Transfer Pricing in Mining with a Focus on Africa

Summarized by Pietro Guj, Stephanie Martin and Alexandra Readhead

January 2017
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A Briefing Note

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NOTES:

1—This publication is a summary of the handbook entitled ‘Transfer Pricing in Mining with a Focus on Africa: A Reference Guide for Practitioners’ to be jointly published in late 2016 by the:

- World Bank Group (WBG),
- Centre for Exploration Targeting (CET) and
- International Mining for Development Centre (IM4DC)

2—The Guidebook was co-authored by a group of international tax and mining experts including:

- Prof. Pietro Guj, CET—University of Western Australia (corresponding author),
- Ms. Stephanie Martin—Tax Consultant,
- Dr. Bryan Maybee, CET—Curtin University,
- Prof. Frederick Cawood—University of Witwatersrand,
- Mr. Boubacar Bocoum—World Bank Group,
- Ms. Nishana Gosai—South African Revenue Services and
- Mr. Steef Huibregtse—(Transfer Pricing Associates (Global)), The Netherlands

3—This summary was compiled by Prof. Pietro Guj, Ms. Stephanie Martin and Ms. Alexandra Readhead.

4—The drafting of this briefing note was facilitated by The Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ).
Transfer Pricing in Mining with a Focus on Africa: A Briefing Note

Summarised by Pietro Guj1, Stephanie Martin2, and Alexandra Readhead3

Executive Summary

This briefing note summarises the results of research on transfer pricing (TP) in the specific context of the mining industry in Africa. The study was commissioned in 2015–16 by the World Bank Group (WBG) in cooperation with the International Mining for Development Centre (IM4DC)4 and conducted by an international team of taxation and mining experts5 directed by the Centre for Exploration Targeting (CET).6 The results of this study, to be published as a handbook entitled ‘Transfer Pricing in Mining with a Focus on Africa: A Reference Guide for Practitioners’, together with practical training material, currently being developed, will support a series of specialised TP workshops to be delivered to African tax officials starting early in 2017. This reference guide also represents a mining-specific complement to a general TP toolkit entitled ‘Transfer Pricing and Developing Economies’ compiled by the WBG Global Tax Team.

Importance of mining to Africa

The contribution of mining to the economy of many African countries has grown in recent years ahead of other sectors, increasing their dependency on this industry as a mechanism for development and growth. Africa’s mineral endowment has become a magnet for foreign direct investment (FDI) in mineral exploration and mine development. In 2013,7 it attracted USD2.9 billion or 17% of worldwide mineral exploration and was the dominant world producer of cobalt, platinum, diamond and chromium and a significant producer of gold, uranium and copper.

Although investment in mining declined over the last two years because of falls in commodity prices, it will inevitably resume over the longer term. The 301 producing mines, 333 projects at conceptual or feasibility stage, and the 9388 exploration prospects in Africa may be levers to

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2Consultant, previously Deputy Commissioner of Taxation, Australian Tax Office.
3Natural resources governance consultant, GIZ/NRGI.
4Funded by the Australian Department of Foreign Affairs and Trade.
5Including besides P. Guj and S. Martin: B. Maybee (CET), F. Cawood (University of Witwatersrand), B. Bocoum (WBG), N. Gosai (South African Revenue Services) and S. Huibregtse (Transfer Pricing Associates).
6CET is a joint venture between the University of Western Australia, Curtin University and the mining industry.
7SNL 2014, Mining and Metals 2014.
8Numbers sourced from RIU, 2014.
Further boost domestic revenue mobilisation in a continent with several countries struggling to achieve a tax to GDP ratio of 15% against an average of over 33.6% for OECD countries since 2000. It is thus critical that African jurisdictions continue to develop mining regulatory and fiscal regimes that, while attracting FDI, are capable of being administratively enforced, ensuring that mining is safe, environmentally and socially responsible and also pays a fair amount of taxes on the profits generated in their country.

Corporate structures used by mining multinationals and their potential fiscal consequences

Most African countries require that individual mining projects be ring-fenced, i.e., owned and operated by a mining subsidiary of the controlling multinational enterprise (MNE), registered and taxable in the host country. MNEs have tended to structure their businesses by consolidating high-value functions and related intangible assets in hubs that provide goods and services to their global operations, and locating them in low-tax jurisdictions or in jurisdictions allowing the establishment of preferentially taxed special purpose entities (SPEs).

MNEs contend that consolidating the provision of services in these hubs is driven primarily by the objective of maximising shareholder’s value by achieving critical mass through pooling of specialised resources, proximity to customers, trading and shipping centres and/or research facilities. However, the extreme complexity and artificiality of some of these multilayered structures and evidence that some conduit companies are effectively just ‘mailboxes’ with no clear business purpose, adding little or no value, indicates that they may be primarily designed to minimise MNEs’ tax at the consolidated level. Use of ‘treaty shopping’ and the speed with which some MNEs change their structures to counteract the closure of fiscal loopholes by government corroborate this view. While these tax practices may be technically legal, it may be argued they are ethically questionable.

The consequences of the global corporate structures used by mining MNEs in Africa are that:

- the tax base of the country hosting the mining may be eroded as profit is shifted abroad;
- the functions of MNEs’ mining subsidiaries are often stripped down to mostly routine activities utilising primarily less skilled personnel and tangible assets;
- few mining companies are fully vertically integrated and frequently export crushed and screened ore (as for instance iron ore and coal), or base metals and other concentrates or intermediate products after limited processing to related smelters or marketing hubs;
- mining companies have increasingly entered into a significant number of cross-border transactions for the provision of high-value, specialised services and assets, and/or financing, many of which are conducted with related entities or part of the same MNE group.

Tax authorities need to question whether the profits of mining subsidiaries and of overseas related customers and/or service providers match the value actually added by each of them.

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9Complex networks of related conduit companies resident in jurisdictions carefully selected to derive tax minimisation advantages, otherwise may be inhibited by the limited network of double taxation agreements (DTAs) in Africa.
along the mining value chain. A tax adjustment may be warranted where the economic substance and the form of an arrangement do not match.

Extreme cases may warrant re-characterisation of related-party transactions to reflect the conditions that would have been agreed between unrelated parties in uncontrolled transactions. Logically, mining companies, acting independently, would not enter into arrangements involving conditions that could reasonably be expected to lead to them trading at an unacceptable rate of return or even at a long-term loss. They would not accept excessive discounts on mineral products sales and/or pay grossly above-market prices for marketing, finance, technical/R&D, corporate and other goods and services. Nor would they divest assets, at times well below their market values, to an entity and subsequently pay premium fees and/or royalties for their use. Taxpayers’ objections to re-characterisation because it may result in double-taxation may be exaggerated because most jurisdictions provide foreign taxation credits or exemptions. The UK has introduced, and recently Australia announced, a ‘diverted profits tax’ to more effectively address these issues.

Transfer pricing and application of the arm’s-length principle

The arm’s-length principle (ALP) is the cornerstone of the international rules to set transfer pricing (TP) between controlled or related-party dealings. It requires transfer prices to be as if the parties were independent, operating at arm’s length and engaging in comparable transactions under similar conditions and economic circumstances. Although MNEs are expected to set their TP applying the ALP, where this is not the case, tax adjustments may be needed. Five methods are presented for application of the ALP in the OECD’s TP Guidelines,10 (to be updated in line with the recommendations of the G20/OECD’s BEPS (2015) Final Reports). The study confirmed that transfer mispricing represents a major taxation risk in the context of MNEs’ mining subsidiaries in Africa, because this sector often represents a major source of revenue and individual transactions may involve very significant cash flows and complexities. This was confirmed by a detailed analysis of the revenue and costs compositions of current mining operations (categorised by commodity, size and type of mining, whether underground or open pit) for the main minerals mined in Africa. Profit shifting through mispricing may arise from:

- Undercharging for mineral products exported and transferred to related parties, and
- Overpayment for routine (e.g., most corporate services) and specialised (e.g., marketing, treasury/financing, insurance, logistics and technical/R&D) goods and services,

reducing the profit of the mining subsidiary and therefore the tax collected in the host country. UNECA11 estimated illicit financial outflows from Africa due to mispricing at USD50 billion a year, with the ADB identifying “...inefficient taxation of extractive activities and the inability to fight abuses of TP by multinational enterprises...”12 as a significant cause of tax base erosion in developing countries. Abuse of TP is not limited to developing countries, as indicated by recent multimillion dollar adjustments to the income tax and royalty payable by

an Australian mining company selling its mineral products through a related marketing hub resident in Singapore.

Given the risk to revenue, it is vital that tax administrations in Africa have the powers and the capacity to ascertain whether TPs are actually at arm’s length through systematic TP compliance risk management processes. Discussions about TP often revolve around auditing a particular case, which is just one aspect of an extensive process to effectively deal with TP risk, including:

- Phase 1: Case Selection—selecting who should be looked at and in what order;
- Phase 2: Risk Assessment—selecting what issues to look at within identified MNEs;
- Phase 3: Audit—identifying and undertaking the actions needed to manage the specific taxpayer risks through a possible tax adjustment; and
- Phase 4: Resolution—of both past issues and future risks.

One should also not undervalue the role of non-government (NGOs) and civil society organisations (CSOs) in alerting public opinion about potential abuses of TP rules by MNEs. Their allegations, generally very direct but mostly based on circumstantial evidence, have often the effect of precipitating government investigations and intervention.

Most African jurisdictions lack the capacity to undertake effective TP audits

With a few exceptions, African jurisdictions, in spite of having generally adequate TP legislation, have been incapable of effectively enforcing it. As a result, few TP audits are being carried out, with mining-specific ones a rarity. This is due to a variety of reasons including:

- Inadequate resourcing of tax administrations in general and TP expertise in particular, and inadequate depth of knowledge of the mining industry, its activities and processes.
- The inherent complexity of some of the mining-related transactions, which creates opacity and opportunities for manipulation. This may be due to the fact that:
  - most mineral products transferred to related smelters or marketing hubs are intermediate products for which there are no stringent standard specifications and readily available market prices. Even in the case of metals traded in terminal markets, the price-determination modalities of off-take agreements can present challenges in making comparability adjustments to reference (e.g., LME) prices;
  - some transactions, involving hard-to-value specialised marketing, finance, technical/R&D, management and legal know-how and related intangible assets and IP, are often difficult to audit as tax administrations may be denied access to adequate financial information relating to the relevant foreign service providers;
  - as some mining services are unavailable domestically, tax authorities do not have access to local comparable uncontrolled prices and are forced to adjust foreign comparables, in most cases irrelevant to both mining and Africa;
  - difficulties in accessing relevant financial information concerning foreign related parties to transactions involving TP in spite of the domestic TP legislation requiring maintenance and disclosure upon request of contemporaneous TP documentation; and
  - the vast amount of capital imported by mining companies generates complex TP issues such as determining appropriate risk premiums for interest on intra-group loans and guarantee fees not adequately addressed by thin capitalisation rules.
Given a past history of tax avoidance and at times unfavourable deals in their mining sector, tax administrations’ tendency for adversarial and litigious attitudes towards taxpayers. This is in spite of the fact that, in many cases, it may prove more effective to achieve resolution through cooperative approaches and negotiation, avoiding resource-intensive and time-consuming court action that can lead to unfavourable outcomes.

To overcome some of these complexities, African governments have tended to capture a greater proportion of profits by applying comparatively high levels of withholding taxes on overseas remittances for dividends, interest, royalties, service fees, etc.

The way forward—recommendations

African governments must address the strong need for capacity strengthening in the area of tax administration in general and TP in particular and for enhancing their knowledge of the structures, value chain characteristics and processes of the mining industry. While most jurisdictions already have adequate TP legislation, the challenge now is to put in place supporting regulations, structures and adequate administrative capacity to effectively enforce it.

