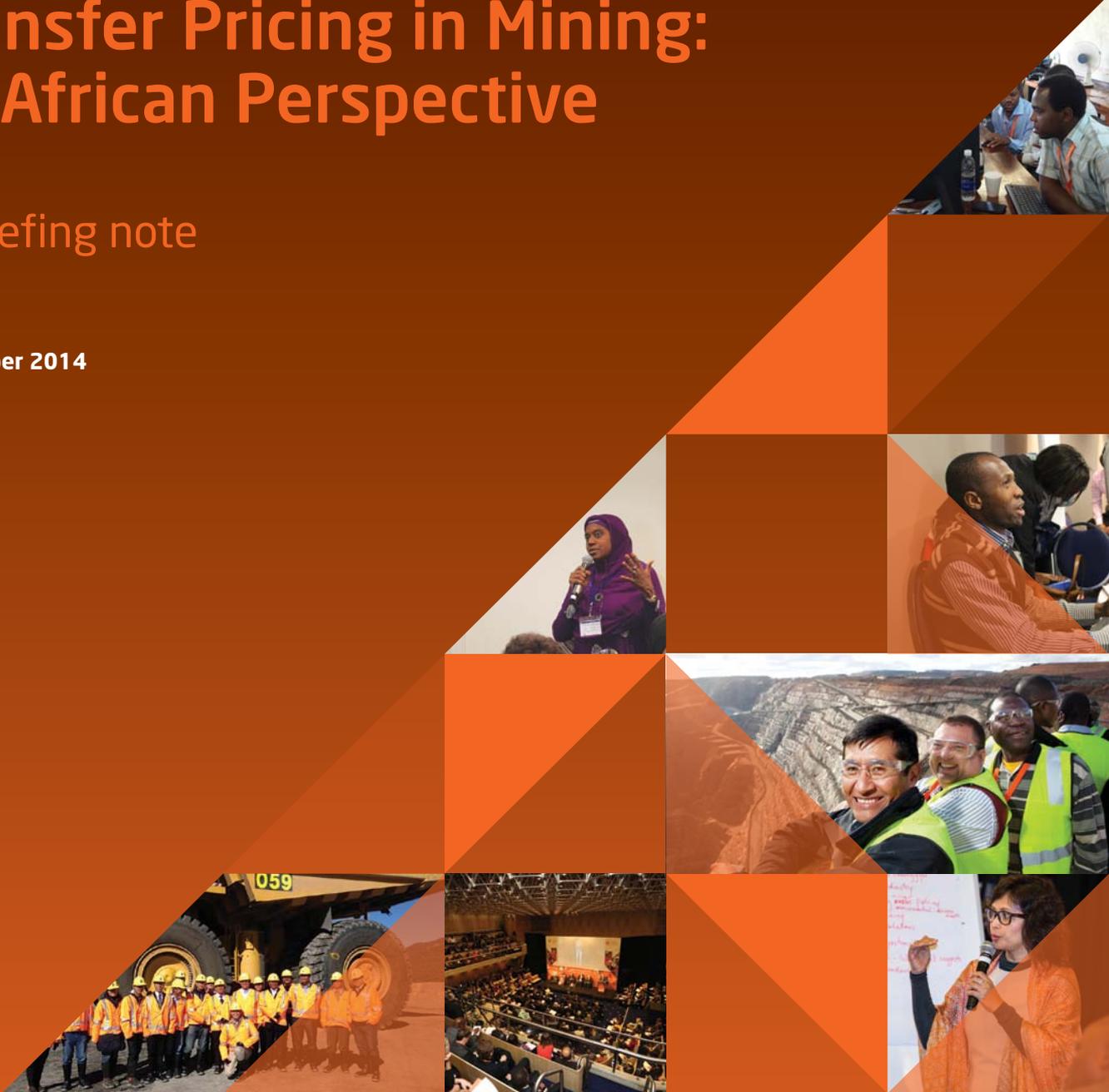


International Mining for Development Centre

Transfer Pricing in Mining: an African Perspective

A briefing note

September 2014



International Mining for Development Centre

FUNDED BY



Australian Government
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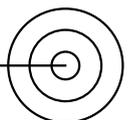
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The **International Mining for Development Centre** was established to promote the more sustainable use of minerals and energy resources in developing nations by assisting governments and civil society organisations through education and training, fellowships, research and advice. Our focus is three core themes—governance and regulation, community and environmental sustainability, and operational effectiveness.

