



Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Curbing Illicit Financial Flows from Resource-rich Developing Countries: Improving Natural Resource Governance to Finance the SDGs

Working Paper No. R4D-IFF-WP08-2019

Curbing Commodity Trade Mispricing: Simplified Methods in Host Countries

April, 2019

Irene Musselli*

Centre for Development and Environment (CDE) University of Bern

*The report builds on knowledge gained in the interdisciplinary research project “Curbing Illicit Financial Flows (IFFs) from Resource-rich Developing Countries: Improving Natural Resource Governance to Finance the SDGs”. It was prepared under the legal work package coordinated by Elisabeth Bürgi Bonanomi. Rebecca Engebretsen and Rahul Mehrotra provided helpful comments on an earlier version of this report.

© The Authors. All rights reserved. For more details, visit the project website: <https://curbing-iffs.org/>
This project is funded through the Swiss Programme for Research on Global Issues for Development (www.r4d.ch) by the Swiss Agency for Development and Cooperation (SDC) and the Swiss National Science Foundation (SNSF).



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC



SWISS NATIONAL SCIENCE FOUNDATION

Contents

Introduction.....	1
1. Commodity trade mispricing	2
1.1. Misinvoicing, transfer mispricing, other (mis)pricing practices	2
1.2. ‘Output’ v. ‘input’ side	3
2. Benchmarks under ‘mainstream’ transfer pricing approaches.....	4
3. Setting benchmarks for commodity transactions	6
3.1. Information needs	6
3.2. Meeting information needs	7
3.2.1. More extensive use of administrative data.....	7
3.2.1.1. Market information services.....	7
3.2.1.2. Customs data	8
3.2.1.3. Tax returns	9
3.2.1.4. Companies’ financial information and transaction data	10
3.2.2. Partner with the private sector.....	12
3.2.3. Catalyze international initiatives	13
4. Using benchmarks: Regulatory options	13
4.1. (Mainly) procedural methods.....	14
4.1.1. Red-flag indicators in risk assessment	15
4.1.2. Reversal of the burden of proof.....	15
4.1.3. Mutual Agreement Procedures	15
4.1.4. Safe harbours	15
4.1.5. Advanced pricing agreements	17
4.2. ‘Crude’ use for tax purposes	18
4.2.1. Sixth method	18
4.2.2. Transactional fixed margin methods	21
4.2.3. Deemed profits and fractional apportionment.....	22
4.2.4. Beyond transfer pricing: Administrative pricing regimes.....	23
4.3. Set contract terms.....	24
5. Regulatory space to use benchmarks	25
Conclusions.....	27
References	30

Introduction

Developing countries need simple, context-specific ways to counter mispricing practices in commodity trade (Faccio and Picciotto 2017; Readhead 2017; Picciotto 2018). They need easy-to-administer rules that reduce the administrative burden and staff requirements and leave little room for administrative discretion and corruption (Atupare Atudiwe and Kpebu 2019; Norasing 2019). The focus should be on locally adapted solutions that leverage existing databases and procedures and simultaneously serve multiple policy purposes such as tax enforcement, anti-money laundering, and market surveillance.

This report assembles thoughts on host country measures to target commodity trade mispricing. It addresses the following question: what ready-to-use information can tax administrations in developing countries use to detect and redress commodity trade mispricing, and through which regulatory techniques and instruments. The analysis is practice-oriented and geared to public officials in developing countries. The focus is on solutions capable of cost-effective implementation in countries with resource-strained tax administrations.

The report draws from scholarly work on simplified transfer pricing approaches,¹ and outlines simple regulatory tools and techniques that developing countries could unilaterally implement to track down commodity trade mispricing. To a varying extent, these techniques revolve around the use of reference prices for benchmarking purposes in the interests of administrative convenience and simplicity. As demonstrated in the paper by Brugger, Engebretsen and Waldmeier (2019), these simplified approaches have been kept at the periphery of policy discourses. However, they are gaining new attention in a context of shifting circumstances and paradigms (Platform for Collaboration on Tax 2017; Inclusive Framework on BEPS 2018, 2019a and 2019b; IMF 2019).

The analysis proceeds as follows:

Chapter 1 clarifies ‘commodity trade mispricing’.

Chapter 2 sets the stage for the following analysis. It briefly recalls current ‘mainstream’ rules and methods for assessing the pricing of commodity transactions between related parties and advocates for simplified methods that rely on reference prices and margins to track down mispricing.

Chapter 3 considers the type of information that public administrations in developing countries can use to set reference prices and margins for comparability purposes. In particular, it considers the use of administrative data for price/profit benchmarking purposes and discusses regulatory and administrative choices that affect information availability. It emphasizes the need to engage with the private sector in setting benchmarks and the opportunity to leverage international initiatives in this direction.

Chapter 4 delves deeper into the regulatory use of reference prices and margins for benchmarking purposes. It presents various regulatory techniques and measures to use benchmark prices for tax purposes. It first considers ‘procedural’ approaches, such as the use of reference prices to reverse the burden of proof for the justification of tax adjustments. It then turns to more ‘prescriptive’ methods that use benchmark prices to assess taxable income or to frame contract terms.

Chapter 5 assesses the regulatory space that developing countries have to use reference prices and margins for benchmarking purposes in the context of simplified methods taking into account their international obligations under tax treaties. It further considers different regulatory options for implementing simplified schemes such as tax laws, regulations and guidance published by tax administrations, and negotiated deals.

A Conclusion summarizes the key points.

¹ There is a growing body of literature on simplified and alternative transfer pricing methods. Among the major contributions are Avi-Yonah (2007 and 2010), BEPS Monitoring Group (2018), Durst (2010), Faccio and Fitzgerald (2018), Faccio and Picciotto (2017), Gomes and Mansur (2018), Grondona (2018), Illaraz (2014), Kadet, Faccio and Picciotto (2018), Langbein (1986), Picciotto (2015 and 2018), Readhead (2017 and 2018), Schoueri (2015), Sheppard (2012 and 2013), Spencer (2012), Valadão (2016), Valadão and Lopes (2013).

1. Commodity trade mispricing

Before discussing ways to counter commodity trade mispricing, it is useful to clarify what ‘commodity trade mispricing’ is. In simple terms, commodity trade mispricing occurs when one or both parties to the transaction set a price that does not correctly match the value of the good. The commodity shipment is then ‘abnormally priced’² by reference to current market prices. For the exporting country, the problem lies in export undervaluation. The revenue impact of underpriced exports can be significant, particularly when corporate income taxes and *ad valorem* royalties are assessed against sales prices. Revenue losses from export undervaluation can accrue from, “amongst other things, under-quoting prices, mis-specifying reference prices, excessive deductions or price adjustments, handling or other fees, or simply not declaring the presence of valuable by-products” (Platform for Collaboration on Tax 2017, at 158).

While it is seemingly simple in concept, trade mispricing is a complex phenomenon when assessed from a regulatory angle. The legal viewpoint adds granularity and differentiation to the concept, by disentangling different levels of analysis, as discussed below.

1.1. Misinvoicing, transfer mispricing, other (mis)pricing practices

Commodity trade mispricing is used as an umbrella term (Committee of Experts on International Cooperation in Tax Matters 2018; Musselli and Bürgi 2019) that encompasses trade misinvoicing, abusive transfer pricing and other (mis)pricing issues (Figure 1). It is important to bring these dimensions into focus.

FIGURE 1: MISINVOICING, TRANSFER MISPRICING, OTHER (MIS)PRICING PRACTICES IN COMMODITY TRADE



Source: Author's elaboration.

Trade misinvoicing involves exporters and/or importers deliberately misstating the value, quantity, or nature of goods or services in a trade transaction (Forstater 2018). It may entail, among other things, over/under-invoicing of shipments, multiple invoicing, over/under-shipment, and misclassification of goods. Through the fraudulent mispricing of goods, companies may engage in straight tax evasion by misreporting the value of export proceeds or may circumvent other legal enactments as regards exports such as exchange controls, and so on. Misinvoicing is always illegal, if not criminal. It is often complexly

² In a more technical sense, the term ‘abnormal pricing’ is used to capture the “magnitude of trade valued outside arm’s length range priced” (Carbonnier and Mehrotra 2019, at 5).

entangled with money laundering and corruption and may involve outright smuggling when goods are smuggled through official border points.

Transfers mispricing (also known as abusive transfer pricing, or transfer price manipulation) refers to the manipulation of transfer prices within a multinational enterprise (MNE). For example, by under-invoicing mineral sales to an affiliate in a low-tax jurisdiction, multinationals can move sales revenue and profits offshore to take advantage of lower tax rates abroad. Likewise, a related party marketing hub in a low tax jurisdiction may charge or receive disproportionate service fees or discount on the price of commodities purchased or sold in order to shift profits to the low tax jurisdiction. Under international standards, such practices amount to illicit tax avoidance. Abusive transfer pricing is technically unlawful in most jurisdictions, yet it is difficult to prove.

Finally, mispricing can arise in the context of complex commodity trade deals, including financing, streaming, product swaps, and tolling arrangements (Box 1). These arrangements may raise pricing concerns when the purchase price is set at a deep discount to prevailing spot prices. Yet to prove mispricing, the tax administration would need to engage in a fact-intensive assessment of the functions performed, assets used, and risks assumed by the buyer. For example, mines can sell at below market prices to remunerate the buyer for the prior provision of capital. The discount is justified to the extent that the advance payment is cheaper than conventional borrowing.

BOX 1: STREAMING ARRANGEMENTS, TOLLING DEALS AND LONG-TERM SUPPLY ARRANGEMENTS

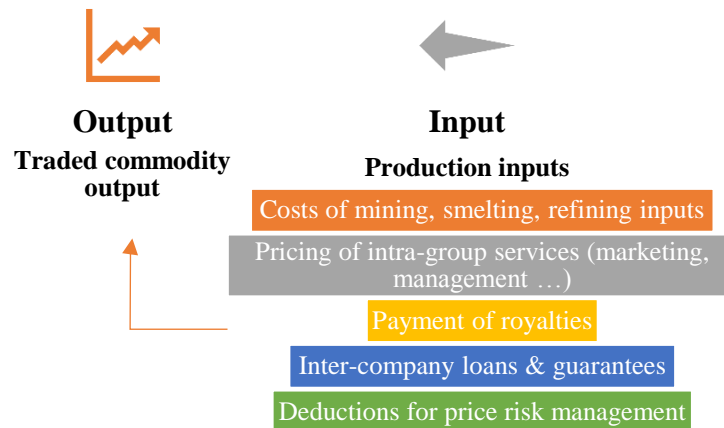
In the context of *streaming arrangements*, the trader may advance funds up-front to the mine in exchange for the right to buy its product at reduced prices in the future. Under *tolling deals*, smelters/refiners process the metal-bearing minerals on a fee-for-service basis; the extracted metal is returned to the mine for subsequent sale. *Swap sales* entail exchanging raw materials for processed products, minus agreed costs and fees. Under *long-term offtake arrangements*, a trader may commit to take over all or a portion of the mine's output over a period in return for a discount, taking on the risks associated with managing inventories and finding buyers. Short of full transfer of production risk, the (related) trader may negotiate a discount in return for handling sales and marketing functions, such as finding buyers, negotiating sales, arranging payments and shipments, or as remuneration for performing blending/processing functions to meet customers' specifications. All these arrangements may raise pricing issues, as discussed in the text.

There is no clear cut-off line between trade misinvoicing, transfer mispricing and other mispricing practices, which can be complexly entangled in practice. For example, multinational enterprises may engage in straight tax evasion by deliberately misstating the value of product shipments (misinvoicing). Likewise, streaming agreements, tolling deals and long-term supply arrangements can be between unrelated or related parties.

1.2. 'Output' v. 'input' side

For analytical clarity, it is also important to draw a line between pricing issues that arise in relation to the traded commodity output, and in relation to production inputs (Figure 2). On the output side, the key issue is the pricing of the traded commodity i.e. product sales contracts. On the input side, some of the key issues revolve around: the costs of key mining, smelting or refining inputs; the remuneration of (related or unrelated) offshore trading and marketing hubs for handling product sales functions; the pricing of other intra-group services; tax deductions from price risk management, particularly where hedging is done between related parties in a MNE group; payment of royalties; and inter-company loans and guarantees.

FIGURE 2: OUTPUT AND INPUT SIDE ISSUES



Source: Author's elaboration.

Commodity trade mispricing draws specific attention to the ‘output side’ of the commodity trade equation. Yet the ‘input’ side cannot be neglected. Indeed, there is a complex interplay between output and input prices, which often intertwine in practice. For example, when a buyer handles sales and marketing functions or advances capital, remuneration may be in the form of the buyer receiving a discounted price or longer payments terms for the commodity. Further, for sales of raw ore or concentrate, the agreed price is typically based on the value of the contained metals (‘payable metals’) less treatment and refining charges and other costs/penalties. In both cases, the price of inputs (smelting and refining, or the cost of pre-financing) is embedded in the product sales contract, and ultimately affects transacted product prices.

2. Benchmarks under ‘mainstream’ transfer pricing approaches

This report discusses regulatory approaches that rely on reference prices and margins to counter trade mispricing (Chapters 3–5). Some of these approaches have been devised to simplify transfer-pricing rules. To set the stage for the following discussion, it is useful to briefly recapitulate the basic features of the current transfer-pricing regime in its application to commodity trading. Which transfer pricing methods would a mining company use to document that its commodity sales to a related trader offshore reflect ‘arm’s length prices’ (see hereafter) under ‘mainstream’ transfer pricing approaches? Can tax authorities use reference prices and margins to substantiate allegations of mispricing? The analysis below will briefly recall some basic tenets of the transfer pricing regime; outline the main transfer pricing approaches used for establishing the arm’s length price for the transfer of commodities; highlight the limits of the use of reference prices under these methods; and recall the main arguments in favour of simplification of the current rules. The objective of this brief incursion into transfer pricing law is purely to set the stage for the analysis that follows in Chapters 3–5 by clarifying some terms and concepts used in those chapters. It is not intended to provide an overview of transfer pricing rules and principles, nor to discuss the general features of the international tax regime.

In regulatory terms, ‘transfer pricing’ refers to the rules and methods for pricing transactions between related parties, within a multinational group. At the heart of the transfer pricing regime is the ‘arm’s length principle’, which implies “valuing intra-firm transactions at the prices that unrelated parties would reach” (IMF 2014, 31). To put it bluntly, prices between related parties should approximate the prices that independent parties would have agreed in the same circumstance. This fiction is premised on the ‘independent entity principle’, which treats a company separately from its owner/controller. Embodied in the OECD Transfer Pricing Guidelines (TPGs) and enshrined in most tax treaties, these principles inform the legal assessment of intra-firm transactions (transfer pricing rules) and underline rules on the allocation of MNE income (profit allocation rules).

Taxpayers must document the fact that their transfer prices reflect arm’s length prices, and tax authorities can contest this. The OECD TPGs (and the United Nations Transfer Pricing Manual), endorses five methods of establishing arm’s length prices: three ‘traditional transaction’ methods, consisting of the ‘comparable uncontrolled price’ (CUP), ‘cost plus’ and ‘resale price’ methods; and two ‘transactional profit methods’, namely, the ‘transactional net margin’ method (TNMM) and the ‘profit split’ method

(OECD 2017d; United Nations 2017b). All these transfer pricing methods, apart from the profit split methods, rely on ‘comparables’ for establishing arm’s length prices (Box 2): prices, for the CUP method; a gross margin on sale, under the resale price method; a mark-up on costs for the cost plus method; margins related to operating profit for TNMM (Platform for Collaboration on Tax 2017).

BOX 2: THE FIVE ‘CANONICAL’ TRANSFER PRICING METHODS

The ‘CUP method’ directly compares the price charged in the controlled transaction to the price charged for similar goods or services in a comparable uncontrolled transaction.

Under the ‘resale price’ method, the term of comparison is the resale margin that a buyer in a controlled transaction earns from reselling the goods/services to an unrelated party: it should approximate the margin earned in comparable uncontrolled purchase and resale transactions.

The ‘cost plus’ method compares the mark-up on costs incurred in the supply of goods/services to a related purchaser with the mark-up on costs incurred in a comparable uncontrolled transaction.