On the basis of our study we present the following recommendations to be implemented by:

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<th>African Tax Administrations</th>
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<td>7</td>
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</table>
### African Tax Administrations

| 8 | Adopt the recommendations of the OECD BEPS 2015 Final Report for Action 4 to cap deductible interest to a set percentage of the EBIT (in the range of 10% to 30%) of an individual entity (fixed ratio rule) or to attribute interest deductions to various subsidiaries in proportion to their contribution to the consolidated MNE’s income (group ratio rule). |

### International Organisations

| 9 | Provide a range of training and capacity building opportunities to African tax administrations to build an appropriate TP skill inventory involving:  
• specialised international workshops on the issue of TP in mining being currently organised by the WBG in cooperation with a number of international institutions including UNECA, GIZ and MEIDA to be rolled out starting early in 2017. These may also be open to CSOs and NGOs;  
• possibly bonded, attendance of appropriate award and non-award university courses;  
• short- to medium-term secondment to more advanced tax jurisdictions;  
• temporary use of external tax specialists from other tax jurisdictions and/or from the private sector to work alongside internal resources with emphasis on transfer of knowledge;  
• establishment of effective follow-up mentoring programs and of clear career paths. |

| 10 | Emphasize training to effectively communicate, engage and negotiate with taxpayers, promoting better understanding of and voluntary compliance with the tax rules, thus reducing litigation, requiring:  
• improvement in taxpayer relations through better communication and consultation,  
• lessening of the current tendency for assuming adversarial positions, and  
• significant strengthening of tax administrators’ communication and negotiation skills. |

| 11 | Establish and support inter-jurisdictional cooperative initiatives as a pragmatic interim solution to current TP capacity constraints. These include:  
• the establishment of *ad hoc* or regional specialist Multinational Transfer Pricing Units (MNTPUs) pooling expertise from various countries based on agreed prioritisation and cost-sharing rules;  
• supporting implementation of the OECD’s ‘tax inspectors without borders’ initiative;  
• jointly funded acquisition and sharing of otherwise unaffordable key comparables databases and establishment of knowledge-sharing e-learning platforms, though a coordinating institution (e.g., African Tax Administration Forum (ATAF));  
• broadening the network of bilateral and multilateral international Exchange of Information (EOI) agreements with African countries, aided by improved computer capacity and the implementation of the BEPS country-by-country reporting initiative. |

| 12 | Support and systematize the current push for recognition in the allocation of profits of location specific advantages (LSAs) in source countries, which in the context of mining would include the value of ‘ready access to mineral resources’ in Africa. |

In essence, the significant improvements in effectiveness and efficiency of administration of TP rules, required to ensure that African countries collect their fair share of the mineral resource rents from a fast expanding global mining industry, will involve significant time, costs and a concerted effort at the domestic level supported by continued international assistance.
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Introduction

The contribution made by mining to the economy of many African countries has grown in recent years, well ahead of that of other sectors, increasing their dependency on this industry as a mechanism for economic development and growth. It has been estimated that around 20 percent of Africa’s economic activity is associated with mining. This is not surprising given the richness and variety of mineral endowment and prospectivity of the continent, which, during the past mining boom, has become a magnet for foreign direct investment (FDI) focused on mineral exploration and mine development. It is estimated that in 2013, Africa attracted USD2.9 billion or 17% of worldwide mineral exploration investment, mainly for gold, base metals and iron ore. At last count in 2013 there were 301 operating mines, excluding small artisanal mines in Africa, dominating world production of cobalt (70.9%), platinum (63.5%), diamond (53.8%) and chromium (48.2%), and accounting for a significant proportion of gold (18.9%), uranium (17.2%) and copper (10.5%).

Although investment in mining declined in the last two years because of significant falls in mineral commodity prices, prices appear to have now stabilized, or, in the case of some commodities rallied. Reductions in output and delays in the development of new projects (including 333 advanced exploration and feasibility stage projects in Africa) may lead to medium-term shortfalls in supply which should help prices to recover and FDI in mining resume its upwards trend. It is thus critical that African jurisdictions continue to develop mining regulatory and fiscal regimes that are effective in attracting FDI in mineral exploration and mine development and capable of being administratively enforced, ensuring that their mining industry is safe, environmentally and socially responsible and pays a fair amount of taxes on the profits generated in their country.

The global nature of the mining industry, its appetite for development capital and the general scarcity of indigenous capital and specialised expertise result in most mining projects in Africa being owned and operated by mining subsidiaries of vertically integrated multinational enterprises (MNEs), which span the full range of the mining value chain operating in many countries often through different group entities. Their mining subsidiaries typically export the majority of their mineral products and import capital and other goods and services. More often than not, this takes place through cross-border transactions with associated companies, part of the same MNE group, frequently residing in jurisdictions which are either low taxing or which

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14 SNL 2014, Mining and Metals 2014.
allow the establishment of Special Purpose Entities (SPEs). UNCTAD\(^\text{16}\) (2015) estimates that around 30% of global cross-border investment is channeled through such offshore hubs which create tax avoidance opportunities on subsequent investment income.

Transfer pricing (TP) is the process of determining the price for goods, services, or property sold between related parties within an MNE. For example, if a mining subsidiary sells mineral products to a parent company, the price paid for those goods to the subsidiary is called the transfer price. TP is a normal business accounting practice. However, some MNEs may use TP as an opportunity to shift profit to low tax jurisdictions to minimise their tax bill in the country hosting the mining operations. This is considered abusive and therefore referred to as “transfer mispricing.” In the mining sector transfer mispricing is generally due to:

- underpricing of outbound transfer of mineral products to related parties, and
- overpricing of inbound (and underpricing of outbound) transfer of goods and services from related parties including marketing and financial services, corporate and support services, tangible and intangible assets, especially proprietary know-how, intellectual property (IP) and research and development (R&D).

Under this set of circumstances it is critical for tax authorities to be able to determine whether the transfer prices used are set in compliance with the ‘arm’s-length principle (ALP)’. The ALP is the cornerstone of the international rules to address TP in controlled dealings between associated or related parties.\(^\text{17,18}\) It requires the price of transactions to be as if the parties were independent, operating at arm’s length and engaging in comparable transactions under similar conditions and economic circumstances. To apply the ALP it is necessary to identify a sufficiently similar transaction between unrelated parties from which comparable pricing data may be derived to benchmark the transfer price applied in the controlled related-party transaction. Where the transfer price diverges from the benchmark, an adjustment for tax purposes may be needed.

Difficulties, however, frequently arise in ascertaining whether a transaction was priced at arm’s length where the characteristics of the mineral product transferred to foreign related parties may differ significantly from the product that is ultimately sold to an independent third party or on the open market and where the transaction involves hard-to-value intangibles for which comparable industry-specific data, knowledge and experience may not be readily available within tax administrations.

The ALP is used in model tax conventions developed by both the OECD and the UN and is now found in the domestic legislation of most developing countries. Consistent and appropriate compliance with it supports outcomes aligned with the value-creating activities of the various members of an MNE group as well as reducing the risk of double taxation. The OECD’s

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\(^{17}\)See further details on tangible and intangibles mining assets in the publication Transfer Pricing in Mining with a Focus on Africa: A Reference Guide for Practitioners.

\(^{18}\)Two enterprises are associated enterprises with respect to each other if one of the enterprises meets the conditions of Article 9 of the OECD Model Tax Convention, i.e., participates directly or indirectly in the management, control or capital of the other enterprise.
'Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations', currently being updated to reflect the BEPS 2015 Final Reports for Actions 8–10, presents five methods which can be used to apply the ALP, including:

- the comparable uncontrolled price (CUP) method,
- the resale price method,
- the cost plus method,
- the transactional net margin method (TNMM), and
- the transactional profit split method.

Some developing nations also make use of the so-called ‘sixth method’ involving mandatory use of publicly quoted prices for commodities on their shipment date to a related party. While this method has the benefit of providing clear and certain benchmarks it does not require consideration of the specific circumstances of the actual transaction, making it less consistent with the ALP. The OECD, however, indicated that this method may be considered as an appropriate anti-avoidance approach for developing countries, due to the difficulties of obtaining comparable data and ease of administration.

Entities of an MNE that follow the approach outlined in the OECD TP Guidelines would be expected to apply the ALP in pricing their related-party dealings. They would also be expected to maintain and make available transfer pricing documentation, demonstrating how they chose the most appropriate method, how the transfer price was calculated and how the outcomes of the various MNE’s entities involved are aligned with the value-creating activities. However, in practice this may not be the case as information may not always exist, or be made available to tax administrations. Without this documentation it is almost impossible for tax administrations to assess whether subsidiaries have reached a reliable estimate of the arm’s-length transfer price. Some countries have therefore tightened their legislative requirements for taxpayers to maintain contemporaneous TP documentation to be made available either automatically or on request. In the BEPS 2015 Final Report Action 13 on Country-by-Country Reporting (CbCR) the OECD recommends that tax administrations adopt a multilayered approach to transfer pricing documentation: a master file containing information on the MNE as a whole, and a local file that refers specifically to related party transactions taking place in the host country. Negotiation of Exchange of Information (EoI) agreements with the countries of residence of relevant MNE subsidiaries and, failing that, legislative deeming rules may prove effective in overcoming some of the problems in accessing necessary information.
2.1 Profiling of the Mining Industry in Africa

Many mineral-rich African economies are not well diversified and are in many instances significantly dependent on mining. The UNDP’s ‘Extractives Dependence Index (EDI)’\(^{19}\) (based on three indicators: (i) share of total export earnings from extractives; (ii) revenue from extractives as a share of total fiscal revenue; and (iii) value added by extractives as a percentage of total) clearly indicates how most Sub-Saharan countries (e.g., Namibia, Central African Republic, DRC, Zambia, Mali, etc.) are highly dependent on mining. This conclusion is supported by a range of other indicators, which include extractives revenues or exports of at least 20% of total fiscal revenue and exports (IMF); 5-year average resources revenues more than 20% of government revenue; and resource rents greater than 10% of GDP (McKinsey Global Institute).

Tax avoidance by mining companies in resource-rich countries is likely to have an outsized impact on revenue generation and therefore warrants particular attention from tax administrations, which should regularly assess the risks posed by TP in the mining sector and review their compliance strategies and subsequent resource allocation so that they remain dynamic to changes in industry circumstances. It is critical that the very limited TP expertise available for auditing needs to be directed to high-risk transactions, while at the same time promoting general compliance through improved communication and development of simplified procedures in the handling of routine transactions. To do this, tax administrations seek and analyse relevant business information using risk-based criteria to identify which miners may warrant further attention.

Tax administrations must, therefore, have an understanding of the industry characteristics and, in particular, of the role their specific country plays in the global industry and the mining value chain for particular mineral commodities mined in the country. This involves obtaining information on the following:

- MNEs conducting mining operations in-country, including what minerals are mined and what is the form and volume of exports, and a comparison of turnover or cash flows;

\(^{19}\)Hailu, D. and Kipgen, C., 2015, The Extractives Dependency Index (EDI), United Nations Development Programme (UNDP).
Market dynamics to determine the price range that could reasonably be expected for mineral products sold to an independent third party;

The business structure (both legal and operational) used by each MNE to undertake its mining operations in the country and how that structure fits within the MNE’s global structure;

The high-level financial performance of the MNEs globally and the contribution made by the mining subsidiaries and other related entities operating in-country;

The relative financial performance of MNEs and mining companies operating in-country to gain insights to separate those whose poor performance might be due to transfer mispricing or other reasons (e.g., poor management, inadequate administrative capacity, business factors). However, a history of consistently low returns or even losses, while alerting a tax administration to potential transfer mispricing, does not in isolation constitute proof of it.

To assess the risk of transfer mispricing it is also necessary to understand the revenue potential and main cost components for each mining operation. Commodity type will be the main factor as different commodities have markedly different characteristics in terms of:

- extraction technology involved;
- level of ore tonnage throughput;
- necessary initial capital cost;
- unit recurrent cost of production;
- required downstream processing and related energy intensity;
- reliance on transport and logistics as a major input; and
- specifications and marketing characteristics.

For example, cost characteristics will be very different between underground and open pit mines, particularly in the case of bulk commodities (e.g., iron ore and coal). The latter will also display significantly higher levels of revenue and capital cost as a function of the relatively large volume of material that must be processed to extract the ore ("throughput"). Bulk commodities require significant investment in transportation and port infrastructure capable of conveying large volumes of ore to export markets. In the African context this may involve rail facilities crossing national boundaries that require significant negotiation and cooperation among countries. On the redeeming side, however, they will display generally lower recurrent unit costs of production due to their economies of scale.

To aid this aspect of the profiling process the study included compilation of a database of the current mineral resources\(^{20}\) and of all the main mineral commodities currently mined in each African country\(^ {21}\), as exemplified for copper in Table 1. The database categorises the population of mines according to:

- the mineral commodity they produce (e.g., gold, base metals, coal, etc.);
- the type of mining (whether surface or underground);

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\(^{20}\)Information was extracted from publications by the US Geological Survey (USGS) and the British Geological Survey (BGS), MinEx Consulting, and from the websites of various companies and industry groups.

\(^{21}\)Information primarily extracted from the RIU’s Register of African Mines 2014 and from a variety of other published and unpublished sources. See further details on the database in the publication *Transfer Pricing in Mining with a Focus on Africa: A Reference Guide for Practitioners*. 
their size classified as ‘small’, ‘medium’ and ‘large’ depending on whether they fall below, between or above the first and third quartile of daily production throughput respectively. A ‘large’ classification generally denotes a major or world-class deposit; the number and significance of current development projects and exploration potential.