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Abstract

Briefing note on Transfer Pricing in Mining: an African Perspective

World Bank Group, Centre for Exploration Targeting and International Mining for Development Centre.¹

Reviews conducted by the World Bank Group (WBG) of the mining taxation policy and administrative procedures of a number of mineral-rich African countries have identified a strong need for a study focusing specifically on the administration of transfer pricing in the African mining sector. The objective is to formulate a practical framework of effective strategies for mineral rich developing countries in Africa to prioritise transfer pricing audit efforts and concentrate resources and training toward the application of the arm's length principle to high-risk transactions in the sector. The study will also consider the potential for application of various administrative tools, such as safe harbours and advance pricing agreements. The results of the study will be published in 2015 jointly by the WBG, the International Mining for Development Centre (IM4DC)² and the Centre for Exploration Targeting (CET)³ in the form of a source book that will provide practical guidance on transfer pricing in the sector to tax practitioners in mineral-rich developing countries in Africa and elsewhere.

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² IM4DC is a partnership between The University of Western Australia and The University of Queensland, funded by the Australian Government through the Australian Department of Foreign Affairs and Trade (DFAT).

³ CET is an unincorporated joint venture between the University of Western Australia, Curtin University and the mining industry, established with seed funding provided by the State of Western Australia under their Centre of Excellence Program.

Introduction

Objective of this Briefing note

This report highlights the objectives, methodology and current progress of a study on Transfer Pricing (TP) with specific focus on mining in Africa. The study was commissioned in early 2014 by the World Bank Group (WBG) in partnership with the International Mining for Development Centre (IM4DC) with the research being co-ordinated and technically led by the Centre for Exploration Targeting (CET).

Needs identification

In response to concerns from African countries that their tax revenues from the mining sector did not adequately reflect recent increases in commodity prices and companies' profits, the WBG contracted the CET to conduct research and field reviews of the mining taxation policy and administrative procedures of a number of mineral-rich Sub-Saharan African countries⁴.

Insights from these reviews were captured in 2013 in the WBG-CET publication *How to improve mining tax administration and collection frameworks: A source book*. This publication is now used as the basis for workshops attended by senior tax practitioners from Ministries of Finance and Mines and other tax administration institutions of a large number of resource-rich countries⁵. Workshops facilitate exchange and cross-fertilisation of ideas on how to improve mining fiscal regimes and identification of pressing mining taxation issues.

Although transfer pricing has been previously recognised by the G20 as an important economy-wide concern for developing countries, the workshops emphasised the high vulnerability of tax revenues to transfer mispricing in the mining sector as being of particular concern. Recently the UN's Economic Commission for Africa (UNECA) estimated illicit financial outflows from Africa due to trade mispricing at USD50 billion a year. UNECA echoed the opinion of the African Development Bank and said that much of the outflow is probably attributable to extractive industries⁶.

Research and capacity building in the area of transfer pricing in the mining sector is crucial, particularly given the rapid growth in the economic importance of this sector⁷, its technical and logistical complexity, the prevalence of multinational enterprise (MNE) groups, increasingly fragmented supply chains, and high volumes of cross-border transactions between related parties. These factors create opportunities for transfer mispricing, which can take the form of underpayment for outbound supplies of mineral products and overpayment for inbound assets, services and finance provided to their mining operations in developing countries by foreign subsidiaries of MNE groups.

