The impact of tax treaties on revenue collection:

A case study of developing and least developed countries

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Abebi teaches in a primary school with no electricity or water and with no working toilet. Children often miss school because they do not have any food and are instead taken out by their parents to farm. Others do not make the journey due to lack of public transport and a lack of support from the government.

“Mainly the children I teach are from villages. These families are not at all wealthy. They are just managing. “We don’t have anything like electricity or water in the school. At times we leave before 7:00am and we trek a long distance for water.” “Even children that are in school can’t learn well because there are not many materials. “We don’t have enough school books, pens or paper. Sometimes children will not write anything in the class because they don’t have a pencil or book. At times, we’ll be teaching without anything unless we improvise. “In my own class, if you look at the back, you see damaged chairs and tables.” “The government keeps saying there is no money. They say that some people are not paying their taxes.” “The big foreign companies coming to Nigeria should be paying their tax so that our government will have money to do all those things that they’re supposed to do for schools, because so many children in the village can’t come to school’.

Executive summary

- Developing countries are increasingly keen to attract foreign direct investment (FDI) from multinational enterprises, and to do this, many have signed tax treaties (or double taxation agreements) with a number of – usually richer – countries. However, tax treaties have a huge impact on tax revenues – often on a scale unintended and unforeseen when those treaties were signed.

- We provide estimates of the potential real costs of tax treaties to developing countries. Due to limited data, we estimate the effects of only two types of losses generated by tax treaties, namely, lower withholding taxes on outgoing dividends and interest payments. We estimate the effects for 14 developing countries (14 for dividends; 11 for interest payments) with information from the ActionAid Tax Treaties Dataset and the International Monetary Fund's foreign direct investment data.

- Within this group of countries, we estimate the highest potential tax revenue losses are those of the Philippines (US$509 million) and Pakistan (US130 million). Relative to their GDP, we estimate that the potential losses are highest for the Philippines and Mongolia (0.17% of GDP for both).

- We find that Japan, the Netherlands, Switzerland and Singapore are the investor countries together responsible for more than half of the estimated losses. The majority of the estimated losses are due to dividends, only around 5% are due to interest payments. We discuss the limitations of these illustrative estimates and how future research could improve their quality as well as coverage.

- We identify four top recommendations for governments of developing countries. First, they should collect, and offer access to, data about the broad range of tax avoidance facilitated by tax treaties. Second, they should consider using our, and other similar, results to identify treaties that would benefit from review. Third, governments should consider the UN model treaty tax rates as minimum standards. Fourth, they should carefully consider whether and under what conditions to sign the OECD's Multilateral Instrument.

1. Introduction

Developing countries are increasingly keen to attract foreign direct investment (FDI) from multinational enterprises, and to do this, many have signed tax treaties (or double taxation agreements) with a number of – usually richer – countries. However, tax treaties have a huge impact on tax revenues – often on a scale unintended and unforeseen when those treaties were signed.

It is rare that ActionAid's analysis reflects that of the International Monetary Fund (IMF) – the inter-governmental financial organisation with substantial influence over developing and crisis-affected countries' economic policies – but this happens to be the case in relation to the effects of tax treaties on developing countries' tax revenue.

ActionAid's 2016 report, *Mistreated*, states that: "The era of outdated and unscrutinised tax treaties that create opportunities for multinational tax avoidance must come to an end." Similarly, the IMF has stated that "'Treaty shopping' – the use of tax treaty networks to reduce tax payments – is a major issue for many developing countries, which would be well-advised to sign treaties only with considerable caution." Furthermore, the IMF estimates tax revenue losses of US$1.6 billion in 2010 for non-OECD countries that had tax treaties with the United States, while ActionAid (2016, p. 4) stated more generally that, "on a global scale, just two rules in tax treaties – dividend and interest payment rules – cost developing countries billions of dollars each year".

This report estimates the negative effects of tax treaties on tax revenue in a number of developing countries, and considers treaties between developing countries and many investor countries (see Box 1).[1] For the first time, estimates of the revenue effects for a number of developing and investor countries are provided. The report also estimates the effects for 14 developing countries (14 for dividends; and 11 for interest payments) using information from both the ActionAid Tax Treaties Dataset and the IMF's FDI data. Within this group of countries, we estimate the highest potential tax revenue losses for the Philippines (US$509 million) and Pakistan (US$130 million). Relative to their GDP, we estimate that the potential losses among the countries studied are highest for the Philippines and Mongolia (0.17% of GDP for both). We find that Japan, the Netherlands, Switzerland, and Singapore are the surveyed investor countries that together are responsible for more than half of all estimated losses. The majority of the estimated losses are due to dividends, with only around 5% due to interest payments.