Typical, mid-range throughputs were then used to identify a representative ratio of the volume of waste material to be moved for each tonne of ore extracted (“stripping ratio”) and mining method for surface and underground operations respectively. On this basis, the order of magnitude of the expected revenue and of the main cost components were assessed for each typical operation, including specific items of both capital and recurrent expenditures. These costbreakups, exemplified in Table 2, provide an initial indication of which activities and related
<table>
<thead>
<tr>
<th>Typical Surface Mining Operations</th>
<th>Gold 4:1 Strip Ratio</th>
<th>Copper 4:1 Strip Ratio</th>
<th>Iron Ore 4:1 Strip Ratio</th>
<th>Coal 20:1 Strip Ratio</th>
<th>Diamonds 4:1 Strip Ratio</th>
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<tr>
<td>Total Annual Operating Expenses</td>
<td>$72,981,000</td>
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<td>Supplies and consumables</td>
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<td>$3,974,000</td>
<td>$116,364,605</td>
<td>$7,281,619</td>
</tr>
<tr>
<td>Transportation</td>
<td>$6,642,000</td>
<td>$8,002,800</td>
<td>$3,945,600</td>
<td>$116,364,605</td>
<td>$7,281,619</td>
</tr>
<tr>
<td>Total Capital Expenditure</td>
<td>$182,717,700</td>
<td>$191,801,100</td>
<td>$96,491,400</td>
<td>$254,699,100</td>
<td>$96,491,400</td>
</tr>
<tr>
<td>Equipment purchases and installation</td>
<td>$93,576,900</td>
<td>$97,233,200</td>
<td>$45,976,600</td>
<td>$171,682,100</td>
<td>$45,976,600</td>
</tr>
<tr>
<td>Preproduction and site preparation</td>
<td>$7,239,800</td>
<td>$8,002,800</td>
<td>$7,239,800</td>
<td>$18,079,900</td>
<td>$7,239,800</td>
</tr>
<tr>
<td>Facilities and buildings</td>
<td>$35,737,500</td>
<td>$32,777,700</td>
<td>$11,683,700</td>
<td>$13,838,300</td>
<td>$11,683,700</td>
</tr>
<tr>
<td>Engineering &amp; management</td>
<td>$22,387,400</td>
<td>$21,337,400</td>
<td>$12,149,100</td>
<td>$24,414,000</td>
<td>$12,149,100</td>
</tr>
<tr>
<td>Sustaining and working capital</td>
<td>$17,379,000</td>
<td>$17,511,200</td>
<td>$—</td>
<td>$17,704,900</td>
<td>$17,704,900</td>
</tr>
<tr>
<td>Other</td>
<td>$7,704,900</td>
<td>$7,704,900</td>
<td>$7,704,900</td>
<td>$7,704,900</td>
<td>$7,704,900</td>
</tr>
</tbody>
</table>

Table 2: Costing for "typical" African surface mining operations
transactions are of financial importance in different types of mines and should be given priority when considering their potential susceptibility to TP issues when mapping the main risk points to government revenue.\textsuperscript{22}

It is important to note that different commodities have markedly different characteristics in terms of their:

- extraction technology involved;
- level of ore tonnage throughput;
- necessary initial capital cost;
- unit recurrent cost of production;
- required downstream processing and related energy intensity;
- reliance on transport and logistics as a major input; and
- specifications and marketing characteristics.

As we see in Table 2, contrary to bulk mining, which generally produces and exports crushed and screened ore after no, or minimum, beneficiation, some metallic commodities, such as copper, and to a lesser degree gold, require significant investment in downstream processing and waste disposal facilities such as tailing dams, and are often marketed as either concentrates (e.g., copper (gold) concentrates) and/or crude and refined metals (e.g., blister copper, doré).

As discussed in detail later when dealing with marketing hubs, product specifications vary from very stringent for refined metals sold on terminal markets (e.g., London Metals Exchange) to more variable for concentrates and intermediate products, to customer specifications for specialty metals and industrial minerals, to strictly quality-based specifications for diamonds and gemstones in general. These market differences and the nature of of-take contracts can be the source of significant challenges for tax authorities in determining whether the related transfer prices comply with the ALP.

\textbf{2.2 Functional Analysis: The Mining Value Chain and Its Functions, Assets, and Risks}

The starting point for TP analysis is identifying the actual conditions of arrangements between related parties and whether they are an appropriate reflection of the economic substance provided by each of the parties. To identify the actual conditions a rigorous functional analysis of the mining value chain occurs during the audit stage of a case. This step analyses the \textit{functions (F)} performed, \textit{assets (A)} used in carrying out those functions as well as the \textit{risks (R)} borne by each of the related parties in undertaking those functions. Questions will need to be asked and documents obtained by auditors to verify whether what is reported is accurate (detailed questionnaires have been developed for this purpose in the TP guidebook). This is best done at the miner’s offices with their staff rather than through an intermediary (such as an accountant or lawyer) as the goal is to establish facts to enable identification of the parties responsible for key value-adding activities. Where mining entities allegedly have limited value-adding activities, information from other sources including exchanges of information

\textsuperscript{22}Cost information was extracted from the CostMine database.
from other countries may be needed. The process requires a deep knowledge of the mining industry value chain and of its various mineral products, processes and procedures.

2.2.1 The mining value chain

Figure 1 displays the typical stages in the mining value chain from initial exploration to marketing of refined metals on terminal markets. The degree of vertical integration within a single taxable entity depends on the nature of the mineral products sold, which is a function of the degree of downstream processing undertaken, ranging from:

- **Crushed and screened ore** with no or minimal beneficiation, e.g., bulk commodities such as iron ore, coal, phosphate rock, etc.; to
- **Mineral concentrates** and other partially downstream processed, mineral products, e.g., base metals and nickel concentrates and various other intermediate products; to
- **Metals** after smelting and refining.
It is at these different points of either sales in a contestable market to unrelated entities, or transfers to a related entity part of the same MNE group owning the mining company, that profits taxable in the source country are generated.

Situations where an MNE carries out its mining business in a developing country in its own right through a local branch are comparatively rare because most African countries require that mining projects be ring-fenced, i.e., individually owned (aside from generally minority (generally around 10%) government equity) and operated by a mining-specific subsidiary of the MNE registered and taxable in the host country. The use of MNE’s branches, even if allowed, is generally discouraged by highly differential rates of taxation, which may be a reflection of the limited network of double taxation agreements (DTAs) in Africa.

Even where a mining project is fully vertically integrated from the exploration stage to marketing of its refined metals, it is unlikely that all inputs down the value-adding chain would be supplied by internal functional units. Its production process would often involve customer-supplier transactions with related suppliers, i.e., entities (either subsidiaries or branches) owned and controlled by the same MNE which holds the mining project.

### 2.2.2 Functions performed

Functions can be categorized as:

- **primary**, i.e., those associated directly with core activities such as exploration, mining/processing and selling of mineral commodities shown in green in Figure 2, and
- **secondary**, i.e., support functions not directly related to the discovery, extraction and disposal of minerals, including corporate services (accounting, finance, human resource management (HR), information technology (IT), insurance, legal, etc.), shown in orange. There are also routine and nonroutine functions.

Figure 1 shows how transactions with related parties may occur at any stage along the mining value chain, subdividing them into the two categories of:

- Outbound transfers of mineral products to, and
- Inbound (and outbound) transfers of goods and services from/to a related party.

Functions may be performed by a related party for a variety of reasons, including capacity, economies of scale and taxation purposes. Some of the more common related-party functions that occur in the mining sector include:

- Research and development (R&D) and technical services during the exploration stage;
- Design, engineering, procurement, transport, logistics, treasury, insurance and legal services during the development and construction stage;

---

23It must be pointed out that while ring-fencing is generally applied throughout the world in the context of mineral royalties, it is not the norm in the context of corporate income tax (CIT) in the developed world where losses can generally be offset against taxable income produced by a related company.
■ Development of intellectual property (IP), acquisition or leasing of equipment for extraction and transport, logistics, engineering and technical services, treasury, insurance, legal and public relations (PR) services during the mining and concentration stage; and

■ Sales, customer liaison, contractual, warehousing, shipping, insurance, logistics and foreign exchange management services during the trading, marketing and sales stage.

The details of some of these functions naturally vary with the mine design and scale and, above all, the nature of the mineral commodity mined and of the mineral product produced and sold, involving potentially significant differences in the processing technology used and their marketing characteristics.

TP issues can arise where the return for functions actually undertaken in the host county by the mining subsidiary is claimed to be performed elsewhere by the MNE, often in low-tax jurisdictions and/or where the pricing of those functions are not at arm’s length.

The financial significance of some of the outbound and inbound transfers and transactions with related parties can be very high given the scale of the mining industry. This makes appropriate
estimation of the related transfer prices a critical issue. The degree of risk to revenue arising from these estimations will range from relatively low for routine transactions where relevant comparables may be readily available, to very high for more complex transactions involving the transfer of hard-to-value intermediate mineral products with prices not normally quoted in terminal markets, and/or intangibles such as R&D and IP, patents and licenses, etc.

2.2.3 Assets used in carrying out the functions

Table 3 lists the typical assets utilised by mining. In the context of mining the majority of tangible assets are used in day-to-day operations and are easily identifiable as they are likely to be located in the host country and owned by the mining subsidiary. Tangible assets are generally capitalized and depreciated over their useful lives at rates set by the tax legislation. Some plant and equipment may be leased from either independent third parties (providing useful information in applying the ALP) or from related entities.

Intangible assets (i.e., nonphysical or financial assets capable of being owned and/or controlled) used by the mining sector include the most economically important mining rights, usually granted by government or acquired. Other intangible assets may be used, usually in the performance of specialized, nonroutine functions that normally also require unique professional skills and expertise. TP issues can arise where assets are transferred between related parties on other than arm’s-length conditions or where the price paid for use of such assets held by related parties is not at arm’s length.

Compensation for the use of hard-to-value intangibles in the mining sector (usually for primary mining functions) is often claimed at a significant margin markup by way of licences and/or royalty payments for their use. They include:

- Exploration and mining tenements, and other licenses providing legal access to valuable mining reserves and resources;
- IP and patents covering inventions, innovative industrial methods, processes and prototypes, computer programs and databases;
- Specialised know-how and managerial expertise (e.g., of geosciences, mine design, development and construction, mining methods and metallurgical product and process technology, etc.) and R&D capabilities; and
- Specialised expertise and intelligence skills in identifying and satisfying unique customer requirements and specifications for minerals not commonly traded on terminal markets, thus creating value in use and capturing valuable niche markets, and related patents and trademarks, etc.

The review of such claims are challenging for tax administrations as the process is often hindered by the paucity of available comparable data. This is particularly pronounced in developing countries due to the paucity of independent business and uncontrolled transactions. Importantly the BEPS 2015 Final Report for Actions 8–10 provides updated guidelines for arm’s-length pricing of intangibles, including that legal ownership does not ‘determine’ the returns for intangibles.