It is widely recognised that the administration of transfer pricing legislation poses a significant challenge for developing countries, due in particular to the paucity of specialist expertise and experience and the difficulties in obtaining the information necessary for applying the arm's length principle (OECD, 2014⁸). In the mining sector, these challenges are compounded by the relative complexity of the sector, which can involve hard-to-value intangibles and other complex transactions, and by a lack of industry specific knowledge and experience within tax administrations. These factors place significant pressure on many tax administrations, limiting their current capacity to adequately monitor and address transfer pricing risks.

The action plan currently being implemented by the OECD⁹ (2013) to address base erosion and profit shifting (BEPS), whilst including various transfer pricing related actions, does not specifically address the unique characteristics of transfer pricing issues arising in the mining sector, nor does it address many of the fundamental issues and concerns that are particular to developing countries.

Objectives and nature of the current study

The current study attempts to complement initiatives by the WBG and others in delivering economy-wide technical assistance on the implementation and application of transfer pricing legislation, and to fill some of the expertise gaps by focusing specifically on transfer pricing risks in the mining sector, with a specific focus on Africa. For this study, key transfer pricing risks are being mapped with the objective of formulating a practical framework for mineral-rich countries to assist with the prioritisation of their transfer pricing audit efforts in the mining sector by concentrating scarce resources and training toward financially significant high-risk transactions.

The results will be published jointly by the WBG, IM4DC and the CET in 2015 as a new *source book*. The source book is intended to be a practical reference for tax officials in mineral-rich developing countries, aimed at assisting them to identify and address key transfer pricing risks, within the framework of the arm's length principle.

Although this study is co-ordinated by the CET, it makes use of expertise and information provided by a number of participating organisations. These include the WBG, the University of the Witwatersrand, tax authorities in key mineral economies (e.g. the Australian Tax Office [ATO] and the South African Revenue Services [SARS]), and mining taxation practitioners from both industry and accounting firms, particularly Transfer Pricing Associates (TPA)¹⁰.

4 To date field reviews of the mining taxation administration and collection systems have been conducted in Burkina Faso, Ghana, Mali, Namibia and in Tanzania.

5 To date workshops have been conducted in Ghana, South Africa and Tanzania, with one to be conducted in Ethiopia late in 2014. Workshops are typically attended by around 40 to 50 delegates from around a dozen different countries within reach of the selected venue.

6 United Nations' High Level Panel of the Economic Commission for Africa, 2014, Progress Report on Illicit Financial Flows entitled "Track it! Stop it! Get it!"

7 The World Bank 2013 overview indicates that growth in GDP in Africa is expected to exceed 6% p.a. over the next decade in part because of higher than average growth rates in a third of its sub-Saharan countries, many of which are mineral-rich.

8 OECD, (2014). Transfer pricing comparability data and developing countries, OECD Publishing.

9 OECD (2013), Action Plan on Base Erosion and Profit Shifting, OECD Publishing.

10 Including licence to extract and publish information from TPA's "Transfer Pricing Handbook for the Mining Industry", 2012.

STUDY SCOPE AND METHODOLOGY

The study involves a number of distinct research activities as summarised below.

Assessing the current status of TP legislation development and enforcement in Africa

The ability for tax administrations to identify and address transfer pricing risks is highly dependent on the existence of commensurate legislation. Many African countries, although having basic provisions in place dealing with transfer pricing (i.e. introducing the arm’s length principle for related-party transactions), do not have in place appropriate documentation rules and or have not yet published the necessary implementing regulations/guidance. Table 1 provides an up-to-date view of the status of evolution of transfer pricing legislation in a sample of selected mineral-rich Sub-Saharan African countries. While significant progress has been achieved to date in introducing transfer pricing rules in Africa, many countries have not yet embarked in or are still at the very initial stages in the process.

Whilst the existence of appropriate legislation concerning transfer pricing is fundamental to dealing with transfer pricing risks, failure to have in place commensurate administrative capacity and to actively enforce the legislation can render the current legislation largely ineffective. A comprehensive transfer pricing questionnaire has been drafted and is currently being administered to a large number of senior tax officials of mineral-rich African countries, who have attended the IM4DC/WBG workshops, to get a better idea of the degree to which transfer pricing audits are in fact currently being carried out in various countries. The first 16 responses received to date (out of 26 countries targeted so far), confirm that only a relatively small number of African countries¹¹, even though they may have adequate specific transfer pricing rules in place, are in a position to actively enforce them.