1. While it was desirable to show the level of tax revenue that developing countries could have had if the standard tax rate (rather than the tax treaty rate) applied, data restrictions meant we could estimate the effects of only two types of losses generated by tax treaties, namely, lower withholding taxes on outgoing dividends, and interest payments. For these two the potential revenue losses of tax treaties were quantified and attributed to specific developing and investor countries.

Box 1: Investor and recipient countries surveyed in this report

Developing countries (14) for which there are available data and for which we estimate the revenue effects:

Bangladesh
Cape Verde
Ghana
Mongolia
Mozambique
Nigeria
Pakistan
Philippines
Rwanda
Senegal
Sri Lanka
Tanzania
Uganda
Zambia

Investor countries (77, both developing and developed) with whom the 14 developing countries have tax treaties:

Australia
Austria
Bahrain
Bangladesh
Belarus
Belgium
Bosnia and Herzegovina
Brazil
Brunei Darussalam
Bulgaria
Canada
Czech Republic
Denmark
Egypt
Finland
France
Germany
Hungary
China
India
Indonesia
Iran
Ireland
Israel
Italy
Japan
Jordan
Kazakhstan
South Korea
Kuwait
Kyrgyz Republic
Lebanon
Libya
Luxembourg
Macau
Macedonia
Malaysia
Malta
Mauritius
Montenegro
Morocco
Nepal
the Netherlands
New Zealand
Nigeria
Norway
Oman
Pakistan
Philippines
Poland
Portugal
Qatar
Romania
Russia
Saudi Arabia
Serbia
Seychelles
Singapore
Slovak Republic
South Africa
Spain
Sri Lanka
Sweden
Switzerland
Syria
Taiwan
Thailand
Tunisia
Turkey
Turkmenistan
Ukraine
United Arab Emirates
United Kingdom
United States
Uzbekistan
Vietnam
Yemen

This report can be read alongside other, related reports. First, the technical report *Estimating the revenue effects of tax treaties in developing countries* which accompanies this report contains the technical details relating to the estimates presented, including all assumptions, limitations and related literature. And as a follow-up report, this document refers readers to *Mistreated* for more detailed descriptions of some of the issues, for example: why some provisions in tax treaties with developing countries are problematic, why developing countries are more vulnerable, and which tax treaties are most restrictive.

Orji is an unpaid nurse and midwife in a local hospital with no water source, no electricity and no government funding. She teaches women how to care for themselves during pregnancy, but being so under-resourced and having no other hospital with medicine nearby, means many women deliver their babies in dangerous circumstances, sometimes on the side of the road. Often women die in the process.

Orji's salary was previously paid for under a government scheme to tackle poverty. The scheme was scrapped in 2015 by the incoming government, partly because of Nigeria's dwindling public funds. This is money that could be raised through big companies paying their fair share of tax.

According to the African Union, tax havens are a 'major pull factor' in illicit financial flows which are estimated to drain more than $50 billion a year in capital out of Africa. Nearly a third of these flows are attributed to just one country, Nigeria, a country with one of the highest maternal mortality rates in the world.