A special category of intangibles are the so-called Location Specific Advantages (LSA). Unfortunately, the rules of accounting have not yet developed standards for capitalizing individual LSAs which, in the case of mineral-rich developing countries, would include ready access to
**Table 3:** Typical assets of a mining company

<table>
<thead>
<tr>
<th>Exploration Discovery</th>
<th>Mine Development and Construction</th>
<th>Mining Exploitation</th>
<th>Beneficiation, Smelting and Refining</th>
<th>Trading, Marketing and Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploration and mining licenses and rights, (I)</td>
<td>Engineering design (I)</td>
<td>Exploitation techniques (I)</td>
<td>Beneficiation processes (I)</td>
<td>Customer lists and relationships (I)</td>
</tr>
<tr>
<td>Access and surface rights (I)</td>
<td>Engineering machinery (T)</td>
<td>Exploitation plant and equipment and infrastructure (T)</td>
<td>Beneficiation plant and equipment (T)</td>
<td>Marketing and distribution activities (I+T)</td>
</tr>
<tr>
<td>Drilling rights (I)</td>
<td>Engineering, procurement and project management know-how (I)</td>
<td>Logistics management and infrastructure (I+T)</td>
<td>Logistics management and infrastructure (I+T)</td>
<td>Logistics management and infrastructure (I+T)</td>
</tr>
<tr>
<td>Exploration and laboratory equipment and machinery (T)</td>
<td>Construction, drilling and excavation plant and equipment (T)</td>
<td>Transportation plant and equipment and infrastructure (T)</td>
<td>IP relative to the smelting/refining processes and protocols (I)</td>
<td>Shipping and warehousing (T)</td>
</tr>
<tr>
<td>Topographical surveys (I)</td>
<td>Construction camp and logistic infrastructure (T)</td>
<td>Value of mineral resources and reserves included in price of acquisition of mining rights from a third party (not by means of discovery) (I)</td>
<td>Smelting and refining plant and equipment (T)</td>
<td>Product stocks (T)</td>
</tr>
<tr>
<td>Geological surveys (I)</td>
<td>Mine development (T)</td>
<td>Broken ore stockpiles and inventory (T)</td>
<td>Ore, concentrate and metal stockpiles and inventories (T)</td>
<td>Marketing know-how (I)</td>
</tr>
<tr>
<td>Geochemical surveys (I)</td>
<td></td>
<td></td>
<td></td>
<td>Trading software/platforms (I)</td>
</tr>
<tr>
<td>Geophysical surveys (I)</td>
<td></td>
<td></td>
<td></td>
<td>Specialized aspects of supply chain management (I)</td>
</tr>
<tr>
<td>Transport, communication and camp facilities (T)</td>
<td></td>
<td></td>
<td></td>
<td>Product innovation processes (I)</td>
</tr>
<tr>
<td>Exploration techniques and know-how (I)</td>
<td></td>
<td></td>
<td></td>
<td>Distribution rights (I)</td>
</tr>
</tbody>
</table>

(continued)
**Transfer Pricing in Mining with a Focus on Africa**

**Exploration Discovery**

- IP related to remote sensing and GIS techniques and related databases (I)

**Mine Development and Construction**

- IP related to negotiation, contract structuring and management of joint ventures (I)

**Mining Exploitation**

- IP related to negotiation, contract structuring and management of joint ventures (I)

**Beneficiation, Smelting and Refining**

**Trading, Marketing and Sales**

- Pricing negotiations know-how for unusual commodities (I)

---

**Table 3: Continued**

<table>
<thead>
<tr>
<th>Exploration Discovery</th>
<th>Mine Development and Construction</th>
<th>Mining Exploitation</th>
<th>Beneficiation, Smelting and Refining</th>
<th>Trading, Marketing and Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP related to remote sensing and GIS techniques and related databases (I)</td>
<td>IP related to negotiation, contract structuring and management of joint ventures (I)</td>
<td></td>
<td></td>
<td>Pricing negotiations know-how for unusual commodities (I)</td>
</tr>
</tbody>
</table>

I = Intangible asset, T = Tangible asset, I + T = Intangible and tangible assets

---

mineral resources and lower regulatory and environmental hurdles to mine development and exploitation, and other “synergies” such as availability of a comparatively cheaper yet competent workforce, etc. As a result their value is only occasionally and partially captured in the generalised entry of “goodwill.” The LSA debate is ongoing and there remains a difference of view internationally on the extent to which LSAs could and should be considered as relevant to profit outcomes at the entity level in a given jurisdiction. The BEPS 2015 Final Report for Actions 8–10 in updating the OECD TP Guidelines indicates that the existence and allocation of LSAs among members of an MNE group should be based on functional analysis with comparability adjustments to be made where required.24

2.2.4 Risks assumed in performing functions

A clear understanding is needed of the nature of the risks (R) that mining companies are likely to confront along the mining value chain and of whom specifically or de facto carries and manages those risks. This is critical in determining which party to a transaction should be entitled to a larger or smaller share of the economic benefits, to balance risk with return, and to determine the appropriate TP method to reflect risk in an arm’s-length consideration.

For example, an offshore marketing hub may take legal title of the mineral product from the subsidiary, on-selling to its own unrelated customers. In this case the hub assumes a number of risks, including: price risk (i.e., it is responsible for negotiating contracts with third parties), market risk (i.e., demand for the commodity may fall), and supply risk (i.e., the subsidiary may be unable to produce the volume that the hub has already sold to customers). The level of risk taken on by the marketing hub may justify higher remuneration than if it was simply to advise on market conditions and identify customers.

Table 4: Risks typically encountered by a mining company (Source: TPA Global).

<table>
<thead>
<tr>
<th>Risks</th>
<th>Acquisition/Exploration</th>
<th>Mining</th>
<th>Ore Processing</th>
<th>Trade</th>
<th>Marketing/Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exogeneous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market risk</td>
<td>—</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>X</td>
</tr>
<tr>
<td>Currency/foreign exchange risk</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Social/political sovereign/legal risk</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Natural disaster risk</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Environmental risk</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Endogenous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploration risk</td>
<td>X</td>
<td>—</td>
<td></td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Operating risk</td>
<td>—</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>X</td>
</tr>
<tr>
<td>Processing risk</td>
<td>—</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>—</td>
</tr>
<tr>
<td>Capacity underutilization and availability risk</td>
<td>—</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>—</td>
</tr>
<tr>
<td>Transportation risk</td>
<td>—</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Inventory risk</td>
<td>—</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Product liability risk</td>
<td>—</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>X</td>
</tr>
<tr>
<td>Credit risk</td>
<td>—</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>X</td>
</tr>
</tbody>
</table>

— = Limited risk, x = Moderate risk, X = High risk

Table 4 presents the main risks (R) arising at the various stages of the mining value chain. The risks are grouped into two main categories of exogenous (i.e., external to the enterprise) and endogenous risks (i.e., inherent in the nature of the enterprise and its operations/activities).

2.3 The Four Phases of TP Compliance and Auditing Processes

Often discussions about TP are about auditing a particular case—but tax administrations have to do much more than audit to effectively deal with transfer pricing. Tax administrations have limited resources and the following practical mechanisms need to be in place if those resources are to be used in a way to get the best outcome for the mining host country:

- Phase 1: Case selection—selecting who should be looked at—what are the significant risks to address and their relative priority. What industry or business groups and what taxpayers may present those risks?
Phase 2: Risk Assessment—selecting what issues to look at within identified MNEs.

Phase 3: Audit—identifying and undertaking action needed to manage the specific taxpayer risks through to tax adjustment, if required. This includes determining comparability factors through functional analysis which considers the functions performed, the assets utilised and the risk borne by different parties in transactions along the mining value chain from exploration, through mining and processing, to transfer of mineral products, as well as of the relevant contract terms, business strategies and economic circumstances.

Phase 4: Resolution—resolving the risks both relating to the past issues and risks into the future. Negotiation is a key activity at this phase and it may involve arbitration, litigation, mechanisms to relieve double taxation and possibly advance pricing arrangements (APAs).

The main characteristics of these processes are summarised in Table 5 while the key sources of guidance relating to the four phases of TP verification and audit are schematised in Appendix A.

It is very important for tax administrations to review their risk management and resource allocation decisions in the mining sector at regular intervals as they can get mired in the past and fail to identify and deal with current risks arising from the frequent changes that mining MNEs make to their arrangements. Mining TP audits can take many years to resolve and in that time opportunities may be missed to implement policy, legislative or administrative changes to lessen the risk of future noncompliance. The right balance needs to be struck between ‘punishing the past’ and ‘fixing the future’.
<table>
<thead>
<tr>
<th>Phase</th>
<th>Broad Industry Analysis</th>
<th>Market Analysis</th>
<th>Business Analysis</th>
<th>Profitability Analysis</th>
<th>Functional Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 1</strong></td>
<td><strong>Who Is of Concern</strong></td>
<td>Analyse the industry to identify products mined and exported and who is involved. Understand expected tax behaviours and outcomes. Identify features that may indicate a tax concern.</td>
<td>Analyse the market (e.g., Porters Five Forces approach) to gain insights about prices and costs that might reasonably be expected for the products mined and exported. Identify those who appear to deviate significantly.</td>
<td>Analyse the business against its peers and against its past performance. Understand who has significant amounts of related party transactions.</td>
<td>Analyse functions performed in the jurisdiction at a high level. Identify those who have significant operations in the country.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Phase 2</strong></td>
<td><strong>What Issues Do They Have</strong></td>
<td>Understand the broad industry value chain and the associated tax issues and what indicators reveal their possible existence.</td>
<td>Understand the market and how that may impact upon the likelihood and consequences of a tax issue being present.</td>
<td>Understand the business’s economic and tax performance. Understand the reasons for any divergence in key ratios and balances.</td>
<td>Examine financial accounts over time. Understand the reasons for tax performance that is below reasonable projections. Perform initial functional reviews to identify those functions that appear to be significant and of concern.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
| **Phase 3** | **Audit the Evidence** | A process similar to the following four steps should be used when undertaking an audit of transfer prices:  
**Step 1:** **Identify** the actual conditions. Gather and review the facts/evidence.  
**Step 2:** **Analyse**—Identify and adjust for comparable circumstances relevant to arm’s-length condition. Select best arm’s-length method  
**Step 3:** **Apply** the transfer pricing rules to achieve consistency with the relevant guidance material, (e.g., OECD, UN, Country Specific),  
**Step 4:** **Update/amend** transfer prices if necessary. Decide on roll back/roll forward aspects. Monitor ongoing compliance. | | |
| **Phase 4** | **Resolve Issues** | Resolve the adjustment with the taxpayer and other relevant tax administrations (MAP). Identify who else in the industry/market may have similar issues and consider whether to provide additional guidance or if compliance action is warranted. | | |

**Links**
Risks to Government Revenues Arising from MNEs Structuring and Mispricing of Transfers Between Related Parties

3.1 Corporate Structures Used by Mining MNEs and Their Fiscal Consequences

The mining supply chain consists of a series of interconnected activities including operations, logistics and marketing functions. MNEs may introduce complex international structures when setting up their structure for investment in a mining venture, or following a restructure of pre-existing arrangements in order optimize their business. The result is a fragmentation of the supply chain, which may lead to profits being shifted from the host country where mining activities are undertaken.

This is because business optimization processes tend to consolidate most of an MNE’s specialized intangible assets and nonroutine, value-adding capabilities into centralised service centres or hubs or subsidiaries located abroad, often in low tax jurisdictions. As a consequence the tax base of the host country is eroded and profits are shifted to the lower tax jurisdictions, thus reducing the total tax paid by the MNE at the consolidated level.

Economic substance to these arrangements is likely to exist where the chosen countries have favourable business conditions, for example, where there is:

- established trade centres close to customers and warehousing/shipping facilities to support marketing and distribution activities, or
- good research infrastructure (universities, research centres, etc.) to support specialised engineering, scientific and technical R&D activities.

Where there is economic substance, and the goods and services provided by the hubs actually add value, then the issue is merely to ascertain whether the transfer prices used for related-party transactions are arm’s-length prices.

In other cases it may be more difficult to determine the degree to which various MNEs’ entities add value, especially where they are holding or conduit companies. Despite arguments that
business considerations prevail, tax exploitation opportunities feature strongly, for example through:

- tax rate arbitration between jurisdictions with different tax rates;
- specific tax concessions provided in certain countries (i.e., The Netherlands, Singapore and Luxembourg);
- availability of tax losses to offset profits;
- opportunities to reduce the rates of withholding tax (WHT) payable by MNE entities taking advantage of DTA networks (i.e., ‘treaty shopping’).

Figure 3 exemplifies the case of a mining MNE headquartered in Australia (HeadCo) that owns (asides from limited Government equity) and operates mines in two different African countries (MinCo A and MinCo B) through two separate holding conduit companies registered in a European country (HoldCo Europe) and in Mauritius (HoldCo Mauritius). Financing services to the mining companies are also provided through these jurisdictions. As neither of these holding companies has any permanent staff in their respective countries of residence, a question of form versus economic substance arises and one may be justified in assuming that the MNE has registered the two holding companies for the two separate projects in two separate countries because:

- country A has a bilateral DTA with The Netherlands and country B with Mauritius, which have the effect of reducing/eliminating WHT payable, and
- both the European country in which the company is registered and Mauritius are low-tax jurisdictions, with treaties with Australia.

The net result is that HeadCo’s tax liability is largely reduced at the consolidated corporate level.

![Figure 3: Diagrammatic representation of a tax-minimising corporate structure](1705352-Transfer_pricing_in_mining_summary.indd)
3.2 Centralised Service Centres or Hubs

Mining companies use hubs for the provision of a range of services, including marketing, finance, insurance, technical/engineering, R&D, procurement, and corporate services. The structure used by MNEs for their hubs varies significantly. In some cases services may be provided by the parent company in other cases they may be provided by a centralised or integrated group that performs a particular function throughout the MNE group or a particular region or a combination of both. The trend towards greater use of globalised service centres or hubs purportedly supplying high value-added services to related mining operations raises serious TP issues that warrant careful examination and has been one of the factors leading to the updating of the OECD TP Guidelines under the BEPS 2015 Final Reports for Actions 8–10.