The TNMM compares the net profit margin (relative to costs, sales, assets, or another base) that an enterprise realizes in a controlled transaction with the net profit margin achieved in comparable uncontrolled transactions.

Finally, profit-split methods pool the combined profits earned by all the related parties from one or a series of transactions and allocate them in a way that would replicate the division of profits in an agreement made at arm’s length.

Source: OECD 2017d, Chapter II; United Nations 2017b, Part B.3; Platform for Collaboration on Tax 2017, pp.25-29.

For commodity transactions, the CUP method “would generally be an appropriate transfer pricing method for establishing the arm’s length price for the transfer of commodities between associated enterprises” (OECD 2017d, paragraph 2.18). The OECD CUP method allows the use of ‘quoted prices’³ as a starting point for identifying arm’s length commodity prices but subject to adjustments on a case-by-case basis to reflect the specifics of the case. For example, tax authorities may use prices from commodity exchanges or statistical agencies to check if a mine undercharged its sales. However, price adjustments would need to be made to the quoted price to take into account, for example, the mine’s product grade and impurities, value addition and related processing costs, the risks assumed by the parties to the transaction, the specificities of destination markets and sale arrangements, and the type of contract – long-term versus spot (OECD 2017d, chapter I.D). The CUP method thus allows the use of reference prices for benchmarking purposes, but subject to a host of comparability adjustments that move from a fact-intensive transactional and functional analysis.⁴ Nor is the use of ‘deemed’ pricing dates⁵ allowed in principle: under the CUP method, the pricing date to identify the benchmark quoted price shall be the date, time or time period agreed between the parties, as inferred from the available contract documentation and from the parties’ conduct (OECD 2017d, paragraph 2.22). The tax administration can resort to deemed prices, e.g., the quoted price on the shipping date, only as an exception when there is a misalignment between contract documents and facts (ibid).

The CUP method is not the only relevant transfer pricing method for adjusting commodity transaction prices. Particularly when commodities are sold in the context of complex trade arrangements (Box 1), while the traded commodity may still be priced by reference to the CUP method based on quoted prices,

³ Under the OECD Transfer Pricing Guidelines, ‘quoted prices’ refer to “the price of the commodity in the relevant period obtained in an international or domestic commodity exchange market. In this context, a quoted price also includes prices obtained from recognised and transparent price reporting or statistical agencies, or from governmental price-setting agencies, where such indexes are used as a reference by unrelated parties to determine prices in transactions between them” (OECD 2017d, paragraph 2.18).

⁴ Adjustments to the quoted prices need to reflect four sets of transaction-specific factors: 1) the specific contractual terms of the individual transaction (*contractual adjustments*); 2) the functions performed by each of the parties to the transaction, taking into account functions performed, assets used and risks assumed (*functional adjustments*); 3) the individual characteristics of the transacted good (*physical adjustments*); 4) the specific market conditions in which the parties operate, including their relative competitive position, and the business strategies pursued by the parties (*economic and business adjustments*) (OECD 2017d, Chapter I D1).

⁵ Under the OECD TPG, for commodity transactions determined by reference to the quoted price, the ‘pricing date’ refers to “the specific time, date or time period (e.g. a specified range of dates over which an average price is determined) selected by the parties to determine the price for commodity transactions” (OECD 2017d, paragraph 2.22).

the remuneration of other activities may need to be analysed using other transfer pricing methods (Platform for Collaboration on Tax 2017, at 171). Under the OECD TPG, these other methods bring with them a requirement for fact-intensive functional analysis and specific comparables, with little room for fixed margins or deemed profits.

Hence, whatever the technique used, the OECD TPG require detailed, fact-intensive analysis. In particular, the analysis should take into account the functions performed, assets used, and risks assumed by each transacting party (functional analysis), and make ‘comparability adjustments’ based on their functional profiles (BEPS Monitoring Group 2019a and 2019b). The requirement is for an individual, ad hoc analysis of the facts and circumstances of each case, on a transaction-by-transaction basis. This typically places a significant burden on resource-strained tax administrations in poor countries. Further, as pointed out by the BEPS Monitoring Group, this results in “a severe information asymmetry, since a company will always know more about its own business and its sector than any outsider, especially tax authorities who have little background in the industry of the MNE and no detailed knowledge of the taxpayer’s operations” (BEPS Monitoring Group 2019c, at 4).

As a response to the complexity of the OECD approach, simpler methods have been proposed to establish arm’s length prices. For commodity transactions, they essentially imply the automatic and formulaic use of reference prices and margins. These techniques are considered hereafter in some detail as regulatory approaches to counter commodity trade mispricing. The analysis first considers how administrations can compile repositories of strategic market information for benchmarking purposes (Chapter 3). It then discusses the regulatory instruments and approaches through which tax administrations can use these benchmarks to counter commodity trade mispricing (Chapter 4).

3. Setting benchmarks for commodity transactions

Having clarified some background concepts in Chapters 1 and 2, it is time to move on to the first pillar of the core inquiry: How can tax administrations in developing countries set locally adapted comparables and benchmarks to check on commodity export sales? The following analysis will first briefly discuss what information tax administrations need to check on the pricing of commodity exports. It will then consider how it can meet these information needs, by articulating a three-pronged strategy based on the greater use of administrative data, private sector involvement, and shared data platforms.

3.1. Information needs

The pricing of commodities is relatively straightforward compared to, for example, the pricing of intangibles. In the commodity trade, quoted prices from reputable and transparent sources⁶ are routinely used as a reference for pricing commodity transactions. These reference prices can be conveniently used by tax administrations to check on and adjust transaction prices. As discussed above (Chapter 2), the revised OECD Transfer Pricing Guidelines allow the use of quoted prices under the CUP method as a starting point for identifying arm’s length prices (OECD 2017d, paragraphs 2.18 and 2.19).

Yet things are not as simple as it might seem in at least three respects:

- First, commodities are often traded in intermediary forms (e.g., blister copper, pig iron, gold doré, or ore concentrates) for which no public quotations exist. Their pricing is based on a calculation of the contained metals (‘payable metals’) valued by reference to quoted prices, if they exist, less treatment and refining charges and penalties. A ‘netback’ approach is often used in such cases: adjustments are made to the price of the final refined commodity to ‘netback’ refining and treatment costs, freight charges and other costs incurred between the market pricing point (refined product) and the relevant valuation point (intermediate metal/mineral), including an allowance for capital expenditure (Platform for Collaboration on Tax 2017).

⁶ The OECD Transfer Pricing Guidelines define the term “quoted price” as referring to “the price of the commodity in the relevant period obtained in an international or domestic commodity exchange market” (OECD 2017d, 2.18). The Guidelines elaborate further: “[i]n this context, a quoted price also includes prices obtained from recognised and transparent price reporting or statistical agencies, or from governmental price-setting agencies, where such indexes are used as a reference by unrelated parties to determine prices in transactions between them” (ibid.).

- Second, when quoted prices apply, adjustments need to be made to reflect variations from standard contract specifications regarding quality, lot size and shape, delivery dates, settlement terms, and currencies, among other things. For example, refined copper (copper cathodes) is often priced by reference to spot prices quoted on the London Metal Exchange (LME). The LME spot price (US\$) refers to LME-approved brands of metal qualified by assayers that meet strict specifications on quality (Grade A copper that conforms to particular standards of chemical composition), shape and weight (full plate cathodes in lots of 25 tonnes), and delivery terms (copper paid for and deliverable in two trading days). The more the contract moves away from standard LME specifications, the more adjustments could be expected to the final agreed price (LME 2019).
- Third, as discussed, commodities may be sold at below market prices in the context of complex arrangements where the buyer takes on specific business functions and risks (see above, 1.1 and Box 1). For example, a producer may sell to a trader at a discount to prevailing spot prices, as a remuneration for the prior provision of capital, the assumption of production risks, or the performance of marketing or processing functions.

Eventually, as put forward by a representative of the trading industry, “quoted ‘market prices’ have ultimately very little to do with the many specificities of individual transactions that in the end determine their ultimate negotiated price” (STSA 2014, at 4). Price adjustments for physical characteristics, contract and payment terms may be necessary. Further, as discussed, transactions priced in the context of complex long-term off-take deals cannot be conveniently benchmarked against spot prices; other benchmarks may be used, such as gross margins on sales (resale plus method), mark-up on costs (cost plus method), net returns by companies in similar lines of business (net transactional profit method), and a profit split formula. In all cases (price adjustments, margin/costs transactional methods and profit-based methods), quoted commodity prices may not be the only information needed by revenue authorities to check on transaction prices.

3.2. Meeting information needs

It follows that to check on commodity export prices, the revenue authority would need to build a strong statistical database on prices, marketing costs and margins along the entire value chain. How can tax authorities efficiently build these strategic information repositories, in contexts of limited financial resources and poor staff resources? The motto might be “keep it simple”: collate information already in the hands of tax administrations in developing countries, and make the best use of this data.⁷ In addition, it is critical to engage the private sector in information sharing with the administration, by framing and incentivizing disclosure of relevant information to the administration, including in the context of public-private partnerships. Finally, developing countries could engage with regional and international organizations to assess the potential for building up shared repositories of strategic market information. This three-fold strategy is outlined below.

3.2.1. More extensive use of administrative data

Tax administrations in resource-strained countries could make the best use of data already available in their hands in order to set comparables and benchmarks (Platform for Collaboration on Tax 2019). In most countries, a few repositories of commercially strategic information exist and can be built upon. They include agricultural market information services, customs datasets, tax returns and company filings.

3.2.1.1. Market information services

Recent years have seen an increased interest in the use of market information services (MIS)⁸ for public policy purposes, notably for providing an early warning of food security problems. It is worth considering

⁷ The Platform for Collaboration on Tax (2017) stated that “non-public administrative information can be highly relevant in practice. Typically, it is the main source of information for the design of benchmarks for risk assessment guiding audit selection [...] Moreover, administrative information has the potential to be used as a source of information for the design of safe harbour rules” (Platform for Collaboration on Tax 2017, at 47).

⁸ Market information services (MIS) are “designed to collect, analyse and disseminate data on the status and the dynamics of agricultural market prices” (FAO 2017, at 1). In the past, MIS were generally operated by the public sector. They typically involved the regular collection of price information from rural assembly, wholesale, and retail markets, and timely

further ways in which market information platforms can be used to foster market transparency and counter mispricing practices in agricultural commodity trade. There is some potential for this – and a few challenges.

The potential is there: market information platforms exist for key agricultural commodities in a few, if not most, of developing countries. These platforms have a part to play in setting benchmarks and in compiling sets of ‘local’ comparables. MIS provide a strategic repository of domestic information that can be used for comparability purposes: daily spot quotations and price statistics in relation to assembly, wholesale and retail markets; information on traded volumes, quality and contract specifications; intermediate costs regarding preparation and packaging, handling and transport, losses, storage, processing; capital costs; internal fees, commissions and other payments; and port fees/fobbing costs, including inspection charges. Reference prices can be construed as a moving average of market prices, or a defined price range, using the MIS data. Tax administrations can use this data for benchmarking purposes, in order to check on transaction prices and costs by comparing the individual transaction price with the general level of prices in the market.

However, a few challenges remain. The biggest challenge is associated with data accuracy and sustainability in light of cost implications. Many MIS in developing countries have performed poorly in this regard, due to low levels of accuracy and lack of timeliness in the provision of information (FAO 2017). The major hurdles are typically price collection at source (at local assembly markets or close to the farm gate) and dissemination of timely information to farmers. Note, however, that these two aspects are not so relevant when MIS data are used to track down commodity trade mispricing. The critical nodes in detecting cross-border mispricing situate at or close to the point of export. The most relevant domestic information relates to wholesale prices, marketing costs and fobbing charges. This information is quite standardized and relatively easy to collect. It may also be supplied by private actors through traders’ associations or chambers of commerce, as discussed in Section 3.2.2. Finally, to mitigate costs, it may be cost-effective to selectively focus on commercially important crops that generate significant revenue for the state.

A second challenge is institutional. MIS are generally established within ministries of agriculture. It may be necessary to set up internal exchange protocols and procedures for the flow of information between the ministry of agriculture and the revenue authority that uses MIS data for tax purposes.

3.2.1.2. Customs data

At the disaggregated level, customs data consist of microdata on firm-level trade. These transaction-level data essentially record the price of individual shipments as extracted from commercial invoices, plus fobbing costs (FOB export data). Indirectly, they provide key information on product sales contracts.

Trade microdata are in the hands of customs authorities. As for MIS data, they can be conveniently used for benchmarking purposes. Simply put, based on customs data, a price benchmark can be set using a variety of statistical tools such as percentiles (e.g., interquartile range), simple and weighted average, and the median. Export shipments that deviate significantly from the benchmark price or price range would be designated to be ‘abnormally priced’ (Carbonnier and Mehrotra 2019) and would be subject to administrative review. This methodology has been tested in Carbonnier and Mehrotra (2019), Ahene-Ahene-Codjoe and Alu (2019) and Nolintha, Sayavong and Mehrotra (2019). It offers a promising venue for risk-based selection of cases for transfer pricing audit.

dissemination of this information through various media to farmers, traders, government officials, policymakers and others (Shepherd and Schalke 1995). The objective was to enhance trade and competitiveness of smallholder farmers, and track trends in prices. Today, a variety of MIS platforms exist that follow different organisational models: some are public, for example, the Market News Service operated by the United States Department of Agriculture (USDA); others are private services, such as Reuters Market Light in India and Esoko in Africa; and a few are public-private partnerships. Data is no longer limited to prices, but may also include information relating to quality requirements, contract specifications, intermediate costs, as well as production and policy measures. A growing number of MIS rely heavily on cell phones and modern information and communication technologies. In addition to providing market information, these new-generation MIS are generally linked with additional market services and infrastructure, such as storage facilities, warehouse receipt systems and commodity exchanges (CTA 2013; Mukhebi and Kundu 2014; Katangeza 2012).

There are some technical limits to the use of customs data to track down commodity trade mispricing (Platform for Collaboration on Tax 2017; Carbonnier and Mehrotra 2019). First, customs data do not always have a sufficient level of granularity to allow for meaningful price analysis: even at the most disaggregated level, customs data may not distinguish between commodities of different quality or branding; do not shed light on the functions, assets and risks of the parties to the transaction; and do not identify related party sales. Note, also, that this method will always produce some overpriced or underpriced transactions if there are variants in export shipment prices (Carbonnier and Mehrotra 2019).

Some of these technical constraints can be eased by adding granularity to customs data. It is worth considering the possibility of compiling raw customs data into repositories of transaction-level data in physical commodity markets, patterned after the trade repositories that monitor transactions in over-the-counter (OTC) commodity derivatives. Customs software is generally scalable and modular and could integrate strategic repositories of export sales transaction-level data. Physical trade repositories, subject to robust regulatory standards and supervision, will stock chain-specific firm-level information regarding who is buying what, where, when, at what price. In developing countries, this information will help domestic authorities detect instances of market abuse in export transactions, and redress price distortions.

From a regulatory perspective, it may be necessary to ‘enable’ the flow of information between tax and customs authorities. The use of customs data for tax purposes requires closer co-operation between customs officers and transfer pricing auditors.⁹ Countries that have separate administrations for tax and customs may need rules and procedures for the flow of information between the different administrations. Further, if repositories of sensitive information are set up, it becomes critical to set safeguards in relation to confidentiality, data protection and the proper use of the information, as discussed in the following section.

3.2.1.3. Tax returns

In order to set benchmarks in relation to profit margins, prices and costs, tax authorities can also conveniently use relevant information sourced from company tax returns (Platform for Collaboration on Tax 2017). Corporate tax filings contain detailed information on key company figures such as turnover, profits, deductions and reliefs, with accompanying documents. Such taxpayer lodged information could be used to feed a centralized database of financial data that in turn can be used by the tax administration to establish benchmark margins (gross and net profit margins and other profitability ratios) prevalent in a relevant industry, sector or line of business.¹⁰ The process can eventually be automated, with key data being automatically extracted from tax returns filed online, and inputted into the central database.

