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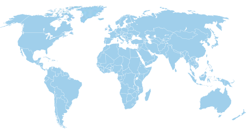
The price of fairness: Tackling mispricing of commodity exports from poor countries

For decades, countries in Africa, Asia, and Latin America have remained trapped in poverty despite continuously exporting valuable *commodities* with which they are richly endowed – including oil, metals, plant proteins, grains, and more. This policy brief outlines one of the key causes of this harmful, unjust phenomenon: *trade mispricing*. More importantly, it introduces a raft of measures that can be taken to stop revenue losses from trade mispricing – in particular measures that commodity-exporting poor countries can implement unilaterally.


The research featured here is focused globally.

Global trade, we are often told, benefits everyone. And in rich countries especially, it is hard to imagine life without it. From our morning coffee to the smartphone in our pocket, our reliance on goods from abroad is ubiquitous. Asked to explain the benefits of trade, many would likely refer to the old idea of "comparative advantage": different countries will make and export what they are most efficient at, and import what they need from others.

Of course, the reality of trade today is vastly more complex. Webs of elaborate "value chains" – spanning financing, production, processing, trade, etc. – now crisscross the world. And multinational companies have arguably become the dominant architects and beneficiaries of trade and financial flows. Meanwhile, state (and citizen) power has declined. One symptom of this is an ongoing regulatory *race to the bottom* – e.g. cutting taxes and social or ecological protections – among states competing to host different "links" in each value chain, whether manufacturing, corporate headquarters, or management of related financial flows.

KEY MESSAGES

- Poor countries lose billions of dollars annually to mispricing of their commodity exports – including oil, copper, and other primary commodities that are crucial to global development and the infrastructure of the future.
- At the industry level, new technologies like *smart containers*, *blockchain*, and *automated data matching* can be introduced to eliminate room for trade-related fraud.
- At the country level, low-income countries can proactively combine short- to mid-term policies to counter the revenue effects of trade mispricing. They can leverage new funding mechanisms for independent *mineral valuation*, set up robust *buyer selection processes*, legislate various *tax-related uses of reference prices and margins*, and enforce *restrictions on deductible taxpayer costs* for multinational companies.
- In the longer term, more ambitious policies like *unitary taxation with formulary apportionment* might be introduced to better share the revenues from global value chains – especially those dominated by multinationals.

Key terms

Illicit financial flows are cross-border financial flows that are considered illicit in terms of their origin, cross-border transfer, and/or end use. Examples include money flows resulting from tax evasion, money laundering, bribery, or trade mispricing by institutions or individuals. Broad definitions encompass grey-area practices that may be difficult to prosecute, but nevertheless bend or violate the spirit of the law in certain jurisdictions. Examples include highly exploitative trade terms or aggressive "tax optimization" efforts pursued by multinational firms, which deprive poorer countries of urgently needed revenue for human development and environmental protection.[29]

Commodities are raw materials or primary agricultural products that can be bought and sold on the market. They include mined/extracted "hard commodities" like oil, gold, and copper, as well as cultivated "soft commodities" like coffee, cocoa, and wheat.[30]

Trade mispricing refers to trade at distorted prices that are intended to boost company profits and/or deceive tax/customs authorities. It includes misreporting the value, quantity, or nature of traded goods or services (***trade misinvoicing***). It also includes the manipulation of prices between related companies (***transfer mispricing*** or ***abusive transfer pricing***), such as subsidiaries of the same multinational firm.[31]

Resource rich, yet poor

Indeed, the benefits of trade do not always appear as mutual as they should. Instead, we witness many countries – and social classes – pitted against each other over the right to claim shrinking shares of circulating value. This is acutely visible in the area of commodity production and trade: Clusters of countries in Africa, Asia, and Latin America have stayed poor for decades despite exporting valuable commodities for which they have a comparative advantage – resources like fossil fuels, metals, gems, plant proteins or oils, grains, and more.

This paradox of resource-rich poor countries highlights the urgent need for changes in the legal architecture and hands-on operation of trade. While there are many aspects that must be tackled, one problem in particular is consistently emphasized by experts: that of so-called trade mispricing.