Tax authorities need to question whether the profits allocated to the mining subsidiary in the host country and the profits allocated to related hub entities match the value actually added by each of them along the mining value chain. A tax adjustment may be warranted where the economic substance and the form of an arrangement do not match.

Extreme cases may warrant re-characterisation of related-party transactions to reflect the conditions that would have been agreed between unrelated parties in uncontrolled deals. Logically, mining companies, acting independently, would not enter into arrangements involving conditions that could reasonably be expected to lead to them trading at an unacceptable rate of return or even at a long-term loss. They would not accept excessive discounts on mineral products sales and/or pay grossly above market prices for marketing, finance (including interest and fees on borrowing and guarantees), technical/R&D, corporate and other goods and services. Nor would they divest assets, at times well below their market values, to an entity and subsequently pay that entity premium fees and/or royalties for their use. Taxpayers’ claims that re-characterisation should be avoided because it may result in double taxation may be exaggerated because most jurisdictions provide foreign taxation credits or exemptions. The UK has introduced, and more recently Australia has announced, a ‘diverted profits tax’ to more effectively address these issues.

3.3 Revenue Risk Matrix

Our research, including responses to a TP questionnaire administered to tax officers from most of the mineral-rich Sub-Saharan tax administrations, indicated that they are particularly worried about the potential for significant transfer mispricing in the context of the marketing and financial services hubs of MNEs providing services to their mining subsidiaries. This is because of the financial significance, and of the very complex nature of the related transactions due to the unique characteristics of the mineral products exported and of the funding structure requirements in the mining industry. For these reasons the operations of these hubs are discussed in more detail below. For the others, which display greater similarities across different sectors of the economy, the reader is referred to the more comprehensive WBG’s publications: ‘Transfer Pricing in Mining with a Focus on Africa: A Reference Guide for Practitioners’ and ‘Transfer Pricing and Developing Economies’.

The degree of TP risk to revenue posed by various types of service hubs at various stages of the mining value chain is summarised in the Risk Matrix of Table 6.
Table 6: Matrix mapping the most common risk point encountered at various stages of the mining value chain

<table>
<thead>
<tr>
<th>Value-Chain Stage</th>
<th>Acquisition Exploration</th>
<th>Development Construction</th>
<th>Mining and Concentration</th>
<th>Transport</th>
<th>Smelting and Refining</th>
<th>Marketing and Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Hub</td>
<td>H</td>
<td>H-M</td>
<td></td>
<td>M-H</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>Marketing services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shipping and distribution services</td>
<td>H</td>
<td>H-M</td>
<td></td>
<td>M</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>Cargo insurance services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance Hub</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treasury services</td>
<td>M</td>
<td>H</td>
<td>M-L</td>
<td>M-L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financing services</td>
<td>M-L</td>
<td>H</td>
<td>M-L</td>
<td>M-L</td>
<td>M-L</td>
<td>H</td>
</tr>
<tr>
<td>Insurance Hub</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance brokerage services</td>
<td>L</td>
<td>M-L</td>
<td>M-L</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Captive insurance services</td>
<td>M-H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>Engineering, Science and Tech. Hub</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPC/EPCM contracts</td>
<td>H</td>
<td>M-L</td>
<td>M-L</td>
<td>M-L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical and scientific services</td>
<td>H</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patents and other IP</td>
<td>H</td>
<td>H</td>
<td>M-H</td>
<td>M-H</td>
<td></td>
<td>M</td>
</tr>
<tr>
<td>Corporate Services Hub</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR, accounting, IT, legal, etc.</td>
<td>M-L</td>
<td>M-H</td>
<td>M-L</td>
<td>M-L</td>
<td>M-L</td>
<td>M-L</td>
</tr>
</tbody>
</table>

Legend: H, M, L refers to level of risk; red color = high flows; green color = high level of intangibles.
3.4 Marketing Hubs

The functions performed by a marketing service provider may range from marketing support through to the role of commissionaire or marketing agent to that of a fully-fledged marketer. Determination of which of the above roles is performed should be based on facts, as to whether the hub is fully resourced financially and physically to carry out the various functions, assumes ownership and takes delivery of the minerals, and is in a position to bear and actually bears the related risks. Accordingly, the functions performed by the hub may or may not include any of the following:

- **Marketing Services** involving:
  - Engaging customers
  - Handling orders
  - Processing of related financial transactions
  - Providing support for the product marketed
  - Development of innovative marketing systems and strategies, particularly for those mineral products that are not commonly traded in terminal markets, requiring specific customer specifications.

- **Shipping and Distribution Services** involving:
  - Arranging chartering of ore carriers or other vessels and of possible transhipping
  - Warehousing and packaging products for shipping and distribution to customers
  - Negotiating address commission,\(^25\) dead freight, bunkerage and demurrage\(^26\)
  - Providing for frequently captive freight insurance, as discussed later.

Many of the marketing hubs claim to be adding significant economic value, which in their view justifies remuneration moving from a cost plus basis, which is typically associated with the functional profile of a cost centre, to higher forms of remuneration typically associated with a profit centre. Contracts between the mining company and a related marketing hub may involve arrangements for change in ownership of the minerals beyond the export point and covering their subsequent sales to unrelated parties. A question arises as to whether these contractual arrangements amount to the undertaking of a full marketing/distribution function, especially where the mineral product is shipped directly from the host country to the foreign purchaser, that is to say sold on the “high seas” in a so-called ‘triangular’ transaction, as shown in Figure 4. In many cases, irrespective of whether the marketing hub takes title of the minerals or not, inventory management, warehousing and ship loading, i.e., the physical side of distribution, are generally carried out by the mining company or an associated entity.

The fundamental question from a tax authority’s point of view relates to the extent to which the marketing hub can and does add value by influencing the price of the underlying commodity, the cost of production and transport, and/or the quantities sold. While it is true that

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\(^{25}\)This is a commission typically of the order of a few percentage points charged by the charterer to the owner of the vessel in addition to any commission charged by a possible shipping broker. The ship owner will tend to add these commissions to the shipping rate per tonne of cargo to be charged to the charterer. It is in effect a mechanism whereby charterers can direct moneys toward the cost of running their department, which in some instances may escape the attention of relevant tax authorities.

\(^{26}\)Demurrage at the port of export is generally accounted for as part of the operating cost, that is at the port of destination as part of the marketing/shipping cost.
marketing activities may add some value, the degree to which they will do so depends primarily, as shown in Table 7, on the nature of the product sold. The value added will range from very low for sales of refined base and precious metals into terminal markets, where their stringent specifications are met primarily by the mining company’s operations at source, to high in the case of some specialty metals and some non-metallic industrial minerals where marketing entails identifying and satisfying unique and stringent specifications set by potential customers on the basis of their value-in-use. The value added by marketing may be very high in the case of certain fancy gemstones (e.g., pink diamonds), the demand for which has been created by cleverly devised advertising campaigns and by selective, by invitation, tenders through high fashion houses in New York and Paris.

Very high-value markups, in excess of 2.5% of the value of sales, have been reported\textsuperscript{27} in the case of iron ore and coal marketing hubs based in Singapore, which in the case of one of the main Australian producers, have generated an average of about $1 billion in revenue for the hub in recent years. This has been the subject of an inquiry resulting in AUD 522 million adjustments to the tax payable by the Australian entity and of AUD 288 million adjustment to its mineral royalty liability.

Aside from the criteria for establishing marketing fees, including consideration of whether the services included possible use of specialised IP and other intangibles, the terms of off-take

\textsuperscript{27}Australian Financial Review (April 22, 2015) and (April 7, 2015).
Table 7: Specification, marketing modalities and pricing of various commodities, related sources of information and indicative value of marketing intangibles

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical Mineral Products</td>
<td>Cu, Pb, Zn, Ni, Co, Sn, Al, Au, Ag, Pt, Pl</td>
<td>Iron ore, coking and steam coal, manganese ore, phosphate rock</td>
<td>Cu(Au), Zn(Ag), Pb(Ag), Zn-Pb, Co, Mo, Ni, heavy minerals (Ti, Zr), magnetite, titanomagnetite, chromite, cassiterite, tantalite-columbite</td>
<td>Blister copper, nickel matte, alumina, doré, mixed rare earth oxides, vanadium pentoxide, titanium sponge, zirconia and dioxide, alumina, ferroalloys, UO₂, lithium carbonate, chromite</td>
<td>While there is a vast array of non-metallic minerals used domestically, only a minority is subject to cross-border trading, e.g., barite, fluorite, graphite, industrial diamonds, beryl, etc.</td>
<td>Rough diamonds, other gemstones</td>
</tr>
</tbody>
</table>

Specifications
- Standard, stringent and inflexible
- Multiple standards, flexible, and subject to discounts and premia for quality
- Multiple standards, flexible, and subject to discounts and premia for quality
- Multiple standards, flexible, and subject to discounts and premia for quality
- Customer-defined and based on value-in-use
- Based on multiple quality attributes and/ or on trends in fashion

Markets
- Terminal commodity markets and OTC sales
- Medium- to long-term off-take contracts with prices re-negotiated at frequent intervals, subordinately spot sales
- Multi-annual contracts with individual smelter/refiners under reasonably standard contract formulae, limited spot sales
- Sales to individual smelter/refiners under less standardised contract formulae
- Off-take and/ or spot sales to individual end users
- Sold through tenders on specialised markets in assortments or as individual stones

Prices
- Daily quoted prices
- Daily price indices for selected grades
- Negotiated hybrid prices, i.e., LME less TC/RC
- Negotiated prices
- Producers’ price lists and negotiated prices with significant traders intermediation
- Producers’ price lists and tender prices

Sources
- Easily obtainable from the LME, NYMEX, LBMA, LPPM, John Mathey and Kitco, etc.
- Easily obtainable from Platts, Metal Bulletin, Metals and Minerals, globalCOAL, etc.
- Reported in industry journals and specialised magazines, CRU, AME, Reuters, Bloomberg
- Specialised trading magazines, World Bureau of Metal Statistics
- Specialised trading magazines, e.g., Industrial Minerals and Mineral PriceWatch
- Diamond Trading Corporation (DTC) [De Beers] Price Book, Rapport diamond price list, Gemmological Institute of America (GIA)

Value of Marketing Services and Intangibles
- Low
- Low to medium
- Medium
- Medium to high
- High
- Extremely high
agreements can also create complexity in comparability analysis due to a range of issues, such as:

- determination of payable grades, precious metals credits, penalties for impurities, etc., in concentrates;
- the appropriateness and justification for shareholders' and other price discounts;
- mode and timing of payment, creating opportunities for free credit; and
- determining when during the ‘quotation period’, ownership of the mineral is actually transferred, which, given the volatility of commodity prices, may influence the applicable transfer price28 as exemplified in Table 8 which displays the transfer dates selected in transfers of doré from a South American gold mine to a related overseas marketing hub. These issues have been ameliorated by the recent revision of Chapter II of the OECD TP Guidelines included in the 2015 BEPS Final Reports package on deemed pricing dates.

For the sake of transparency, it would be expected that the contract between the marketing entity and the independent purchaser of the mineral product should be provided by the MNE and examined by the tax administration. However, MNEs frequently fail to provide it arguing that they are not the legal holder of the information or that it should be restricted on the basis of its commercial and in confidence nature. Both arguments are invalid considering that the MNE is the ultimate controller of the information and tax administrations are bound by secrecy provisions.

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28The recently released OECD’s BEPS publication ‘Aligning Transfer Pricing Outcomes to Value Creation: Actions 8–10—2015 Final Reports’ specifically addresses this type of risk.
Under some jurisdictions, the law provides for deeming, i.e., the ability to disregard the actual conditions agreed and replace them with ‘arm’s-length conditions’ consistent with the terms and conditions observed in unrelated party dealings, keeping in mind that there may be some differences if the unrelated sales are at the prevailing spot price. This would include looking at the hub’s ability to bear the risk and its ability to mitigate or control the related risk factors to determine whether the risk allocation implied in the contract is grounded in reality.\textsuperscript{29} Some of the financial risks that should be considered are:

1. Credit risk, which includes risk of nonpayment. In the context of mining some of the factors that would need to be looked at are:
   a. the likelihood of the nonpayment given the standing of the purchasers (especially as many purchases, as for instance some enterprises from emerging countries, are State backed)
   b. what is done to mitigate the consequences, for instance by requiring the application of advance payment or part payment, security and guarantees.
2. Transport risk, which includes the risk for loss during shipping. In the context of mining products this risk is often dealt with by insurance, which may be through a related party captive insurer, which in turn, may be covered through reinsurance.
3. Inventory risk, which involves the risk of carrying inventory when either demand slows or prices drop or both. This risk will arise only where the marketer is also a true distributor and maintains a stockpile.
4. Human resource risk of losing key staff, which in turn may mean the loss of key clients.