BOX 3: A TRACKING SYSTEM TO MONITOR THE PROFITS OF MNEs IN CHINA

As summarised in the UN Transfer Pricing Manual, “the SAT [State Administration of Taxation] has installed a monitoring system to track the profits of MNEs in China. The primary data sources are the annual corporate income tax returns and the accompanying related party filings. The information is compiled, compared and analyzed by year, industry, and geographical area. The monitoring system was designed to combine industry analysis with individual taxpayer screening, and relies on the China Taxation Administration Information System (CTAIS). Under the above system, tax authorities receive alerts when risks are identified. The records and performance evaluation that the tax authorities have for a particular taxpayer can also be accessed in the system. The Chinese SAT has put extra emphasis on routine reviews of related party filings and contemporaneous transfer pricing documentation”.

Source: United Nations 2017b, at 553-54.

The tax administration would then have reliable industry figures (comparables) on, for example, gross and net operating margins prevalent at specific points of the commodity value chain. Such information could be used to make netback adjustments when using the CUP method based on quoted prices (see above, p.

⁹ The World Customs Organization (WCO), in collaboration with the OECD and World Bank, has produced a guide on the interaction between customs valuation and transfer pricing regimes (WCO 2018). The guide assesses the possibilities for Customs to use transfer pricing information to examine related party transactions.

¹⁰ In this direction, Platform for Collaboration on Tax (2017), at 82-83.

6). It can also be used to review declared gross resale margins (resale minus method with fixed margins), mark-ups on costs (cost plus method with fixed margins), or net profits (transactional net margin methods) (refer to sections 3.6.2 and 3.6.3).

This approach is promising, but again, there are a few technical and legal issues to tackle.

At the technical level, it would be necessary to build an application that automatically retrieves key data from corporate tax returns and processes them to generate sector-specific profit level indicators. The tax return filing should also be digitalized (no paper forms). The key requirement is for skilled accountants and IT programmers, who are generally in shortage in resource-constrained jurisdictions. To ease budgetary constraints and fill the know-how gap in this area, developing countries may seek technical assistance from regional and international organizations, or through bilateral channels. This is an area where donor money could make a difference, if sustainable applications are deployed and the need to train and second local staff in the mid- to long-run and keep things simple are taken into account.

In regulatory terms, it is critical to address concerns about confidentiality, data safeguards and protection, and the proper use of the information. Drawing from the exchange of tax information procedures (OECD 2017b), three building blocks are essential in ensuring appropriate data safeguards. First, the legal framework should ensure that the tax data is kept confidential and properly used. Specific rules should: specify the necessary level of protection of personal data, as required under domestic law; confine access to the database to the tax administration; specify the terms for disclosure of anonymized, aggregate information; and set civil and criminal sanctions for the unauthorized inspection, disclosure or use of data. Second, an information security management system must be in place to ensure the practical implementation and observance of any safeguarding specified in the law. In concrete terms, the tax administration would be required to implement a set of policies, practices and procedures to ensure that the information is securely managed, including concerning IT risks.¹¹ Third, the tax administration should have processes in place to monitor compliance with these policies, detect confidentiality breaches and kick-off investigations in case of a breach. Note that the regulatory costs associated with preparing and implementing confidentiality safeguards would not be too high since jurisdictions could draw from existing commentaries, by-laws and questionnaires developed in the context of automatic information exchange procedures (OECD 2017b).¹²

3.2.1.4. Companies' financial information and transaction data

Finally, tax administrations can use financial information and transaction-level data disclosed by companies. To some extent, tax administrations may deal with the lack of access to specialist industry knowledge by increasing disclosure requirements on taxpayers. The reach and depth of company disclosure depends on a country's regulatory framework, which sets obligations to prepare and file financial accounts. Regulatory and administrative choices will ultimately affect information availability.

The debate on enhanced disclosure of companies' data has become increasingly forceful.¹³ Three issues deserve specific attention in relation to efforts to counter commodity trade mispricing.

a) Transfer pricing (TP) documentation requirements

First, tax authorities can impose strict reporting and documentation requirements on transfer pricing arrangements. Under the Base Erosion and Profit Shifting (BEPS) initiative, these include country-by-country reporting and master file obligations in addition to requirements for a local file and the submission of an annual transfer pricing declaration form. The local file – optional, under the BEPS standard – is a critical tool to tackle transfer pricing risks in countries with limited tax administration

¹¹ Relevant aspects include background checks on employees, contract terms and training, access to premises and physical document storage, database access rights, identification and authentication procedures, traceability, system maintenance, security assessment, and contingency planning (OECD 2017b, at 83-87).

¹² Refer in particular to the OECD Commentary on Section 5 of the Common Reporting Standard concerning Confidentiality and Data Safeguards and the example questionnaire in Annex 4 (OECD 2017b).

¹³ For example, there has been significant policy debate in Switzerland on 'payment to government' disclosure requirements and their extension to traders, and growing pressure by civil society groups to introduce mandatory due diligence regimes, in line with developments at the EU level.

capacity (Box 4). Local TP documentation requirements transfer to the taxpayer the requirement for a detailed transfer pricing analysis; provide the tax administration with extremely relevant information on pricing formulae, netback adjustments, comparables and comparability adjustments; and furnish copies of intra-group contracts and tax rulings.

BOX 4: 'LOCAL FILE' REQUIREMENTS

Under the BEPS template, local files include a detailed description of the management structure and business strategy of the local entity; relevant corporate financial data; and detailed, transaction-level information on intra-group deals. Regarding transaction-level data, the following information should be included for controlled transactions/category of controlled transactions in which the entity is involved: a description of the controlled transactions and their context; amount of intra-group payments and receipts; identification of associated enterprises involved; detailed functional analysis of assets, functions and risks of the parties; a description of the transfer pricing methods used, comparables selected and comparability adjustments done; copies of intra-group contracts; and copy of unilateral and bilateral/multilateral advance pricing agreements (APAs) and other tax rulings to which the local tax jurisdiction is not a party and which are related to the controlled transactions.

Source: OECD 2015, Annex II to Chapter V

b) Payments-to-governments (PtG) disclosure requirements

A relevant transparency issue is the extension of payments-to-governments (PtG) disclosure requirements to traders. Under the existing PtG disclosure regimes,¹⁴ extractive companies are required to report payments to governments, by project, whether in money or in kind. These disclosure requirements cover payments made in relation to the upstream exploration and extraction activities, which are subject to significant transparency and oversight. They do not cover trading activities, which remain shrouded in significant opacity and secrecy. There has been much recent debate in both advocacy and political circles about extending PtG disclosure requirements to commodity trading payments. The issue is hotly debated in relation to 'first purchase' payments and volumes, or 'first trades' (EITI 2017; Malden and Williams 2018).¹⁵ Traders would have to report on the purchase side of the 'first trade' transaction: what they buy, from whom, and at which price.

c) Contract transparency

The definition of 'payments to governments' has been broadened in recent policy discourse to encompass the processes by which sales contracts are allocated, the terms of the contract, pricing methods, and so on. Comprehensive and ambitious disclosure requirements are being considered for complex commodity trade deals involving streaming, prepayment or product swaps, with disclosure of key terms of the underlying contractual arrangements (EITI 2017). As discussed in Löf and Ericsson (2019), host countries may set specific documentation and pre-approval requirements for complex trade deals above a certain value threshold. These documentation requirements might cover, for example, contract with the trader, production volumes, assay results, investment plans, competing offers from other traders, and the cost of borrowing from commercial banks (Löf and Ericsson 2019, at 60). In general, the host state may legislate the compulsory registration and filing of sales contracts related to commodity exports (Löf and Ericsson 2019). There is precedent for this.

BOX 5: CONTRACT REGISTRATION REQUIREMENTS - THE CHILEAN COPPER COMMISSION

As summarised by Löf and Ericsson (2019), the Chilean Copper Commission (COCHILCO), a specialized technical agency reporting to and advising the Ministry of Mines, oversees imports and exports of copper and copper by-products. The commission verifies that all export sales are conducted at market prices and reports violations to the Internal Revenue Service and the Customs Service. All copper exporters are required to register

¹⁴ In the US, Congress enacted Section 1504 of the Dodd Franck Act, requiring US-listed extractive companies to disclose certain payments made to the United States or a foreign Government. Similar reporting requirements were adopted by the European Union, Norway, and Canada.

¹⁵ Reporting on 'first trades' covers sales made by the government or state-owned enterprises to unrelated or related parties (EITI 2017, at 12). The call for more transparency on 'first sales' intertwines with the quest for enhanced transparency as regards 'in-kind payments' and 'unconventional sales' (for example, swap sales, pre-payment deals, and commodity-backed loans) in the extractive sector.

with COCHILCO and file sales contracts with the Mining Export System (Sicex) platform. COCHILCO further oversees compliance with mining-related foreign investment contracts.

Source: Löf and Ericsson 2019.

The transparency and revenue gains from tightened disclosure need to be weighed against the costs of new stringent disclosure regimes: regulatory costs for business that may need to adjust accounting practices to comply with new disclosure requirements; regulatory costs for the tax administration, also due to the fact that accounting information cannot be straightforwardly used for tax purposes; and overall efficiency losses and international competitiveness issues.

3.2.2. Partner with the private sector

When the tax administration engages in some sort of benchmarking exercise, it should make sure that the approach used – pricing formulæ, netback deductions, and so on – is in line with industry practices and solidly backed by market data. To this end, the administration could proactively engage with the private sector and seek validation from the commodity industry and trade representatives. Private sector involvement is essential to favour a richer understanding of price formation and transmission mechanisms in commodities. Further, private actors may yield insights into the key, catalytic market interventions that can impact the inner workings of markets, with modest changes in the law. Note also that commercial interests straddle across jurisdictions, which would allow coherent and concerted action across the border, beyond the jurisdictional limits of state enforcement (Musselli 2017).

Constructive dialogue with the private sector can be an effective and efficient way for the tax administration to gain insights into pricing practices and cost structures in commodities, particularly as regard costs incurred beyond the point of export. The tax administration would put itself in a strong position by establishing benchmarks in line with industry practices in consultation with the private sector. Industry knowledge will be particularly useful in determining which quoted price to use; appropriate sector-specific margins; average premia or discounts for delivery at a place other than that indicated in standardized contracts, or in relation to specific contract terms (e.g. prompt delivery); insurance and sea freight costs between various ports worldwide; smelting and refining costs and rates of recovery in smelting and refining operations; and the prevailing contract terms in a line of business.

As briefly outlined in Section 3.2.1.4 above, states may enact disclosure requirements and compel companies to share in commercially relevant information that the tax administration can use for benchmarking and comparability purposes.

An alternative – or complementary – course of action is to incentivize disclosure, through the establishment of mechanisms of multi-stakeholder price concertation. The idea is to cluster and lock a plurality of key market participants into cooperative behaviour, under guidance and monitoring from the sectoral authority in the producing country. In soft commodities, this approach relies on mechanisms that have already been tested through the ‘fair trade’ model; it is reminiscent of models of organized supply chains; and reflects a global drive towards multi-stakeholder (public-private) models of supply chain governance (Box 6).

BOX 6: MULTI-STAKEHOLDER GOVERNANCE IN COCOA

In Côte d’Ivoire, a cocoa supply-chain management scheme has been implemented through groups of participants, each consisting of one exporter, one to three co-operatives and one to three chocolate manufacturers, with the institutional involvement of the *Bourse du Café et du Cacao* (ICCO 2006). At the global level, the Abidjan Cocoa Declaration has outlined a new governance model to bring about changes in the cocoa sector, including more stable and sustainable prices. The new model involves coordinated and concerted producer-consumer intervention through a multi-stakeholder (public-private) approach. The key players in the cocoa value chain adopted the declaration at the 1st World Cocoa Conference, held in Abidjan in November 2012. The conference grouped key stakeholders in the cocoa value-chain, including individual farmers, cooperatives, traders, exporters, processors, chocolate manufacturers, wholesalers, producing and consuming countries, governmental and non-governmental organizations, financial institutions as well as donors and international aid and development agencies. In relation to the strategic management of the sector, stakeholders agreed to develop or assist, as required, “the formulation and

implementation of national cocoa development plans, based on transparent and fully participatory local Public-Private-Partnership (PPP) approaches” (ICCO 2012).

Source: Anga 2015, ICCO 2006, ICCO 2012.

The involvement of trade associations and industry bodies, especially when their membership spreads across countries, may catalyze the broad uptake of multi-stakeholder initiatives, playing a role in levelling the playing field and overcoming collective action problems (Musselli 2017).

3.2.3. Catalyze international initiatives

One step further, developing countries may engage with regional and international organizations to assess the potential for compiling a regional or international set of relevant commercial information for specific commodity chains.¹⁶ The information would be presented in an aggregated format that retains disclosure of commercially sensitive information, yet disaggregated enough to be commercially meaningful. It may be necessary to ‘localize’ the dataset, by compiling information that is relevant at the regional and sub-regional level. Further, the dataset would need to be product specific, given the specificity of commodity markets. Relevant information may include: international freight costs between various ports worldwide, broken down by type of cargo and ship size; rental charges for the use of warehouse space; treatment and refining costs paid to smelters and refiners; conversion ratios/rates of recovery in smelting and refining processes; and reference prices, by shipment destination and sub-region. The database should ideally contain a built-in application that allows users to engage in benchmarking exercises. For a specific product shipment of x origin and x destination, the application would pick up the right quoted price, based on industry practice, calculate premia and discounts in relation to quality, delivery and contract terms, and make the needed netback adjustments (for freight, insurance, treatment and processing, etc.). The database would be managed by the repository regional/international organization, in the context of a public-private partnership with relevant trade and industry associations and companies.

When assessing the feasibility of this approach, it may be expedient to build on existing market transparency initiatives and multi-stakeholder platforms. The FAO, UNCTAD, ITC and different regional organizations have set up market monitor and information systems or inter-agency platforms aimed at enhancing market transparency.¹⁷ It is worth exploring the possibility of building on these databases and applications to track down commodity trade mispricing. Note also that several inter-governmental commodity bodies, alongside UNCTAD and the FAO, have set up inclusive and flexible institutional arrangements for private sector involvement. These include, for example: the World Coffee Conference and the Private Sector Consultative Board, within the framework of the International Coffee Organization; the Consultative Board on the World Cocoa Economy and the World Cocoa Conference, in the framework of the International Cocoa Organization; multi-stakeholder partnerships for sustainable commodity production and trade such as the World Banana Forum within the FAO; and multi-stakeholder initiatives like the Global Commodities Forum and the UNCTAD's Secretary-General's Multi-stakeholder Consultations on Trade and Development Issues relating to Commodities, at UNCTAD. These venues provide a forum for constructive engagement with the private sector and may favour the broad uptake of innovative price-monitoring schemes (Musselli 2017).

