a foreign country* Chile Chile Singapore Mauritus S Tax haven State (non-tax haven) Zimbabwe Virgin Islands Netherlands ERNC Delaware (USA) Glencore Canada Xstrata South Africa

Figure 1. Global corporate structures of mining companies

Figure 1 uses the Action Aid tax haven tracker database to plot the global presence of all mining companies listed in the FTSE 100 (2013). Only those countries where the companies have 20 or more subsidiaries have been shown here.

^{*}The graph includes countries in which these companies have 20 or more subsidiaries

The transfer price is the price of a transaction between two entities that are part of the same group of companies. For example, a South Africa-based company might procure mining equipment and machinery on behalf of its Ghana-based subsidiary, charging a fee for service. The price agreed is the "transfer price," and the process for setting it is referred to as "transfer pricing." The difficulty in monitoring and taxing such transactions is that they do not take place on an open market. Whereas a commercial transaction between two independent companies ("uncontrolled transaction") on a competitive market should reflect the best option for both companies, transactions between affiliated companies ("controlled transactions") are more likely to be made in the best interest of the global corporation. It can be in the interest of the global corporation to make higher profits in lower-taxed jurisdictions and lower profits in higher-taxed ones, as a means of reducing its overall tax bill. While the corporations gain from such tax planning, there are winners and losers between the countries involved. Many governments from countries that risk losing revenue as a result of this "transfer mispricing" have created rules to regulate the practice.

Monitoring and taxing controlled transactions is difficult because they do not take place on an open market.

In the event that a company engages in a controlled transaction, transfer pricing rules tend to recommend the application of the arm's length principle: the transaction should reflect the market value of the goods or services exchanged. In other words, affiliated companies should trade with each other as if they were not affiliated. If a controlled transaction does not conform to the arm's length principle, transfer pricing rules are meant to give governments the legal right to adjust the price in the reported profits of the company. However, the success of these rules depends on the administrative capacity to actively enforce the legislation and the flow of information necessary to measure compliance. According to the OECD, the capacity constraints experienced by developing countries stem largely from inadequate transfer pricing rules, limited transfer pricing expertise and experience compounded by a lack of industry knowledge, and difficulties obtaining information needed from taxpayers and other tax jurisdictions to select cases for audit or carry out effective audits (OECD 2011, 29).

INTERNATIONAL TRANSFER PRICING INITIATIVES

Transfer mispricing is a global issue and there is a range of international and regional initiatives to counter it. The OECD Transfer Pricing Guidelines are regarded as the international authority on common practices and methods in the area of transfer pricing. More than 100 countries refer to the OECD guidelines in their domestic legislation. In 2013 the United Nations released its own transfer pricing manual that aims to tailor transfer pricing guidance to the circumstances, priorities, and administrative capacity of non-OECD countries. Both guidelines are relevant, although the UN manual offers a more pragmatic approach for countries that are importers rather than exporters of capital. The International Monetary Fund (IMF) produced a handbook on "Administering Fiscal Regimes for Extractive Industries" that provides useful sector specific guidance on the implementation of transfer pricing rules. More detailed guidance on transfer pricing in the mining sector is expected from the World Bank and the Minerals and Energy for Development Alliance (MEfDA) in 2016.

The most recent initiative is the OECD Base Erosion and Profit Shifting (BEPS) project. BEPS was launched at the request of the G20 in 2013 to identify and address the causes of the loss of revenue from corporate income tax. This initiative resulted in an action plan, launched in 2015. Although BEPS has been hosted by the OECD, developing countries were invited to participate in the process and special attention has been given to how OECD and G20 countries can assist developing countries to meet the challenges posed by BEPS and the priorities stated in the action plan. This engagement with developing countries has encouraged the OECD to add more flexibility in the application of transfer pricing methods and disaggregated country-by-country financial reporting requirements for taxpayers. The current report on preventing tax base erosion in Africa also illustrates some of the challenges that developing countries face in implementing OECD transfer pricing rules.

OBJECTIVE AND NATURE OF THE STUDY

Starting from the low level of domestic revenue generation and weak institutions in many mineral-rich countries in Africa, this study sought to identify realistic and fair ways to increase corporate tax revenues from the mining industry. More specifically, the research explored the challenges to implementation and enforcement of transfer pricing rules in the mining sector. The study included qualitative field research in five countries: Ghana, Guinea, Sierra Leone, Tanzania and Zambia. Each of these countries is rich in a variety of mineral resources and has some form of rules in place to guard against abusive transfer pricing. This field research allowed us to capture the experiences of a cross section of African countries at different stages of enactment and implementation of transfer pricing rules.

Until recently, guidance on transfer pricing has been economy-wide rather than sector specific, but African policy makers increasingly requested an explicit focus on transfer pricing risks in the mining industry. Hence, the study has sought to complement general transfer pricing guidance by addressing specific challenges in the mining industry. This is not an isolated initiative: the World Bank and MEfDA will release a reference guide for practitioners on transfer pricing in the African mining industry in 2016; the African Tax Administration Forum (ATAF) is embarking on a program of technical support to member countries on taxation of extractive industries; the OECD has released guidance on mineral product pricing in the context of controlled sales; and the African Minerals Development Centre is expected to launch a report quantifying the impact of tax avoidance on mining revenue collection in Africa.

This study sets itself apart by focusing less on the finer points of applying the arm's length principle to controlled transactions, and rather more on the institutional conditions required for effective implementation of transfer pricing rules in the mining sector. Based on the experience detailed in the accompanying case studies, the report provides examples of the challenges and successes connected with administering transfer pricing rules in the mining sector. In many cases, the challenges in implementing transfer pricing rules based purely on the arm's length principle may be difficult to fully overcome. In the last section the report discusses a number of alternative solutions for certain categories of transactions. Insights from the country case studies and this report will hopefully bring an additional perspective from mineral rich developing countries and support the development of international transfer pricing rules that are suited to a variety of institutional contexts.

The study included qualitative field research in five countries: Ghana, Guinea, Sierra Leone, Tanzania and Zamhia.

Controlled transactions and the mining value chain

There are numerous possible controlled transactions in the mining industry value chain, which can be broadly grouped into two categories: (1) the sale of minerals and/or mineral rights to related parties; and (2) the purchase or acquisition of various goods, services and assets from related parties. These transactions are common to most mining companies, but the value, and therefore the potential tax revenue leakage, vary greatly depending on the size and structure of the operation, commodity type and production processes. For example, the charge for inter-company marketing services is likely to be lower in the case of bulk commodities than for precious stones given that less specific market knowledge and expertise is required. Other things being equal, large multinational corporations tend to have more transactions with related enterprises and more complex financing structures than smaller companies.

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Figure 2. Possible controlled transactions along the mining value chain

Source: Institute for Mining for Development, 2014

Box 1. Examples of controlled transactions

- **Procurement and export of goods** a company purchases mining machinery on behalf of its subsidiary; the price charged will include the direct cost, plus a fee for service.
- **Financing** the subsidiary receives a loan from its parent, usually to finance its exploration or development costs. This is another way for shareholders to provide capital to a mining project, but its accounting treatment is different from equity. Loans generate interest, are repaid in priority to dividends, but do not give controlling rights on the company.
- **Support services** the subsidiary pays a fee to a related party in return for a range of administrative, technical and advisory functions.
- **Mineral sales** mineral products may be sold to a related company, for example a trading hub or a smelter.

To determine the appropriate transfer price for a controlled transaction, international best practice recommends the application of the arm's length principle. This requires that the controlled transaction be compared with a transaction at arm's length between two independent entities, an uncontrolled transaction. Several transfer pricing methods exist to apply the arm's length principle.

Box 2. OECD transfer pricing methods

The OECD proposes five major transfer pricing methods to apply the arm's length principle. For the sake of illustration, each of the five methods is explained in reference to the example below.

Example: A sells minerals to B, a related party, who sells the same minerals on to C, a third party. B is the "tested party" (the party which is the point of reference for comparison of the controlled transaction with the uncontrolled transaction). We must determine the transfer price for the transaction between A and B.

- 1 The comparable uncontrolled price (CUP) method directly compares the price in a controlled transaction with the price in an uncontrolled transaction in comparable circumstances. In the example, the transfer price between A and B is the price received in a sale between two unrelated parties in similar circumstances, taking into account factors such as contractual terms, quality, transportation and insurance.
- 2 The resale price method (RSP) is based on the difference between the price at which a service or product is purchased in a controlled transaction and the price at which the same service or product is sold on to a third party. In the example, B sells minerals to C for USD 100. Based on the gross profit margin earned by third parties in comparable circumstances B earns USD 20, or 20 percent of the sale price. The transfer price is USD 80, i.e., the resale price of USD 100 minus the arm's length gross profit margin of USD 20.
- 3 The cost plus method (CPM) identifies the costs incurred by the supplier of goods or services in a controlled transaction and then adds an arm's length mark-up to that cost base. In the example, B sells the minerals to C, on behalf of A. The direct cost to B of performing this service for A is USD 10 (e.g., to cover staff time and administration). Based on the arm's length mark-up earned by third parties in comparable circumstances, B earns 10 percent of the costs incurred in providing the service to A, or USD 1. The transfer price received by A is USD 89, i.e., the sale price to C, USD 100 (method 2) minus the USD 11 compensation to B.
- 4 The transactional net margin method (TNMM) compares the net profit margin that a related party earns from a controlled transaction with the net profit margin earned by a third party on a comparable uncontrolled transaction. The net profit margin is measured relative to an appropriate indicator (i.e., the cost of providing the service, the sales generated, or the assets used). In the example, comparable companies have a net profit margin of 20 percent relative to operating costs. This means that if B earns USD 20 gross profit /tonne (method 2) the arm's length net profit margin is USD 4. The transfer price is then defined as the price that allows B to make a USD 4 net profit margin.
- 5 The profit split method (PSM) divides the combined profit earned by related parties from the same transaction according to the relative contribution of each party to the transaction. The transfer price is then defined as the price that splits the profit between parties according to the agreed relative contributions. In the example, B advises A on market conditions and identifies potential customers, in which case its contribution to the combined gross profit from the sale to C is low, resulting in limited compensation to B, and a higher transfer price to A. Alternatively, B may take legal title of the mineral products, selling to its own customers, in which case B's compensation is higher, reducing the transfer price to A.

The use of single example for all methods is only illustrative; in practice different methods are applied to different types of transactions. For example, CUP is adapted to straightforward sales of commonly traded commodities; RSP or CPM may be alternatively applied in the case of marketing hubs, depending on the sophistication of the services provided by the hub. They are also used in cases where companies have dedicated subsidiaries in charge of procurement of goods and services. TNMM and PSM are more adapted for cases when several affiliated companies contribute significantly to the total income of a business. According to OECD guidance, authorities should ensure that enterprises use the method that is the most appropriate to each controlled transaction, given the data available.

For detailed guidance on the different methods, see the OECD Guidelines (OECD 2010, 59-105).

The arm's length principle requires that the controlled transaction be compared with a transaction at arm's length between two independent entities—an uncontrolled transaction.

All of the transfer pricing methods rely directly or indirectly on comparable data. CUP, RSP and CPM require data from comparable uncontrolled transactions, whereas TNMM and PSM require information on the profit allocations or margins of comparable independent businesses. To determine whether an uncontrolled transaction is comparable a range of "comparability factors" must be identified. These might include the characteristics of the property or services, contractual terms, and economic circumstances. For TNMM and PSM, comparability will turn on whether the independent business performs functions and incurs risks similar to the tested party. Assuming that there is no material difference between the transactions, or the businesses, "comparable data" may be used as a benchmark against which to review, and potentially adjust, the transfer price of the controlled transactions.

For revenue authorities in Africa, applying the arm's length principle can be extremely difficult because there is often a lack of comparable independent businesses and uncontrolled transactions. Parties often end up having to adapt comparable data from developed countries. This can often be time consuming and expensive, and produce results that do not reflect the economic reality of companies operating in Africa. Access to information on related parties based in offshore jurisdictions is a further obstacle for many revenue authorities, preventing them from building a complete picture of global activities of companies.