PHOTO: ACTIONAID

2. How tax treaties affect developing countries' tax revenue

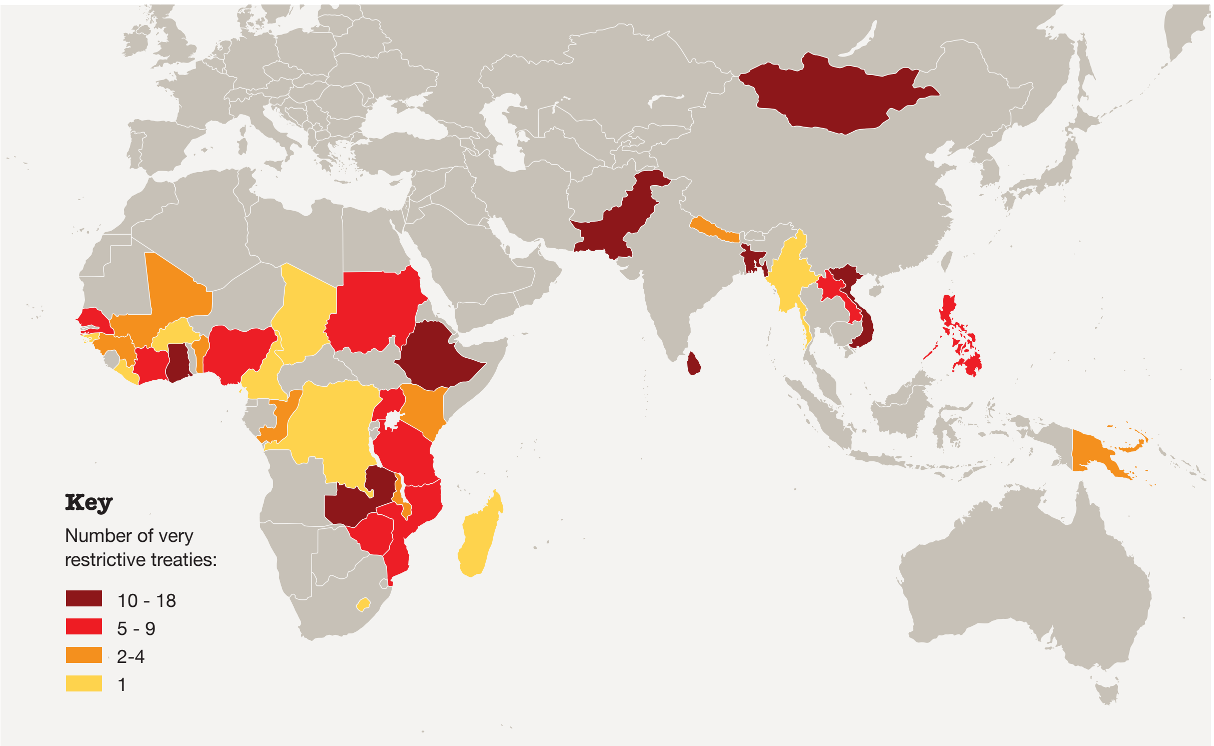
The impact of tax treaties on revenue for developing countries comes from various types of taxes especially:

1. **Profit or corporate income tax**
2. **Capital gains tax**
3. **Withholding taxes for royalties and service fees, dividend and interest payments**

This report focuses on withholding taxes – in particular the revenue effects of dividend and interest withholding taxes, for which relevant data are available (by contrast there are no comparable data available for royalties and service fees, making it impossible to estimate the revenue effects of withholding taxes for these types of payments).

Our methodology builds on the few studies that exist, and the ActionAid Tax Treaties Dataset introduced by Hearson (2016). In addition to reviewing the tax treaties with regard to how restrictive they are (see Figure 1), the dataset includes information on the dividend and interest withholding taxes used for our estimates.

Map 1: Distribution and number of very restrictive tax treaties for countries in ActionAid's Tax Treaties Dataset



Source: ActionAid, http://taxtreaties.taxpower.org/

In short, we estimate revenue losses (similar to those estimated for Bangladesh in ActionAid's Mistreated report, 2016), by taking the total dividends paid and interest payments made by each developing country to foreign shareholders in the latest year (mostly 2015) and applying to that the FDI share of each treaty partner, then calculating the effect of treaty caps on the domestic dividend or interest payment withholding tax rate.

Box 1 highlights the main limitations and assumptions – see *Estimating the Revenue Effects of Tax Treaties in Developing Countries* for full details.

Box 2: Selected assumptions and limitations of the methodology

Assumptions:

- FDI is not influenced by tax treaties.
- The distribution of FDI income reflects the distribution of FDI stock across countries.

Limitations:

- Only examines the effects of tax treaty provisions on dividends and interest payments and not on corporate income tax, capital gains, or other taxes.
- Only examines 14 developing countries for which there is information on each of the three main sources: (i) tax treaty withholding rates in the ActionAid Tax Treaties Dataset; (ii) domestic withholding tax rates according to either PwC (2017), EY (2017), or Deloitte (2017); (iii) FDI stock and income data in the IMF's Balance of Payments and Coordinated Direct Investment Survey data.

School children learn outside classrooms due to shortage of classroom blocks at M'bwetu Primary School in Malawi's capital, Lilongwe. ActionAid is on a campaign to make big multinational companies, which dodge taxes despite making huge profits in the host countries they operate in, realise that they need to pay their taxes because Corporate tax dodging denies governments the funds desperately needed to provide basic services to their people such as better education and health facilities which eventually can allow poor countries to pull themselves out of poverty.