Trade mispricing occurs when parties involved in a trade – for example, two related companies – misstate or deliberately manipulate the sale price, quantity, or nature of particular goods (e.g. copper or lithium) exported by one party and imported by the other. In other words, they trade or transfer goods at a price that differs from their "fair market" value. Such mispricing might be done, for example, to avoid paying appropriate taxes or royalties in the exporting country. Other times, it might even be done to launder money, smuggle goods, or hide bribes paid to politically exposed persons. In most cases, it involves illicitly moving economic value (e.g. goods, profits) across borders. And all too often, the costs are borne by countries and populations who can least afford it.

Harms of trade mispricing

Observers cite trade mispricing as one of the biggest sources of *illicit financial flows* (IFFs) out of developing countries – including up to 50% of such flows out of African countries.[1] Empirical findings from the ongoing Swiss r4d project on IFFs (www.curbing-iffs.org) point to significant undervaluation of commodity exports from specific countries (Ghana and Lao PDR).[2] Overall, the NGO Global Financial Integrity estimated that 25% of all developing country trade was mispriced in a recent 10-year period.[3]

Again, one sector in particular appears uniquely susceptible to these value manipulations: the commodity sector, involving the production and trade of raw materials. More specifically, it is extractive industries like *mining* and *oil production* that are especially risk-prone.[4] UNCTAD estimates that roughly USD 40 billion was illicitly moved out of Africa alone in 2015 by underpricing extracted and exported goods like gold and gemstones.[5]

These illicit activities deprive vulnerable countries of urgently needed foreign exchange income (i.e. euros, dollars, and francs) and erode the tax base they need to care for their populations. For example, UNCTAD estimates that African countries suffering high levels of capital flight (including from trade mispricing) could cut the mortality rate of children under five from 59% to 20% if such financial losses were prevented and instead invested in the health sector.[6] Turning to pressing climate change needs, curbing illicit financial flows could contribute nearly half the investment needed for adaptation and mitigation measures in Africa.[7]

Sources of vulnerability

The question is how it is even possible to manipulate prices and siphon off wealth this way. After all, are we not dealing with markets subject to internal laws, like competition, and external controls, like tax and customs authorities? At the country level, a variety of weaknesses in developing countries make such manipulations possible. These include corruption and poor governance, the opacity and complexity of commodity transactions, severe asymmetries in information access between powerful companies and weak states, and the limitations of under-resourced customs authorities in low-income countries.

More broadly, however, there is a major global-level structural issue at play which goes unnoticed by most casual observers of trade: It is the long-standing "legal fiction" that allows related companies – such as parent companies and subsidiaries of the same multinational corporation – to "trade" with each other and be treated and taxed *as if* they were actually unrelated parties.[8] This incentivizes multinationals to find ways, like trade mispricing (or abusive transfer pricing), to shift value and profits across borders into their divisions in low-tax countries, for example corporate hubs in Europe. They are supposed to use "arm's length" prices (i.e. real market-based valuations) for the goods they *transfer* (simulating trade) between their divisions.[9] But the incentives to boost multinational-level company profits through accounting tricks are immense.

Ways to combat mispricing

Clearly, commodity-dependent developing countries cannot afford to lose revenues through trade mispricing any longer. They need and deserve to use their own resources for their own development. To this end, the r4d IFFs team – including CDE legal experts and experts from Ghana and Laos – have identified methods for commodity-producing countries to counter mispricing of their exports.[10] Of particular importance are measures that can be taken relatively quickly. Promising approaches include the following:

Use of "smart" technologies. With proper support (ideally industry-wide), several new hands-on technologies could be rapidly introduced to detect and discourage meddling with physical commodities or documentation in transit. *Electronic seals* could replace single-use mechanical seals on cargo containers, triggering an alarm and recording evidence in the event of any tampering.[11] *Smart containers* equipped with tracking devices and sensors could be implemented, providing real-time data on container position, temperature, movement, shocks, door opening, etc.[12] *Fixed scanners* capable of scanning hundreds of containers per hour could be installed at points of export and import, allowing systematic two-dimensional x-ray scanning of all goods, prior to customs clearance.[13] *Blockchain technology*, finally, could be used to provide a decentralized, near-unalterable record of commodity transactions, helping to prevent document (e.g. invoice) manipulations once they enter the accounting chain.[14]