With a few exceptions, the complexity of the processes and their limited technical capacity and industry knowledge, coupled with the high cost of implementing a transfer pricing audit function in general, are the main reasons for the current state of affairs. Only few jurisdictions have specific transfer pricing units within their tax administrations, and audits of transfer pricing issues are rarely carried out as part of general audits.

Table 1: Current status of transfer pricing legislation in selected Sub-Saharan African countries

Country	Legislation (Providing for arm's-length principle)	Implementing Regulations / Guidance	Effective Documentation Requirements (With penalty and/or burden of proof)	Annual Disclosure Requirements (For related-party transactions)
Angola	Yes	Yes	Yes	Yes
Cameroon	Yes, 2012 Finance Law	Being revised	Yes	Yes, on request
Ghana	Yes, S. 70 of IRA	Yes	Yes	Yes
Ivory Coast	Anti-avoidance rules in A. 38 of CGI	Yes	Yes. No TP specific penalties	No, on request
Kenya	Yes, C.470 of ITA	Yes	Yes	Yes* (but not yet widespread)
Ethiopia	Yes	Being drafted	No	No
Madagascar	Anti-avoidance rules in A.010115 of CGI	Not specific	Yes. Large Taxpayers only	Not specific
Malawi	Yes, C. 41 of ITA	Yes	Yes. No TP specific penalties	No, on request
Mali	Anti-avoidance rules in A. 81 of CGI	Being drafted	No No. TP specific penalties	No
Mozambique	Yes, A. 58 of Corporate Income Tax Code	Not specific	No. No TP specific penalties	No
Namibia	Yes, S.95(a) of the Income Tax Act	Yes	No. No TP specific penalties	No
Nigeria	Yes	Yes	Yes No. TP specific penalties	No, on request
Senegal	Yes, A.17 of CGI	Yes	Yes, LT only No TP specific penalties	No, on request
South Africa	Yes, Taxation Laws Amendment Act N.7	Yes	Yes	Yes
Tanzania	Anti-avoidance S. 33 of ITA Act	Yes	Yes	Yes
Uganda	Yes, C. 340 of ITA	Yes	Yes	No, on request
Zambia	Yes, S. 97A of ITA	Yes	Yes. No TP specific penalties	No, on request

Sources: Transfer Pricing Associates' Country Summaries 2014 and country TP questionnaires

¹¹ Aside from a significant effort in South Africa, Ghana, Kenya, Malawi, Mali, Mozambique, Tanzania and Zambia have been endeavouring to actively enforce their TP rules, particularly in the context of mining, but their efforts are in some cases being constrained by a generally inadequate level of resources and expertise.

Characterising current mining operations and advanced mining projects in the region

In 2013 there were 591 mineral exploration and mining companies in Africa operating a total of 1572 mineral projects¹². Of these, 301 were producing mines (289 in Sub-Saharan Africa) and 333 were development projects at the conceptual to feasibility stage. These figures relate to valuable commodities only including gold, platinum group metals, base metals, nickel, uranium and bulk commodities such as iron ore, bauxite and coal, and exclude artisanal mining and low-value materials for domestic use.

Given its undisputed mineral prospectivity, the African continent has also become a magnet for foreign direct investment in mineral exploration. SNL Metals & Mining¹³ estimates that in 2013, Africa attracted USD 2.9 billion or 17% of worldwide mineral exploration, with the bulk of it in the Sub-Saharan region mainly for gold, base metals and iron ore. This will eventually lead to new discoveries which should sustain or enhance the current rate of economic growth in the region.