4. Using benchmarks: Regulatory options

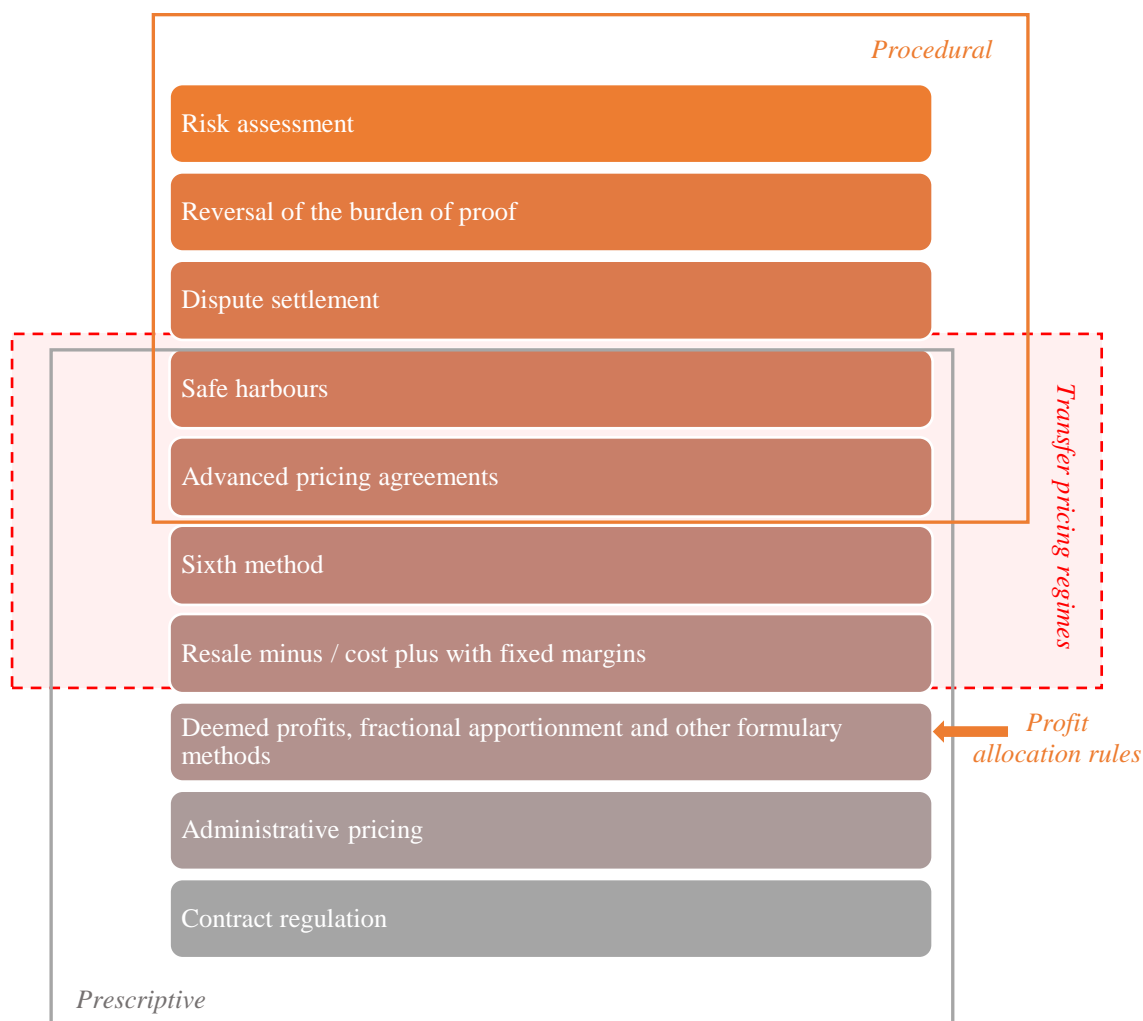
The previous chapter has explored how tax administrations can set locally adapted comparables and benchmarks. This chapter moves on to consider how they can use benchmarks to counter mispricing practices in commodity trading. The analysis points to a wide spectrum of regulatory approaches and instruments. Tax administrations can indeed use benchmark prices and margins in different ways and for a variety of purposes: as red flag indicators in risk assessment; to reverse the burden of proof; to set safe harbour parameters or for the design of advance pricing agreements; in the Mutual Agreement Procedure

¹⁶ The suggestion was advanced by the inter-agency Platform for Collaboration on Tax in relation to data derived from tax returns (Platform for Collaboration on Tax 2017).

¹⁷ Suffice here to mention FAO's Agricultural Market Information System (AMIS), UNCTAD's INFOCOMM & Infoshare platforms, and International Trade Centre (ITC) market information tools.

for resolution of transfer pricing cases; for ‘crude’ tax purposes, to assess royalties and corporate income taxes, or determine the customs value; and to set limits on contracts. Some of these techniques are procedural, for example, the use of benchmarks to reverse the burden of proof; others are substantive or prescriptive, notably the use of reference prices to assess taxes or to adjust contractually agreed prices. All of these are market-based since the starting point is the prices observed in market transactions. Such regulatory techniques and approaches are outlined below.¹⁸

FIGURE 3: REGULATORY USE OF REFERENCE PRICES AND MARGINS TO TRACK DOWN MISPRICING



Source: Author's elaboration.

4.1. (Mainly) procedural methods

Tax administrations in developing countries can use the benchmark data discussed in Chapter 3 in several ways. Some techniques are essentially procedural since they primarily aim at simplifying screening procedures. Specifically, they are geared to reduce the workforce employed toward screening transactions to detect tax risks. As discussed below, they consist in using reference prices and margins to reverse the burden of proof, in the context of dispute settlement, or to set the parameters of safe harbours and advance pricing agreements (APA). Safe harbours and APA can also use reference prices to set the tax value of commodity sales, turning into the type of substantive instruments discussed in Chapter 4.2.

¹⁸ Anti-avoidance and other tax base protection measures (thin capitalization rules, on deductions for royalties, controlled foreign corporations (CFCs), etc.) are out of scope here. Also, out of scope are formulary apportionment and other unitary taxation options that require more coordinated international action.

4.1.1. Red-flag indicators in risk assessment

Reference prices can be used as red flag indicators in risk assessment to spot potential mispricing. For example, as discussed in Section 3.2.1.2, customs can use export transaction data to set reference prices using a variety of statistical tools such as percentiles, simple and weighted average, or the median. Export shipments that deviate significantly from the benchmark price or price range, designated as abnormally priced, can be subject to scrutiny (Carbonnier and Mehrotra 2019). The same approach can be used for the risk-based selection of cases for transfer pricing audits. When risks are detected by the system, tax authorities may mechanically receive alerts that automatically trigger the investigation. This would reduce the workforce employed towards screening transactions to detect tax risks. Further, it would close down room for discretion in selecting audit cases.

4.1.2. Reversal of the burden of proof

Benchmark data derived from MIS, customs datasets, tax returns or company filings (Chapter 3.2.1) can also be expediently used to reverse the burden of proof when investigating mispricing.

In tax matters, the primary onus of justifying a tax return formally lies with the taxpayer, who must justify its accounts. Yet, “in practice the reverse is the case” (Picciotto 2018, at 22): the tax administration cannot challenge the taxpayer’s submission without carrying out a detailed, fact-intensive analysis. In fact, for any adjustment to the taxpayer’s return that the administration proposes, the burden of justifying it is with the administration. Under transfer pricing law, the introduction of the ‘best method rule’ has added further complexity for the administration, since the tax administration must now successfully show that the transfer pricing methodology chosen by the taxpayer is flawed (Picciotto 2018, at 22).

Benchmark prices/margins can be used to shift the onus of claiming adjustments to the taxpayer: if the taxpayer proposes adjustments to the reference price, the burden of justifying the adjustment would be on the taxpayer. In other words, there would be a rebuttable presumption that the reference price is right, subject to a taxpayer’s right to demonstrate that adjustments need to be made, or a different pricing formula is to be used. This is a way for the tax administration to shift on the taxpayer the justification of price adjustments.

These benefits can, in part, be realized by other means. As discussed, countries can legislate strict transfer pricing documentation requirements as well as specific documentation and pre-approval requirements for complex trade deals (Chapter 3.2.1.4). These documentation requirements can be set high enough to cover pricing formulae used, pricing date, premia or discounts applied, and so on. Such disclosure requirements would put a higher burden on the taxpayer to justify their pricing method.

4.1.3. Mutual Agreement Procedures

Reference prices can be used in the context of Mutual Agreement Procedures (MAP) for speedier resolution of pending cases. The MAP provision in bilateral tax treaties provides mechanisms to resolve cross-border tax disputes. It is worth exploring further the possible role of simplified methods of resolving transfer-pricing disputes in the context of MAPs. This requires flexibility to move beyond the international standard that OECD countries have agreed should be used for determining transfer prices for tax purposes (for a more detailed analysis of regulatory space issues, refer to Chapter 5).

4.1.4. Safe harbours

Reference margins and prices can be further used to set the parameters of safe harbour rules in transfer pricing regimes. Safe harbour rules are “provisions whereby if a taxpayer’s reported profits are within a certain range or percentage or under a certain amount, the taxpayer is not required to follow a complex and burdensome rule, such as applying the transfer price methodologies” (United Nations 2017b, at 49).¹⁹ In practice, safe harbours define circumstances in which the tax administration shall accept the figures

¹⁹ The OECD Transfer Pricing Guidelines define a safe harbour as: “a provision that applies to a defined category of taxpayers or transactions and that relieves eligible taxpayers from certain obligations otherwise imposed by a country’s general transfer pricing rules. A safe harbour substitutes simpler obligations for those under the general transfer pricing regime” (OECD 2017d, para. 4.102)

declared by the taxpayer. The normal tax audit process would not apply, and the taxpayers would be entitled to acceptance of their declared operating profit margin if within a specified safe harbour rate.

Regarding commodity trade, tax administrations could use prices obtained from commodity exchanges or statistical agencies to set the parameters of price-related safe harbours: export sales that fall within the reference range will be deemed at arm's length and accepted. The parties would be free to set prices outside the range, but may incur into strict reporting and documentation requirements on their trade arrangement (Chapter 3.2.1.4), and may face a transfer pricing investigation. In practice, this would amount to using the 'sixth method' (refer to Chapter 4.2.1 below) as a safe harbour. Safe harbours can also be used to set the parameters of netback adjustments to quoted prices. As discussed, commodities traded in intermediary form for which no public quotation exists can be valued by reference to quoted prices, but adjustments need to be made to the quoted price to netback the costs incurred between different valuation points (refined product and intermediate product) (Chapter 3.1). An official cost schedule could be set as a safe harbour reference for costs that need to be net back such as refining and treatment costs, and freight charges. This schedule may be promulgated by a transparent price reporting or statistical agency, based on industry data and in concert with the private sector (3.2.2). Finally, safe harbours can be set for complex trade deals, including financing and tolling arrangements (Box 1). In this context, safe harbours can be set in relation to intra-group loans and guarantees, to benchmark interest rates, and in relation to profit margins. These parameters could eventually be agreed in the context of an APA, as discussed below.

Several countries have adopted safe harbours based on benchmark prices and margins.²⁰ To be OECD standard-compliant, such schemes are, for the most part, narrowly framed: optional for taxpayers, who can either opt in or out of the scheme at discretion; specifically targeted at low-risk taxpayers (small and medium enterprises) and/or low-risk transactions (routine, low value transactions); and agreed bilaterally or multilaterally, or subject to mutual agreement procedures under double tax treaties.²¹

Safe harbours can have significant advantages for tax administrations in resource-constrained jurisdictions, in terms of compliance relief, certainty and administrative simplicity (OECD 2017d, 2016-7; United Nations 2017b, at 371). In particular, safe harbours can be a useful tool to curb the number of transfer pricing audits and secure tax revenues in low-risk situations with the limited commitment of

²⁰ India introduced safe harbour provisions in the Indian Income Tax Act with effect from 1st April 2009 (Revised safe harbour rules as per sub Rule (2A) of rule 10TD, applicable from annual year 2017/18 to annual year 2019/20). These provisions have been several times amended since, with a progressive relaxation of the safe harbour margins, to attract taxpayers. In India safe harbour rules cover specific industry segments and transactions: software development services (IT services) and information technology enabled services (ITeS); knowledge process outsourcing (KPO) services; contract R&D services relating to software development and generic pharmaceutical drugs; manufacture and export of auto components, for 90 percent of which the entity should be the original equipment manufacturer; and certain intra-group loans and guarantees. The regulation sets upper transaction thresholds that limit safe harbour eligibility in the listed sectors: an upper turnover threshold limit at INR200 crore for contract service providers (IT, ITeS, KPO, and R&D services); and intra-group loans less-than or equal to INR50 crore. Such limits confine the availability of safe harbours to small and medium enterprises and low value transactions; larger taxpayers should either opt for an advance pricing agreement or for the normal tax regime, which may involve litigation. The safe harbour rates (ratio of operating margins to operating expense) are: for IT services and ITeS, 17 percent or 18 percent, depending on the aggregate value of transactions; for KPO services, 18 percent, 21 percent and 24 percent, depending upon the percentage of employee costs to operating costs; for R&D service providers, 24 percent (KPMG 2017). Eligible taxpayers that have opted-in the safe harbour scheme shall declare not less than these profit margins. They are entitled to acceptance of their declared margins and are exempted from general transfer pricing rules. As regards intra-group loans and guarantees, the revised regulation prescribes safe-harbour rates based on the London Inter-bank Offered Rate (LIBOR) for loans denominated in foreign currency (interest rate \geq six-month LIBOR as on 30 September of the previous year plus basis points depending on the credit rating of the borrower). For loans denominated in local currency, interest rates are benchmarked against costs of borrowing from the State Bank of India (\geq one-year marginal cost of funds lending rate of State Bank of India as of 1 April of the previous year, plus basis points based on the credit rating of the borrower) (KPMG 2017). The India scheme is optional (opt-in approach). Taxpayers are free to declare lower margins and follow the normal assessment route, which may involve litigation. The safe harbour rates are only applicable for three years (2017/18 to 2019/20), compared to five years offered by APAs (nine, if rollback is sought) (KPMG 2017).

²¹ The OECD "reluctantly" accepted the possibility of safe harbours' in 2012, and within strict limits (Picciotto 2018, at 28). OECD-compliant safe harbours shall be: specifically targeted, better if directed at low-risk taxpayers and/or transactions; elective; adopted on a bilateral or multilateral basis, or subject to mutual agreement proceedings, where adopted unilaterally; and, if unilateral, in no way binding on countries which have not themselves adopted the safe harbour (OECD 2017d, Chapter IV (Administrative practices), section E, at 213-14). Observance of these limits "greatly reduces the effectiveness of safe harbours" (Picciotto 2018, at 28).

administrative resources (OECD 2017d, at 206). Note, however, that safe harbours also entail risks. By creating two distinct sets of rules in the transfer pricing area (general regime and safe harbour regime), safe harbour rules could potentially raise equity and uniformity concerns (OECD 2017d, 4.126). They may also provide taxpayers with tax planning opportunities. For example, to exploit the safe harbour provisions, taxpayers may artificially split transactions to make them seem small or simple (OECD 2017d, 4.122 and 4.123). Besides, OECD standard-compliant schemes, which are elective and specifically targeted, raise important trade-offs. They involve a trade-off between administrability (the simpler the better) and the requirement to target low-risk taxpayers/transactions (which implies a costly assessment of eligibility criteria). Further, when the safe harbour is on an opt-in basis, it typically involves a trade-off between the need to secure a revenue flow (reasonably high safe harbour margins) and the need to attract a response from the taxpayer (low margins). The risk is that, to attract taxpayers, safe harbour rates are set low, with a potential revenue loss for the tax administration.

4.1.5. Advanced pricing agreements

Benchmark prices and margins can also be used as a source of information for the design of advanced pricing agreements (APAs) in transfer pricing regimes.

APAs are ‘tailored agreements’ between the tax authority and one taxpayer, through which the tax authority pre-determines, in agreement with the taxpayer, the tax consequences of a particular transaction or sets of transactions, based on agreed sets of criteria (United Nations 2017b, at 391). APAs can be legally binding engagements between taxpayers and tax authorities or more informal arrangements; they can be an ad hoc arrangements with individual taxpayers, or be generally available under structured APA programmes; and can be unilateral (between a single tax administration and the taxpayer), bilateral (involving the source, the residence country and the taxpayer), or multilateral (with the participation of several jurisdictions concerned by a business transaction/structure). The terms of an APA typically last for three to five years, or 10 or more years through ‘roll-backs’ (United Nations 2017b, at 485-6). In some contexts, APAs can amend the domestic tax legislation of a country through a ‘special proceeding’ suitable only for a particular situation or taxpayer, without the need for a formal amendment (United Nations 2017b, at 392).

Regarding commodities, APAs have been discussed as a way to shed light into complex and obscure intra-firm deals (Atupare Atudiwe and Kpebu 2019). APAs are attractive as a tax simplification measure to avoid disputes involving tax adjustments; reduce human resources employed in tax auditing procedures; and allow the tax administration to forecast how much tax revenue can be collected as a result of the application of transfer pricing rules in any given year (United Nations 2017b, at 392). More generally, they help create an active tax dialogue between taxpayers and tax administrations, and assist the tax administrations in accessing business documentation and gaining insight into complex business structures (United Nations 2017b, at 486).

However, APAs also carry significant risks, particularly when they involve tax administrations with severe resource limitations. A system of case-specific rulings, typically shrouded in secrecy, may give rise to integrity concerns and equity issues unless there is a robust review process in place (United Nations 2017b, at 468). Transparency issues arise when it may prove difficult to strike a balance between taxpayer confidentiality concerns and the desired level of public disclosure (United Nations 2017b, 468). Finally, a tax administration that is still developing its general audit capabilities may be at a disadvantage in negotiating APAs with the tax departments of powerful, skilled and well-resourced MNEs.