In light of these implementation challenges an additional transfer pricing method has emerged, called the "sixth method." The method originated in Argentina in 2003, where the government was seeking to evaluate the sale of raw materials to related parties located in countries with lower tax rates. It is essentially a version of the CUP method, designed specifically to limit the risk of transfer mispricing in commodity transactions. It requires that taxpayers selling commodity products to offshore related parties use the publicly quoted price of the traded goods on the date that the goods are shipped, unless the price agreed between the related parties is higher than the quoted price. This is particularly relevant for resource-rich economies when publically quoted prices of minerals or metals are widely available, for example through the London Metals Exchange, the London gold fixing, or the increasing number of Chinabased price indexes. These prices may be used as benchmarks for evaluating the sale of mineral products between related parties.

In addition to the sixth method, the last section of this report sets out a range of policy and procedural alternatives that while not always consistent with the arm's length principle, may be a more pragmatic approach for many mineral producing countries.

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Challenges to implementing transfer pricing rules

This section of the report reviews how Guinea, Ghana, Sierra Leone, Tanzania and Zambia are addressing transfer mispricing in their mining sectors, using rules based on the international standard of the arm's length principle. It explores what types of rules are needed, and what capacity, information and institutions are needed to apply the rules. Despite some successful steps taken by the case study countries, there remain fundamental challenges in strictly adhering to the arm's length principle in the context of developing economies. This is why several countries have developed partial alternatives to the arm's length principle that avoid some of the biggest transfer pricing risks, which are covered in the last section of the report.

1. INADEQUATE RULES

The first challenge faced by many mineral producing countries aiming to tackle transfer pricing in the mining sector is to ensure that appropriate rules are in place. Such rules should define what transfer pricing is and give tax administrations the legal tools to prohibit or limit the manipulation of controlled transactions. The case studies show that it is not enough to have the right principles in legislation; successful monitoring of controlled transactions requires detailed transfer pricing regulations, including guidance notes and specific documentation requirements. The second challenge is to ensure that general transfer pricing rules are consistently applied to the mining sector. This is made even more challenging by the fact that many countries have some degree of distinct legal framework for mining, including royalty and tax obligations that are stabilized against legislative changes for some period of time.

Successful monitoring of controlled transactions requires detailed transfer pricing regulations, including guidance notes and documentation requirements.

1.1 Detailed transfer pricing rules

The OECD recommends that countries adopt transfer pricing legislation that embodies the arm's length principle as outlined in Article 9(1) of the OECD Model Tax Convention on Income and Capital (2010), and Article 9(1) of the United Nations Model Double Tax Convention between Developed and Low-income Countries (2011), followed by detailed regulations. The arm's length principle dictates that controlled transactions should be priced according to the price at which the transaction would take place if the buying and selling entities were not related. The OECD definition of the arm's length principle has become a global standard in the regulation of controlled transactions. More than 100 countries, including those in the case studies, have included this definition of the arm's length principle in their domestic legislation.

From a legal perspective, tax administrations could audit transfer pricing cases without implementing regulations or guidelines, relying solely on the arm's length principle defined in the primary legislation, and the commissioner's corresponding power to adjust controlled transactions. Prior to the introduction of transfer pricing

It is important to note that the arm's length principle describes a method for allocating profits, rather than an intrinsic concept of price.

⁵ The OECD and UN formulations of the arm's length rule are identical. It is more common for countries to reference the original OECD formulation because it was used as the basis for Article 9(1) of the UN Tax Convention.

regulations, the International Tax Unit (ITU) in Tanzania had undertaken four transfer pricing adjustments, and the Ghana Revenue Authority (GRA) had identified a number of transfer pricing issues during the course of general audits. In Zambia, the mining audit team has undertaken at least 10 transfer pricing enquiries in the mining sector, with the regulations yet to be passed. However, these interventions were all, to some extent, hampered by the absence of more detailed transfer pricing guidelines set out clearly in regulations.

Box 3. Lack of legal guidance on transfer pricing methods leads to taxpayer dispute

The importance of a clear regulatory framework was highlighted in the case of Mbeya Cement, the Tanzanian subsidiary of French company Lafarge. The Tanzania Revenue Authority (TRA) had adjusted the value added tax on imported technical and management services which Mbeya had received from Lafarge since 2005. The TRA made the adjustment based on the view that the services provided by Lafarge were not in accordance with the arm's length principle. Mbeya argued that the services had been priced according to OECD Guidelines. The judge ruled in favor of the TRA on this issue stating that: "the report of PWC on issues of arm's length was based on the OECD guidelines which had no binding effect in Tanzania." It was most likely reasonable for Mbeya to use the OECD approach to apply the arm's length principle, but the fact that the guidelines had not been incorporated into Tanzanian tax law meant that the court chose not to recognize them. This case revealed the lack of legal guidance regarding transfer pricing methods, and the likelihood that this would lead to taxpayer disputes. The case was a catalyst for the 2014 regulations, which subsequently included the OECD guidelines as means of interpretation.

Regulations are passed by an executive branch of the government. They are more specific and provide details on how a particular law should be administered. They are easier to change and to adapt to new circumstances or international practice. As indicated in Table 1, all case study countries include the arm's length principle in their income tax law, but not all have corresponding regulations. Sierra Leone, Guinea, and Zambia lack detailed guidance for both tax officials and taxpayers as to how the arm's length principle should be applied. Tanzania and Ghana have regulations, and in both cases this has contributed to a substantial increase in transfer pricing audits. In Tanzania, the ITU has undertaken 15 transfer pricing audits since the regulations were passed in 2014, concluding five, with three more cases nearing completion. Prior to this the ITU had completed four cases as part of the business plan for the Large Taxpayers Department.

Tanzania and Ghana have regulations and in both cases this has contributed to a substantial increase in transfer pricing audits.

Country	Tax Law (includes arm's- length principle)	Implementing regulations	Specific documentation requirements	Annual transfer pricing disclosure requirements
Ghana	Yes	Yes	Yes	Yes
Tanzania	Yes	Yes	Yes	Yes
Zambia	Yes	Pending (2016)	Pending (2016)	Pending (2016)
Guinea	Yes	No	Yes	No
Sierra Leone	Yes	No	No	No

Table 1. Current status of transfer pricing rules in case study countries

There are other benefits to introducing detailed transfer pricing rules. In Ghana, Tanzania, and Zambia, tax officials have reported that the development of transfer pricing regulations has led to: increased awareness of transfer pricing issues amongst government officials and taxpayers; a focus on capacity building as well as structural change; a consistent and coordinated approach to interpreting and applying transfer pricing provisions in the primary legislation; and increased confidence amongst auditors to pursue transfer pricing cases.

According to the former head of the International Tax Unit (ITU) in Tanzania:

"The transfer pricing regulations have made us more confident to pursue taxpayers, being able to refer our findings to the law. The regulations have also created a more concrete and consistent approach to the application of transfer pricing methods. Now we have a standard way of working."

Box 4. Transfer pricing regulations

To strengthen administration of transfer pricing rules, regulations should address the following:

- · transfer pricing methodologies
- guidance on comparability analysis (i.e., use of local and/or foreign comparable data)
- transfer pricing documentation requirements and filing deadlines
- how and when transfer pricing adjustments will be made by the revenue authority
- · how taxpayer disputes will be resolved
- fines and penalties
- optionally: specific guidance on particular related party transactions (e.g., Ghana's regulations focus on intra-group services)

1.2 Transfer pricing documentation requirements

Revenue authorities need documentation from taxpayers to be notified of controlled transactions between the taxpayer and related parties and to determine whether these transactions were conducted at arm's length. The required information may include an organogram of the group, the value and type of related party transactions, as well as non-monetary transactions, and the transfer pricing methods used. From interviews in all five case study countries, getting hold of documentation from taxpayers appeared to be one of the most significant challenges to successful implementation of transfer pricing rules.

Box 5. Companies withholding proof of management services rendered

Zambia is struggling to deal with the problem of management service charges, which in some cases are as high as USD 15 million annually. The Zambian Revenue Authority (ZRA) has requested documentation to determine how management service charges are calculated, and whether they are arm's length, but most companies have not been forthcoming. Several companies told the ZRA that the fees are based on an agreement with the related party "they offer a range of services and dictate the payment." They provided no further explanation. The ZRA's authority to request documentation that specifies how inter-company service transactions are determined remains limited until the Ministry of Justice approves the transfer pricing regulations, which include detailed documentation requirements.

In all case study countries, getting hold of documentation from taxpayers appeared to be one of the most significant challenges to successful implementation of transfer pricing rules.

In the absence of specific transfer pricing documentation requirements, it may be possible to rely on generic documentation provisions commonly found in income tax law. However, given the specific type of information that is required to assess transfer pricing risks, most countries have chosen to establish distinct legal obligations to maintain and submit transfer pricing documentation. Transfer pricing documentation requirements create the obligation for taxpayers to submit to revenue authorities an annual transfer pricing file, detailing all controlled transactions, including an explanation of how these transactions were priced.

Tanzania relies on its Income Tax Act for access to documentation from taxpayers. While its transfer pricing regulations provide direction on the application of these generic provisions, taxpayer confusion has led the TRA to draft in 2015 more comprehensive guidance on transfer pricing documentation. In Zambia, transfer pricing documentation rules are considered to be so vital that a manual for taxpayers has been included in the transfer pricing regulations to be published in 2016. This level of detail is intended to limit taxpayer misunderstandings and prevent delays to the audit process. Guidance on how to comply with transfer pricing documentation obligations is also necessary. For example, revenue authorities in Tanzania and Ghana have issued transfer pricing practice notes. OECD countries regularly produce such notes. Following concerns about two major Australian mining companies (BHP Billiton and Rio Tinto) channeling profits through marketing hubs in Singapore, the Australian Tax Office has been developing a practical guide to help taxpayers self-assess their transfer pricing activity in respect to related party offshore marketing hubs (Woolrich 2015).

All of the case study countries that have introduced documentation requirements request that it be made available to revenue authorities on request rather than automatically. This approach balances the need for regular oversight of controlled transactions with minimizing the compliance burden for taxpayers, and prevents revenue authorities from being overwhelmed by unnecessary information, as recommended by international best practice. The OECD BEPS Report for Action 13 provides specific guidance on the type of information that taxpayers should be expected to provide on request or automatically, and above what materiality threshold. The U.N. Transfer Pricing Manual, used by both Ghana and Tanzania as the basis for their documentation rules, also sets out a sample schedule in Chapter 7. To supplement these rules, both countries have introduced transfer pricing return forms requiring taxpayers to report controlled transactions when filing their annual tax return. This is particularly useful for revenue authorities with limited resources, as it helps to focus on high-risk transactions.

An additional challenge in introducing transfer pricing documentation rules is management of the information received. A company representative in Ghana revealed that they had submitted the annual transfer pricing return form two years in a row and been told on both occasions that the returns were not received, despite having proof of receipt. Poor information management increases the compliance burden for companies, and makes risk assessment and audit preparation more difficult for tax officials. (See Section 4: Difficulties accessing taxpayer information.)

Finally, when transfer pricing rules are not drafted clearly—including by outlining what information is to be kept and how frequently it should be updated—the resulting ambiguity risks exploitation by taxpayers. Guinea introduced transfer pricing documentation rules in 2015 without these specifications, making it difficult to implement the rules for both the industry and the revenue authority.

Transfer pricing return forms are useful for revenue authorities with limited resources, as they help tax authorities to focus on high-risk transactions.

1.3 Transfer pricing methods

Application of the arm's length principle in a controlled transaction can be achieved using a variety of "transfer pricing methods." Generally, taxpayers are required to use one of the five OECD transfer pricing methods described in Box 2 or the sixth method for some commodities.