For example, in Figure 5 the trading subsidiaries (TradeCos 1 and 2) of a major African iron ore producer, registered as CFCs in a European and Asian country respectively, were initially classified as marketing agencies, but later have been reclassified as fully fledged distributors on account of title to iron ore shipments and related risks being formally transferred to them. This means that a greater proportion of profit is realized by them in the low-tax jurisdictions of the European and Asian countries even though a relatively low number of employees is based there.

3.5 Finance Hubs

Mining is a very capital-intensive business. High-risk activities, such as mineral exploration, are funded primarily by equity, and the return to investors may be by way of a capital gain should the project be disposed of, or through future dividends if exploration leads to a profitable mining operation. However, significant up-front capital is required through an appropriate mix of equity and debt for the development of a mineral discovery and construction of the mine. Because of the high risk and of the largely illiquid and location-bound nature of its assets, on average the debt to equity ratio of the mining industry is much lower than that of most other sectors.

\textsuperscript{29}Page 6, PwC Transfer pricing perspectives, Re-solutions, moving towards certainty, quoting US representative introducing the topic in Issue Note 1 Discussion Draft —Discussion Draft on Transfer Pricing Aspects of Business Restructurings—2-day public consultation, 9 and 10 June 2009.
While capital may be easily raised at the level of a creditworthy parent MNE, loans at the project level may not be easily obtainable from third parties in some developing countries, or may entail much higher rates of interest to compensate for perceived higher risk. In addition, the majority of loans are drawn down during the period of pre-production that can last for a significant number of years while no revenue is generated by the project from which interest expenses could be deducted. Nor could they be deducted from the taxable income of a related entity on account of the ring-fencing of the project. This issue has been acknowledged by the BEPS 2015 Final Report for Action 4 which recommends that un-deducted interest may be carried forward. Mining projects also require significant injections of working capital at the initial stages when mine production hopefully ramps up to planned capacity and during the productive life of the mine to ‘sustain’ operating capacity and to fund possible expansion and/or other changes in the design of the mine.

Thus, it is no surprise that many MNEs optimise their overall cost of funding at the consolidated level in a globally tax-effective way by carrying out centralized capital raising and
providing financial services through an in-house financing arm of the MNE group, a so-called Finance Hub, which may provide:

- **Treasury Services**
  - Financial advice;
  - Capital raising, both equity and debt through:
    - IPOs, share issues and placements, and
    - Loan contracts;
  - Management of interest and exchange rate risk;
  - Refinancing;
  - Debt factoring; and

- **Financing Services**
  - Provision of internal loans;
  - Supervision of cash flows and solvency;
  - Cash pooling;
  - Collateral and loan guarantees; and
  - Hedging.

Financial services are an area of relatively high TP vulnerability, because the deductibility of interest expenses creates an incentive for businesses to exploit debt leverage in their capital structure, and because the significant size of financing for a mining business means that even minor mispricing can have a material impact on profitability. In addition, complexity may be added through the determination of what constitutes debt and equity and the complex treatment of hybrid instruments that can be used to take advantage of tax arbitrage opportunities between the tax systems prevailing in different countries.

### 3.5.1 Determination of interest rates appropriate to the mining industry

The average debt to equity ratio of the mining industry globally (at 0.84 or 45.7% of total funds) is comparatively low relative to other sectors (CSIMarkets, 2015). Logic also dictates that, given the generally higher degree of risk in developing countries:

- the interest rates applicable to mining companies should be higher because of higher risk premiums; and
- their debt to equity ratios should be lower than average, that is to say that more equity funds should be utilised in their capital structure. However, because debt is frequently provided by related finance hubs that use cross-border lending to related entities as a tax-effective means of optimizing the cost of capital at the consolidated MNE level, this is not often the case, and as a consequence, mining projects in developing countries are often “thinly capitalized” and exposed to considerable financial risk.

Determination of an appropriate risk premium to be included in setting the interest rate charged to a mining subsidiary in a developing country is a much contested issue. The WBG[^30]

provides an up-to-date tabulation of the indicative bank lending interest rates that usually meet the short- and medium-term financing needs of the private sector in various countries. The rate of course varies with the economic sector and creditworthiness of the borrower, with mining being on the upper side of the underlying range.\(^{31}\)

To counteract excessive financing service charges being built into interest rate spreads, many African tax administrations have adopted a range of interim measures in their domestic legislation, including:

- Capping the maximum interest rate allowable by:
  - benchmarking it on observable international rates such as LIBOR plus a margin appropriate to their country; or
  - requiring the rate of interest charged to the mining subsidiary in their countries to be the average, or some other pre-set proportion of the rate of interest incurred by the MNE at the consolidated level;
- Levying relatively high rates of WHT on interest payments remitted to related lenders abroad.

Many tax administrations in developing countries contend that, irrespective of how appropriately the risk-adjusted interest rates may have been determined using a theoretical basis for various jurisdictions in which an MNE is conducting its business, the cumulative interest expense deductions for all of an MNE’s subsidiaries should not aggregate to a figure higher than the total net borrowing cost incurred by the MNE at the consolidated level. If this position were to be enforced, there would be a need to legislate to only allow interest expenses deductions based on the same interest rate as that paid by the holding MNE on external corporate borrowing at the consolidated level.

A case of particular interest is where a subsidiary borrows money from and pays interest to a cash-rich related party that has not borrowed and on-lends the relevant amount to another related entity. Under these circumstances the MNE as a whole has not incurred any interest expenses relating to an external source. A strict adherence to the principle that the cumulative interest deductions from all subsidiaries should not exceed the consolidated interest expenses of the holding MNE would lead to the above interest expenses being disallowed as a deduction. As the ‘loan’ to the mining subsidiary does not increase indebtedness at the consolidated MNE level, it is in fact a form of equity contribution rendering the ‘interest’ paid a form of ‘dividend’, and therefore, not deductible for the purpose of assessing taxable income. Some argue that this would appear unfair, as the lending entity would incur an opportunity cost for which it would not be compensated.

\(^{31}\)It is interesting to note that no figures are available for many of the African countries, which is probably an indication that the relevant financial services are not adequately developed in some of them. This is supported by the per capita level of access to a commercial bank branch which in Sub-Saharan Africa is 3 per 100,000 people as compared to 38 for Europe. Of the African countries for which rates are quoted, some appear very high by developed world standards (e.g., 20 to 60%), this may be the result of both prevailing high rates of inflation, country risk premia and very high spreads of around 11% between deposit and lending rates.
3.5.2 Issues relating to thin capitalisation

The majority of African countries have been dealing with the issue of thin capitalisation by determining an appropriate level of debt and/or of allowable interest deductions through a range of approaches including:

- thin capitalisation rules setting a limit on the ratio of debt to equity, generally of 2:1 or 3:1, that is to say 66.67% or 75% of total funds respectively, both of which are, however, significantly higher than standard debt-to-equity ratios for mining. Any borrowing debt in excess of the allowed ratio is to be considered equity and the related interest charges dividends, and therefore no longer would they be deductible. Thin capitalisation rules generally avoid the need for the application of the ALP on a case-by-case basis and act as a ‘safe harbour’ when the allowed ratio of debt to equity is not exceeded. This notwithstanding, some countries, as for instance South Africa, apply the arm’s-length test, and even in Australia, which has thin capitalisation rules, the arm’s-length test is applied if the safe harbor ratio is exceeded.

- interest capping rules that limit the amount of interest that can be deducted by an entity for tax purposes in any one year as a proportion of their gross income or EBIT, and/or

- group-wide rules that allocate interest expense as a function of the subsidiaries individual contributions to the MNE’s consolidated revenue or earnings.32

All the above issues may become less of an administrative challenge in the future if the interest capping provisions recommended by the OECD in their BEPS 2015 Final Report for Action 4 become widely applied. These include an optional de minimis monetary threshold to filter out low risk entities and a ceiling based on a fixed ratio rule, allowing deduction of an entity’s net interest expenses up to a benchmark percentage of its earnings before interest, tax, depreciation and amortization (EBITDA). This ratio should be set within a corridor of 10% to 30% depending on individual cases. Provision is also made for adoption of an optional group ratio rule when this is higher than the entity’s fixed ratio, and of applying to it an uplift of up to 10%, should this become necessary to avoid potential double taxation. The ratio may also be exceeded when borrowing relates specifically to the generation of public benefits. The fixed ratio rule recommendation need not be inconsistent with application of the arm’s-length principle and does not prevent the concomitant use of other best practice options embodied in individual countries’ tax legislation, such as those relating to thin capitalization and specific applicable interest rate capping.

Table 9 shows how an independent mining company borrowing from an unrelated bank may be limited by market constraints to fund only 40% of its capital requirements of $100 million by means of a loan at a rate of interest of say 5% per annum. Assuming annual revenue of $15 million and costs of $5 million, the mining company would pay $2 million in corporate income tax and retain $6 million of earnings in a mining jurisdiction with a tax rate of 25%. In effect a high level of debt would not be accessible to the miner irrespective of the fact that the jurisdiction allows for 3:1 capitalisation.

32See Annex 3 examples in Public Discussion draft BEPS Action 4: Interest deductions and other financial payments.
By contrast, Figure 6 shows a situation where the mining company borrowing 40% of the funds from an unrelated bank, but secured by the MNE’s Head office involving a $1 million guarantee fee, and 35% of the funds from a related finance hub, thus leveraging up to the allowed 3:1 capitalisation ratio.

It will be noted that under this financing structure the earnings retained by the mining company are lower than in the case portrayed in Table 9 (i.e., $3.94M versus $4.69M) even though the tax paid by the mining entity (and consequently by the MNE at the consolidated level) is lower (i.e., $1.31M versus $2.0M). Although an interest rate of 5% has been assumed in both the above examples, tax administrations are often presented, in addition to the guarantee fee, with claims for higher interest rates that incorporate a premium to compensate for the additional financial risk (e.g., credit risk).

Tax authorities must also question the legitimacy of deducting a guarantee fee if a high risk premium has been incorporated in the interest rate charged on a non-arm’s-length loan by a related party to a highly geared mining subsidiary due to the increased financial risk. As for captive insurance, where in some cases the risk has not in fact been transferred out of the MNE group in aggregate, it is problematic as to whether a charge for its transfer out of just the mining subsidiary should stand and be deductible.

More broadly risk hedging via derivatives (e.g., interest rate hedging, exchange rate hedging, etc.) has also become a norm over the last decade and this can further complicate a tax

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33 These levels of debt will in many cases be accompanied by payments for guarantee fees by the company to a related party to protect the loan and interest in this alleged higher risk scenario.
3.5.3 Re-characterisation of borrowing transactions

The power and practice of tax administrations to ignore or reconstruct arrangements that would not have been entered into between unrelated parties given the circumstances is one of the most contentious issues between tax administrations and businesses in discussions about TP. In this regard, the BEPS 2015 Final Reports for Actions 8–10 continue to authorise arrangements between related parties to be disregarded where exceptional circumstances of commercial irrationality apply. The mere fact that a transaction may not be seen between independent parties is not sufficient; the key question is whether the arrangement entered into possesses commercial rationality and would have been agreed between unrelated parties in comparable economic circumstances. For example, when looking at levels of borrowing in an MNE subsidiary, tax administrations should look at whether the subsidiary can rationally and commercially sustain that level of debt in terms of its profitability, creditworthiness and business purpose. If not, it may be that debt has effectively been ‘dumped’ into the subsidiary to minimise taxation, and the tax administration should consider whether the debt should be disregarded or treated as equity for tax purposes.

Figure 6: Calculation of tax payable by a company that borrows 75% of the required funds partly (40%) from an unrelated bank but subject to a guarantee by the MNE’s Head office and part (35%) from the MNE’s finance hub.
The interplay between thin capitalization rules and the re-characterisation of a borrowing transaction under the transfer pricing rules is illustrated by the Australian Taxation Office (ATO) Taxation Ruling TR2014/6. The interest rate is worked out on the basis that arm’s-length conditions operated and that an arm’s-length rate is then applied to the debt principal actually issued by the entity and permitted under thin capitalisation provisions, instead of the debt interest that would have been issued had the arm’s-length conditions operated in the context of determining an appropriate level of debt principal.