It follows that APAs can be a useful simplification tool, but they need to be used strategically as an interim measure to build capacities. In particular, the tax administration may strategically use APAs to set benchmark prices and margins in a non-confrontational way, through an active dialogue with taxpayers. Through the APA process, the taxpayer may provide extensive information in advance regarding the price setting policy for commodity transactions such as quoted prices used, pricing date, premia/discounts applied, and netback adjustments for costs. The tax administration would access specialist industry knowledge and documentation on comparables and appropriate adjustment thereto, which can be used to inform general safe harbour margins together with taxpayers (see above, Section 4.1.4). This strategy may

also be pursued in the context of multilateral APA programmes between developed and developing countries, possibly in the framework of technical assistance to support the tax authority in the source country.

4.2. ‘Crude’ use for tax purposes

The techniques outlined above are, to a large extent, procedural: they use reference prices to simplify or fast-track administrative procedures. Countries can also straightforwardly use reference prices and margins to determine the tax value of commodity sales, particularly where they are concerned about systemic trade mispricing. So used, reference prices may serve various tax purposes: assess arm’s length prices in related-party transactions; calculate corporate income taxes; assess royalties; and customs valuation. They may be specified in legislation or regulations, or negotiated with companies in advance pricing arrangements.

Several prescriptive approaches are available. A few have been developed in the context of transfer pricing regimes and profit allocation rules (Chapter 2 and Box 12). For example, some countries use quoted prices to assess arm’s length prices in related-party transactions (‘sixth method’ approaches under transfer pricing rules) (see below, Chapter 4.2.1). Others legislate fixed margins for gross profits and mark-up in relation to related-party transactions (‘fixed margin’ transactional approaches) (Chapter 4.2.2). Besides, there are proposals as regards simplification of allocation of profits within multinational groups (fixed margin methods, profit split and fractional approaches) (Chapter 4.2.3). Other methods, such as ‘administrative pricing’ or ‘norm pricing’, have different historical roots and rationale (Chapter 4.2.4). All these methods set reference prices for tax purposes, without interfering with underlying transaction prices. These initiatives have been discussed in detail in the literature (for an overview, Picciotto 2018, Faccio and Picciotto 2017, United Nations 2017b). It is suffice to recall the main features for purposes of the present analysis.

4.2.1. Sixth method

Broadly, the ‘sixth method’ mandates the use of prices derived from commodity exchanges, reporting and statistical agencies or other reputable price-setting agencies (‘quoted prices’) to assess arm’s length prices in related-party transactions.²² Under some schemes, the method also applies to third-party sales.

In some accounts, the ‘sixth method’ is as a simplified version of the CUP transfer pricing method (refer to Chapter 2), specifically geared to commodity transactions (Readhead 2017). However, it departs from the CUP methods in some key respects.²³ Under some national designs, it consists of imputing to the exporter a notional income equal to the market price difference between a transaction and quoted prices. In such cases, it operates as a safeguard mechanism to secure or enlarge the domestic tax base, departing from transfer pricing rules (Teijeiro 2014). It then comes close to an administrative pricing regime, where

²² Beyond these general features, individual schemes vary widely. The approaches adopted differ in several respects, including (United Nations 2017b, at 21-23): whether the method covers export or import transactions, or both; the product coverage (specific commodities, or goods with known quoted prices on terminal markets, or all goods); whether the method only applies to related party sales, or also to third party sales; specific requirements as regards the buyer (offshore intermediary without ‘economic substance’) or its location (low tax jurisdiction); the prices used (the quoted price, the higher between the quoted price and the transaction price, or specific pricing formula); the pricing date (shipping date, transaction date, other); whether the approach allows for, or requires, comparability adjustments to the publicly available price so as to take into account market circumstances, contract terms and conditions, and product quality and specifications; whether there are exceptions to applying the measure, and whether the measure is mandatory or optional – e.g., when taxpayer can chose either the ‘sixth method’ or the general CUP method.

²³ First, as mentioned, the ‘sixth method’ typically prescribes a specific pricing date to select the quoted price, such as the shipping date. In this respect, it departs from the ‘canonical’ CUP method, under which “[t]ax administrations should determine the price for commodity transactions by reference to the pricing date agreed by associated enterprises ... If the pricing date specified in any written agreement between the associated enterprises is inconsistent with the actual conduct of the parties or with other facts of the case, tax administrations may determine a different pricing date ... on the basis of evidence available to the tax administration” (OECD 2017d). Second, the ‘sixth method’ may use quoted prices without appropriate comparability adjustments to reflect variations from standard contract specifications – a major departure from the OECD ‘individualised’ requirement. Finally, the approach may be mandatory in relation to commodity transactions – departing from the OECD ‘most appropriate’ rule, which allows taxpayer to select the most appropriate transfer pricing methodology (CUP, cost plus, retail minus, or profit-based methods).

the administration sets tax reference prices to calculate the taxable income of companies (see below, chapter 4.2.4).

First introduced by Argentina as the sixth paragraph of Article 15 of the Income Tax Law (hence the term ‘sixth method’), the ‘sixth method’ is now in use, with many variations, across several countries (Box 7). These are mainly developing countries in Latin America and the Caribbean (United Nations 2017b). Zambia is the only African country currently using the ‘sixth method’ (Readhead 2017, at 3).

BOX 7: SIXTH METHOD – COUNTRY EXAMPLES

In Latin America, ten countries (Argentina, Bolivia, Brazil, Costa Rica, the Dominican Republic, Ecuador, Guatemala, Paraguay, Peru, and Uruguay) have implemented the ‘sixth method’.

Under Argentinian law,²⁴ the ‘sixth method’ is specifically required for export transactions that are made using a triangular structure: it applies to commodity exports to a final purchaser through a foreign trading entity. Commodities covered include cereals, oilseeds, hydrocarbons and their derivatives, and, in general, all goods quoted in a transparent market.²⁵ Prices should be based on the exchange-quoted price (textually, ‘the trading value of the goods in a transparent market’) on the date the goods are shipped, unless the transaction price is higher than the quoted price. Under Law No. 25.784, the method was triggered by the lack of ‘economic substance’ of the foreign intermediary.²⁶ With the amendment introduced by Law No. 27.430, the ‘sixth method’ applies when any of the following conditions is met: a) the intermediary is related to the local subject; b) the intermediary is unrelated to the local subject, but the exporter or original importer at destination are linked to the local subject; c) the intermediary is located, constituted, or domiciled in a non-cooperating jurisdiction with low or no taxation (CIAT 2018).

Under Bolivian law,²⁷ the ‘sixth method’ applies to import or export of goods quoted on a transparent international market or public stock exchange. It applies the quoted price on the date of shipment. The method only applies to sales between related parties.

Costa Rica²⁸ applies the ‘sixth method’ to import or export of goods with internationally quoted prices. The method applies to related party sales.

In Ecuador,²⁹ the ‘sixth method’ applies to exports of certain commodities only (oil, bananas and metals). For bananas the reference price is previously set for the whole year; for oil it is the price of the calendar month before the liquidation of crude oil in the state; and for metals is the price of the month following the calendar month of shipment, unless a different quotation period is submitted to the tax administration (CIAT 2018). The reference price applies to related-party sales. For oil and metal (not bananas), the same reference price is applicable to export trade with unrelated parties. If there is an intermediary, specific rules establish the profit margin to be recognized.

Guatemala³⁰ applies the ‘sixth method’ to import or export of commodities with a quoted price on the international market, stock exchanges or similar. Commodities covered are agricultural commodities and their derivatives, hydrocarbons and their derivatives, and mineral concentrates “whose price is set by reference to the price of a well-known product publicly traded on the international market” (CIAT 2018). As in the case of Argentina, the application of the ‘sixth method’ presupposes the existence of an offshore intermediary. The export price is calculated using international quoted prices, considering the contract terms agreed by the parties. The pricing date is the last day of shipment unless the parties can prove that the transaction was completed later. In the case of imports, the price shall not exceed the market price at the location of origin on the purchase date.

²⁴ Law No. 25.784, B.O. 22/10/2003; Law No. 27.430, BO 29/12/2017; Decree 916/2004; Administrative Resolution 1918/2005 (CIAT 2018).

²⁵ The method can also be used in other exports where the nature and characteristics of international operations warrant (CIAT 2018, Section III - Sixth Method; Art. 15, sixth paragraph, Law on Income Tax No. 20.628).

²⁶ In Paragraph 6 of Art. 15 of Law No. 25784, to prove ‘economic substance’ the intermediary shall meet the following cumulative requirements: a) have real presence in the territory of residence, and assets, functions and risks of a similar weight to the volumes of transactions negotiated; b) its main activity must not consist of passive income or the intermediation of sales of goods from and to Argentina or with other members of the economic group; and c) its foreign trade operations with other members of the same economic group shall not exceed 30 per cent of the total annual turnover of the entity (Grondona and Knobel 2017). The burden of proof lies with the local taxpayer being analysed (CIAT 2018).

²⁷ Law No. 549 of 21.07.2014; Supreme Decree No. 2227 of 31/12/2014 (CIAT 2018).

²⁸ Decree 37898-H (CIAT 2018).

²⁹ Resolution NAC-DGERCGC16-00000531 (CIAT 2018).

³⁰ Decree No. 10-2012 of the Congress of Guatemala, Tax Law Update; Government Decision No. 213-2013, Regulation of Book I of the Law on Tax Update (CIAT 2018).

The ‘sixth method’ applied in Paraguay³¹ is prescribed for export of unprocessed soy and its derivatives, as well as flour, oil, pellets and expeller.³² The method is not dependent on the existence of a relationship between the parties. The reference price is calculated as follows: the international transparent market price (lowest quote CBOT) less ‘regional basis’ adjustment, ‘costs’ (port services, quality control, insurance and freight), ‘other items’ (losses, financial expenses from loans or loans). If the invoice price is lower than the reference price, an equivalent price adjustment is made. The pricing date is either the contract date or the shipping date.

Under Peruvian law,³³ the ‘sixth method’ is used to price import and export of goods quoted on international markets. It applies whenever sales are made to related or unrelated parties. The pricing date is the date of the contract when registered with the tax authority; otherwise, it is the shipping date. In the case of imported goods, the price is deemed to be the market value on the date of unloading.

In the Dominican Republic,³⁴ the method applies to import and export of commodities to related parties. If there is an unrelated international intermediary, the taxpayer must demonstrate that it has a substantial presence and actually performs brokerage functions. For exports, the method applies the known quoted price on the date the goods are shipped, but allows for exceptions; for imports, prices in transparent markets for comparable operations on the first day of the import declaration or the first day of loading of the good (CIAT 2018).

The Uruguayan variant of the method³⁵ applies to import and export of goods with a quoted price traded in transparent markets. For imports, the highest quote is used and for exports the lowest quote is used. The pricing date is the transaction (contract date) if the contract is registered with the Chamber of Commerce; otherwise, the bill of lading date is used. The method only applies to related-party sales.

Brazil³⁶ applies the ‘sixth method’ to import or export of commodities subject to trading in internationally recognized mercantile and futures exchanges.³⁷ It mandates the method whenever sales are made to foreign-related buyers or unrelated purchasers subject to a preferential tax regime. The price to be considered for exports is the price (daily average value) quoted on commodity and futures exchanges. The pricing date is the date of the transaction; if the transaction date is unknown, the shipping date is used.

In Zambia,³⁸ the method consists of using publicly quoted benchmark prices as the basis for calculating sales revenue from related party mineral sales. The Ministry of Mines and Mineral Development has cross-referenced the transfer pricing rule in the Mines and Minerals Development Act, aligning valuation of mineral sales for royalties and income tax (Readhead 2017). Price quotations are derived from the London Metals Exchange (LME), the Metal Bulletin, or any other metal exchange market approved by the commissioner general of Zambia. As summarized in Readhead, “when a mining company submits its tax return online, the system automatically inputs the relevant LME price for related party sales and calculates the tax accordingly, reducing the need for transfer pricing analysis” (Readhead 2017, at 4). The method allows deductions for quality adjustments.

Sources: CIAT 2018; Grondona and Knobel 2017; Readhead 2017; Teijeiro 2014; United Nations 2017b.

Regulatory approaches based on the ‘sixth method’ can effectively deter and counter tax-motivated mispricing practices in commodities. The ‘sixth method’ has been effectively applied to secure revenue with the relatively limited commitment of administrative resources. Especially in its most rudimentary form, it is easy to administer, by reducing the need for a facts and circumstances analysis of individual taxpayers.

Yet, ‘sixth method’ approaches may raise tax fairness issues if they do not allow for adjustments to the quoted prices for such characteristics as the quality of the traded commodity, or contract and payment terms. As discussed (Chapter 3.1), quoted market prices do not reflect the specificities of individual transactions: a host of adjustments is needed to take into account legitimate price differentials that reflect differences in grades and quality, contract terms, and end-user markets. This raises trade-offs: as for

³¹ Law No. 5061; Regulation No. 1832/2014; Resolution No. 31/2014; Resolution No. 58/2015 (CIAT 2018).

³² Other goods may be included for which the international publicly known price is established through transparent or markets, stock market or similar (CIAT 2018).

³³ Consolidated Text of the Law on Income Tax approved by D.S. 179- 2004, and amendments (CIAT 2018).

³⁴ Law No. 253-12, paragraphs IX and X of Art. 26; Regulation No. 78-14 (CIAT 2018).

³⁵ Title 4 text of 1996 items 42 and 43 (CIAT 2018).

³⁶ Law No. 9430/1996, as amended by Law 12715/2012; RFB Normative Instruction no 1312/2012 (CIAT 2018).

³⁷ Listed in Annex I of the Receita Federal do Brasil (RFB) Normative Instruction no 1312/2012. The method can be extended to other goods not specifically listed (CIAT 2018).

³⁸ Section 97A of the Income Tax Act (CIAT 2018).

simplified methods in general, “there is a balance to be struck between ease of administration and ensuring appropriate tax levels” (Picciotto 2018).

A compromise solution would be to use some variant of the ‘sixth method’ as a safe harbour (see Chapter 4.1.4) or to trigger a reversal of the burden of proof (Chapter 4.1.2). In practice, this occurs when the ‘sixth method’ is made optional (a taxpayer can choose either the ‘sixth method’ or the general CUP method) or when it is subject to factual rebuttal by the taxpayer. When the scheme is so designed, strong incentives should be set to encourage market participants to opt in, for example, by setting extremely stringent documentation requirements for those who prefer to be taxed based on actual transaction prices.

4.2.2. Transactional fixed margin methods

While the ‘sixth method’ uses reference prices, ‘fixed margin’ methods use benchmark margins and mark-ups to determine sale prices for tax purposes.³⁹ Brazil, for example, applies legislatively fixed margins for gross profits and mark-ups to determine arm’s length import and export prices. This method is a simplified version of the OECD ‘resale minus’ and ‘cost plus’ method (see Chapter 2), with fixed profit margins and mark-ups on costs set out in the rules, rather than based on comparables (Faccio and Picciotto 2017; Picciotto 2018; United Nations 2017b).

BOX 8: BRAZIL’S RESALE MINUS AND COST PLUS WITH FIXED MARGIN METHODS

Under Brazil’s fixed profit margins method, arm’s length prices are calculated using the following formulae:

Resale minus method with fixed margins: For exports, the minimum acceptable price is the wholesale/retail price in the country of destination reduced by a fixed profit margin (15% for wholesale and 30% for retail sales). For imports, the maximum acceptable price is the net resale price charged by the reselling company in Brazil,⁴⁰ less different margins for specific economic sectors (e.g., 40% petroleum and natural gas and derived products, 30% paper and paper products, 20% residual sectors).

Cost plus with fixed margins: Production costs plus gross profit margins, as determined by law (20% mark-up margin on imports and 15% margin on exports).

Due to information accessibility, the resale minus method is usually more suitable when the Brazilian company imports and the cost plus method when the Brazilian company exports (UN TPM 2017).

The Brazilian rules allow some leeway for taxpayers. First, if more than one of the methods specified in Brazil’s transfer pricing law (CUP, resale minus, cost plus, ‘sixth method’) may be applicable, the taxpayer can choose which method to apply, even if it produces a lower tax burden. Besides, the taxpayer is not required to make an adjustment if the deviation from the parameter price is less than 5% or 3% for the commodity price. Finally, the Minister of Finance, ex officio, or by request (taxpayer), is authorized by law to adjust the margins.