For the purposes of this study, a database of African mines was compiled by extracting information primarily from the RIU's Register of African Mines 2014 and from a variety of other published and unpublished sources. Mines were classified according to the mineral commodity they produce, the type of mining (surface or underground) and their annual production throughput as:

- Small¹⁴: falling below the first quartile (Q1) in terms of production rate,
- Medium: falling between the first and third quartiles, and
- Large: having a production rate in excess of the third quartile (Q3).

Table 2 displays the size of the "typical" mine, which is taken to be the midpoint of each size category range, for a number of the main mineral commodities which account for the bulk of current mining operations, i.e. 163¹⁵ out of a total of 301¹⁶ in Sub-Saharan Africa. Table 3 shows the number of operations that currently fall into each of the identified size categories.

Table 2: African mines categorised according to the mineral commodity they produce, the type of mining (surface or underground) and their annual production throughput

		Small (tonnes/day)	Q1 (t/d)	Medium (tonnes/day)	Q3 (t/d)	Large (tonnes/day)
Gold	Surface	3,500	4,944	7,500	12,750	16,000
	Underground	500	960	1,500	2,653	3,000
PGE	Surface	4,500	7,944	22,000	30,056	30,500
	Underground	3,000	4,090	6,500	11,833	15,000
Copper	Surface	2,000	2,746	9,500	30,097	63,500
	Underground	1,000	2,292	6,000	28,042	37,000
Coal	Surface	3,500	4,586	6,000	14,215	24,500
	Underground	500	1,111	3,500	19,231	25,500
Iron Ore	Surface	2,000	4,083	8,500	27,083	33,000

Source: Study database compiled primarily using information extracted from RIU's Register of African Mines 2014 and a variety of other publications

Table 3: Number of producing mines in each of the size categories and mineral commodities as listed in Table 2

		Small	Medium	Large
Gold	Surface	11	20	11
	Underground	8	14	7
PGE	Surface	1	2	3
	Underground	3	8	3
Copper	Surface	3	8	3
	Underground	2	5	2
Coal	Surface	5	10	5
	Underground	3	6	3
Iron Ore	Surface	4	9	4

Source: Study database compiled primarily using information extracted from RIU's Register of African Mines 2014 and a variety of other publications

12 Resource Information Unit (RIU), Register of African Mines, 2014. Perth, Western Australia.

13 SNL Metals & Mining, 2014, World Exploration Trends, A Special Report for the PDAC International Convention.

14 It must be pointed out that "small" is a relative term in so far that a "small" coal or iron ore open-cut mine can in fact represent a reasonably sizeable operation. A "large" classification generally denotes major or world-class deposits.

15 Bisha mine in Eritrea produces both significant gold and copper and is therefore listed in both categories.

16 Study database compiled primarily from information extracted from RIU's Register of African Mines 2014 and various other sources.

The source book will ultimately include information about all other minerals, not yet investigated in detail or for which meaningful aggregated statistics cannot be generated due to the limited number of operations (e.g. there are only five nickel mines currently in operation in Africa).

It will also present a breakdown of the typical revenue and cost (both capital and recurrent) structures for mining operations involving different mineral commodities and production types and sizes, and identify areas of large flows, assuming representative stripping ratios and likely mining methods.

This information is useful because even relatively small percentage variations in transaction prices can translate into significant tax leakages where they relate to very large flows. For example the net smelter payment (NSP) received for the sales of concentrates is a function of the unique characteristics of each concentrate and the diversity of contractual terms relating to smelting and refining charges and timing of payments, which lend themselves to individually minor, but collectively significant, overestimation of transfer prices.

Using a medium-size open cut copper mine as an example, if the operating company receives a NSP of USD241 million for the sale of concentrates to a related smelter, instead of USD253 million¹⁷, which would have been the arm’s-length NSP if the transaction had been between unrelated parties, then its income would be understated by 5% or around USD12 million. Assuming a 30% tax rate, the magnitude of the annual tax leakage would be in the order of USD3.6 million. Of course, these estimates are predicated on the basis that the weight and grade of concentrates transferred to a related smelter have also not been understated.