Regulations must specify which transfer pricing methods are to be used to avoid unnecessary conflicts with taxpayers and ensure that tax officials are equipped to administer the chosen methods. In Guinea, disputes regarding methodology are already being anticipated by one gold mining company: "Transfer pricing disputes go on for years in countries that clearly stipulate the transfer pricing methods for use, let alone in a place like Guinea where the methods are a mystery." Zambia, Ghana and Tanzania have adopted the five OECD transfer pricing methods in their income tax law, without any prescribed order of priority. These countries also leave open the option for the taxpayer and the revenue authorities to mutually agree on an alternative method if necessary. It is standard practice for taxpayers to choose which of the five transfer pricing methods to use, but this flexibility presents challenges for the case study countries. The TRA has found that taxpayers prefer to use the transactional net margin method (TNMM) ahead of other transfer pricing methods. However, according to the TRA, the TNMM is not in the interest of the Tanzanian government because it fails to produce economically realistic results. (See box 6.) Introducing regulations that clearly specify which transfer pricing methods should be used for certain categories of transactions, and with an order of priority, will make it easier for revenue authorities to review their implementation and reduce the likelihood of taxpayer disputes.

Transfer pricing methods require that in a controlled transaction, revenue authorities identify a comparable price derived from an uncontrolled transaction that is sufficiently similar. To determine whether the controlled and uncontrolled transactions are comparable, the following factors may be considered: features of the traded product, functions performed by the parties to the transaction, contractual terms of the transaction, economic circumstances, and business strategies of the parties. Material differences are identified, quantified and adjusted for determining the transfer price of the transaction in question.

The challenge with sourcing domestic comparable data in many developing countries is that there are often few uncontrolled transactions in the market place that satisfy comparability requirements. This is true for the mining sector in the case study countries, given the limited number of non-affiliated companies from which to obtain data on comparable uncontrolled transactions. The alternative is to use foreign comparable data, available from a range of commercial transfer pricing databases. Despite their limitations, these transfer pricing databases provide a reference point for revenue authorities to work with.

According to one gold mining company in Guinea: "Transfer pricing disputes go on for years in countries that clearly stipulate the transfer pricing methods for use, let alone in a place like Guinea where the methods are a mystery."

Box 6. Tanzania's experience with transfer pricing databases

Of the case study countries, Tanzania is the only one to have access to a transfer pricing database. Ghana is in the process of purchasing a subscription. The TRA uses the database Orbis, produced by Bureau Van Dijk. The TRA has found Orbis to be a useful starting point to review controlled transactions. However, there are some drawbacks:

- The databases are expensive; TRA pays an annual subscription of €45,000.
- Adjustments to foreign data can be information-and-resource intensive.
- There can be systematic differences between Africa and other markets. For example, the
 ITU in Tanzania has found out that companies make a relatively higher net profit margin
 when operating in Africa than in more mature, competitive markets. Using net profit
 margins in OECD countries as comparable data in applying the TNMM would then lead
 the ITU to make inaccurate assessments, underestimating the transfer price of commodity exports.
- It can easily create disputes. According to the former Head of the ITU in Tanzania "any adjustment can be debatable, leading to complaints from taxpayers."

The sixth method has become a popular way for resource-rich developing countries to simplify the application of the arm's length principle to commodity transactions. Typically, the sixth method uses publicly quoted prices including some analysis of the conditions of the actual transaction versus the quoted price, for example grade and quality.

Zambia is the only case study country currently using the sixth method. Guinea, Sierra Leone and Ghana anticipate using a version of this method in the future. In Zambia, Section 97A (13) of the Income Tax Act requires all related party mineral sales to be calculated according to the appropriate reference price. Section 97A (14) explains that reference prices must be drawn from the London Metals Exchange (LME), the Metal Bulletin, or another metal exchange market approved by the commissioner-general. Zambia's version of the sixth method diverges from Argentina in that there are no exceptions. For example, in Argentina taxpayers are not required to use the sixth method where transactions with foreign-related parties are less than 30 percent of their total activity. Such exceptions presumably make the method more business-friendly, but in resource-constrained environments a blanket approach may be more practical. But even in Zambia, implementation of the sixth method has not been easy, as Box 7 illustrates.

The sixth method has become a popular way for resource-rich developing countries to simplify the application of the arm's length principle to commodity transactions.

Box 7. A 10 percent undervaluation results in USD 74.5 million lost revenue

In this case the company was a major copper-cobalt producer in Zambia. The buyer (a related party) agreed to purchase the total output of the plant during the contract duration. The price for the material delivered to the buyer was 10 percent lower than the reference price for copper at the London Metal Exchange. If the metal had been valued according to the LME reference price, as stipulated in Section 97A (13) (14) of the Income Tax Act, the company should have had a taxable profit of USD 235/tonne and paid USD 70.50/tonne in corporate income tax (rate of 30 percent) to the government of Zambia. However, the actual sale resulted in taxable profits of USD 86/tonne, paying the government only USD 25.80/tonne; or USD 44.7 less than the tax owed if the sales had been priced according to the market. On exports of 1.67 million tonnes per year this meant the government lost USD 74.6 million annually (1.67* USD 44.7/tonne).

Source: Lee Corrick, Technical Adviser International Taxation, African Tax Administration Forum

The lesson from this example is that when legislating the sixth method, clear guidance must be given in regulation and other supporting documents as to how reference prices are to be applied i.e. whether quality adjustments are allowed, and if so, to what extent. Given that Tanzania is the only case study country that has independent facilities to test the grade and quality of mineral exports, there is a strong argument for the other countries to disallow any deductions or adjustments in applying the sixth method.

1.4 Advance pricing agreements

Advance pricing agreements (APAs) can simplify administration of the arm's length principle. An APA is an agreement, usually for a fixed period, between a taxpayer and at least one revenue authority, specifying the chosen transfer pricing method that the taxpayer will apply to a particular controlled transaction; the revenue authorities commit to not making any adjustments during that period. The UN and the OECD consider APAs to be a simplified approach to transfer pricing, potentially attractive to revenue authorities with limited transfer pricing expertise. Other advantages include: access to detailed taxpayer information during negotiations, preventing costly audits, and enabling resources to be allocated to more material transfer pricing issues.

APAs can be granted to companies from various sectors, but given the scale of mining operations and the costs of government audits, they should be of particular value for large mining companies. If done well, APAs have the potential to significantly reduce the risk of transfer mispricing and, therefore, the monitoring burden for revenue authorities. Less common is the use of APAs to control the risk of transfer mispricing with respect to cost deductions, for example, agreeing a cap on management service charges. (See final section on Alternative Tax Policy Rules.)

It is revealing that not one of the case study countries has entered into an APA. Zambia and Ghana have explicitly avoided APAs. This reluctance is largely due to concerns about being "outgunned" in negotiations with sophisticated mining taxpayers, a similar issue faced in general audits, although arguably audit capacity can improve gradually while badly negotiated APAs cannot be fixed for many years. With the right technical support these challenges can be mitigated. Supporting the development and negotiation of APAs could be an interesting area for assistance from development partners.

1.5 Inconsistent inclusion of transfer pricing rules in mining legislation and regulation

Even when transfer pricing rules have been thoroughly defined in legislation and accompanying regulations, it can be a challenge to apply them to the mining sector. The mining industry is often subject to different tax treatment from other sectors. The tax treatment can be defined in a mining code, or in a specific section of the income tax law (for example in Ghana, Zambia and Tanzania), and/or in specific contracts. For example, in Sierra Leone, some mining companies are totally exempt from withholding tax on interest payments and/or management fees, set between 10 and 15 percent for other mining taxpayers.

When the law defining the tax obligations of mining companies does not explicitly refer to transfer pricing rules, even when such rules exist in the general tax law, companies can sometimes argue that these rules do not apply to them. Neither Tanzania nor Ghana, the two case study countries with transfer pricing regulations, has referenced these rules in extractive industry laws or resource contracts. Consequently, in Ghana,

If done well, advance pricing agreements have the potential to significantly reduce the risk of transfer mispricing and, therefore, the monitoring burden for revenue authorities.

according to a senior official at the GRA, companies in the oil sector initially claimed exemption from transfer pricing regulations passed in year 2012 based on stabilization provisions in their contracts. Their claim was eventually refuted on the basis of Section 5 of the 1987 Petroleum Income Tax Law that regulates artificial or fictitious transactions. In Guinea the OECD methods are referenced in Article 24 of the Decree on Financial Regulations of the Mining Code, but not in the General Tax Code. Taxpayers could challenge this aspect of the Decree on the basis that it lacks support (by omission) in the tax code.

To ensure that mining companies' transactions can be monitored by revenue authorities, it may be necessary to make an explicit reference to the application of general transfer pricing rules in all legal documents imposing levies on the mining industry, including mining contracts, where applicable.

According to a senior official at the GRA, companies in Ghana's oil sector initially claimed exemption from transfer pricing regulations passed in year 2012 based on stabilization provisions in their contracts.

RECOMMENDATION 1

Put in place detailed rules that enable revenue authorities to determine the tax value of intra-company transactions rigorously and consistently, including by spelling out the procedures by which the system is to be administered.

- Countries that have not yet done so should introduce regulations to support implementation of transfer pricing rules defined in primary legislation.
- Documentation requirements should specify the types of information to be maintained, and how frequently it is to be updated by the taxpayer. (See BEPS Action 13 and UN manual chapter 7.) Regulations should also require taxpayers to submit a transfer pricing return form in conjunction with their annual tax return to improve information management and case selection by the revenue authorities.
- Transfer pricing practice notes should be developed to further explain certain aspects of the regulations, and their application to the mining industry specifically.
- Regulations should specify which of the OECD transfer pricing methods are to be applied under which circumstances, and in what order. There should also be an option to agree an alternative transfer pricing method depending on the situation.
- Revenue authorities without access to commercial transfer pricing databases should purchase subscriptions. This may require financial and technical support from development partners. It is not enough to rely solely on foreign data, and efforts must be made at the country and regional level to improve the range of comparable data relevant to African countries.
- Legislation and regulations should define the use of the sixth method in the case of related party mineral sales. Comprehensive guidance should be provided on which metal exchange markets must be used, and how reference prices are to be applied, and specifically, whether adjustments are allowed.
- The option for APAs should be included in regulations even if not exercised until transfer pricing capability has been sufficiently built. Development partners should provide technical support in the negotiation of APAs.
- To avoid potential ambiguity regarding the application of transfer pricing rules to all
 mining companies, countries should directly cross-reference transfer pricing rules
 from income tax law to all legal documents imposing levies on the mining industry,
 including mining contracts, where applicable.

2. POOR INSTITUTIONAL COORDINATION

All case study countries are faced with the question of how to design the organizational structure to enable administration of transfer pricing rules. A major challenge will be ensuring that tax administrators with direct responsibility for implementation of transfer pricing rules have access to the required knowledge of both transfer pricing assessments and of the mining industries. Table 2 shows the various levels of dedicated and trained transfer pricing specialists in all five countries, and those that have access to mining industry knowledge. It highlights some of the gaps in the institutional capacity required to implement transfer pricing rules. The rest of the section focuses on the particular issue of coordination within tax administrations, and between tax administrations and mining ministries.

Country	Transfer pricing unit	Transfer pricing specialists	Received transfer pricing training*	Training on transfer pricing in mining	Mining revenue inter-agency. coordination mechanism
Ghana	Yes	Yes	Yes	No	No
Tanzania	Yes	Yes	Yes	No	Yes
Zambia	No	Yes	Yes	Yes ⁶	No
Guinea	No	No	No	No	No
Sierra Leone	No	No	No	No	Yes

Table 2. Status of transfer pricing fundamentals in case study countries

2.1 Internal coordination of the revenue authority

Both the U.N. manual and OECD guidelines recommend that countries establish a transfer pricing unit ("unit") within their revenue authority. A unit is a specialized team of auditors charged with the responsibility of implementing transfer pricing rules. In Ghana and Tanzania this unit is located within a Large Taxpayers Office (LTO). The advantages of a centralized unit are that: (i) knowledge can be built up quickly through direct experience in auditing cross-border transactions; and (ii) clear lines of authority and communication are established. The majority of tax officials interviewed for this research shared the view that a unit is a necessary condition for effective implementation of transfer pricing rules. Tanzania and Ghana established separate units in the LTO of their revenue authorities in 2012 and 2014, respectively. Zambia intends to follow suit soon, although it has adopted a more decentralized approach in the short term. Guinea and Sierra Leone are further behind in terms of structural reform, but officials consulted for this research indicated that they intend to establish separate units as soon as possible. The establishment of such units reflects both the recent realization of the scale and complexity of transfer mispricing, and increased international interest in the form of training opportunities, assistance and funding. Transfer pricing units do seem to be a very good investment of public money, as illustrated by anecdotal evidence from Tanzania (Box 8).