Source: Brazil 1996 (Law 9430 as amended); Calich and Rolim 2012; Gomes and Mansur 2018; Ilarraz 2014; Picciotto 2018; Rocha 2017; United Nations 2017b; Valadão 2018; Valadão and Lopes 2013.

Brazil’s fixed margin method has achieved simplicity of administration, as well as a very low level of tax disputes (Picciotto 2018, at 33). However, it overlooks significant differences between industry sector or business models and disregards the actual profitability of the company concerned (Picciotto 2018, at 32). Other countries considering the adoption of the fixed margin method may endorse suggestions for more tailored, market-based and flexible schemes (Picciotto 2018; Schoueri 2015; United Nations 2017b): margins could be determined by line of business at different levels of specificity; they should be based on market research on the profit margins prevalent in the relevant industry, sector or line of business; they should be transparently set, possibly in consultation with the private sector; some leeway may be provided

³⁹ Gross profit margins are revenue minus the cost of goods sold, expressed as a percentage of revenue; the markup percentage is shown as a percentage of cost as opposed to a percentage of revenue.

⁴⁰ The net resale price is the resale price of the product (charged between independent parties) reduced by unconditional discounts granted; taxes and contributions on sales; commissions and brokerage fees paid (United Nations 2017b, at 530). When the imported good is an input in the manufacturing operation of the seller, it is necessary to calculate the ‘participation value’ of the sale price of the imported input in the net resale price of the final manufactured product— i.e. the ratio of the price of input to the total cost of the goods resold, calculated according to the company’s cost spreadsheet (United Nations 2017b, 530-32).

to taxpayers, for example, by specifying a margin range, or by allowing a 5% deviation from fixed margins, such as in Brazil; finally, standardized fixed margins would need to be rebuttable by the taxpayer in hardship cases.

4.2.3. Deemed profits and fractional apportionment

The techniques discussed above – ‘sixth method’, as well as cost plus and resale minus with fixed margins – are ‘transactional’, or transaction-based. They focus on the pricing of individual transactions between related parties – export or import operations – and propose simplified ways to check and rectify transfer prices.⁴¹

Other simplified methods deal with profit allocation on an aggregate basis: they set simplified ways to estimate and adjust profits attributable to parts of an MNE. There is clearly a link between transactional and profit-based methods, as profits derive from transactions. However, simplified profit-based methods focus on the allocation of profits, rather than on adjusting transactions. They provide for adjustments to a company’s accounts for tax purposes, or straightforwardly set in law (rebuttable) presumptions as regards certain profit levels, based on profit formulae.

The OECD (reluctantly) included profit-based methods in its Transfer Pricing Guidelines in 1995 while emphasizing that their use did not involve a global profit allocation but rather allocation for the particular transaction (Avi-Yonah 2010) – hence the name ‘transactional’ profit methods. Under the OECD ‘transactional net margin method’ (see Chapter 2),⁴² the analysis compares the net profit realized in a controlled transaction to the net profit realized by broadly similar independent enterprises in similar transactions.⁴³ The method typically uses a margin of operating profit (generally before interest and taxes) as a proportion of total costs, sales revenue or value of assets employed. Other profit-level indicators can also be applied.

More far-reaching approaches use deemed profit methods and fractional apportionment, as discussed below.

Some countries use deemed profit method and deemed profit rates for taxing non-resident enterprises in the absence of accurate separate accounts. In China, for example, the tax administration is entitled to collect income tax on non-resident enterprises on a deemed basis when accurate and complete accounts are not available (circular Guoshuifa [2010] No.19). In particular, when the local establishment can demonstrate its revenue but not its deductible costs, the taxable income equals total revenue x deemed profit rate (set for engineering work, design and consulting services at 15%–30%, for management services at 30%–50%, and for other services at no less than 15%). When the establishment can calculate costs but not revenue, the taxable income equals total costs and expenses / (1 – deemed profit rate) x deemed profit rate (as set above) (Lehman Brown). This approach does not necessarily reflect actual profits and is not subject to factual rebuttal by the taxpayer. More tailored, market-based and flexible schemes can be devised based on administrative data and in concert with the private sector. As discussed (Chapter 3.2.1.3), tax authorities may in principle use taxpayer-lodged information to establish the net profit margins and profitability ratios prevalent in a relevant industry, sector or line of business. They can also strategically use APAs to assess net returns and set specific profitability ratios in a non-confrontational way, through an active dialogue with taxpayers (Chapter 4.1.5). Such deemed profits may be used to set a presumption rebuttable by the taxpayer. So used, deemed profits would reverse the burden of proof in relation to justifying tax adjustments (see Chapter 4.1.2).

⁴¹ As briefly discussed in section 3.6.2, the sixth method and Brazil’s fixed margin method determine the sale value of transactions by reference to quoted prices (sixth method), by deducting a fixed gross margin from the net resale price (resale minus with fixed margins), or by adding a fixed mark-up to production costs (cost-plus with fixed margins).

⁴² The Transactional Net Margin Method is one of the five common transfer pricing methods used to examine the “arm’s-length” nature of “controlled transactions” in the OECD TPG (OECD 2017d). The method “examines the net profit relative to an appropriate base (e.g. costs, sales, assets) that a taxpayer realises from a controlled transaction (or transactions that are appropriate to aggregate [...])” (OECD 2017d, 2.64).

⁴³ More precisely, the method compares the net profit margin that the party being audited earns in a controlled sale to the same margin earned by the company in comparable transactions with unrelated parties, or by third companies in comparable transactions.

Other approaches use fractional methods to apportion profits to a local establishment (see also Box 12 *infra*). Under formulary profit split approaches, the profits of a corporate group are consolidated and apportioned across jurisdictions on the basis of factors that reflect the MNE's real activity in each jurisdiction (e.g. sales, assets, payroll and/or employees) (Faccio and Picciotto 2017, at 2; IMF 2004, at 39; IMF 2019; BEPS Monitoring Group 2019a). These approaches establish a multijurisdictional enterprise's tax base on a 'unitary' basis (IMF 2004, at 39), and require some form of cooperation at the plurilateral or multilateral level. They are not discussed here, given the present focus on approaches capable of unilateral implementation. Other formulaic approaches do not necessitate the consolidation of profits of the enterprise from different tax jurisdictions and can be implemented unilaterally. In this direction is the fractional approach under consideration in India (Box 9), as well as proposals for the local affiliate to earn a profit margin in proportion to that of the corporate group as a whole (Durst 2016a).

BOX 9: INDIA'S PROPOSAL ON THE ATTRIBUTION OF PROFITS

A tax committee was set up in India to re-assess domestic tax allocation rules regarding non-resident enterprises with a business presence in India. Under Indian tax law, the business profits of the non-resident enterprise are taxable in India if they arise through or from a business connection in India; profits are allocated to the Indian operation based on its accounts. Where detailed accounts are not available, profits can be attributed by way of apportionment. Apportionment is governed by rule 10 of the Income Tax Rules 1962, which allows discretionary apportionment by the tax administration. To counter the ambiguity and uncertainty brought by this discipline, the committee recommends a fractional apportionment approach that allocates profits derived from India to the Indian operation based on three equally weighted supply and demand factors in India (sales, manpower and assets). For digital businesses, a fourth factor – users – is introduced. In practice, under the proposal, the tax administration first calculates the profits derived from the Indian operations of the MNE. This is the higher of the following amounts: revenue derived from India x global operational profit margin (the earnings before interest, taxes, depreciation and amortization (EBITDA) margin); or 2% of the revenue from India. It then apportions the profits derived from India based on three equally-weighted factors: sales by Indian operations, workforce (split into employees and wages) concerning the Indian operations, and assets deployed for Indian operations. In detail, sales is the ratio of Indian sales to total sales of the Indian operation (S_i/S_t); employees are the Indian-based employees divided by the total employees of the Indian operations (N_i/N_t); wages is the ratio of wages paid to employees in India and overall with respect to Indian operations (W_i/W_t); and assets is the ratio of assets located in India (A_i) and total assets (A_t) deployed for India operations. A 30% weight is assigned to each factor (for workforce, 15% to wages and 15% to headcount). The weighted formula to attribute profits to the Indian operations is: Profits derived from India x [$0.3 \times S_i/S_t + (0.15 \times N_i/N_t) + (0.15 \times W_i/W_t) + (0.3 \times A_i/A_t)$]. For digital businesses, a fourth factor (users) is introduced, with more or less weight depending on data user intensity.

Source: India's Central Board of Direct Taxes 2019. See also BEPS Monitoring Group 2019b; EY 2019; KPMG 2019; Majmudar and Vishweshwar 2019.

Profit-based methods are not directly relevant to counter commodity trade mispricing since they are not concerned with the pricing of individual cross-border transactions – export and import operations. However, they may provide techniques to assess and simplify profit allocation in the context of complex commodity trade arrangements (Box 1).

4.2.4. Beyond transfer pricing: Administrative pricing regimes

The simplification approaches discussed above have evolved in the context of transfer pricing regimes and profit allocation rules. Other simplification techniques have different historical roots. In commodities, for example, administrative pricing is a legacy of market intervention and reflects government ownership of natural resources. Under an administrative pricing regime, the government, rather than the taxpayer, determines the value of the transaction for tax purposes. In other terms, the government uses calculated prices, rather than transaction prices, to determine corporate income taxes and royalties due. In doing so, it overcomes the direct revenue impact of commodity trade mispricing. Administrative pricing model is common with respect to oil and gas (Box 10). As regards minerals, administrative pricing rules are sometimes used to assess *ad valorem* royalties based on commodity prices (

Box 11).

BOX 10: NORWAY - THE PETROLEUM PRICE BOARD AND THE NORM PRICES

In Norway, pursuant to the Petroleum Taxation Act § 4, the Petroleum Price Board (PPB) sets tax reference prices, also known as norm prices, to calculate the taxable income for oil companies. The PPB meets every quarter to set the daily norm price for each oil producing field for the previous quarter. The PPB sets prices based on benchmark market prices (Brent indicators), also considering the data and views presented by the companies. Companies may appeal the final norm prices within 30 days from its publication. Angola and Indonesia have also chosen to value oil at administrative prices set by the government.

Source: Durst 2016; Readhead 2018; PPB 2019.

BOX 11: LAOS PEOPLES' DEMOCRATIC REPUBLIC – CALCULATED PRICES FOR ROYALTY ASSESSMENT

Some governments are concerned that invoice value in mineral transactions does not reflect the market value. In response, they base their royalty assessment on hypothetical market values, by first determining the amount of 'payable metal' in the mineral and then applying a reference price to that product, less transport, insurance and handling costs. In Laos, for example, the Ministry of Energy and Mines assesses royalties for copper using a price formula referencing the LME Official Price for copper. The LME price is multiplied by the copper percentage in the concentrate, generally assessed at 25%. Deductions are then made to account for the price differential between the concentrate and the LME grade of the underlying metal, transport and insurance costs, treatment and refining costs, and other adjustments.

Source: Norasing 2019.

Administrative pricing is a strong way to offset the revenue impacts of commodity trade mispricing. It prescribes prices for tax purposes, off-setting the revenue impact of trade mispricing. However, its requirements are demanding: it requires reliable benchmark prices, limited quality variation, strong institutions mandated to set prices, and appropriate technical expertise (Readhead 2017). These requirements can be met in the context of multi-stakeholder initiatives that constructively engage public and private stakeholders (Chapter 4.2.4). This points to a new governance model that brings back price oversight and regulation within the framework of public-private models of supply chain governance.

4.3. Set contract terms

Finally, countries may use reference prices to 'frame' transaction prices in commodity contracts. This is the most prescriptive approach, and not necessarily the most cost-effective. Note that, in this respect, it is not enough to legislate specific contract terms; a monitoring system must be in place to ensure that these terms are integrated into contracts. This leads to contract registration requirements and contract screening procedures. The regulatory and efficiency costs involved are high. They may be justified where the governments' fiscal take is also potentially high, for example, in the context of high-value metals streaming deals. It is also critically important to ensure that the legislated pricing approach (quoted prices used, netback adjustments, etc.) is in line with industry practice. However prescriptive, the approach must be solidly market-based. This requires appropriate technical expertise and industry knowledge, hence a requirement for constructive dialogue with the private sector.

With these caveats in mind, several legislative options are available to ensure that contract prices are aligned with market prices:

Reference prices: For example, a country heavily reliant on a few mineral exports may legislate the use of widely accepted reference price in physical contracts. This is a very common practice in commodity markets, especially in base metals.

Price formula: For key export commodities, countries may set up consultation procedures with key stakeholders in the private sector, or establish multistakeholder taskforces, charged with setting reference prices or pricing formulae for use in contracts. These price-setting bodies may authoritatively regulate standard price formulae, deductions and penalties ranges in line with industry practices. In softer terms, they may produce guidance on the use of relevant quoted prices, and provide calculations for adjustments for physical characteristics, contract and payment terms, and differences in valuation points (netback adjustments).

Options, caps and lower limits: Finally, the country may legislate certain terms – options, caps and lower limits – to be included in streaming agreements, long-term offtake deals and other complex trade arrangements (Löf and Ericsson 2019). As regards streaming deals, these terms may include for example, “an option for the mining company to buy back production from the streamer if the agreed price turns out to be too low” or “a cap on the volume of the streamed product, based on the size of the mineral reserve at the time of the agreement” (Löf and Ericsson 2019, at 58). Fixed prices in long-term contracts can be subject to “a conceptual lower limit [...] that would recover the costs of building and operating the mine over its expected life, plus an equity return commensurate with the use of that capital and the risk of the project” (Platform for Collaboration on Tax 2017, at 171).

Sector-specific multistakeholder initiatives provide the most viable venue to assess the commercial viability of these options, and work out their details (see Chapter 3.2.2).

5. Regulatory space to use benchmarks

How much regulatory space and flexibility is left to implement the schemes discussed in Chapter 4, particularly in relation to related-party sales? Can simplified mechanisms be applied unilaterally by developing countries, while considering their international obligations under tax treaties and international trade law? The analysis below considers the most complex case, which triggers transfer pricing law: commodities traded between related parties.

In domestic terms, it depends on the transfer pricing regulations in place. Countries that have adopted transfer pricing regulations based on the OECD Transfer Pricing Guidelines would have little room for manoeuvre: tax officers in principle could not use pricing formulae or automatic adjustments to value related-party sales, and should instead engage in a facts and circumstances analysis in every case (Chapter 2).⁴⁴ If the tax law instead provides some flexibility to use ‘other methods’ beyond the OECD standard, the tax administration would have leeway to implement simplified schemes. Ghana’s transfer pricing regulations, for example, adopted the OECD Guidelines on transfer pricing substantially, but also made provision to use other methods when more appropriate (Atupare Atudiwe and Kpebu 2019). In Laos, the requirement is for related-party sales to be based on ‘market prices’ which seems to allow the use of benchmark prices when indicative of market prices (Norasing 2019). In both countries, the tax administration seems to have enough leeway to adopt rules that specify simplified methods that diverge from the OECD TPG. Such regulations may specify pricing methods, procedures for identifying benchmarks, documentation requirements, and so on. Circulars and instructions may provide further operational details, for example, by setting safe harbour margins subject to periodic review.

At the international level, separate policy space issues arise under tax treaties and international trade law.

Simplified methods are held to be compatible with profit allocation rules under most existing tax treaties (Picciotto 2018; BEPS Monitoring Group 2019a and 2019b; Avi-Yonah and Tinhaga 2014). The view taken in Brazil, for example, is that Brazil’s fixed margin methods are compatible with tax treaties, but not with the OECD Transfer Pricing Guidelines (Calich and Rolim 2012, 536-40; Ilarraz 2014). It is claimed in this respect that treaty allocation rules (Box 12) leave it to each state to decide on the method of implementation of the arm’s length principle. Further, fractional apportionment (see Chapter 4.2.3) is permissible for attribution of profits under Article 7(4) in the majority of tax treaties (Box 12). However, compatibility issues may arise if countries have adopted domestic transfer pricing regulations based on the OECD Transfer Pricing Guidelines, or when they refer to the Guidelines as guidance to treaty interpretation (Picciotto 2018, at 46). In the end, the leeway countries have to implement simplified approaches depends on the specific treaty language used, in interplay with the specificities of domestic law.