In Example 1 (paras 69–76) of the ATO Taxation Ruling 2014/6:

- Africa Co is a resident of an African country and a subsidiary of Foreign Co, the parent company which is resident in another country;
- The African country has thin capitalization provisions with a debt to equity ratio of 3:1;
- Africa Co borrows $300m from Foreign Co at 15% interest per annum;
- For thin capitalization purposes, Africa Co has a ‘safe harbour debt amount of $300m (and equity of $100m);
- This means Africa Co has claimed $45m in debt deductions for the year;
- Borrowings from independent parties at 10% per annum are possible in the African country which may be used as a comparable;
- In addition, analysis of market reference rates for borrowing of that size and of the credit standing that the capital markets would give Africa Co may indicate that a maximum $250m loan (not $300m) could realistically be provided by independent lenders under the circumstances;
- The analysis might show that the loan from Foreign Co might not reasonably be expected to occur between independent parties dealing at arm’s length because it would not make commercial sense for Africa Co (and Foreign Co), for example, because of the impacts on Africa Co from the relatively high cost of the loan on the profitability, viability or competitiveness of its business. Clearly, there is no rationale whereby Africa Co would have entered into similar arrangements if it were dealing with an unrelated party;
- As pointed out above, available information supports a conclusion that the closest arm’s-length scenario at which a loan might reasonably be expected to exist between independent parties dealing at arm’s length is a loan of $250m at 10% providing a further $50m of equity were to be raised;
- On this basis, if there was no ‘safe harbour debt amount’ under thin capitalisation provisions, an interest deduction of $25m (i.e., 10% interest on an amount of debt of $250m) would be allowed applying the arm’s-length principles. If on the other hand there were a 3:1 safe harbour debt amount, then in combination with the arm’s-length principle an interest deduction of $30m could have been claimed, as the thin capitalization provisions would operate to protect the arm’s-length interest on the $50m of debt that in their absence would have been reclassified as equity.

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4

TP Legislative Development and Enforcement in Africa

4.1 Challenges to Implementation of TP Legislation in Africa

Development of TP legislation in Africa is a dynamic process of continuous improvement, and the current status of development is progressively updated and reported by the major international accounting firms. Analysis of these sources of information complemented by the results of a comprehensive TP questionnaire,35 administered to a number of senior tax and mines department officials from some 40 African countries, revealed that, even though most jurisdictions have reference to the ALP in their tax legislation and/or adequate specific TP legislation in place, only a relatively small number are in a position to enforce it to any appreciable degree. As a consequence compliance activities such as audits of TP issues are rarely carried out and mostly as part of general audits that, with a few exceptions, seldom concern mining companies.

There are several reasons for this:

- the legislation is, in some cases, not yet complemented by the necessary practical regulations/guidance and systems for its effective implementation;
- most tax authorities have inadequate administrative capacity and systems and lack TP-specific expertise;
- there is a lack of or limited access to reliable comparables databases relevant to mining in the developing world;
- only a few jurisdictions have specific TP units within their tax administrations; and
- there is often inadequate knowledge of the mining industry within some tax authorities and, as a consequence, TP issues specific to the mining sector may often not be fully identified or understood and therefore addressed.

About half of the jurisdictions require taxpayers to compile effective TP contemporaneous documentation, in some cases with penalty provisions and onus of proof, and to either disclose it annually or more frequently produce it on request. In spite of this, many jurisdictions report reluctance on the side of MNEs to provide information in support of audits in a timely manner.

35The questionnaire and its results may be found in the publication Transfer Pricing in Mining with a Focus on Africa: A Reference Guide for Practitioners'.
Interestingly, many jurisdictions appear to make provisions for advance pricing agreements (APAs) and other forms of safe havens, but as discussed later, these have to date not been widely implemented in Africa.

4.2 Access to Comparable Databases and Other Critical Audit Information

Once a clear understanding of the functions performed, assets used and risks assumed by the parties to a transaction under review has been reached, access to key information and comparables databases is required. This is fundamental in determining whether the TP method chosen by the taxpayer is appropriate and to what degree the transfer prices adopted are compliant with the ALP.

Unfortunately, the inherent information asymmetry is not helped by some of the overseas related service suppliers withholding key elements of information and, as recognised by the OECD, by the paucity of relevant comparables data. While foreign comparables databases are available (e.g., Bureau van Dijk’s Orbis, Amadeus and others) they are expensive and populated by European and/or North American data, making them largely irrelevant to Africa and in particular to its mining sector.

By contrast some databases, such as those from Bloomberg, Platt’s and Metals Bulletin, focus specifically on mineral commodities and, given the size of the cash flows relating to the transfer of mineral products, are extremely useful in addressing issues relating to pricing and revenues. Useful information relevant to mining companies active in Africa can also be derived from their financial and other reports to various stock exchanges, i.e., the Australian Stock Exchange, Toronto Stock Exchange, Alternative Investment Market and some of the regional exchanges, on which most mining companies with interests in Africa are listed and/or traded.

In essence, with a few exceptions, the complexity of the TP processes and the limited technical capacity and mining industry knowledge of most tax administrations, coupled with the high cost of acquiring relevant information and implementing an effective TP compliance program, are the main reasons for weak implementation of TP rules.

4.3 Need for Improving Communication and Cooperation with Stakeholders

Effective TP compliance requires engagement and communication with a range of stakeholders at various stages in the process, including:

- policy developers and other decision makers in government and their advisors;
- CSOs and NGOs commenting about mining and taxation activities in Africa;
- the community, especially other taxpayers who want assurance about fairness of the tax system;

Transfer Pricing Comparability Data and Developing Countries, 2014.
mining industry bodies operating in Africa; and
the taxpayer mining subsidiaries operating in the host country as well as their MNEs.

4.3.1 Dealing and negotiating effectively with industry taxpayers

To be able to comply with the TP policy, legislation and administrative guidelines, taxpayers (and their MNE group) must be aware of and understand the position of the tax administration. If taxpayers disagree with that position then they should be able to dispute it in a transparent way. This requires tax administrations to make their position clearly known on key matters and to have processes in place to negotiate and process disputes (including to courts where necessary) in a professional and timely way.

Communication and relationships between tax administrations and mining MNEs regarding TP issues are frequently problematic from the perspective of both parties. While a degree of professional tension will inevitably arise, the relationship can reach a breakdown point, which can lead to long protracted processes and undesirable outcomes. Consequently it is important that efforts be made to avoid this situation where possible.

In an attempt to improve relationships and avoid such problems, many tax administrations have published best practice codes of conduct to govern the conduct of tax officers (including auditors) as well as making it clear to taxpayers about what they can expect during audits and other interactions with tax administrations. As the audit stage for TP cases is especially difficult and complex, it is important that auditors be trained and are well versed in so-called soft skills and the ability to bring an audit to a successful conclusion consistent with the TP legislation of the host country. Tax administrations and taxpayers can have different positions during audits, and a range of tactics, which may be deliberate or instinctive, may come into play by either or both parties.

While many mining MNEs do comply with TP legislation and processes, it is not uncommon for some to use tactics to disrupt TP audits from being undertaken in an effective and timely manner. Auditors need to be able to deal with such tactics which can include:

- Challenges to the validity of the role of tax administrations and, in particular, the role of tax auditors. Tax administrations should endeavour to build up with training and other means the confidence of auditors to be able to confidently deal with such challenges and be unwavering in their role in assuring the community and government that the TP legislation is being verified and enforced where necessary, in a professional, impartial and transparent way.
- Defensive and sometimes aggressive responses from the mining subsidiary and MNE. Auditors can better deal with this when they know and understand the roles and background of the people they are dealing with, in particular, whether they were the initiators or acting under instruction from others, so that they can to some degree anticipate their tactics.
- Seeking intervention from more senior tax and government officials (including Ministers). It is not uncommon for some mining MNEs to complain about TP audits and to seek to have the audit stopped or for auditors to be removed from the case. This tactic can be headed off by best practice briefings to senior officials informing them on a regular and preemptive basis about TP compliance activities so that the senior officials are in a position to support the activities and to avoid inadvertent responses that may undermine the validity of the TP audit.
Problems obtaining necessary information and documentation, and broad claims for legal professional privilege. These are perennial problems that are frequently encountered in TP audits in the mining sector. TP audits can get bogged down for years in trying to get information and, in some cases, respond to collateral litigation. Creativity is needed to look for other ways to proceed with the audit in a timely way, e.g., independent arbitration, other sources to get information or proceeding to make a tax adjustment based on reasonable assumptions.

Compromises may be proposed and it is important that auditors be able to identify and be ready to accept (or propose) compromises within the limits of justifiable reason recognising that TP issues are inherently complex and many issues are arguable. Compromises must be made in good faith, subject to good governance and be well documented.

4.3.2 Dealing with CSOs, NGOs and at the community level

The mining sector in Africa is seen by some as having failed to deliver the economic transformation that citizens anticipated including because of, at times, unbalanced deals with mining companies, mal governance, and tax avoidance. Civil society organizations (CSOs) and nongovernmental organizations (NGOs) have stepped in to support processes to improve and enforce mining obligations, or to directly monitor company compliance. This has yielded some positive results. In many African countries mining contracts are now publically available, there is greater transparency of mining revenues and scrutiny of mining negotiations. Bilateral and multilateral organisations (such as the World Bank Group or the International Monetary Fund) together with sustained advocacy by CSOs and NGOs, many of which are internationally based, has sparked greater awareness of the problem amongst governments, citizens, and development partners. Advocacy by CSOs and NGOs has been a factor in inquiries into tax avoidance and evasion, even though their contributions may not always be well informed and credible. Given the significant influence that CSOs and NGOs have on public opinion, it is important that their claims regarding potential transfer mispricing are based on reliable evidence and informed analysis.

As transfer pricing is a relatively new topic and highly technical, it is no surprise that CSOs and NGOs may be potentially uninformed due to a lack of technical capacity. If CSOs and NGOs are going to be effective contributors and play their appropriate role in tackling TP issues, efforts must be made to improve their understanding of TP, and how it is likely to manifest in practice in the African mining sector. Their capacity has been improved in recent years through a range of training initiatives including, for example, those by the World Bank Group and the Natural Resource Governance Institute (NRGI). Capacity building is required in the following areas:

- basic principles of TP and other tax minimisation measures;
- specific training on TP as it relates to the mining sector in Africa, institutional arrangements and specific accountability mechanisms;
- TP risk assessment; and
- guidance on how to better use EITI and other public data to monitor TP risks.

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The activities of CSOs and NGOs, if properly informed and trained, can be both mutually reinforcing and beneficial (rather than competing) to governments’ efforts to achieve effective TP compliance in the African mining sector. They are part of global networks that can be leveraged to access information from other tax jurisdictions on the global activities of mining MNEs that may otherwise not come to light. As NGOs and CSOs are often trusted by the public at large, if properly trained and informed by relevant authorities, they can become an effective channel to inform the public about what is being done to address TP issues and to manage unrealistic expectations while supporting accountability and transparency.

While taxpayer confidentiality is to be respected, more information could be shared by governments and tax administrations on TP in the mining sector to improve the quality and level of public debate. Greater transparency and sharing of information is critical to a more collaborative approach with the public, CSOs and NGOs and the overall success of an effective TP compliance program.

### 4.4 Possible Simplification Strategies

Compliance with TP rules and the arm’s-length principle can have high costs for both taxpayers and tax administrations. There are, however, some strategies that tax administrations can potentially use, if and as relevant, to reduce these costs while at the same time potentially improving compliance.

#### 4.4.1 Safe harbours

Administrative or legislative safe harbours can apply to a defined category of taxpayers (e.g., those with turnover below a specific level) or transactions (e.g., low-value corporate support services) to provide relief from some of the complexities and obligations that arise from the application of TP rules. Providing a safe harbour for routine low-risk functions can provide certainty for taxpayers, reduce the need to perform comparability studies under the arm’s-length principle and free up resources so that both tax administrations and taxpayers can concentrate on the more important and higher risk TP matters. An example of such a safe harbour might be to accept a price as arm’s length for low value support services between related parties providing the profit margin does not exceed 5%. Industry experts can be very useful to help identify industry norms and thresholds for potential safe harbours (a mechanism used in South Africa).

Safe harbours should be accompanied by stringent disclosure, review and eligibility requirements to prevent possible abuse.

#### 4.4.2 Advance Pricing Agreements (APAs)

An APA determines, in advance of the controlled transactions, a set of criteria to determine the arm’s-length price for those transactions over a fixed period of time. The criteria can include such matters as the method, specific acceptable comparables and adjustments, as well as critical assumptions as to future events. APAs can be unilateral, involving one tax administration and an MNE and its subsidiaries, or multilateral involving two or more tax administrations.