Transfer pricing units seem to be a very good investment of public money, as illustrated by evidence from Tanzania.

^{*}This constitutes two or more trainings.

⁶ Under the OECD Tax and Development program a mining expert from the London School of Mines provided training on the copper industry value-chain to the ZRA.

Box 8. Tanzania's International Tax Unit: a cost-benefit analysis

The International Tax Unit (ITU) was established in Tanzania in 2012, and includes ten full-time staff members, five of whom work exclusively on transfer pricing; including two economists, two accountants and one tax specialist.

The ITU's budget ranges between 250 million and 300 million Tanzanian shillings (TZS) (around USD 130,000) per year; to cover staff costs as well as an annual subscription to Bureau Van Dijk's transfer pricing database, Orbis. Since 2012, the ITU has generated approximately TZS 242 billion (approximately USD 110 million) in tax adjustments, representing a return of more than 800 percent.

In deciding whether to establish a transfer pricing unit, it is important to consider other indirect costs, particularly the opportunity costs of employing scarce human resource capacity. Transfer pricing practices are complex, and they generally require skilled and experienced auditors. In a low capacity environment, establishing a unit can deprive other departments of revenue authorities of valuable staff. In Ghana, all 17 members of the unit were recruited from within the Domestic Tax Department (DTD) of the GRA. According to a former international advisor to the GRA, many of the staff in the transfer pricing unit are only working part-time and continue to manage audit responsibilities elsewhere in the DTD, suggesting the recruitment was too much of a drain on the DTD capacity. Even where a less centralized approach is adopted, such as in Zambia, there is a risk that diverting general auditors to work on transfer pricing issues may hinder other revenue raising activities. According to the head of the LTO at the ZRA, now that auditors in both the mining and nonmining audit teams have transfer pricing responsibilities, the LTO needs to increase manpower to avoid a drop in revenue; transfer pricing cases take a long time, at the cost of other potential audits that generate tax revenue. It is important that revenue authorities consider whether the risk of transfer mispricing by MNEs is sufficient to justify the resources, both human and financial, to establish a separate unit.

Another challenge that a standalone transfer pricing unit might face is internal coordination with the rest of the LTO. Coordination underpins the referral of transfer pricing cases from general auditors to transfer pricing specialists, as well as the availability of information and technical expertise to enable transfer pricing specialists to interpret and evaluate transfer pricing risks in specific sectors. Ghana and Tanzania are both experiencing internal coordination challenges regarding their units. In Ghana, there is no relationship between the transfer pricing unit and the mining desk at the LTO. According to the desk, the unit works independently with very limited collaboration with other divisions. While cooperation between Tanzania's ITU and the rest of the LTO has improved since its creation, there is still reluctance from the extractives audit team to refer transfer pricing issues. One explanation is that the extractives audit team feels equipped to deal with transfer pricing issues on which its auditors have been trained. Another is that the extractives team prefers to address transfer pricing issues independently so as to maintain complete oversight of extractive industry taxpayers.

To overcome some of the initial internal coordination challenges associated with setting up a separate unit, countries may wish to consider the approach taken by Zambia (Box 9).

Revenue authorities should consider whether the risk of transfer mispricing by MNEs is sufficient to justify the resources, both human and financial, to establish a separate unit.

Box 9. The Zambian approach

In 2012, the ZRA selected individuals within the mining and non-mining audit teams, and gave them specialized training and the power to investigate transfer pricing issues that arise during the course of general audits. This approach was less threatening to the rest of the LTO than the establishment of a separate unit, and overcame the problem of auditors having to refer transfer pricing issues to a separate team, as in Tanzania and Ghana. The gradual introduction of the concept of transfer pricing as a dedicated problem in tax audits gives specialists time to build credibility. If the government ultimately decides to set up a separate unit, the rest of the LTO should then be more willing to cooperate with the transfer pricing specialists. It also enables transfer pricing specialists to tailor their knowledge to specific sectors and taxpayers. Two of the specialists are embedded in the mining audit team, combining transfer pricing expertise with knowledge and experience of the mining sector to improve transfer pricing risk identification and evaluation.

In Zambia two transfer pricing specialists are embedded in the mining audit team, combining transfer pricing expertise with knowledge and experience of the mining sector to improve transfer pricing risk identification and evaluation.

2.2 Inter-agency coordination across government

Inter-agency coordination can be another challenge for transfer pricing assessment in the mining sector. In Tanzania, institutions that have some role in auditing mining companies include the TRA, the Tanzania Minerals Audit Agency (TMAA), the Ministry of Finance, and the Ministry of Mines. The National Development Corporation may also play a role with respect to transfer pricing assessments for the Liganga iron ore and steel project. The Office of the Auditor General can also become involved in transfer pricing assessments. In a series of recommendations on the mining sector fiscal regime, the IMF has expressed concern that rather than the TMAA limiting its role to verifying technical compliance and cost assessments of mining companies, it also comments on tax issues, potentially duplicating the role of the TRA.

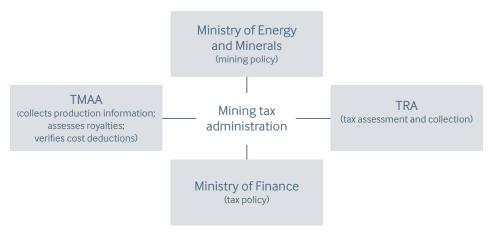


Figure 3. Mining tax administration in Tanzania

Having numerous institutions involved in mining industry audits creates checks and balances and allows each institution to specialize in a specific category of audits. However, these institutions may develop a "silo mentality," which can prevent them cooperating with each other and prevent development of a strong understanding of the economics of mining projects at various stages.

Box 10. Conflicting copper production figures lead to allegations of missing copper

Major coordination challenges in the mining sector in Zambia have led to conflicting accounts of copper production and export volumes from the Central Statistical Office, the Bank of Zambia and the Ministry of Mines. In 2010, the Central Statistical Office reported 767,008 tonnes of copper produced, while the Bank of Zambia reported 852,566 tonnes, a difference of 85,000 tonnes; in 2012 the reported discrepancy was 103,000 tonnes (Das and Rose 2014, 24). In both instances, the discrepancy was explained by the double counting of the intermediate production as both intermediate and finished product. However, the ZRA has had to navigate three different answers on production and export volumes as it seeks to assess tax and non-tax revenues.

None of the case study countries had a system for automatically sharing information between mining industry regulators and the revenue authorities. This problem has been particularly acute among agencies regulating the petroleum sector. Poor information sharing has had huge consequences in Ghana. According to civil society representative Steve Manteaw, the failure of the Petroleum Commission to alert the GRA to the transfer of shares in Jubilee Fields, plus inconsistencies in the petroleum legal framework, caused the government to forgo approximately USD 67 million in capital gains tax. Since then, the Petroleum Commission has informed the GRA when there is a transfer of shares.

None of the case study countries had a system for automatically sharing information between mining industry regulators and the revenue authorities.

Revenue authorities could improve their analysis of risks through sharing production data, findings from cost audits, mining agreements, and information on beneficial owners as a matter of course rather than just before a tax audit. Zambia is in the process of finalizing an online platform to improve information coordination between agencies. Sierra Leone has an online repository for mining that includes information on licenses, non-tax payments, and some tax payments up to 2013. Anyone inside or outside of government can access the repository once they register. The drawbacks are that production data is not included, information on tax payments has been patchy, and only staff at the National Minerals Agency and its partner the Revenue Development Foundation are able to upload data.

Inter-agency cooperation is also an important way to provide the revenue authorities with technical expertise and understanding of the mining industry. In all case study countries, especially in Guinea and Sierra Leone, revenue authorities have limited in-house expertise on mining. In Zambia, the ZRA is responding to the challenge by hiring metallurgists and mining engineers, but it risks replicating existing capacity and wasting precious human resources. To increase technical understanding of the mining industry of the tax administration, it is more efficient to pursue improved inter-agency coordination. By working with industry regulators and relevant government ministries, revenue authorities can draw on their technical expertise and practical experience to effectively identify and evaluate transfer pricing risks in the mining sector.

⁷ The EITI defines a beneficial owner in respect of a company as: the natural person(s) who directly or indirectly ultimately owns or controls the corporate entity.

According to a senior government official in Guinea:

"No verification of a mining company should take place without people from the mining sector. Tax inspectors come in and apply the law as it is and when an adjustment is proposed, companies will dispute the claim based on a range of industry specific considerations that the revenue authority was probably not aware of at the outset given their lack of experience of the sector."

The exchange of information and expertise between government institutions is often hindered in case study countries by the lack of effective overarching coordination mechanisms for resource revenue collection. In Guinea, coordination between the Ministry of Mines and the Ministry of Finance is *ad-hoc*, on a case-by-case basis, without a more sustainable approach to identifying tax avoidance risks. Ghana's Mineral Commission hosts an inter-agency group called the Mineral Revenue Taskforce, though it is not adequately resourced and has not met since 2014. Tanzania's TRA hosts an inter-agency Revenue Forecasting and Modeling Team on Mining, Oil and Gas, though it has a narrow focus, and limited participation from the various sector agencies. Guinea and Zambia have no such mechanisms. At the technical level, Sierra Leone is forging a new approach to coordination that other countries may find instructive (Box 11).

Box 11. Sierra Leone's Extractive Industries Revenue Taskforce out in front

Coordination of mining sector policy at the technical level has improved considerably following the establishment of the Extractive Industries Revenue Taskforce (EIRT). The EIRT is hosted by the Tax Revenue Policy at the Ministry of Finance and Economic Development and includes the Ministry of Finance, National Revenue Authority, National Minerals Agency, Petroleum Directorate and the Extractive Industries Transparency Initiative (EITI) secretariat. The EIRT began informally to troubleshoot various issues relating to EITI reconciliation reports. Members of the group found it to be so useful in terms of sharing information and solving problems that they decided to formalize it and extend its mandate beyond EITI challenges. One particular achievement of the EIRT was to reduce the export duty on gold to levels more comparable to the other Mano River Union (MRU) countries (Guinea, Liberia, Ivory Coast), which is seen to be the main factor in recent decreases in smuggling and increases in official gold exports.

In Sierra Leone, coordination of mining sector policy at the technical level has improved considerably following the establishment of the Extractive Industries Revenue Taskforce.

RECOMMENDATION 2

Establish administrative structures that promote a concentration of well-trained, highly-skilled officials that are sufficiently empowered to implement transfer pricing rules effectively.

- Start by identifying a small number of existing auditors to be trained to respond to
 potential transfer pricing issues in the context of general audits (i.e., the Zambian
 approach). If specialized transfer pricing audits become necessary, a separate unit,
 or a more formal network of transfer pricing specialists may be required.
- Systems should be established to ensure referral of transfer pricing issues to the specialists, and to share information and expertise between transfer pricing specialists and other LTO staff.

RECOMMENDATION 3

Improve inter-agency coordination on mining revenue collection by clarifying division of audit responsibilities, encouraging joint audits, and establishing overarching coordination mechanisms.

- Clarify which government institution is responsible for collecting which specific information at specified intervals on the various aspects of mining activities.
- Establish an inter-governmental mechanism between these institutions to automatically share all information related to companies operating in the mining sector.
- Appoint a technical coordination group to oversee implementation of the information sharing agreement and support the administration of transfer pricing rules in relation to the mining sector.

3. CAPACITY GAPS

3.1 Transfer pricing expertise

According to the U.N. Transfer Pricing Manual, a transfer pricing unit should be composed or have access to: project and team managers, lawyers, economists, accountants, auditors, database experts, business process experts and communication/public relations experts. While these skill sets may be necessary for effective implementation of transfer pricing rules, none of the case study countries can claim to have all of them in their LTOs, let alone their transfer pricing units. Tanzania's ITU is the best staffed, with economists, auditors and lawyers. They are also developing expertise in the use of transfer pricing databases.