Automated data matching. Another readily available option to help identify and prevent trade-related fraud would be automatic cross-checking of key documentation. For example, *commodity export documents* *could be systematically matched with import documents* to uncover any inconsistencies between recorded sale and purchase prices.[15] Likewise, *customs forms could be cross-checked with income tax returns* filed by buyers in importing countries, making it possible to spot discrepancies in commodity values set for customs versus tax purposes. However, making such data matching work will require some harmonization between countries: Operationally, there is a need for use of electronically filed, *standardized forms* across jurisdictions, as well as universally recognized *unique entity identifiers* across firms. Institutionally, there is a need for greater *international cooperation between authorities* in customs, revenue/tax agencies, banks, and governments.[16]

Prescriptive approaches to taxation. Notably, low-income countries also require mispricing countermeasures they can implement more or less *unilaterally* – especially where funds and international cooperation are lacking for expensive technology and information exchange. Several "prescriptive" approaches can be applied directly to deter price manipulation and revenue losses:[17]

- Under the so-called *sixth method* of transfer pricing law, countries can mandate the use of market reference prices when auditing trades between related parties. In Zambia, for example, mining companies are legally required to use publicly quoted benchmark prices as a basis to determine the transfer price of mineral commodities.[18]
- In *administered pricing*, the government (rather than companies themselves) can directly establish the value of commodity-related transactions for tax purposes. Here, prices calculated by a trusted committee of experts can be used by governments to determine the commodity-related income taxes and royalties they are due, rather than manipulation-prone transfer prices. Norway uses such an approach to price its oil exports.[19]
- With *referencing in contracts*, countries can mandate use of reference prices or price formulas directly in commodity sales contracts. For example, they can require that certain terms – options, caps, and lower limits – be included in metals streaming agreements, long-term supply arrangements, and other complex trade deals in commodities.[20]
- Alternatively, countries can apply *fixed profit margins and markups* to certain types of transactions or specific lines of business. For example, under Brazil's transfer pricing law, the accepted "arm's length" price for commodity exports between related parties is the resale (wholesale/retail) price in the destination country, minus a fixed profit margin.[21]
- Finally, poor countries can introduce *restrictions on deductible taxpayer costs*, for example regarding interest and royalties paid by local mining companies to offshore entities, so as to preserve the tax base where commodities are actually sourced.[22]

Whatever the technique used, "prescriptive" methods are a powerful, targeted means of countering trade mispricing and preventing or restoring lost profits on behalf of exporting countries.

Accurate valuation of minerals. Fast action could also be taken by poor countries to prevent deliberate or mistaken underestimation of the quality (e.g. grade/purity) – and thus sale price – of their commodities (e.g. oil). If they cannot verify the quality of their mineral resources on their own, low-income countries could contractually require private mining companies or commodity buyers to pay for inspection of quality by independent experts. Alternatively, they could *levy a fixed annual fee for independent quality inspection*, also payable by private buyers or mining companies.[23]

Improved buyer selection by state companies. Of course, state-owned companies – or unethical actors within them – can also play a role in undervaluing of goods, for example by selling low to corrupt buyers in return for hidden kickbacks. A variety of practices could be adopted to prevent improperly valued sales by state companies. These include: establishment of *independent buyer-selection teams free from political influence*; use of *predetermined, quantifiable buyer selection criteria*; introduction of *standardized, automatic procedures for bid submission*; and use of *standardized contractual guidelines in direct negotiations* with buyers. Notably, all information on the bidding processes should be made public to ensure accountability.[24]

Longer-term solutions

More ambitious policies to tackle trade mispricing would require much greater international cooperation. Of particular note are reforms aimed at taxing multinationals as what they actually are: unified global firms with value-chain subdivisions – e.g. extraction, refining, trading, retail – located in different countries/legal jurisdictions. Under global profit-split approaches – e.g. *unitary taxation with formulary apportionment* – the total global profits of a multinational firm would be pooled together and then apportioned between jurisdictions based on internationally agreed factors that reflect its *real economic activity in each jurisdiction*.[25] Notably, this type of approach would finally address the founding *legal fiction* that treats related companies as if they were separate market actors engaged in "free trade".