BOX 12: TREATY ‘ALLOCATION RULES’ – WHICH POLICY SPACE FOR SIMPLIFIED METHODS?

⁴⁴ Indeed, the OECD TPG standard requirement for individualised evaluation of actual transactions seems to preclude simplified adjustments that can be applied automatically (Picciotto 2018, at 28).

The OECD and UN Model treaties deal with the allocation of MNE income (profit allocation rules) under Article 9 and Article 7.

Article 9 deals with separately incorporated entities that are legally required to produce separate accounts. It deals with the allocation of profits that result from transactions between associated enterprises. In a nutshell, it allows tax authorities to adjust a company's accounts if they do not reflect arm's length transactions. Under both the OECD and the UN models, Article 9 does not specify the methodologies which may be applied to adjust a company's books if transactions have been concluded on other than arm's length terms. This issue is dealt with in the commentaries to the model treaties. The commentary to the OECD Model Convention refers to the Transfer Pricing Guidelines as "internationally agreed principles" that "provide guidelines" for the application of the arm's length principle (commentary on Article 9, paragraph 1, OECD 2017c, at 226). The commentary to the UN Model considers that the OECD TPG contains "valuable guidance" for the application of the arm's length principle, but also refer to the United Nations Practical Manual on Transfer Pricing (Article 9 commentary, paragraph 4, United Nations 2017a, at 251-252). This latter gives some consideration to simplified methods (United Nations 2017b, Part D).

Article 7 (to be read jointly with Article 5) specifies when a non-resident company is liable to taxation in a third (source, or host) state when it carries a trade there through a permanent establishment (PE). A permanent establishment is any fixed facility or premises through which a non-resident carries on business abroad – traditionally, a branch, an office, a factory, a workshop, a mine, an oil or gas well, a quarry or other extraction place, or a construction site. Extensions to the notion of PE have been made over time to address changes in business conditions, to cover various agency or commissionaire arrangements, services provision and virtual – digital – presence. Under Article 7, the separate entity and arm's length principles extend to the attribution of profits to a PE: the profits attributable to the PE, taxable in the source/host country, are those which would be earned if the PE were a wholly independent business entity from its home office (Article 7(2)). The concern is with profits that derive from transactions with the home office and with other parts of the enterprise. In these respects, the tax administration in the host state is entitled to rectify the declaration of income and accounts of the local establishment to reflect arm's length terms. As regards the methods that should be used to assess arm's length prices, model clauses diverge. The pre-2010 version of Article 7 in the OECD model, as well as Article 7 in the UN model, do not specify methods to estimate arm's length profits attributable to a PE. The commentaries specifically refer to the 'arm's length principle' as being embodied in paragraph 2 of Article 7, but do not go further. This implies deference to the specifics and mechanisms of domestic law in assessing arm's length prices. It is to be noted that the pre-2010 version of Article 7 in the OECD model, as well as Article 7 in the UN model, explicitly authorize fractional methods for apportioning profits, if permissible under domestic laws (Article 7(4)). The 2010 update of OECD Model tax convention introduced significant changes, by introducing fact-intensive functions, assets and risks analysis (see Chapter 2) as the basis of the profit attribution to a PE, and by deleting all reference to fractional methods. It is important to note, however, that most tax treaties do not follow the revised OECD approach and still reflect the pre-2010 version of Article 7 in the OECD model or Article 7 of the UN Model (Avi-Yonah and Tinhaga 2014).

Sources: OECD 2017c and 2017d; United Nations 2017a and 2017b; Avi-Yonah and Tinhaga 2014; Indian Central Board of Direct Taxes 2017.

Other legal issues may also arise under international trade rules in relation to customs valuation, price support and non-discrimination.

Customs valuation: WTO rules proscribe the use of reference prices to determine the customs value of imported goods: customs valuation shall, except in specified circumstances, be based on the invoice price of the traded good.⁴⁵ The underlying concern is that a country may artificially use reference prices as a trade barrier, to increase import costs.

Price support: On the export side, reference prices may raise price support issues, but not when price benchmarks are based on market prices. Under trade rules, the critical aspect is the level at which administered prices are set relative to market prices, the difference being accounted for as trade-distorting

⁴⁵ WTO Agreement on Implementation of Article VII of the GATT 1994. Where Customs Administrations have "reasons to doubt the truth or accuracy of the declared value", other five methods can be used, namely, the transaction value of identical goods, the transaction value of similar goods, a 'deductive method', 'computed method' and 'fall-back method'. In all cases, the valuation is circumstantial, and valuation cannot be straightforwardly based on reference prices.

support.⁴⁶ Market-based prices and margins, by definition, do not raise price support issues. Note, also, that price support issues only arise when administered prices are used to support or stabilize producer income. Reference prices do not raise support issues if they are only used to attribute a nominal taxable income to the taxpayer, without discernible trade impacts.

Non-discrimination: Under WTO rules, countries cannot discriminate between their trading partners (most-favoured-nation treatment), or between nationals and foreigners (national treatment rule). Non-discrimination issues may arise when designing simplified schemes in the context of safe harbours and APAs. Safe harbours and APAs may result in preferential treatment for individual taxpayers or a specific category of taxpayers and could potentially entail discrimination and competitive distortions. If this affects trade, the scheme may trigger WTO disciplines.

A final point concerns the legal instruments employed to implement benchmarking schemes. If the country has not locked in its regulatory space, simplified methods may be specified in tax law, administrative regulations, or through APAs. Enshrined in tax law, simplified methods would provide greater certainty to taxpayers, but could not be easily adjusted. In this respect, note that reference prices and pricing formulæ need to be constantly adjusted and updated, to remain aligned with commercial practices. It may be expedient then to strike a balance between legislation and administrative regulation in setting the parameters of simplified methods (Platform for Collaboration on Tax 2017, at 69). Tax law shall provide for the use of alternative, simplified methods. Eventually, it may also set the parameters and rationale of the scheme, in broad terms. The specifics of the scheme could be detailed elsewhere – in regulations and administrative guidance published by a tax administration. In particular, notifications and guidance could be flexibly updated without the need for costly legislative changes that trigger parliamentary approvals. APAs, as mentioned, should be used as an interim measure only, to pilot innovative solutions and build the knowledge base needed to set regulatory schemes.

Conclusions

Developing countries can unilaterally adopt context-relevant and simple measures to curb commodity trade mispricing.

Setting up benchmarks

To check on transaction prices in complex trade deals, the revenue authority needs comparables and benchmarks. The most cost-effective way to compile ‘local’ comparables and benchmarks is to build on existing datasets and procedures, and to make the best use of administrative data in the hands of the administration. For example, market information platforms exist for key agricultural commodities in many developing countries, and can provide a strategic repository of domestic market information for comparability purposes (Chapter 3.2.1.1); based on customs data, administrations may set price benchmarks using a variety of statistical techniques (Chapter 3.2.1.2); tax authorities can conveniently use information compiled from tax filings to set reference margins in a relevant industry, sector or line of business (Chapter 3.2.1.3); and finally, countries may deal with the lack of access to specialist industry knowledge by increasing disclosure requirements on taxpayers (Chapter 3.2.1.4). The objective is to compile strategic repositories of commercial information that can be used to set reference prices/margins or ranges, for comparability and benchmark purposes. The use of ‘local’ comparables, referring to the local geographic market, would relieve the tax administration from the need to consider the impact of geographic market differences – a major hurdle when using ‘foreign’ comparables from commercial databases (Platform for Collaboration on Tax 2017, at 41).

⁴⁶ Under WTO rules, price support is determined differently for different legal purposes. Under the WTO Agreement on Agriculture (AoA), it is calculated using the gap between a fixed external reference price and the applied administered price, multiplied by the quantity of production eligible to receive the applied administered price (AoA, Annex 3, para. 8). Under the WTO Agreement on Subsidies and Countervailing Measures (ASCM), price support is defined in terms of “adequate remuneration”, determined with reference to the “prevailing market conditions for the good or service in question in the country” (ASCM, Article 14 (d)).

From a regulatory viewpoint, the legal and regulatory infrastructure for implementing domestic repositories of strategic market information is, to a large extent, already in place. Declaration requirements embedded in customs, tax and company laws ensure availability of, and access to, firm-level transaction data. Relevant data from customs datasets, tax filings, and company records can be compiled into reference data banks, as discussed in Chapter 3. Yet regulatory reform is still needed to enable and frame the use of administrative data for benchmarking purposes, in two respects.

First, rules and procedures may be needed to ‘enable’ the flow of information between different administrative departments. For example, the use of customs data for tax purposes requires close co-operation between customs officers and tax auditors: countries that have separate administrations for tax and customs may need rules and procedures for the flow of information between the two administrations. Likewise, exchange of accounting information with customs or tax departments may require a legal basis, since company records are kept by company registry offices generally located in trade or industry departments. Overall, strategic repositories may involve single window access to datasets held by customs, tax and company registry departments. This requires rules and procedures to be improved and internal coordination between administrative units that tend to operate in silos to be stepped up.

Second, it is critical to address concerns about confidentiality, data safeguards and protection, and the proper use of the information. As discussed (Chapter 3.2.1.3), the legal framework should ensure that sensitive data is kept confidential and properly used; a set of policies, practices and procedures must be put in place to ensure the practical implementation and observance of any safeguarding specified in the law; and a system needs to be put in place to monitor compliance with these policies, detect confidentiality breaches and kick off investigations in case of a breach. In implementing these regulatory reforms, jurisdictions could draw from legal material developed in the context of automatic information exchange procedures (Musselli and Bürgi 2018).

Using benchmarks

Countries with limited administrative resources may consider various regulatory techniques and measures to use benchmark prices to counter mispricing practices in commodities trading. Some of these techniques are, to a large extent, procedural: they use reference prices to simplify or fast-track administrative procedures. These include, for example, the use of reference prices to reverse the burden of proof for the justification of tax adjustments in relation to sales proceeds (Chapter 4.1.2), or as red-flag indicators that trigger an administrative review of sales transactions (Chapter 4.1.1). Other techniques are more substantive or ‘prescriptive’. They imply using reference prices and margins to determine the value of a transaction for tax purposes: where a taxpayer’s price or margin falls within the reference range no adjustment will be made; if a taxpayer’s price or margin falls outside the range an adjustment can be made to the mid-point of the range (Chapter 4.2). Countries may also use reference prices to ‘frame’ transaction prices in commodity contracts. For example, countries may legislate the use of a widely accepted reference price in physical contracts; set up consultation procedures or establish multistakeholder taskforces to set pricing formulæ for use in contracts; or legislate certain terms – options, caps and lower limits – to be included in high-risk commodity trade deals (Chapter 4.3).

Depending on how they have framed their domestic laws and international commitments, countries may or may not have regulatory space to use reference prices for benchmarking purposes, particularly in relation to related-party sales (Chapter 5). Countries that have adopted transfer pricing regulations based on the OECD Transfer Pricing Guidelines would have little room for manoeuvre; if tax law instead provides some flexibility to use ‘other methods’ beyond the OECD standard, the tax administration would have leeway to implement simplified schemes. At the international level, separate policy space issues arise under tax treaties and international trade law. Simplified approaches can be said to be compatible with model tax treaties, although not with the OECD TPGs. Under international trade rules, some issues may arise in relation to customs valuation, price support and non-discrimination.

General remarks

When the tax administration engages in any kind of benchmarking exercise, it should make sure that the approach used – pricing formulae, netback deductions, and so on – is in line with industry practices and solidly backed by market data (Chapter 3.2.2). The involvement of trade associations and industry bodies, especially when their membership spreads across countries, may catalyze the broad uptake of disclosure initiatives, playing a role in leveling the playing field and overcoming collective action problems. Note, also, that a number of inter-governmental commodity bodies have set up inclusive and flexible institutional arrangements for private sector involvement. These venues provide a forum for constructive engagement with the private sector and may favour the broad uptake of innovative price-monitoring schemes.

Finally, developing countries may seek technical assistance from regional and international organizations, or through bilateral channels, to pilot simple schemes to counter mispricing. In recent years, much of the technical assistance effort to counter value manipulation in cross-border transfers has focused on adopting the OECD approach. As mentioned, this approach requires a facts and circumstances analysis in every case and does not provide leeway for the substantive use of simplified methods. Yet, safe harbours, fixed margins and other simplified approaches are attracting growing interest in the scientific and policy discourse, although mainly in relation to the tax challenges of the digital economy (for example, IMF 2019; Inclusive Framework on BEPS 2018, 2019a, 2019b; Platform for Collaboration on Tax 2017). Against this background, some donors have extended financial and technical support to assess the feasibility of simplified methods in developing countries (Charlet, Silberyetein and Pointe 2017). There is some momentum to push simplified methods further.

References

- Ahene-Codjoe, Ama A., and Angela Alu. 2019. 'Commodity Trade-Related Illicit Financial Flows: Evidence of Abnormal Pricing in Commodity Exports from Ghana'. R4D-IFF-WP03-2019. R4D-IFF Working Paper Series. <https://curbing-iffs.org/publications/>.
- Anga, Jean-Marc. 2015. 'Latest Developments in the Cocoa Market'. In UNCTAD's Multi-year Expert Meeting on Commodities and Development, 2015. Geneva.
- Atupare Atudiwe, Peter, and Martin Kpebu. 2019. 'Transfer Pricing (TP) Rules, Procedures, and Documentations: A Perspective on Ghana'. R4D-IFF-WP05-2019. R4D-IFF Working Paper Series. <https://curbing-iffs.org/publications/>.
- Avi-Yonah, Reuven S. 2007. 'The Rise and Fall of Arm's Length: A Study in the Evolution of U.S. International Taxation'. Law & Economics Working Papers. University of Michigan Law School.
- . 2010. 'Between Formulary Apportionment and the OECD Guidelines: A Proposal for Reconciliation'. *World Tax Journal* 2 (1): 3–18.
- Avi-Yonah, Reuven, and Zachée Pouga Tinhaga. 2014. 'Unitary Taxation and International Tax Rules'. 26. ICTD Working Paper. International Centre for Tax and Development.
- Baistrocchi, Eduardo A. 2006. 'The Transfer Pricing Problem: A Global Proposal for Simplification'. *Tax Lawyer* 59: 941–79.
- BEPS Monitoring Group. 2018. 'Submission to the Subcommittee on Article 9 (Associated Enterprises): Transfer Pricing of the United Nations Committee of Experts on International Cooperation in Tax Matters on Revision of the UN Practical Manual on Transfer Pricing for Developing Countries'.
- . 2019a. 'Addressing the Tax Challenges of the Digitalization of the Economy'. <https://www.bepsmonitoringgroup.org/news/2019/3/10/addressing-the-tax-challenges-of-digitalisation-of-the-economy>.
- . 2019b. 'Proposal for Amendment of Rules for Profit Attribution to a Permanent Establishment'. <https://www.bepsmonitoringgroup.org/news/2019/5/17/india-proposal-of-amendment-of-rules-for-profit-attribution-to-a-permanent-establishment>.
- . 2019c. 'What Is Driving Tax Morale?'. <https://www.bepsmonitoringgroup.org/news/2019/5/17/what-is-driving-tax-morale>.
- Brugger, Fritz, Rebecca Engebretsen, and Esther Waldmeier. 2018. 'Out in the Cold: Explaining the Inferior Position of Simplified Transfer Pricing Methods on the World Stage'. R4D-IFF-WP03-2018. R4D-IFF Working Paper Series.
- Calich, Isabel, and João Dácio Rolim. 2012. 'Transfer Pricing Disputes in Brazil'. In *Resolving Transfer Pricing Disputes*, edited by Eduardo Baistrocchi and Ian Roxan, 519–54. Cambridge: Cambridge University Press.
- Carbonnier, Gilles, and Rahul Mehrotra. 2019. 'Abnormal Pricing in International Commodity Trade: Empirical Evidence from Switzerland'. R4D-IFF-WP01-2019. R4D-IFF Working Paper Series. <https://curbing-iffs.org/publications/>.
- Charlet, Alain, Caroline Silberztein, and Gérard Pointe. 2017. 'Transfer Pricing: Study on the Feasibility of Introducing Safe Harbour Provisions in ECOWAS Countries'. https://ec.europa.eu/europeaid/transfer-pricing-study-feasibility-introducing-safe-harbour-provisions-ecowas-countries_en.
- CIAT (Inter-American Center of Tax Administrations). 2018. 'Data Base on Transfer Pricing Rules and Practices in Latin American and Caribbean Countries'. 2018. <https://www.ciat.org/transfer-pricing/?lang=en>.
- Cobham, Alex. 2018a. 'The Bell Tolls for Arm's Length Pricing'. Tax Justice Network. <https://www.taxjustice.net/2018/04/20/the-bell-tolls-for-arms-length-pricing/>.
- . 2018b. 'Advance Tax Rulings: Publish or Abolish?'. Tax Justice Network. <https://www.taxjustice.net/2018/03/02/advance-tax-rulings-publish-abolish/>.
- Committee of Experts on International Cooperation in Tax Matters. 2018. "Note by the Secretariat. Seventeenth Session. Geneva, 16–19 October 2018. Item 3(c)(i) of the Provisional Agenda of the Handbook on Selected Issues for Taxation of the Extractive Industries by Developing Countries. E/C.18/2018/CRP.18."
- CTA (Technical Centre for Agricultural and Rural Cooperation). 2013. 'Market Information'. In *Structured Grain Trading Systems in Africa*. Wageningen, The Netherlands: CTA Publication.
- Durst, Michael C. 2010. 'It's Not Just Academic: The OECD Should Reevaluate Transfer Pricing Laws'. Viewpoints. Tax Justice Network.