None of the case study countries have all of the required transfer pricing skills sets in their LTOs, let alone their transfer pricing units.

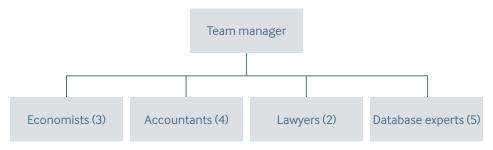


Figure 4: Composition of the ITU, Tanzania

Like the ITU in Tanzania, the GRA also has the most important skillsets in place (i.e., lawyers, economists, and accountants, all with transfer pricing training). In Zambia, the ZRA is limited to four auditors with specific transfer pricing expertise. In all the case study countries revenue authorities have limited access to experts on international tax. In Guinea all international tax matters have to be referred to the chief of fiscal control and the assistant to the head of the LTO, the only officials who have some knowledge of these issues. The literature on transfer pricing suggests that retaining qualified staff may be a challenge. So far this has not been a major issue for Tanzania, Zambia, or Ghana. In Ghana the challenge has been losing transfer pricing staff to competing demands in the DTD. This is a bottleneck that can be addressed by hiring more staff with the appropriate expertise.

The main providers of capacity development support on transfer pricing in the case study countries have been the OECD, IMF and the Norwegian Tax Administration (NTA). The level and extent of training has been variable, and there has been limited follow up. The revenue authorities in Sierra Leone and Guinea have each received one-off trainings facilitated by the United Nations Development Programme (UNDP) and the IMF, respectively. Ghana has received support primarily from the OECD in the drafting of its transfer pricing regulations, and is expecting a technical assistant from the Tax Inspectors Without Borders program. Zambia has received training from the OECD, representatives visiting a few times a year to provide top-up training and practical support, as well as the International Bureau of Fiscal Documentation. Tanzania has had ongoing support from the US government, and the HM Revenue & Customs (UK) has recently committed to supporting capacity building on exchange of information.

Training has primarily been focused on the general principles of transfer pricing, whereas dedicated technical assistance on the application of transfer pricing rules to the mining industry has been more limited. Some tax administration officials working on transfer pricing in Ghana, Zambia and Tanzania have benefited from capacity building on mineral taxation, but not on transfer pricing issues specific to the mining sector. Tax officials in Guinea and Sierra Leone have received very little formal training on mineral taxation and transfer pricing issues. Formal training is not a panacea. An IMF official observed that despite numerous training events in case study countries, transfer pricing specialists appeared reluctant to deal with anything other than low hanging fruit (management fees and interest deductions in particular).

Both Tanzania and Zambia have benefited greatly from having embedded transfer pricing experts from the US and Norwegian governments, respectively. Since 2013 the ITU in Tanzania has had the same US Treasury official come to work with them three to four times a year. The former head of the ITU credits this practical, embedded support with the increase in the number of transfer pricing audits undertaken and completed since the regulations were introduced in 2014.

According to a tax official at the ITU in Tanzania:

"The most useful assistance is in the form of experienced transfer pricing specialists who have done it themselves, confronted problems, and developed pragmatic approaches."

In all case study countries, evidence shows that having international tax experts working alongside transfer pricing auditors has had the most impact, particularly in terms of building confidence. In Zambia, Norwegian experts have challenged transfer pricing officials to be more assertive when requesting information from taxpayers. This type of hands-on assistance is a vital part of preparing transfer pricing specialists to tackle complex transfer pricing cases. According to officials in Zambia and Tanzania, secondments to transfer pricing units in Kenya and South Africa have been very useful in building experience and confidence.

According to a tax official at the ITU in Tanzania, "The most useful assistance is in the form of experienced transfer pricing specialists who have done it themselves, confronted problems, and developed pragmatic approaches."

3.2 Knowledge and understanding of the mining industry

While transfer pricing risks are not unique to the mining industry, tax officials do require some experience of the sector to determine whether a transaction between related parties has been manipulated. In Zambia, for example, to determine whether the sale of copper concentrate to a smelter conforms to the arm's length principle and decide whether a case is worthy of a transfer pricing audit, the revenue authorities must have knowledge of the particular characteristics of that concentrate and the exact terms of the sales agreement, in addition to general knowledge of the sector, international mineral markets, production and processing methods.

According to a senior official at the GRA:

"We (tax officials) are not trained in engineering or other relevant disciplines that would enable us to determine whether the components used in the drilling rigs built in Ghana are the same as those used in rigs built in Nigeria, or whether the lifespan of the components are the same, and in the end they are all lumped together and called a drilling rig."

Politicians and officials in case study countries agree that establishing a designated team of auditors to focus exclusively on mining industry taxpayers is a critical step toward improving revenue collection in the sector. The ZRA has established a separate mining audit team comprised of 17 tax auditors, up from only three in 2008. Tanzania and Ghana have extractive industries audit teams with 26 and 17 staff, respectively. Sierra Leone has just set up an Extractive Industries Revenue Unit (EIRU) with four staff, and Guinea has a small mining division within the Fiscal Control Team.

While staffing of the units responsible for transfer pricing control in the case study countries has increased, industry expertise has not, and very few staff have had real industry exposure. In Sierra Leone, the EIRU is made up of two economists and two accountants. None of them have been trained in specialized audits, nor do they have prior experience of the mining sector. Of the case study countries, Zambia is the only one to have dedicated sector experts in-house at the ZRA to assist in the assessment of royalties, though as discussed in Section 2 these individual's profiles (metallurgists) create a risk of duplicating the functions of the Ministry of Mines. The kind of industry exposure that would be most relevant to revenue authorities might include specialized audit training, mine site visits, and secondments to more technically advanced revenue authorities in other resource-rich countries (e.g., South Africa, Chile, Brazil).

According to the head of the extractive industries audit team in Tanzania:

"The most useful trainings have been those that have focused on building an understanding of the industry. We know our tax law, and we know how to apply it, the issue is understanding what is normal industry practice and what is abusive."

The lack of sector-specific expertise is particularly problematic for risk assessment; an essential component of successful transfer pricing audits. To determine whether there is a risk of transfer mispricing, revenue authorities will refer to a range of transfer pricing risk indicators, including profitability, transactions with low tax jurisdictions, persistent losses, and particular types of transactions such as management service charges and interest payments. Based on an assessment of these indicators, a decision will be made as to whether an audit is warranted.

According to the head of the extractive industries audit team in Tanzania: "We know our tax law, and we know how to apply it, the issue is understanding what is normal industry practice and what is abusive."

Risk assessment is particularly important for developing countries given their limited audit resources. Revenue authorities must be strategic about the types of companies and transactions they select for assessment and audit, choosing only the most material cases and encouraging self-compliance. For developing countries reliant on mining revenues, the emphasis should presumably be on cases involving mining taxpayers. However, in most cases, revenue authorities are still acquiring the sector-specific expertise and ability to detect and mitigate transfer mispricing, and while the risk indicators highlighted above are not specific to mining, interpreting and evaluating these risks is.

In Ghana, the GRA has a policy of rotating tax auditors around the LTO every two years. This policy may be designed to protect against industry capture. However, it also prevents auditors from developing sector expertise that would make them more effective at collecting tax. The head of the Mining Desk often deals with inexperienced auditors who wrongly assume withholding tax should be paid on mining royalties, and fail to appreciate the use of various mining equipment and how much it should reasonably cost. Mining companies echoed this concern saying that too much time was lost explaining basic things to GRA officials, who, because of their lack of industry expertise, think they are being deceived. Therefore, to determine whether a risk area has been manipulated, revenue authorities require information that will enable them to distinguish between abusive, versus standard industry practice, coupled with the capability to apply that information effectively.

Ideally, the distinction between standard and abusive practice in setting the price of a controlled transaction would be made following a preliminary review of comparable data for similar transactions. However, very often contextually relevant comparable data for African countries is not yet available. (See Section 1.) An alternative is to use "standard industry rates" as a basis for assessing high-risk controlled transactions. For example, the Tanzania Petroleum Development Corporation (TPDC) has sought to adjust the fee paid by an oil company to rent drilling rigs from its subsidiary, by reference to the fee paid by a non-related exploration company for hire of the same rig; this is not a rigorous comparison according to OECD guidelines. The IMF handbook recommends using standard industry rates whenever feasible to identify certain transactions that appear to differ from the norm and that should be subject to further investigation, while also acknowledging that identifying standard industry rates may be challenging; like-for-like comparisons may be complicated by the location and specific geological characteristics of different mining projects, or by the different company policies regarding safety and environmental protection.

Figure 5 is an example of the type of practical guidance required by tax officials with limited knowledge of the mining industry. It presents a simple approach to assessing the risk of transfer mispricing in the area of service charges paid to offshore marketing hubs that are related parties. While this is not a sufficient basis upon which to conclude whether transfer mispricing has occurred, it should help tax officials to identify high-risk cases where an audit may be warranted, enabling more effective allocation of limited audit resources.

2% Marketing fee

- Advise on market conditions and assist in identifying customers
- Mostly service long term sales contracts
- Mine remains responsible for decision-making

4% Marketing fee

- negotiate contracts
- Service long term contracts and engage in spot selling
- Do not take legal title of goods.

6% Marketing fee

- Engage customers and Innovative marketing systems and strategies
 - Engaged in real value creation/risk exposure activities
 - Takes physical and/or legal possession of the product

Any case involving a margin above 6 percent should be subject to audit.

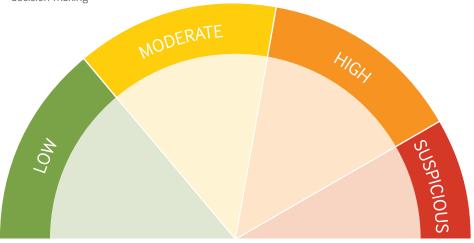


Figure 5. Assessing the transfer price of related party marketing services

Marketing service charges

Many mining subsidiaries use a related marketing hub to sell commodities to end customers. Compensation tends to be based on a percentage of the price at which the ore is sold to a third party. A larger marketing fee is warranted when there is more real exposure to risk.

The OECD's work on mineral product pricing provides a useful checklist to help tax officials as they begin to profile the various mining companies. Strengthening company reporting obligations regarding cost information is critical to monitoring internal company trends, and establishing standard industry rates. In Zambia, mining companies are required to submit a production report to the Ministry of Mines on a monthly basis. This form does not request any information on costs, despite having been recently revised as part of the Mineral Production Monitoring Support Project. By contrast, the TMAA conducts regular cost audits of all large-scale mining companies, publishing key findings in its annual report which is available on the TMAA website. The TMAA's consistent approach to reviewing cost deductions could be replicated in the other case study countries.

Strengthening company reporting obligations regarding cost information is critical to monitoring internal company trends, and establishing standard industry rates.

RECOMMENDATION 5

Equip revenue authorities with transfer pricing expertise and technical sector knowledge to identify and evaluate transfer pricing risks in the mining sector.

- Transfer pricing training should be delivered in conjunction with embedded technical assistance from outside experts so that transfer pricing specialists can deepen their knowledge and gain confidence by working on practical cases alongside experienced tax auditors.
- International partners should facilitate secondments for transfer pricing specialists to other revenue authorities with experience in applying transfer pricing rules to the mining sector.
- Basic transfer pricing training should be provided to all tax auditors in the LTO, so that they can identify transfer pricing issues during general audits and alert the specialists.
- Prioritize the following transfer pricing skillsets: economists, lawyers, accountants and industry experts. Other skill sets may be added later. How these competencies are organized within the revenue authority will depend on the outcome of the previous discussion in Section 2.
- Revenue authorities should consider developing a transfer pricing risk assessment framework specific to the mining industry. This framework would use standard industry rates to guide assessment of particularly high-risk controlled transactions.

4. DIFFICULTIES ACCESSING TAXPAYER INFORMATION

To identify and evaluate transfer pricing risks, revenue authorities require information from local taxpayers, as well as from other tax jurisdictions where related parties are registered. Accessing information both domestically and from foreign jurisdictions can be challenging. Domestic information collection depends on detailed regulations and rigorous enforcement, while international mechanisms for information sharing are only just beginning to emerge.