APAs can provide certainty in a more cooperative way than an audit, thereby providing a better and quicker way to review the evidence and achieve agreement on arm’s-length prices.
can also roll back to prior years (which might otherwise require auditing) or be extended into the future. However, they are best suited to larger taxpayers as they are a reasonably resource-intensive compliance approach in terms of time, cost and skill intensity requiring both mining industry and TP expertise. The cooperative processes involved in the negotiation of an APA are diagrammatically shown in Figure 7. They also require high levels of negotiation skills as well as resource commitment to undertake the annual review work. The cost of an APA program is

![Figure 7: Transfer pricing cooperative compliance phases](image)

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**Figure 7: Transfer pricing cooperative compliance phases**

**Phase 1: Who is of concern? (Candidate Selection)**
- Potential issues identified
- Initial functional review—who does what, where
- Examine accounts & transfer pricing documentation
- Initial compatibility—industry/market
- Results realistic (arm’s length)?
- Close TP review—document into APA

**Phase 2: What issues do they have? (Risk Assessment)**
- Step 1: Identify actual conditions re: TP issues
- Step 2: Comparability analysis & adjustments
- Step 3: Apply best TP method to get price/profit range
- Step 4: Agreement on TP price
- Close TP audit document into APA

**Phase 3: Audit the evidence (Audit)**
- Agreement on resolution process and resulting price?
- Deal with objection/appeal (independent)
- Court—win?
- Reverse amendment/close case

**Phase 4: Resolve the issues (Resolution)**
- Agreement on resolution process and resulting price?
- Deal with objection/appeal (independent)
- Court—win?
- Reverse amendment/close case

- No
- MAP to reduce double tax
- Monitor compliance

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3 to 6 Months ~1 Year ~2 to 3 Years 3+ Years
4.5 Issues Arising from Double Taxation Agreements (DTAs) and Treaty Shopping

African countries do not currently have a large tax treaty network and most of the current treaties are regional. Despite some claims that a broad tax treaty network is needed to attract investment, the empirical evidence on the effects of FDI is mixed as most capital exporting countries have credit or exemption regimes in place to reduce or eliminate double taxation.

The entering into of a DTA usually requires some taxing rights to be given up or shared and source country withholding taxes to be reduced and this would need to be justified by offsetting strategic or economic benefits.

The question of how to structure and negotiate more balanced DTAs between developing and developed countries is still far from resolved. Both the OECD and the UN have international tax treaty models with the UN Model retaining a greater share of taxing power to developing countries. Daurer and Krever (2012) compare these two models in a review about DTAs specifically in the African context.

The decision to enter into tax treaties needs to be based on broad policy and economic reasons (not just for TP purposes), balancing all the expected benefits and costs. The IMF notes that

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**Figure 8: Schematic treaty shopping (Modified from IMF, 2014)**

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caution is needed for any developing country entering into a tax treaty as they may achieve more through domestic law changes than reciprocal tax treaty benefits.

Even though a DTA may not exist between the country hosting the mining operations (A in Figure 8) and the country (C) of residence of the MNE, the MNE may reduce its effective tax rate at the consolidated level by 'treaty shopping', i.e., by routing investment indirectly through an entity in a low tax conduit country that has a treaty with the host country (B). In practice one often finds foreign investment routed through a favourable low effective tax jurisdiction.

With the ever present risk of treaty shopping, developing countries may wish to be cautious about creating tax treaty networks and may wish to include a suitable anti-abuse provision such as a Limitation of Benefit article in any tax treaties they enter into.

One aspect of DTAs that is particularly desirable (in both the OECD and UN models) for administration of TP issues is the exchange of information article. Despite forthcoming improvements in reporting of information as recommended in the BEPS 2015 Final Report for Action 13, and the EITI initiative, some difficulties will remain in gaining access to sufficient and timely information for TP compliance activities. Importantly, exchange of information provisions can be accessed without entering into bilateral treaties—they are available by entering into Taxation Information Exchange Agreements (TIEAs) or by becoming a signatory to the OECD multilateral treaty on mutual administrative assistance in tax matters (of which six African countries are already signatories).

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40Extractive Industries Transparency Initiative (EITI) is a global standard to promote open and accountable management of natural resources. It seeks to strengthen government and company systems, inform public debate and enhance trust. https://eiti.org/
The Way Forward—
Recommendations

Our research corroborated by the study questionnaire clearly highlighted a strong need for capacity strengthening in the area of transfer pricing in general throughout the African continent and for enhancing the specific knowledge of the structures, value chain characteristics and processes of the mining industry within tax authorities, particularly in fast developing mineral-rich countries. While significant, this is, of course, just one facet of the broader issue of having to strengthen the mining taxation administration and collection capacity of African tax authorities in general and these two priorities should be seen as complementary. The assistance provided by various international institutions is ensuring that most African jurisdictions will gradually have an adequate legislative basis to address TP issues. The main challenge is now to put in place supporting regulations, structures and adequate administrative capacity to effectively enforce it.

The current scarcity of TP experts may be gradually overcome, notwithstanding the resources constraints, by providing a range of training and capacity building opportunities to build an appropriate in-house skill inventory. However, these specialised personnel will also be in high general demand, and the government may experience difficulty in retaining them as their employment conditions are less competitive than those offered by the private sector. Governments must do all they can to portray themselves as an ‘employer of choice’ by emphasising security of employment, opportunities for sponsored external and on-the-job professional training, mentoring and development, clear career paths within the relevant ministry and/or across the public service in general. Inter-jurisdictional cooperative initiatives may offer a pragmatic interim solution to current capacity constraints.

On the basis of our study we present the following recommendations42 for consideration to the African tax administrations and relevant international organisations:

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<th>African Tax Administrations</th>
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42Detailed recommendations may be found in the publication Transfer Pricing in Mining with a Focus on Africa: A reference Guide for Practitioners.
In light of the country’s tax base, determine the most appropriate TP institutional structural arrangements:

- Either as a currently, much in favour, large taxpayer unit (LTU) with special functional (including TP) sections providing benefits, particularly in terms of effectiveness, but avoiding as far as possible the risk of cultural isolation from the rest of the organisation, and duplication of internal functions and efforts; or
- The valid alternative of a structure along tax types or functions, particularly if specialised resources are scarce. TP issues could then be either addressed in the context of general audits, or with the support of embedded TP specialists; or
- At the limit, a stand-alone TP specialist unit to carry out specific TP audits. This approach is currently rare in Africa, but may be more justifiable in the future.

Consider whether to establish a mining-specific audit team. This will depend on the significance of mining to revenue generation. In terms of TP issues, the mining audit team will either interact with the stand-alone TP unit, or TP specialists embedded within it.

Develop a better understanding of the industry characteristics and, in particular, of the mining value chain for the specific mineral commodities mined in the country and of the revenue potential and main cost components for each mining operation.

Negotiate exchange of information (EoI) agreements with key tax jurisdictions in which related service providers are residents.

Consider the relevance of the use of the ‘sixth’ method for transfer of mineral products to related marketing hubs.

Consider the relevance of the use of simplification measures such as ‘safe harbours’ for routine functions and negotiation of advance pricing agreements (APAs) with major producers, particularly for pricing of mineral exports, if necessary with the assistance of specialised external consultants.

Adopt the recommendations of the OECD BEPS 2015 Final Report for Action 4 to cap deductible interest to a set percentage of the EBIT (in the range of 10% to 30%) of an individual entity (fixed ratio rule) or to attribute interest deductions to various subsidiaries in proportion to their contribution to the consolidated MNE’s income (group ratio rule).

Provide a range of training and capacity building opportunities to African tax administrations to build an appropriate TP skill inventory involving:

- specialised international workshops on the issue of TP in mining being currently organised by the WBG in cooperation with a number of international institutions including UNECA, GIZ and MEIDA to be rolled out starting in late 2016. These may also be open to CSOs and NGOs;
- possibly bonded, attendance of appropriate award and non-award university courses;
- short- to medium-term secondment to more advanced tax jurisdictions;
- temporary use of external tax specialists from other tax jurisdictions and/or from the private sector to work alongside internal resources with emphasis on transfer of knowledge;
- establishment of effective follow-up mentoring programs and of clear career paths.
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<th>African Tax Administrations</th>
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| 10 | Emphasize training to effectively communicate, engage and negotiate with taxpayers, promoting better understanding of and voluntary compliance with the tax rules, thus reducing litigation, requiring:  
- improvement in taxpayer relations through better communication and consultation;  
- lessening of the current tendency for assuming adversarial positions; and  
- significant strengthening of tax administrators’ communication and negotiation skills. |
| 11 | Establish and support interjurisdictional cooperative initiatives as a pragmatic interim solution to current TP capacity constraints. These include:  
- the establishment of ad hoc or regional specialist Multinational Transfer Pricing Units (MNTPUs) pooling expertise from various countries based on agreed prioritisation and cost-sharing rules;  
- supporting implementation of the OECD’s ‘tax inspectors without borders’ initiative;  
- jointly funded acquisition and sharing of otherwise unaffordable, key comparable databases and establishment of knowledge sharing e-learning platforms, through a coordinating institution (e.g., African Tax Administration Forum (ATAF));  
- broadening the network of bilateral and multilateral international Exchange of Information (EoI) agreements with African countries, aided by improved computer capacity and the implementation of the BEPS country-by-country reporting initiative. |
| 12 | Support and systematise the current push for recognition in the allocation of profits of location specific advantages (LSAs) in source countries, which in the context of mining would include the value of ‘ready access to mineral resources’ in Africa. |

In essence, the significant improvements in effectiveness and efficiency of administration of TP rules, required to ensure that African countries collect their fair share of the mineral resource rents from a fast expanding global mining industry, will involve significant time, cost and a concerted effort at the domestic level supported by continued international assistance.
## APPENDIX A

### Key Sources of Guidance for the Four Phases of TP Verification and Audit

<table>
<thead>
<tr>
<th>Phase</th>
<th>OECD Guidance</th>
<th>UN ‘Practical Manual on Transfer Pricing for Developing Countries’</th>
<th>IRS ‘Transfer Pricing Audit Roadmap’ Example</th>
<th>ATO ‘Large Business and Tax Compliance’ Example</th>
<th>International Auditing Standard</th>
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<tbody>
<tr>
<td><strong>Phase 1</strong></td>
<td>‘Dealing Effectively with the Challenges of Transfer Pricing’ Chapter 2: “Selecting the right cases”</td>
<td>8.3. “Selection of Taxpayers for Transfer Pricing Examination: Risk Assessment”</td>
<td>“Pre-examination analysis”</td>
<td>“Case Selection” /Risk Profiling</td>
<td>N/A</td>
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<tr>
<td><strong>Phase 2</strong></td>
<td>Dealing Effectively . . . : Chapter 3 “Getting off to a good start”</td>
<td>8.5 “Preliminary Examination”</td>
<td>“Initial risk analysis”</td>
<td>“Risk Review” (Transfer Pricing Risk Review)</td>
<td>ISA 200 / ISA 315</td>
</tr>
<tr>
<td>What Issues Do They Have</td>
<td>‘Handbook’ Chapter 3</td>
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<tr>
<td>Phase</td>
<td>OECD Guidance</td>
<td>UN 'Practical Manual on Transfer Pricing for Developing Countries'</td>
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| Phase 3  
Audit the Evidence | ‘TP Guidelines for MNE and Tax Administrations’  
Chapter I: ALP  
D.1.2 Factors determining comparability:  
- Characteristics  
- Functional analysis  
- Contractual terms  
- Economic circumstances  
- Business strategies  
Chapter III: Comparability Analysis | 8.6 “Audit Procedure”  
8.7 “Narrowing of Issues: Development of Tax Authorities’ Position” | “Execution”  
Gather facts  
Perform comparability and functional analysis  
Perform economic analysis  
Perform legal analysis re proposed adjustment | “Audit”  
Gather facts and identify the actual conditions present  
Select the most appropriate and reliable method  
Application of the transfer pricing rules  
Adjust if needed and monitor | ISA 500  
ISA 520  
ISA 530  
ISA 550  
ISA 700 |
| Phase 4  
Resolve Issues | Dealing effectively . . .:  
Chapter 6 ‘Reaching a decision point’  
TP Guidelines: Chapter IV | 9 “Dispute Avoidance and Resolution” | Resolution | Dispute resolution/settlement |  |

Links
http://en.wikipedia.org/wiki/International_Standards_on_Auditing