PHOTO: ACTIONAID

3. Results - how much developing countries lose

Developing countries' losses are reported in Table 1, alongside the size of those losses relative to GDP. Table 1 shows that the biggest losses of withholding tax on outgoing interest and dividend payments in absolute terms were those of the Philippines (US$509 million) and Pakistan (US$130 million). Considering the size of the loss relative to GDP, the biggest losses attributable to double taxation agreements were those of the Philippines and Mongolia (0.17% for both).

As Table 1 shows, the estimated dividend losses are much higher than those related to interest – the majority are due to dividends, and only around 5% due to interest (the results from Table 1 are presented graphically in Figures 2, 3 and 4).

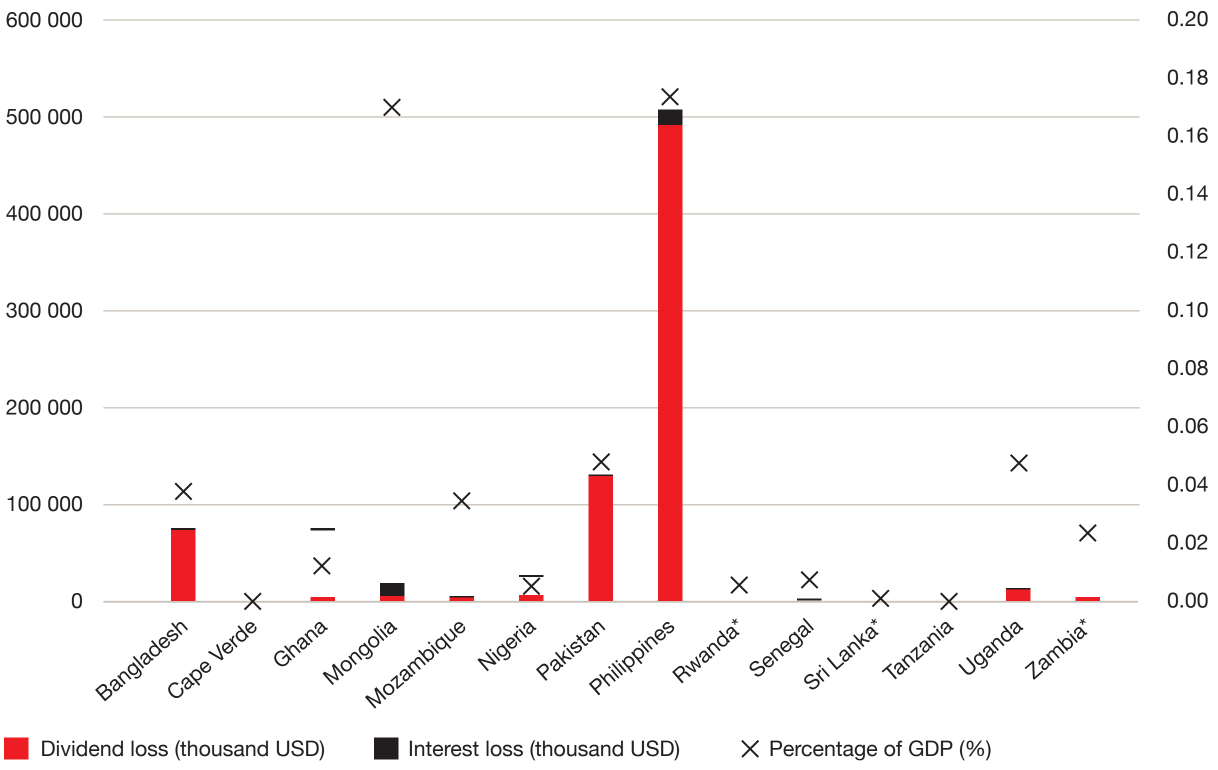
The estimates seem to be consistent with existing literature on the revenue impact of tax treaties. McGauran & Fernandez (2013) estimate dividend and interest tax revenue losses of €770 million in 2011 for developing countries as a consequence of lower withholding tax rates in developing countries' tax treaties with the Netherlands. The International Monetary Fund (IMF, 2014, p. 27) estimates tax revenue losses of US$1.6 billion in 2010 for non-OECD countries that had tax treaties with the United States. Our estimates are of a similar order. We estimate potential tax losses of Bangladesh in 2015 related to dividends at US$37 million, which is lower than the estimate of US$85 million by ActionAid (2016) for 2013. The difference is mostly explained by the fact that the total dividends paid from Bangladesh fell by a quarter between 2013 and 2015.