4.1 Information from mining companies

As noted in Section 1, in Sierra Leone, Guinea and Zambia the absence of transfer pricing documentation rules limits access to information on controlled transactions, and in particular, how the arm's length principle has been applied. Ideally, this information should be maintained contemporaneously, and submitted annually, or on request by the revenue authority. Even where documentation rules are in place, such as in Ghana and Tanzania, companies do not always comply. According to the Transfer Pricing Unit in Ghana, taxpayers often drag their feet, saying that they require approval from headquarters, or give incomplete information that delays the process. In some cases, subcontractors and mining companies may generate documentation for the purpose of the revenue authority, hiding the commercial reality of their arrangements in other documentation, and often in other jurisdictions.

In some cases, subcontractors and mining companies may generate documentation for the purpose of the revenue authority, hiding the commercial reality of their arrangements in other documentation, and often in other jurisdictions.

Where mining companies do submit requested taxpayer information, there may be significant gaps and discrepancies. According to a 2008 publication from a coalition of Tanzanian religious organizations (Curtis and Lissu 2008, 24), the audit report by Alex Stewart Assayers (ASA) on a gold mining company stated that there were 6762 missing documents. This prevented ASA from confirming whether royalties valued at USD 25 million had actually been paid to the TRA.

According to one TRA official: "It seems as if returns are not filled in by knowledgeable people, and that record keeping is unreliable."

The lack of timely and complete information from taxpayers may leave revenue authorities with weak bases on which to question the tax declarations of mining companies. As a result, any tax adjustment is likely to be contested by the taxpayer, often ending up in court. This is costly for governments in terms of deferred tax and the time and resources allocated to legal disputes.

The information deficit could be improved if revenue authorities took a more strategic approach to data collection and use. Deductible expenditure is an area where revenue authorities in the case study countries often fail to request supporting documentation from taxpayers. According to an advisor to the TRA, one mining company was once allowed a deduction for a charge of USD 500,000 for construction of a building without presenting a receipt, simply on the basis that the building existed. In some cases, special tax treatment for mining companies such as exemptions from custom duties reduce the incentive for tax and custom officials to be diligent on taxpayer import declarations. In other cases, challenges in accessing comparable data and political interference with respect to particular taxpayers leave tax officials illequipped to evaluate complex capital expenditures.

Special tax treatment for mining companies such as exemptions from custom duties reduce the incentive for tax and custom officials to be diligent on taxpayer import declarations.

Box 12. Sierra Leone fails to request mining offtake agreements

Sierra Leone is yet to introduce transfer pricing documentation requirements but Section 153 of the Mines and Minerals Act of 2009 requires large-scale mining license holders to provide the National Revenue Authority (NRA) with copies of all sales, management, commercial and other financial agreements in excess of USD 50,000 concluded with any other entity, including affiliates. The NRA has, however, been reluctant to enforce this provision despite its relevance to allegations of significant price discounts granted to a Chinese affiliate by an iron ore company, previously operating in Sierra Leone. Had the NRA enforced Section 153 they might have been in a better position to evaluate whether transfer mispricing was taking place, and to make appropriate adjustments.

Audits could also be more efficient if tax officials better specified the particular information required from taxpayers at the outset. According to an advisor to the TRA, one of the biggest tax adjustments in the Tanzanian mining sector was self-imposed by a company after the TRA had simply asked for information. Good practice suggests that before starting an audit, tax officials should document what they know about a particular company, what the transfer pricing risks are, and meet with other relevant government agencies to collect and cross check information, before requesting specific information from the taxpayer. In practice, revenue authorities often get swamped with boxes of redundant information and start building a position based on what they were provided with, when the most critical information may not have been provided at all. According to a former international advisor to the TRA, in the case of one audit the TRA was given twenty boxes full of documents. The parameters of the subsequent audit were set by the information provided by the company, rather than by the TRA. Audit preparation and clear documentation rules are key to improving access to relevant information from taxpayers.

4.2 Information from other tax jurisdictions

To understand the determination of transfer prices between between related entities within a multinational mining group of a multinational mining company and identify potential mispricing, revenue authorities need information from foreign jurisdictions where the subsidiaries are located. Information that is likely to be particularly relevant to transfer pricing cases might include tax paid to different governments, income and expenses of each subsidiary, directors and shareholders of companies, business records and invoices.

A number of mechanisms have been developed over the past decade to allow different jurisdictions to share taxpayer information: double taxation agreements (DTAs), tax information exchange agreements (TIEAs) and the the OECD Convention on Mutual Administrative Assistance in Tax Matters. So far, none of the case study countries have been successful in obtaining responsive information from other jurisdictions. Zambia has experienced delays in response to requests sent to several countries with which it has signed TIEAs. According to a ZRA official, "If you ask once and don't get a result, you don't ask twice." To overcome this challenge Ghana and Tanzania have both joined the OECD convention so that they can participate in the automatic exchange of information (AEOI) between competent authorities of the parties to the convention. This is a relatively new development for both countries that has yet to show results.

So far, none of the case study countries have been successful in obtaining responsive information from other tax jurisdictions.

⁸ The OECD convention requires the competent authorities to agree on the scope of the automatic exchange of information and the procedure to be complied with. So while the agreement is multilateral, the actual exchanges are bilateral, meaning that requests for automatic exchange of information by certain countries may still be refused.

Box 13. Country-by-country reporting

One of the most significant developments of the BEPS process is country-by-country reporting (CbCR). CbCR requires large multinationals to breakdown key elements of their financial statements based on jurisdiction, thereby providing revenue authorities with a disaggregated view of business activities, in particular: revenue, income, tax paid and tax accrued. To implement CbCR the OECD recommends that revenue authorities adopt a two-tiered approach to transfer pricing documentation, requiring taxpayers to: (1) maintain a master file that contains standardized information relevant for all MNE group members; and (2) a local file that refers specifically to material transactions taking place in the local tax jurisdiction. This should provide a fuller picture of company operations, enabling revenue authorities to more accurately assess the risk of transfer mispricing and tax avoidance generally.

The threshold for taxpayers required to comply with CbCR is €750 million per year. The BEPS Monitoring Group has expressed concern that this threshold is too high, and that very few developing countries are home to firms that have a consolidated income of €750 million, meaning they will not have direct access to the reports; instead they will have to request them from G20 and OECD countries. Although the framework is multilateral in name, it still requires a bilateral agreement before the AEOI can start. This is a serious impediment to information for the purpose of transfer pricing audits in the mining sector in the case study countries.

Repeated concerns about the capacity of developing countries to keep taxpayer information confidential are likely to mean that many developed countries choose not to share data (G20 Development Working Group 2014, 4). Case studies show that information management could be improved. In Ghana, a mining company representative revealed that they had submitted their annual transfer pricing return two years in a row and been told on both occasions that the returns were not received despite the representative's proof of receipt by the GRA. Poor information management undermines the effectiveness of transfer pricing documentation requirements, and legitimizes developed country concerns about standards on confidentiality.

While many developed countries have been reluctant to share information, there are promising examples of cooperation between revenue authorities in Africa beginning to emerge. The South African Revenue Service has worked closely with the ZRA in Zambia on a number of occasions to pursue cross-border taxpayers; the ZRA providing logistical support whilst receiving on the job training. In one recent audit the ZRA made use of Tanzania's mineral laboratory to review the reported quality and grade of a company's mineral exports. Countries are working together, sharing technical expertise and facilities, particularly in cases where they have common investors. The African Tax Administration Forum (ATAF) has become an important medium for strengthening this emerging cooperation and provides a platform to communicate domestic and regional concerns to international fora.

Promising examples of cooperation between revenue authorities in Africa are beginning to emerge.

4.3 Independent information to verify company reports on quality and quantity of exports

Under-invoicing of controlled sales may reduce the seller company's total profits substantially. Consequently, all case study countries find it necessary to monitor deductions, discounts, and commissions that may affect the sale price recorded for the purpose of calculating profits. Governments have particularly struggled to verify deductions for quality adjustments.

Box 14. Guinea's bauxite industry at risk of under-invoicing

Bauxite is the major mineral product of Guinea. For all three bauxite operations in Guinea the price or a price formula has been fixed in advance between related parties. Consequently, the government is concerned that they do not know the real price of the bauxite being sold. This concern grew recently in relation to the largest bauxite operator, Compagnie des bauxites de Guinée (CBG). According to an agreement with CBG, the government of Guinea is entitled to 300 tonnes per year of bauxite to sell independently. At the last auction in May 2015, the government received USD 4 more per tonne than the price received by CBG for sales to the related buyer. The company purchasing the bauxite from the government was a Netherlands-based company that has a 10 percent stake in CBG and is part of the existing purchasing group currently paying USD 4 less per tonne. While a 10 percent difference between spot prices and long-term contractual prices may be reasonable, the government has yet to find a way of determining this, and, given that HALCO, the majority shareholder, is purchasing virtually all of CBG's bauxite, there is a case to be made for improved monitoring of bauxite sales.

Independent verification of company reporting on export quantity and quality is a major challenge for case study countries. Only Tanzania has the facilities to test the quality of mineral exports. Mining companies generally contract third parties to do the quality assessment and customers do their own assessment upon receipt. If the customers are related parties, there is a risk that the quality may be underreported. Guinea, Sierra Leone and Zambia have a further challenge in that they are unable to confidently track production volumes, leading to concerns about whether export quantities are also being under-reported. For example, in Zambia and Guinea, government officials are still not permanently stationed at mine sites or checkpoints to verify production and export volumes, as well as mineral grade. By comparison, in Ghana both the GRA and the Minerals Commission have mines monitors and inspectors seconded to all mining companies to gather information on volumes, grade and to certify mineral exports.

Box 15. Destination of Zambia's copper exports

According to a 2008 Christian Aid report, Zambia's official trade statistics indicated that half of its copper exports were sent to Switzerland, but Swiss import data did not match (Christian Aid 2010, 23). This could be an invoice routing arrangement; the copper is contractually sold to a Switzerland-based company, but is physically exported elsewhere. The problem here is two-fold: (1) the final destination of Zambia's copper is currently unknown to the authorities, exposing weaknesses in the government monitoring system that may permit abusive transfer pricing; and (2) insufficient exchange of information prevents the ZRA from understanding the activities of the Swiss companies buying the copper (i.e. whether they are an actual marketing hub or just shell companies), and assessing if the sale price and any potential discounts follow the arm's length principle.

There are solutions to improving monitoring of production volumes and exports. In Ghana, government officials are stationed at production sites to record the volume of minerals produced daily. Frequent circulation of government officials could mitigate the risk of regulatory capture by the private sector that arise with such proximity. In addition, an adequate accounting system can ensure that the volume recorded at the production site is not changed before the product leaves the country. This may involve physical checkpoints and weighing facilities to verify export quantities. Lessons can be drawn from the minerals tracking and certification initiative launched by the International Conference on the Great Lakes Region in 2010 in response to

the problem of conflict minerals. The initiative tracks mineral flows from mine site to export in order to prevent illegal transfer between countries. A regional database is used to store all mineral data, which enables reconciliation of production, trade and export statistics.

Verifying the quality of mineral exports is more challenging: it requires a laboratory with sufficient technical and financial capacity. Best practice recommends building government capacity in analyzing samples of mining company exports, to provide some monitoring of the quality of minerals exported, while leaving companies free to rely on their own quality controls outside of the country. Some private firms have tried to sell their services to governments in Africa, including Tanzania and Ghana, but these services have proven to be extremely expensive (in Ghana a firm wanted a 10 percent commission on total royalties), to undermine relations with the industry, and to be procured in suspicious circumstances. 9

RECOMMENDATION 6

Take proactive steps to narrow the information gap and obtain more regular and precise information from mining companies.

- Tax administrations should strengthen audit preparation to make information requests to taxpayers more precise and explicit, and enforce reporting and disclosure obligations.
- Mining ministries and agencies should enhance their capacity to gather
 independent information on the quantity and quality of mineral exports by
 setting up mineral testing facilities, seconding government officials to mine sites,
 and establishing physical checkpoints and weighing facilities.
- International development partners should lobby the OECD to lower the financial threshold requirement for country-by-country reporting, and make the automatic exchange of information standard more inclusive by providing the financial and technical support to enable developing countries to comply.