Similar leakages may also occur when payments for capital goods, finance or services provided by a related entity are overpriced. For example the total capital cost (both mine and mill) of a medium size open-pit gold mine is of the order of USD190 million of which USD71 million and USD21 million are represented by plant and equipment purchases and project design and engineering management respectively, much of which is likely to be supplied and funded by related parties.

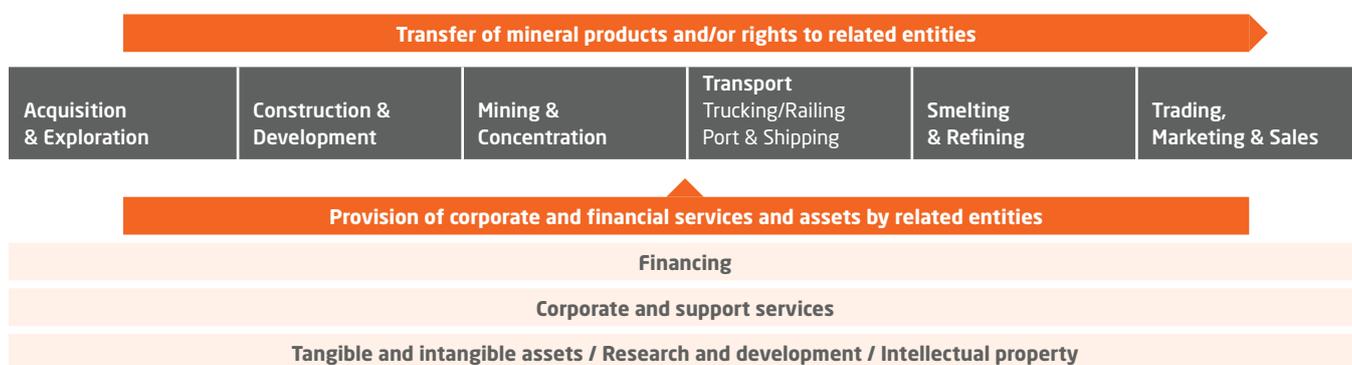
Mapping typical transactions between associated parties at each stage of the mining supply chain

Figure 1 displays the various stages in the mining supply chain from exploration to sales of refined metals. Relatively few mines are fully vertically integrated and related-party transactions may occur at any stage of the value chain. These may involve transfers of mineral products at various stages of downstream processing (e.g. ores, concentrates and metals) and of services and assets as listed in Table 4.

Table 4: Typical related-party transactions that may be entered into at different stages of the mining supply chain, depending on organisational structure and level of integration of the operation

Transaction Category	Examples
Sales of mineral products	Bulk commodities with no or minimal beneficiation (e.g. iron ore, bauxite and coal) Mineral concentrates and other partially downstream processed mineral products, (e.g. base metals and nickel concentrates) Precious and base metals (after smelting and refining)
Use or transfer of tangible and intangible assets	Imported machinery, plant and equipment (sale or lease) Use or transfer of valuable intangibles (e.g. know-how, designs, patents, rights)
Services transactions	Corporate and support services Management services Technical services and R&D Financial/treasury services Insurance
Financial arrangements	Loans Guarantees Cash pooling

Figure 1: Mining cycle value-adding chain showing nature and timing of possible related-party transactions



¹⁷ Amount based on an annual throughput of 3.833 million tonnes of ore with a grade of 1.2% Cu, recovery of 96%, concentrate grade of 30% Cu of which 78% is payable by the smelter at a prevailing Cu price of \$7000/t.

Identification of key TP risks in each of the mining stages

The objective of the source book is to help African tax administrations with the identification and audit of high-risk transactions taking place in the mining sector. The degree of risk exposure will range from relatively low for low-volume routine transactions, to very high for more complex transactions involving large cash flows and hard to value intangibles¹⁸.

Table 5 displays a matrix of the typical and more significant related-party transactions that may occur at various stages of the mining value chain. Transactions may involve the sale or lease of high-value assets, both tangible (e.g. mining and mineral processing plant and equipment) and intangible (e.g. exploration and mining rights, and proprietary exploration, mining and processing technology).