Initial steps in this direction are already visible. If credible international negotiations continue, commodity-exporting poor countries should apply major pressure to make sure the resulting formulas for allocation of (taxable) value actually help them – i.e. give them a larger slice of the global profit pie – rather than hurt them. Overall, the challenge of fair taxation and fair trade is ultimately political, not technical, in nature.[26]

The role of financial centres and trading hubs like Switzerland

The policies recommended in this brief emphasize actions that can be taken by low-income commodity-exporting countries alone or in concert. However, market hubs like Switzerland also have critical responsibilities and should assess the coherency of their current rules concerning illicit financial flows (IFFs). They should consider more stringent regulations, such as extending anti-money-laundering obligations to lawyers, notaries, and fiduciaries; introducing penalties for the professional enablers of tax avoidance schemes; making firms criminally liable when they fail to prevent their agents from facilitating criminal tax evasion; and mandating that taxpayers and intermediaries disclose aggressive cross-border tax deals and automatically exchange relevant information with the countries concerned. Coupled with strengthened whistle-blower protections, such measures will hinder reputational risks and help to hold firms accountable for any abusive or fraudulent arrangements they facilitate.[27, 28]

Research on illicit financial flows and trade mispricing

Our research focuses on commodity-trade-related illicit financial flows (IFFs) from resource-rich developing countries. Our project belongs to the "Swiss Programme for Research on Global Issues for Development" (r4d programme) funded jointly by the Swiss Agency for Development and Cooperation (SDC) and the Swiss National Science Foundation (SNSF). For more information see: www.r4d.ch

Irene Musselli, PhD
Senior Research Scientist
Centre for Development and Environment (CDE)
University of Bern, Switzerland
irene.musselli@unibe.ch

Elisabeth Bürgi Bonanomi, PhD
Attorney at Law
Co-Head of Sustainability Governance Impact Area
Centre for Development and Environment (CDE)
University of Bern, Switzerland
elisabeth.buergi@unibe.ch

Policy implications

Resolve to tackle mispricing of exports, especially from developing countries
Trade mispricing, including undervaluing of commodity exports, is a major source of illicit financial flows from poor countries. As much as 25% of all exports from developing countries are mispriced, according to recent estimates. In one year, for example, African countries can lose tens of billions of dollars to mispricing of high-value exports like precious metals. These countries deserve to use these revenues to address their own needs.

Take fast action to eliminate space for fraud across the entire sector
Emphasis should be placed on industry-wide measures that can be taken quickly to prevent mispricing of shipments. A number of new *"smart" technologies* could be introduced to detect or prevent manipulation of goods or price-relevant documentation. These include *electronic seals and tracking devices* for cargo containers, *fixed (x-ray) scanners* at export and import locations, and *blockchain accounting* ledgers that are accessible to all trading partners and cannot be tampered with. Finally, *automated cross-checking of key documentation* (e.g. import/export and tax forms) could be put in place to uncover pricing inconsistencies. Use of *standardized forms* across jurisdictions and *universally recognized identifiers* for specific goods could enable this.

Empower low-income countries to act in their own tax and revenue interests
Poor countries also need tools to counter mispricing that do not rely on the (often lacking) cooperation, funding, and political will of their wealthier trading partners. Innovative methods of *prescriptive approaches to taxation* – e.g. the *sixth method* or *administered pricing* – directly tackle the possible revenue harms of trade mispricing and can be implemented unilaterally by countries. Such approaches can also be promoted in the context of development cooperation.

Ensure that wider, longer-term solutions actually help poor countries
Ultimately, a much larger paradigm shift is likely needed to solve the inequalities generated by today's system of global trade and taxation. The profits of global value chains – dominated by multinationals – must eventually be shared in ways that explicitly benefit developing countries. Every effort must be made to ensure that future international tax schemes are structured to help commodity-exporting poor countries.

Suggested further reading

Musselli I, Bürgi Bonanomi E. 2021. *Policy Responses to Curb Commodity Trade-related Illicit Financial Flows*. R4D-IFF Working Paper Series, No. R4D-IFF-WP02-2021. https://curbingiffsdotorg.files.wordpress.com/2021/06/wp_policies_24062021.pdf

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Centre for Development and Environment (CDE)
University of Bern
Mittelstrasse 43
3012 Bern
Switzerland
www.cde.unibe.ch

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