5. POLITICAL INTERFERENCE AND EXTERNAL OVERSIGHT

As the five case studies show, politicians are increasingly aware of the problem of tax avoidance in the mining sector, and are eager to improve revenue collection to finance public expenditures. At the launch of the 2012/13 EITI Report in Ghana, the minister of finance said: "Transfer pricing in the extractive sector is one major challenge our revenue institutions must overcome because of its negative effect on revenue collections."

In 2013, the president of Guinea made a strong call for G8 countries to help developing countries tackle tax avoidance (Conde 2013). The recent introduction of transfer pricing regulations, thin capitalization rules, and ring fencing provisions in many of the case study countries suggests a practical commitment to stop mining revenue leakage.

⁹ In Tanzania, two former ministers were charged with impropriety over the award of a mineral audit tender to Alex Stewart Assayers in 2002: http://mg.co.za/article/2008-11-26-tanzania-charges-exministers-over-deal. There have been similar allegations regarding ASA in Guinea and Gabon: http://www.reuters.com/article/gabon-china-idUSL5N0E93DB20130605.

However, despite growing commitment to fighting tax avoidance, the political leadership may not always act consistently. In many of the case study countries, taxation of mining companies is frequently politicized. The public often perceives mining and petroleum companies to be holding them to ransom, with the help of corrupt politicians. Perhaps the most notable example of mining-related corruption scandals was the indictment of President Frederick Chiluba of Zambia, who was accused, although ultimately acquitted, of stealing USD 57 million of public money during the privatization of the mining sector in the late 1990s. Such scandals have made civil society and parliamentarians understandably skeptical about the political leadership's willingness to actually enforce company compliance with transfer pricing rules. In such an environment, oversight actors have a role to play to keep the pressure on both government and companies to enforce the rules. However, they often lack the expertise necessary to function as an effective check on government's implementation of transfer pricing rules.

Box 16. Cost of gas plant inflated by USD 40 million

In 2012, the Civil Society Platform on Oil and Gas in Ghana raised concerns that China's Sinopec International Petroleum Services Corporation (SIPSC) was engaging in transfer mispricing in relation to the construction of the billion-dollar Jubilee Field gas processing plant at Atuabo. According to Steve Manteaw, chairman of the platform, SIPSC had inflated the cost of the processing plant purchased from its special purpose subsidiary, SAF Petroleum Investments based in Dubai, by approximately USD 40 million, in comparison to competing bids. These concerns were raised with President John Mahama in the run-up to the 2012 election campaign but never led to further investigation, according to Manteaw. The platform could not access further information from Ghana Gas and determined that neither the GRA head office, nor the relevant regional office, had a tax file on SIPSC.

5.1 Political interference on transfer pricing enforcement

In all case study countries there are examples of systematic political interference in the mining sector, which continues to limit effective implementation of transfer pricing rules and other anti avoidance measures. In some cases, political interference may prevent systematic tax audits of mining companies. In Sierra Leone, the NRA is yet to undertake any audits of mining companies. While limited technical expertise and understanding of the mining sector is partly to blame, several government officials and civil society representatives consulted for this research suggest that the NRA is wary of putting too much pressure on companies so as to avoid receiving a "tap on the shoulder" from someone higher up. In Guinea, a tax official told us that mining audits tend to be watered down, "to avoid mining companies thinking that they are being stalked or annoyed."

More commonly, tax officials will find reasons to dodge investigating mining taxpayers to avoid attracting unwanted attention from politicians. Tax officials will often cite "limited technical expertise" where they lack the confidence to fully investigate deductible expenditure. A former advisor cited an example of the TRA being unsure whether a mining excavation tool fell into the category of mining equipment, and what depreciation treatment was required. Rather than requesting information from the taxpayer to justify the price, and why the tool was categorized as mining equipment, the TRA tried to answer these questions on behalf of the taxpayer. Failure to enforce information requirements may correlate with particularly influential mining companies. According to

Tax officials will find reasons to dodge investigating mining taxpayers to avoid attracting unwanted attention from politicians.

Ministry of Finance officials in Sierra Leone, the NRA did not ask for the financial statements from mining companies or enforce penalties. The political clout of some mining companies made officials reluctant to hold them accountable. One official said: "There is no incentive for companies to provide information because the political class has given them a blank check." According to a tax official in Tanzania, there will be instances where the TRA has knowledge of a particular company that has avoided tax, but a higher authority instructs them not to follow it up and so they are forced to let the issue go.

"There is no incentive for companies to provide information because the political class has given them a blank check."

—Finance ministry official in Sierra Leone

5.2 External oversight

Because of the inherent political obstacles discussed above, ongoing scrutiny by civil society and parliament is an important means of keeping the political leadership accountable. There have been some notable contributions from civil society in the case study countries to monitoring government enforcement of transfer pricing rules (Curtis et al 2012; Lewis 2013), these efforts are led by a few individuals among oversight actors who have developed knowledge of tax avoidance issues.

In general, transfer pricing is considered by civil society to be a highly technical subject that is not well understood. In countries such as Sierra Leone and Guinea, where mining development agreements are negotiated on a case-by-case basis, civil society is primarily concerned with the impact of tax exemptions on revenue collection and is yet to rigorously examine issues of tax avoidance. A lack of knowledge of tax avoidance issues and the appropriate response could contribute to unnecessary tax disputes. According to a report by South Africa Resource Watch, civil society's depiction of mining taxation issues in Zambia has been a major factor contributing to populist policy making by government, specifically the unilateral decision to abolish Development Agreements and the introduction of punitive royalty rates in 2008 (South Africa Resource Watch 2009, 18-19). These policy changes have damaged the relationships with companies and the economic viability of the industry.

Access to information is also a fundamental constraint for civil society when it comes to monitoring transfer pricing in the mining sector. It is unlikely that revenue authorities will provide transfer pricing information to civil society, when it could end up hurting the government and the taxpayers. According to a prominent activist in Tanzania, civil society organizations are regarded as "troublemakers and antimining" by the ministry of mines and other government agencies. CbCR will generate a huge amount of valuable information but will not be subject to public disclosure. The EITI reports could provide insightful information for transfer pricing monitoring if the data was sufficiently disaggregated by fiscal payment and by project but they do not yet allow for detailed scrutiny of individual transactions.

Civil society is therefore unable to observe specific controlled transactions, but that might not be the best use of its resources anyway. A more general sort of transfer pricing risk assessment could be preferable, for which available data would be sufficient. This work would not replace the internal work to be carried out by revenue authorities themselves, but it could generate political attention on major issues of potential revenue loss and help increase the political costs of weak rules or weak enforcement. It may be possible to use EITI data, for instance, combined with market information to monitor high-level transfer pricing risk indicators such as profitability, transactions with related parties in low-tax jurisdictions, and excessive debt and/or interest expense. To undertake this analysis civil society requires further training on transfer pricing risk assessment, specifically profitability ratios, intra-group service transactions, debt-to-equity ratios, use of intangibles and business structures. As prescribed by the new EITI rules, beneficial ownership disclosure requirements may offer in the future more detailed information on specific controlled transactions.

Civil society also has an important role in advocating for the laws, structures and capacity required to enable effective implementation of transfer pricing rules. In Zambia, the Publish What You Pay coalition released a public statement calling on the government to undertake a range of activities designed to limit the risk of transfer mispricing: enacting legislation to require release of beneficial ownership information, promoting capacity building of key financial institutions to tackle illicit financial flows, and harmonizing tax laws in the region to end tax competition. The demand for beneficial ownership disclosures led Zambia to participate in a pilot program to include such information in Zambia's EITI reports.

Parliaments' mandate in relation to transfer pricing in the mining sector has three components. First, through the budget review process, parliamentarians may track trends regarding mining revenue collection and question any revenue shortfalls. Second, public accounts committees (PACs) scrutinize government audit reports and often have a broader mandate to investigate government corruption, public tenders and revenue collection. The Tanzania PAC has been particularly vocal on corruption, spearheading the investigation into the Tegeta escrow account scandal, a multi-million-dollar corruption scheme in the energy sector in 2014 that led both the Attorney General and the Minister for Energy and Minerals to resign (Ng'wanakilala 2015). PACs are possible entry points for transfer pricing capacity building initiatives, to better monitor the revenue authorities' efforts. Third, parliaments can initiate legislation with respect to transfer pricing, and tax avoidance. For example, in Tanzania, parliamentarians have been at the forefront of changes to capital gains tax and thin capitalization provisions following concerns about corporate tax avoidance (Kabwe 2014). In all these roles, parliaments need adequate resources and support staff. Policy Forum Tanzania has been advocating for the establishment of a Parliamentary Budget Office to enhance parliamentarians' ability to question budget proposals and propose alternatives. The fact that there is a need for such initiatives, indicates the current lack of support available to parliamentarians in their oversight role over revenue collection.

In Tanzania,
parliamentarians
have been at the
forefront of changes to
capital gains tax and
thin capitalization
provisions following
concerns about
corporate tax
avoidance.

RECOMMENDATION 7

Civil society and parliaments should hold the political leadership accountable for implementation of transfer pricing rules in the mining sector.

- Civil society organizations and parliaments should aim to recruit specialized staff
 members and consultants with expertise in tax policy and administration in order
 to maximize their effectiveness in analyzing these issues.
- Civil society organizations active on revenue collection and public finance, as
 well as parliamentarians (PACs) require training on the basic principles of transfer
 pricing, complemented with specific training on transfer pricing as it relates
 to the mining sector, institutional arrangements and specific accountability
 mechanisms.
- Training should include guidance on how to better use existing EITI and other public data to monitor transfer pricing risks.

Alternative tax policy rules

General and detailed transfer pricing rules provide the legal basis to determine whether controlled transactions are in line with the arm's length principle and, in the event that they are not, to make the necessary tax adjustments. The research showed that the case study countries are mostly unable to effectively implement general transfer pricing rules. In particular, the challenge of accessing appropriate comparable data makes it almost impossible to apply the arm's length principle in its current definition. Consequently, some countries have found it useful to introduce specific rules that reduce reliance on comparable data or on the arm's length principle. These measures may be introduced at the country level rather than through bilateral or multilateral mechanisms.

According to the current chair of the Publish What You Pay (PWYP) coalition in Norway:

"There is a need for developing countries to introduce unilateral legal mechanisms that limit the scope for particularly common tax avoidance measures such as payment of management fees, use of derivatives and procurement rebates."

SEPARATE TAX TREATMENT OF HEDGING

Hedging is a legitimate business practice in many commodity markets. It consists of locking in a future-selling price in order for both parties to the transaction to plan their commercial operations with predictability. For example, a mineral producer (such as Mopani copper mine in Zambia – see Box 17) could sign a derivative contract with a future sale price of USD 3/tonne of copper concentrate. If at the date of sale, the current price has increased to USD 4/tonne, Mopani makes an equivalent loss of USD 1/tonne on the derivative contract, whereas if the sale price is USD 2/tonne, Mopani records an equivalent gain on the derivative contract. The effect is that the companies' profits are guaranteed a sale price of USD 3/tonne.

A problem arises when companies engage in abusive hedging with related parties. They can use hedging contracts to set an artificially low sale price for their production and therefore record systematic hedging losses, which reduce taxable income in the producing country.

Box 17. Challenges to copper hedging in Zambia

The challenges associated with hedging have been highlighted by the case of Mopani copper mine, owned by the Anglo-Swiss multinational Glencore, in Zambia. According to a leaked audit report from 2009, Mopani's 'hedging' patterns moved taxable revenue out of the country instead of performing hedging for legitimate purposes. Hedge prices used by Mopani were consistently at the bottom of the price cycle such that it was making losses whether copper prices were rising or falling (European Investment Bank 2015, 1). This pattern is uncommon for a true hedge intended as a genuine risk management instrument. The existence of controlled sales between Mopani and Glencore, the lack of compliance from Mopani at the time of the pilot audit, and the refusal of the European Investment Bank, one of Mopani's major lenders, to disclose the findings from its own investigations into the allegations, together suggested that additional inquiry was necessary. The case is now under audit by the ZRA to determine whether the company used hedging to avoid taxes in Zambia.