- https://www.taxjustice.net/cms/upload/pdf/Durst_1001_OECD_-_not_just_academic.pdf.
- . 2016a. ‘Developing Country Revenue Mobilisation: A Proposal to Modify the “Transactional Net Margin” Transfer Pricing Method’. 44. ICTD Working Paper. International Centre for Tax and Development. <https://www.ictd.ac/publication/developing-country-revenue-mobilisation-a-proposal-to-modify-the-transactional-net-margin-transfer-pricing-method/>.
- . 2016b. ‘Improving the Performance of Natural Resource Taxation in Developing Countries’. ICTD Working Paper 60. Brighton: International Centre for Tax and Development.
- Durst, Michael C., and Robert E. Culbertson. 2003. ‘Clearing Away the Sand: Retrospective Methods and Prospective Documentation in Transfer Pricing Today’. *Tax Law Review* 57: 37–136.
- EITI. 2017. ‘Guidance Note 26: Reporting on First Trades in Oil’. Oslo: EITI International Secretariat. <https://eiti.org/GN26>.
- EY. 2019. ‘Indian Tax Administration Invites Public Comments on Proposal to Amend Rules on Profit Attribution to Permanent Establishment’. Global Tax Alert. EY. [https://www.ey.com/Publication/vwLUAssets/Indian_Tax_Administration_invites_public_comments_on_proposal_to_amend_rules_on_profit_attribution_to_permanent_establishment/\\$FILE/2019G_001978-19Gbl_TP_India%20-%20Proposal%20to%20amend%20PE%20profit%20attrib%20rules.pdf](https://www.ey.com/Publication/vwLUAssets/Indian_Tax_Administration_invites_public_comments_on_proposal_to_amend_rules_on_profit_attribution_to_permanent_establishment/$FILE/2019G_001978-19Gbl_TP_India%20-%20Proposal%20to%20amend%20PE%20profit%20attrib%20rules.pdf).
- Faccio, Tommaso, and Valpy Fitzgerald. 2018. ‘Sharing the Corporate Tax Base: Equitable Taxing of Multinationals and the Choice of Formulary Apportionment’. *Transnational Corporations: Investment and Development* 25 (2): 67–89.
- Faccio, Tommaso, and Sol Picciotto. 2017. ‘Alternatives to the Separate Entity / Arm’s Length Principle for Taxation of Multinational Enterprises’. The Independent Commission for the Reform of International Corporate Taxation.
- FAO. 2017. Building Agricultural Market Information Systems: A Literature Review. Rome: FAO.
- Forstater, Maya. 2018. ‘Illicit Financial Flows, Trade Misinvoicing, and Multinational Tax Avoidance: The Same or Different?’ CGD Policy Paper 123. Center for Global Development. <https://www.cgdev.org/publication/illicit-financial-flows-trade-misinvoicing-and-multinational-tax-avoidance>.
- Gomes, Marcus Lívio, and Débora Ottoni Uébe Mansur. 2018. ‘The Brazilian “Sixth Method” and BEPS Action 10: Transfer Pricing Control on Commodity Transactions’. *International Transfer Pricing Journal* 25 (2).
- Grondona, Veronica. 2018. ‘Transfer Pricing: Concepts and Practices of the “Sixth Method” in Transfer Pricing’. Tax Cooperation Policy Brief 2. South Centre. https://www.globaltaxjustice.org/sites/default/files/TCPB2_Transfer-Pricing-Concepts-and-Practices-of-the-%E2%80%98Sixth-Method%E2%80%99-in-Transfer-Pricing_EN.pdf.
- Grondona, Veronica, and Andres Knobel. 2017. ‘Transfer Pricing in Argentina 1932-2015’. 63. ICTD Working Paper. International Centre for Tax and Development (ICTD).
- Illarraz, Marcelo. 2014. ‘Drawing upon an Alternative Method for the Brazilian Transfer Pricing Experience: The OECD’s Arm’s Length Standard, Pre-Fixed Profit Margins or a Third Way?’ *British Tax Review* 2: 218–35.
- IMF. 2014. ‘Spillovers on International Corporate Taxation’. IMF Policy Paper. Washington, D.C.: IMF. <https://www.imf.org/external/np/pp/eng/2014/050914.pdf>.
- . 2019. ‘Corporate Taxation in the Global Economy’. 19/007. Policy Papers. IMF. <https://www.imf.org/en/Publications/Policy-Papers/Issues/2019/03/08/Corporate-Taxation-in-the-Global-Economy-46650>.
- ICCO (International Cocoa Organization). 2006. ‘Outline of a Cocoa Supply Chain Management Programme’. EX/130/9. London, UK: ICCO.
- . 2012. ‘Abidjan Cocoa Declaration’. In . Abidjan, Côte d’Ivoire.
- Inclusive Framework on BEPS. 2018. *Tax Challenges Arising from Digitalisation – Interim Report 2018*. OECD/G20 Base Erosion and Profit Shifting Project. Paris: OECD Publishing.
- . 2019a. ‘Addressing the Tax Challenges of the Digitalisation of the Economy – Policy Note’. OECD/G20 Base Erosion and Profit Shifting Project. OECD.
- . 2019b. ‘Addressing the Tax Challenges of the Digitalisation of the Economy - Public Consultation Document’. OECD/G20 Base Erosion and Profit Shifting Project.
- India’s Central Board of Direct Taxes. 2019. ‘Report on Profit Attribution to Permanent Establishments’. Notice F. No. 500/33/2017-FTD.I. https://www.incometaxindia.gov.in/news/public_consultation_notice_18_4_19.pdf.
- Kadet, Jeffery M., Tommaso Faccio, and Sol Picciotto. 2018. ‘Profit-Split Method: Time for Countries to

- Apply a Standardized Approach'. *Tax Notes International* 91 (4): 359–62.
- Katangeza, Samson. 2012. 'ICT-Based Market Information Services, Operational Environment and Performance: The Case of Malawi Agricultural Commodity Exchange and Food Nutrition Security Joint Task Force.' *American International Journal of Social Science* 1 (2): 34–43.
- KPMG. 2017. 'CBDT Notifies the Much Awaited Revised Safe Harbour Rules'. Tax Flash News. <https://home.kpmg/content/dam/kpmg/in/pdf/2017/06/KPMG-Flash-News-CBDT-notifies-revised-Safe-Harbour-Rules-2.pdf>.
- . 2019. 'Report on Proposed Amendments of Rules for Profit Attribution to Permanent Establishment in India Open for Public Consultations'. Tax Flash News. <http://www.in.kpmg.com/taxflashnews/KPMG-Flash-News-PE-Attribution-Committee-Report.pdf>.
- Langbein, Stanley I. 1986. 'The Unitary Method and the Myth of Arm's Length'. *Tax Notes* 30: 625.
- LehmanBrown. (n.a.). 'New Regulation on Tax for Non-Resident Enterprises'. Insights e-Newsletter. <https://www.lehmanbrown.com/insights-newsletter/new-regulation-tax-non-resident-enterprises/>.
- LME (London Metal Exchange). 2018. 'How Are LME Reference Prices Used in Physical Metals Contracts?' LME Insight. <https://www.lme.com/Education-and-events/Online-resources/LME-insight/How-are-the-LME-prices-referenced-in-physical-contracts>.
- . 2019. 'Copper Physical Contract Specifications'. <https://www.lme.com/en-GB/Metals/Non-ferrous/Copper/Physical>.
- Löf, Anton, and Magnus Ericsson. 2019. 'Commodity Trading: Understanding the Tax-Related Challenges for Home and Host Countries'. International Institute for Sustainable Development. <https://www.iisd.org/sites/default/files/publications/commodity-trading-challenges.pdf>.
- Majmudar, Suchint, and Mudigonda Vishweshwar. 2019. 'Does India's Proposals on Attribution of Profits to PEs Solve the Issue?' *TPWeek*.
- Malden, Alexander, and Joseph Williams. 2018. 'Generating Government Revenue from the Sale of Oil and Gas: New Data and the Case for Improved Commodity Trading Transparency'. Briefing. Natural Resource Governance Institute. <https://resourcegovernance.org/analysis-tools/publications/generating-government-revenue-sale-oil-and-gas-new-data-and-case>.
- Meyer-Nandi, Sathi. 2018. 'Preventing Tax Treaty Abuse – A Toolbox with Preventive Measures for Ghana, South Africa, and Nigeria'. Vienna: WU Vienna University of Economics and Business. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3161714.
- Mukhebi, Adrian, and James Kundu. 2014. 'Linking Farmers to Markets in Kenya: The Evolving KACE Model'. *Cabiers Agricultures* 23 (4–5): 282–87.
- Musselli, Irene. 2017. *Agriculture, Price Stabilisation and Trade Rules*. The Netherlands: Brill Nijhoff.
- Musselli, Irene, and Elisabeth Bürgi Bonanomi. 2018. 'Curbing Illicit Financial Flows in Commodity Trading: Tax Transparency'. 4. CDE Working Paper. Bern: entre for Development and Environment (CDE). http://www.cde.unibe.ch/unibe/portal/fak_naturwis/g_dept_kzen/b_cde/content/e65013/e584852/e736858/e776375/e776426/CDEWorkingPaper4_eng.pdf.
- . 2019. 'Illicit Financial Flows: Concepts and Definition'. R4D-IFF-WP02-2018. R4D-IFF Working Paper Series. <https://curbing-iffs.org/publications/>.
- Nolintha, Vanthana, Vanxay Sayavong, and Rahul Mehrotra. 2019. 'Abnormal Pricing in International Commodity Trade: Evidence from Lao P.D.R.' R4D-IFF-WP02-2019. R4D-IFF Working Paper Series. <https://curbing-iffs.org/publications/>.
- Norasing, Nalonglith. 2019. 'Transfer Pricing Laws in Context: The Case of Lao PDR'. R4D-IFF-WP06-2019. R4D-IFF Working Paper Series.
- OECD. 2015. *Transfer Pricing Documentation and Country-by-Country Reporting, Action 13 - 2015 Final Report*. Paris: OECD Publishing.
- . 2017a. 'Addressing the Information Gaps on Prices of Minerals Sold in an Intermediate Form (Supplementary Report)'. In *A Toolkit for Addressing Difficulties in Accessing Comparables Data for Transfer Pricing Analyses*, 153–237. <https://www.oecd.org/ctp/toolkit-on-comparability-and-mineral-pricing.pdf>.
- . 2017b. 'Common Reporting Standard'. In *Standard for Automatic Exchange of Financial Account Information in Tax Matters*, 2nd ed. Paris: OECD Publishing. <http://dx.doi.org/10.1787/9789264267992-5-en>.
- . 2017c. *Model Tax Convention on Income and on Capital: Condensed Version 2017*. Paris: OECD Publishing.

- . 2017d. *Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations 2017*. Paris: OECD Publishing.
- . 2019. 'Addressing the Tax Challenges of the Digitalisation of the Economy – Policy Note. As Approved by the Inclusive Framework on BEPS on 23 January 2019'.
- Petroleum Price Board (PPB). 2019. 'Norm Price for Crude Oil Produced on the Norwegian Continental Shelf: 4th Quarter 2018.' <https://www.regjeringen.no/contentassets/8ccca86020534bb79c63cce89f9ef53e/np-4q-2018-eng-norm-prices.pdf>.
- Picciotto, Sol. 2015. 'Indeterminacy, Complexity, Technocracy and the Reform of International Corporate Taxation'. *Social & Legal Studies* 24 (2): 165–84.
- . 2018. 'Simplified Transfer Pricing Methods: An Overview and Analysis'. ICTD Working Paper 86. Brighton, UK: Institute of Development Studies.
- Platform for Collaboration on Tax. 2017. 'A Toolkit for Addressing Difficulties in Accessing Comparables Data for Transfer Pricing Analyses'. International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), United Nations (UN), World Bank Group (WBG). <https://www.oecd.org/ctp/toolkit-on-comparability-and-mineral-pricing.pdf>.
- Readhead, Alexandra. 2017. 'Special Rules for Commodity Sales: Zambia's Use of the "Sixth Method"'. Natural Resource Governance Institute. <https://resourcegovernance.org/sites/default/files/documents/special-rules-for-commodity-sales-zambia-sixth-method.pdf>.
- . 2018. 'What Mining Can Learn from Oil A Study of Special Transfer Pricing Practices in the Oil Sector, and Their Potential Application to Hard Rock Minerals'. CGD Policy Paper 128. Center for Global Development. <https://www.cgdev.org/sites/default/files/what-mining-can-learn-oil-study-special-transfer-pricing-practices-oil-sector.pdf>.
- Rocha, Sergio André. 2017. *Brazil's International Tax Policy*. Editora Lumen Juris.
- Schoueri, Luís Eduardo. 2015. 'Arm's Length: Beyond the Guidelines of the OECD'. *Bulletin for International Taxation* 69 (12): 690–716.
- Shepherd, Andrew W., and Alexander J.F. Schalke. 1995. 'An Assessment of the Indonesian Horticultural Market Information Service'. AGSM Occasional Paper 8. Rome: FAO.
- Sheppard, Lee. 2012. 'Is Transfer Pricing Worth Salvaging?' *Tax Notes*, Tax Notes, 136 (June): 467–76.
- . 2013. 'Losing My Religion? No Says OECD's Andrus'. *Tax Notes* 141 (October).
- Spencer, David. 2012. 'Transfer Pricing: Will the OECD Adjust to Reality?' https://www.taxjustice.net/cms/upload/pdf/Spencer_120524_OECD_.pdf.
- . 2014. 'Formulary Apportionment Is Not a Panacea, Part 1'. *Journal of International Taxation* 25 (7): 44.
- STSA (Swiss Trading and Shipping Association). 2014. 'STSA's Comments on Public Discussion Draft on BEPS Action 10: Transfer Pricing Aspects of Cross-Border Commodity Transactions'. Geneva: STSA.
- Teijeiro, Guillermo. 2014. 'BEPS Action 10: What TP Sixth Method Are We Talking About?' 2014. <https://www.linkedin.com/pulse/beps-action-10-what-tp-sixth-method-we-talking-guillermo-teijeiro>.
- United Nations. 2017a. *Model Double Taxation Convention between Developed and Developing Countries*. New York: United Nations.
- . 2017b. *United Nations Practical Manual on Transfer Pricing for Developing Countries*. 2nd ed. New York: United Nations.
- Valadão, M.A. Pereira. 2016. 'Transfer Pricing in Brazil and Actions 8, 9, 10 and 13 of the OECD Base Erosion and Profit Shifting Initiative'. *Bulletin for International Taxation* 70 (5): 296–308.
- Valadão, M.A. Pereira, and Rodrigo Moreira Lopes. 2013. 'Transfer Pricing in Brazil and the Traditional OECD Approach'. *International Taxation* 8: 31–41.
- WCO (World Customs Organization). 2018. *WCO Guide to Customs Valuation and Transfer Pricing*. Brussels: World Customs Organization.