Frequently, finance is provided by subsidiaries of the same MNE which owns the mining operations, involving on-going recurrent interest payments and a range of related charges and fees. In addition to transfer pricing rules, thin capitalisation rules are employed by numerous countries to limit the erosion of their tax base through interest and other financial payments.

Of particular significance, given the magnitude of the related flows, are the sales of fully or partially processed mineral products to related entities providing fully fledged trading/marketing and/or toll smelting and refining services.

Ambiguity about transfer pricing may also arise in the way charges are applied for a range of administrative services (e.g. financial services, HR, IT etc. and captive insurance) provided by a related party. The valuation of services provided in the areas of technical services and R&D, involving specialised scientific and technical knowhow and tightly guarded IP, can also be extremely complex.

Much of the research effort in coming months will be devoted to identifying and ranking the nature and magnitude of the mispricing risk inherent in various transactions. These transactions and key risk areas will be illustrated in the source book with practical case studies.

Analysis of specific tools and their suitability

Consideration will also be given to various methodologies and simplification measures that may be feasible and desirable in an African context, with particular emphasis on:

- The “Sixth method”, as employed initially in Argentina but now extending to various South American countries and India^{19,20}, which makes specific reference to the use of publicly quoted commodity prices;
- Negotiation of “safe harbours” for routine transactions, e.g. low-value-adding services; and
- The feasibility of applying “advance pricing agreements” (APAs) in the context of the mining sector.

Publishing the results of the study in a source book

The results of this study, to be published in a source book jointly by the WBG, IM4DC and CET in 2015, will complement the economy-wide work being undertaken on transfer pricing by the WBG and others such as the OECD and UN. In particular, the source book will serve as a practical reference for tax practitioners in African tax authorities charged with identifying and dealing with the application of transfer pricing legislation (based on the arm’s-length principle) to taxpayers operating in the mining sector. The source book will also identify possibilities for the use of safe harbours and advance pricing agreements. Finally, the source book will highlight critical capacity building and specialised training needs in the area of transfer pricing in the African mining sector, and present possible strategies to effectively address their delivery.

Table 5: Typical related-party transactions across the value chain

	Acquisition Exploration	Development Construction	Mining Concentration	Transport	Smelting Refining	Trading, Marketing and Sales
Sales of exploration/mining rights	YES	YES	YES		YES	
Project design and construction management services		YES				
Purchase / leasing of plant and equipment	YES	YES	YES	YES	YES	
Sales of final product through trading hub						YES
Sales of intermediate product to toll smelter/refiner			YES		YES	
Provision of transport and logistics services				YES		
Administrative services: Management, Financial, HR, IT, Insurance etc.	YES	YES	YES	YES	YES	YES
Proprietary specialised knowhow and technology, R&D, process development and software programming	YES	YES	YES	YES	YES	
Provision of finance and related interest payments	YES	YES	YES	YES	YES	YES

18 Hard-to-value intangibles include proprietary product and process technology, rights to inventions, industrial prototypes, computer programs and databases, licences (e.g. mining rights, surface rights, access rights etc). Other intangible assets may include know-how (e.g. of geology, mine design, development and construction, mining and metallurgical methods etc), managerial, marketing and trading expertise, and expertise in negotiating, drafting and managing joint venture agreements, supply and off-take contracts, etc. In addition, some mineral-rich developing countries argue that they are not adequately compensated for location specific attributes, such as access to resources. A related complex area relevant to mineral-rich developing countries is that of valuing potential premia for “ready access to resources”; a mining-specific component of the more general issue of “location savings”.

19 PricewaterhouseCoopers, PKN Alert, January 29, 2013.

20 All South American countries with established or currently introducing transfer pricing legislation (i.e. Brazil, Panama, Peru and Colombia and Dominican Republic, Guatemala, Salvador and Chile respectively) with the exclusion of Brazil, Peru and Chile have introduced the sixth method.



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