To protect the tax base, a PWYP report from 2011 titled *Protection from Derivative Abuse* recommends the separation of losses and gains associated with hedging commodity prices, from operation-related profits. This implies that income from hedging arrangements would be taxed separately from operating income, so that losses from hedging would not be used to offset profits made in the main business unit. This approach, already adopted by Zambia, and under consideration in Tanzania, should limit incentives to engage in abusive hedging without preventing its legitimate use to protect companies against price volatility.

Separate tax treatment of hedging income reduces incentives to engage in abusive hedging.

CAPPING MANAGEMENT SERVICE CHARGES

Management service charges are payments made by a subsidiary mining company to a parent company in return for a range of administrative and advisory services. For example, in Sierra Leone a major mining company was found to be including in their accounts a charge equivalent to 3 percent of mineral sales as a management fee to its parent company located in the British Virgin Islands. The fee was approximately USD 4.5 million per year. Services included corporate planning, accounting, auditing, legal and human resource services.

It is reasonable that a parent company should recover expenses incurred in delivering these services and that these services be considered as costs for the subsidiary. However, in practice, assessing the commercial or economic value of the services rendered can be particularly complex, even for the company involved. As a consequence, a management fee is often calculated based on an agreed formula: many companies set a percentage of sales as a management fee, like the mining company in Sierra Leone mentioned previously. This way of calculating the costs of management services may not adhere to the arm's length principle, as such services are usually not a fixed cost per unit of mineral sold. From the perspective of tax officials in all case study countries, management charges have very little to do with services rendered and entail a major risk of transfer mispricing.

Box 18. Thirty percent of total revenue paid to parent company via management charges

This case involved a subcontractor working for a gold mining company based in Guinea. A private audit firm, hired by the subcontractor to conduct an internal audit, found that the subcontractor was paying 30 percent of total revenue, approximately USD 20 million since the beginning of the subcontractor's operations in Guinea, in management fees to its parent company. The private auditor established that the fees were vastly exaggerated and that the types of services provided by the parent company were not likely to be required by the subcontractor in Guinea. The national tax administration remains unaware of the issue.

Tanzania and Zambia are considering different ways to impose legal limits on management fees. The IMF handbook proposes a popular approach that follows the way management fees are charged by the industry; management service charges are limited to a maximum percentage of total operating costs or total revenues. For example, in Guinea, management fees, royalties, and similar payments to parent companies are deductible if they are reasonable and, in total, do not exceed five percent of annual turnover, or 20 percent of general expenses. This is applicable to all sectors (Deloitte 2015, 135). Beyond this common approach, tax officials in Zambia expressed interest in fixing a maximum amount based on the management services

realistically required, rather than a percentage of sales. This is another area where APAs may be useful; rather than setting an arbitrary amount for all companies, revenue authorities could negotiate, on a case-by-case basis, an appropriate monetary value with interested taxpayers. They could take inspiration from some petroleum production sharing agreements that include a scale of acceptable service cost deductions during exploration, and then once development and production begins the percentage allowed for deduction of service costs delivered by related parties is subject to agreement with the government or the national oil company. Neither of these methods is strictly consistent with the arm's length principle, but they both have important advantages in simplicity and predictability.

LIMITING INTEREST DEDUCTIBILITY

Most countries allow companies to deduct interest expenses in calculating taxable income. This includes interest paid on debt owed to related parties. This presents a particular risk of profit shifting; the management may choose to finance their investment disproportionally through debt rather than equity as a means of avoiding corporate income tax and increasing net returns for the shareholders. The financial strategy that uses debt to leverage the investment is referred to as "thin capitalization." To limit the risk that thin capitalization poses to the tax base, Action 4 of the OECD final BEPS report recommends that countries adopt the "earnings stripping rule" that restricts interest deductibility to between 10 percent and 30 percent of a company's earnings (defined as EBITDA – earnings before interest, tax, depreciation and amortization) when the interests are charged by a related party. As Table 3 indicates, of the case study countries only Sierra Leone has sought to specifically limit interest deductibility, in addition to having a debt-to-equity ratio. This is an obvious area for reform, particularly given the ease with which debt-to-equity ratios may be manipulated.

Country	Limit on total debt (debt-to-equity ratio)	Limit on interest deductibility
Ghana	2:1	None
Tanzania	7:3	None
Zambia	3:1 (mining specific)	None
Guinea	None	None
Sierra Leone	3:1 (mining specific)	50 percent of income before capital allowances

Table 3. Thin capitalization and interest deductibility rules

OTHER APPLICATIONS OF THE EARNINGS STRIPPING RULE

It is not just interest expenses to related parties that can be used to reduce taxable income, but also payments for management services, use of property and equipment, inter-company billings representing allocation of common costs, etc. An innovative approach could be to develop a specific rule limiting each of these categories of payments as a proportion of income or EBITDA. This rule, or set of rules, would apply to all taxpayers, thus avoiding the potential pitfalls of negotiation. An even simpler approach would be to consider all relevant transactions lumped together. Such a rule would limit all controlled payments to a certain percentage of EBITDA. The revenue authority would then no longer have to determine whether each controlled

transaction was conducted at arm's length, they would just apply a limit to the deduction of total controlled payments as a proportion of income. This rule is very similar to the approach in many production sharing agreements in the petroleum sector that limit the amount of oil that an operating company is allowed to keep to recover its costs to a certain percentage of annual production, for example on the Jubilee Fields in Ghana. Michael Durst proposes a version of this rule in his article "Congress: Deduction Curbs May Be Most Feasible Fix for Base Erosion." Ecuador has recently passed a similar rule, limiting total expenses for royalties, technical, administrative, consulting and similar services paid by Ecuadorian taxpayers to related parties to 20 percent of taxable income plus the amount of the expenses.

There are legitimate criticisms to rules limiting deduction of any controlled payments. For mining companies that are observing existing transfer pricing rules, the imposition of any additional limits on controlled payments, in law, would have an economic cost (in most cases, companies would take longer to recoup their investments), which could potentially deter further investment in the sector. This may require compensation in some other part of the tax regime, but is worth considering.

EXTENDING THE USE OF REFERENCE PRICES

The sixth method is a transfer pricing method. This means that it is only applicable to related party sales. However, interviews conducted in the case study countries research have shown that revenue authorities are not always able to determine whether local mining subsidiaries and international buyers are related. Many mining multinationals have complex and opaque group structures that make it difficult for revenue authorities to identify related party transactions. Even junior companies can have commercial interests with their customers in several jurisdictions, and therefore incentives to under-invoice their mineral sales from producing countries. Consequently, it may be worth considering the extension of the use of reference prices, in effect the sixth method, to all mineral sales (both controlled and uncontrolled). This approach is already used in all case study countries to value the base of mineral royalties. Extending it to the calculation of the income tax base would go against current international practice, but with the proper regulations and in consultation with the industry, it could be an effective policy to protect the tax base of developing countries.

Many mining multinationals have complex and opaque group structures that make it difficult for revenue authorities to identify related party transactions.

GLOBAL FORMULARY APPORTIONMENT

Among several alternatives to the arm's length principle, global formulary apportionment has been the most widely discussed. Formulary apportionment attributes a multinational corporation's total worldwide profit (or loss) to each tax jurisdiction where it has subsidiaries, based on factors such as the proportion of sales, assets or payroll in that jurisdiction. Such an approach would help developing countries overcome the difficulty of identifying comparable uncontrolled transactions. It would, however, require an international consensus with respect to the formula for profit splitting, which could be politically unachievable. There may be greater potential for this approach at the regional or sub-regional level; for example, in the case of cross-border mining projects, in order to accurately apportion revenues derived from a mine and from related infrastructure. Guinea and Sierra Leone may be particularly interested in such an approach.

RECOMMENDATION 8

Examine the feasibility of adopting specific tax policy rules to limit the reliance on the arm's length principle and the difficulty of finding comparable data for controlled transactions.

- Separate hedging transactions from the primary income of the business unit for the purpose of calculating taxable income.
- Limit management service charges to a percentage of turnover, or a monetary value, if case-by-case APAs can be negotiated with mining companies.
- Limit deductibility of controlled payments as a proportion of income.
- Implement the OECD recommendations on limiting deductibility of interest expenses on controlled debt.
- Identify other categories of mining expenditure most subject to abuse, and specify a limit on the deductibility of these grouped expenses as a proportion of income.
- Resource-rich countries should consider using reference prices as the basis for valuing all mineral sales, regardless of whether they are controlled or not.
- Engage in regional and global discussions on formulary apportionment.

¹⁰ For further reading see: Reuven S. Avi-Yonah and Kimberly A. Clausing, Reforming Corporate Taxation in a Global Economy: A Proposal to Adopt Formulary Apportionment Discussion Paper 2007-08 (The Brookings Institution, 2007).

Conclusion

In the current environment where the OECD guidelines govern international transfer pricing arrangements the case study countries have had to establish the legal rules, capacities, and institutions required to implement the arm's length principle as best as possible. This will continue to pose challenges, particularly due to problems accessing information from other tax jurisdictions as well as contextually relevant comparable data. However, there remain a number of areas for improvement that are generally within the control of the governments of the case study countries, such as transfer pricing regulations, inter-agency coordination and transfer pricing expertise. By addressing these domestic challenges, significant process can be made in the area of transfer pricing audits and subsequent tax adjustments, as Tanzania has shown, adding millions of previously unpaid tax from its mining sector to public revenue.

It is also clear that while implementation of transfer pricing rules can and should be strengthened, this process will take time. Even developed countries continue to struggle to protect their tax base against transfer mispricing. Hence alternative tax policy rules may be required. These include separate tax treatment of hedging, and statutory limits on interest deductibility as well as other categories of payments to related parties. It would also make sense to protect both royalties and income tax against under-invoicing of mineral sales, particularly given the weaknesses in mineral valuation. This would mean using reference prices as the basis for calculating not only royalties, but also income tax. These alternative rules do not perfectly adhere to the arm's length principle, but the trade-off is worth considering. It can be justified by the challenges to implementing the arm's length principle that remain outside the control of the case study countries.

The recommendations from this report will hopefully help to reduce tax avoidance, specifically transfer mispricing, attributable to mining companies in Ghana, Guinea, Sierra Leone, Tanzania and Zambia, as well as other mineral-rich developing countries facing similar challenges.

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Abbreviations and Acronyms

AEOI automatic exchange of information

APA advance pricing agreement

ATAF African Tax Administration Forum

BEPS basic erosion and profit shifting

CUP comparable uncontrolled price

CbCR Country-by-country reporting

DTA Double taxation agreements

EBITDA Earnings before interest, tax, deductions, and amortization

EIRT (Sierra Leone) Extractive Industries Revenue Taskforce

EITI Extractive Industries Transparency Initiative

EITU (Sierra Leone) Extractive Industries Tax Unit

EU European Union

GHEITI Ghana Extractive Industries Transparency Initiative

GRA Ghana Revenue Authority

IMF International Monetary Fund

ITU (Tanzania) International Tax Unit

LME London Metals Exchange

LTO Large Taxpayers Office

MAEI multilateral agreements for exchanging information

MAPs mutual agreement procedures

MDA mining development agreement

MLA mining lease agreement

MNE multinational enterprise

NMA (Sierra Leone) National Minerals Agency

NRGI Natural Resource Governance Institute

NRA (Sierra Leone) National Revenue Authority

NTA Norwegian Tax Administration

ODA overseas development assistance

OECD Organization for Economic Cooperation and Development

PSA production sharing agreement

PURA (Tanzania) Petroleum Upstream Regulatory Authority

PWC PriceWaterhouse Coopers

PWYP Publish What You Pay

TIEA taxation information exchange agreements

TMAA Tanzania Minerals Audit Agency

TPDC Tanzania Petroleum Development Corporation

TRA Tanzania Revenue Authority

UN United Nations

UNDP United Nations Development Programme

UNECA United Nations Economic Commission for Africa

WITS World Integrated Trade Solution

ZRA Zambian Revenue Authority

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