Analysis

How big is the transfer pricing prize for developing countries?

Speed read

Widely cited studies of 'illicit financial flows' have given the impression that addressing transfer price manipulation could generate huge sums of revenue for developing countries. It is becoming increasingly clear that these studies are misleading. Recent studies show that the issues are real, but that the amounts involved are smaller than imagined.

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Government budgets in low income countries are tiny, compared to the need for public services. Low income countries such as Malawi and Vietnam have only around $400 to spend on each person, compared with an OECD average of $13,000. The question of how governments in developing countries can raise enough public revenue to pay for needed education, healthcare and infrastructure has concentrated the minds of everyone from the World Bank to Oxfam, and of governments and revenue authorities around the world.

Transfer pricing itself is often equated with tax avoidance. For example, South Africa's President Jacob Zuma, addressing the UN Global Assembly recently, said: 'Money laundering, tax evasion, tax avoidance, corruption and transfer pricing by multinational companies are some of the biggest challenges to economic growth and stability. They undermine the integrity of the global financial system, efficient tax collection and equitable allocation of resources.'

There is no doubt that customs inspection and the auditing of transfer prices are significant technical challenges, and that companies can take advantage of weak regulations and enforcement in developing countries. There are therefore real gains to be made by governments in developing countries strengthening transfer pricing rules and auditing capacity, and from initiatives such as Tax Inspectors Without Borders providing technical support.

However, debates are often characterised by inflated expectations of the amounts involved in transfer pricing cases, and by the conflation of illicit financial flows with transfer pricing. These expectations are spilling off the page of UN reports, and into the real world. This has most notably recently occurred in Tanzania, where the government has issued a $190bn tax bill to the Barrick Gold subsidiary Acacia Mining, based on accusations of a massive gold smuggling operation (*Inflated expectations about mineral export misinvoicing are having real consequences in Tanzania*, M. Forstater and A. Readhead (2017)).

Illicit financial flows: billions and trillions?

It is often stated that developing countries are 'haemorrhaging billions of dollars' of tax revenues through companies manipulating transfer prices, in particular by mispricing commodities. It has been claimed that developing countries are losing $1trn a year (and that African countries alone are losing $50bn). Such numbers have influenced international debates and expectations on the subject. For example, the UN Commission for Trade and Development (UNCTAD) has argued that 'developing countries are losing up to 67% of their commodity exports' to trade misinvoicing; while the African Union High Level Panel on Illicit Financial Flows from Africa, chaired by Thabo Mbeki, has argued that African countries are losing $50bn a year to illicit financial flows, mainly by multinational corporations (*Illicit financial flows*, High Level Panel on Illicit Financial Flows from Africa (2015).

The numbers quoted come from studies which look at gaps and mismatches in trade data. However, while these have been influential, it is becoming clear that they are unreliable. For example, the UNCTAD study (*Trade misinvoicing in primary commodities in developing countries: The cases of Chile, Côte d'Ivoire, Nigeria, South Africa and Zambia* (L. Ndikumana), December 2016) interpreted a discrepancy between the amount of gold that appears in South African export statistics and the amount of South African gold that appears in partner countries' import statistics as suggesting that a huge annual heist of most of South Africa's gold production is being carried out by major blue chip mining companies. In fact, the discrepancy can be explained by South Africa recording gold exports as 'money', while trade partners classified the same gold bars as 'non-monetary gold'. There is also a broader problem with these figures, as they can interpret ordinary trade through bonded warehouses and transit hubs, or being carried out by commodity traders in countries such as Switzerland, as being illicit (*Trillion dollar estimate: illicit financial flows from developing countries. Darmstadt University of Technology Working Paper,* V. Nitsch (2016); and *Illicit financial flows and trade misinvoicing: time to reassess*, M. Forstater (2017), CGD).

Some real numbers

If the popular 'billions and trillions' studies are not a good guide to sizing the prize from improving international corporate tax compliance, what is? Some numbers are emerging from experience, and economic studies also provide further clues. South Africa developed new transfer pricing rules in 2012, and in the following four years the revenue service successfully finalised 35 transfer pricing cases which raised around $650m (SARs *Annual Reports 2013–16*). Early results from the Tax Inspectors Without Borders initiative have widely increased revenue from transfer pricing audits: in Colombia, from $6m in 2012 to $33m in 2014; in Kenya, from $52m in 2012 to $107m in 2014; and in Vietnam, from $3.9m in 2013 to $40m in 2014. There are also likely to be behavioural impacts as firms change their behaviour in light of beefed up transfer pricing regulations and of BEPS. The numbers involved, however, do not seem to meet the heightened expectations of tax campaigners and the media.

Recent studies

A number of revenue authorities, including the UK's HMRC, the South African Revenue Service, the Finnish tax authority and the US's IRS, allow carefully vetted researchers to analyse anonymised tax records under controlled conditions. Studies based on microdata from 'datalabs' also help to give a clearer picture of the revenues which might be at stake.

In a paper for the UN University World Institute for Development Economics Research, Hayley Reynolds and Ludvig Wier used firm-level tax returns to estimate profit shifting in South Africa (*WIDER Working Paper 2016/128: Estimating profit shifting in South Africa using firm-level tax returns*, H. Reynolds and L. Wier (2016)). They find 'a semi-elasticity of taxable income with respect to the parent tax rate of 1.7'. This means that the South African subsidiary of a foreign company with a headquarters based in a country where the tax rate is 10% lower than South Africa's (i.e. something like the UK or Singapore) would tend to have a 17% lower taxable income than a subsidiary where the parent company is in a country matching South Africa's rate. Reynolds and Wier make a ballpark estimate of revenues lost in this way, finding that it amounts to 7% of subsidiary income or 1% of the total corporate tax base. This implies that profit shifting removes 0.2% of the total tax base in South Africa, reducing government revenues by 0.05% of GDP (around $147m, or $2.60 per person per year).

In a paper supported by HMRC's Datalab, Li Liu, Tim Schmidt-Eisenlohr, and Dongxian Guo look at UK company tax returns and transaction level trade data to explore the transfer pricing of goods exports from the UK (*International transfer pricing and tax avoidance: evidence from linked trade-tax statistics in the UK*, L. Liu, T. Schmidt-Eisenlohr and D. Guo (2017)). They find that transfer prices of exports to lower tax countries, such as Ireland, Turkey, Denmark, Russia and Netherlands, are most sensitive to changes in relative tax rates, while there is little mispricing of exports via small economy 'tax havens'. The price differential is more pronounced for R&D intensive firms (i.e. where the products exported are specific rather than generic). However, the revenue forgone was again small in absolute terms, amounting to £168m in 2010 (0.01% of GDP, or again $2.60 per person per year).

There are many caveats to these studies. Both rely on statutory tax rates for their calculations, which does not allow for the impact of special incentives. The UK study only looks at goods trade, so does not include profit shifting via services, interest and royalties. On the other hand, it is not at all clear that the price differences it identifies as 'mispricing' would necessarily fall outside of a defensible arm's length range. The South African study only considers revenue losses associated with foreign multinationals, not profit shifting by South African headquartered companies.

Nevertheless, both studies confirm that developing countries experience tax losses from transfer price manipulation but that the amounts involved do not live up to the great expectations of transformative amounts of public revenue. Both studies also suggest that companies are undertaking a significant degree of profit shifting, but that this has a relatively small impact on overall public revenues, simply because multinational companies are a limited portion of the corporate tax base, and this in turn is a limited portion of the overall tax base.

Are these findings surprising?

These findings are similar to other economic studies of corporate tax elasticities. It is notable, however, that they are at least an order of magnitude smaller than those generated by the 'spillovers' study conducted by Ernesto Crivelli, Ruud De Mooij and Michael Keen of the IMF in 2015. This much quoted study gave a speculative figure that losses to developing countries from tax avoidance were in the order of 1% of GDP ($200bn overall).

The amount of corporate tax revenues that countries might be losing fundamentally depends on:

- the amount of profit that is generated by companies in the jurisdiction;
- the extent to which those companies are able to access international profit shifting opportunities (are they part of a multinational group?);
- the nature of their business (for example, does it involve differentiated products and intangible assets?); and
- the effectiveness of the tax administration.

The IMF study did not include any of these factors. Instead, it looked at broad statistics about how fast a subset of countries were 'broadening the base and lowering the rate' of overall corporate taxes, to try to identify a general relationship and isolate the impact of base erosion via tax havens. It then applied this tentative relationship more generally to a wider set of countries.

A follow-up study by Alex Cobham and Petr Janský provides a breakdown by country, and notes that the methodology leads to some hard-to-believe findings. For example, Chad is said to be losing tax revenues worth some 8% of its GDP, while Pakistan is said to be losing tax revenues worth 5% of GDP. For this to be true, untaxed profits related to internationally connected formal sector business would account for 20% of GDP in Chad, and to 14% in Pakistan – suggesting that the corporate sector might be more prominent in these economies than in countries such as the UK and Denmark, where the corporate tax base is around 11% of GDP.

Google on our minds?

One place where findings from bottom-up studies, top-down studies and popular expectations are closer together is the United States. Kimberly Clausing uses microdata from confidential surveys carried out by the US Bureau of Economic Analysis. She estimates that losses to profit shifting from the US to countries such as the Netherlands, Ireland, Luxembourg and Singapore was around $100bn in 2012; that is, around 45% of the actual corporate taxes collected, or around 0.7% of GDP. (The lost revenue is around half of the amount suggested for the US by the IMF methodology, according to Cobham and Janský's disaggregation.)

This aligns with what we know from specific cases, which is that many US multinationals have very low effective tax rates on profits from revenues generated in other countries (including global household names such as Google, Starbucks and Microsoft); and that US companies have permanently reinvested around $2.4trn of earnings offshore in order to defer US tax liabilities.

The US is also exceptional – both as a major originator of globally used intangible assets, and as a country with an unusual tax system that encourages retaining earnings offshore. Further studies using microdata will help to understand the nature of corporate profit shifting globally in different countries, but we should not be surprised if they don't look like the US.

Governments should set their sights on getting as much revenue as is sensible, in ways that are feasible. Building understanding and a realistic public scrutiny of tax policy and public budgets will be crucial. ■

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