Table 1: Estimated revenue loss due to dividends and interest payments (US$ ’000)

Country	Year	Dividend loss	Interest loss	Combined loss	Percentage of GDP (%)
Bangladesh	2015	74,736	55	74,791	0.03834
Cape Verde	2015	0	7	7	0.00044
Ghana	2014	4,992	0	49,92	0.01293
Mongolia	2015	7,117	12,848	19,965	0.17004
Mozambique	2015	5,103	81	5,183	0.03503
Nigeria	2015	27,140	131	27,271	0.00567
Pakistan	2015	130,158	303	130,462	0.04813
Philippines	2015	492,796	16,228	509,024	0.17386
Rwanda*	2015	495	-	495	0.00599
Senegal	2014	945	227	1,172	0.00766
Sri Lanka*	2015	1,314	-	1,314	0.00163
Tanzania	2013	11	0	11	0.00003
Uganda	2015	13,021	218	13,239	0.04753
Zambia*	2015	5,090	-	5,090	0.02406

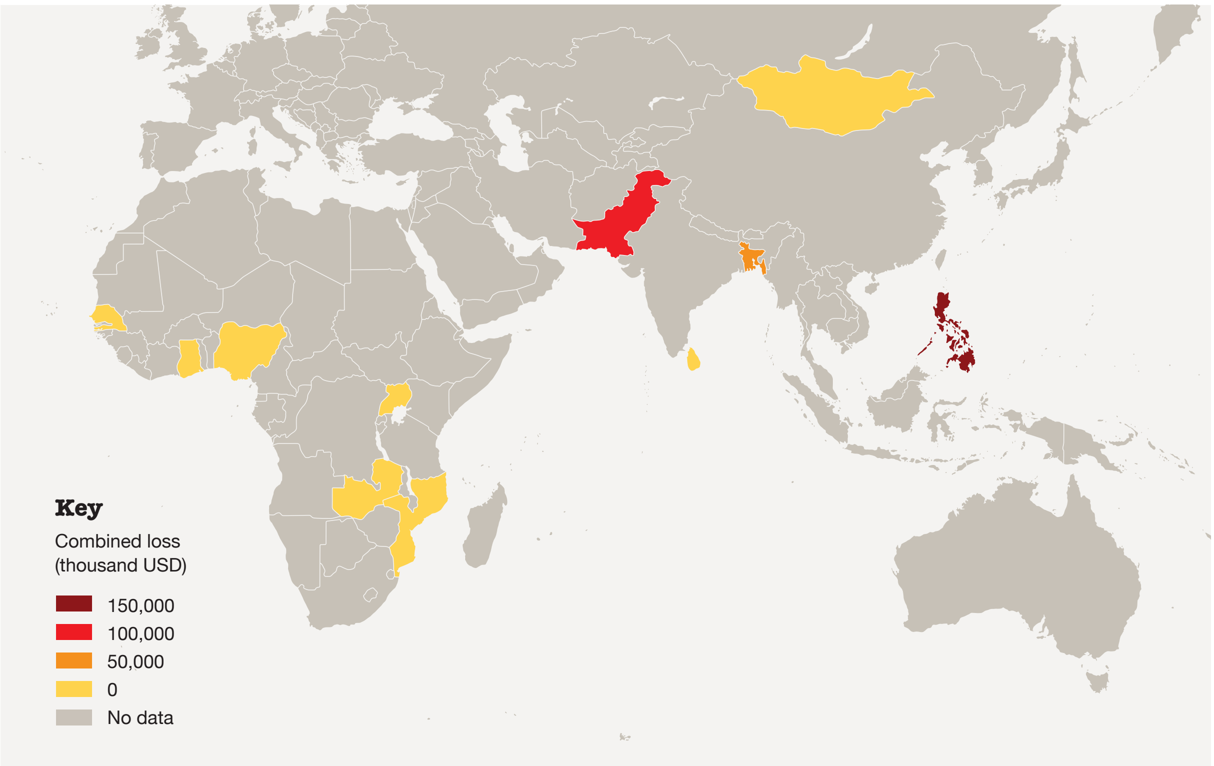
Source: Authors.
*Estimates made only on the basis of dividend data, as interest is not reported.

Figure 1: Estimated revenue loss due to dividends and interest payments



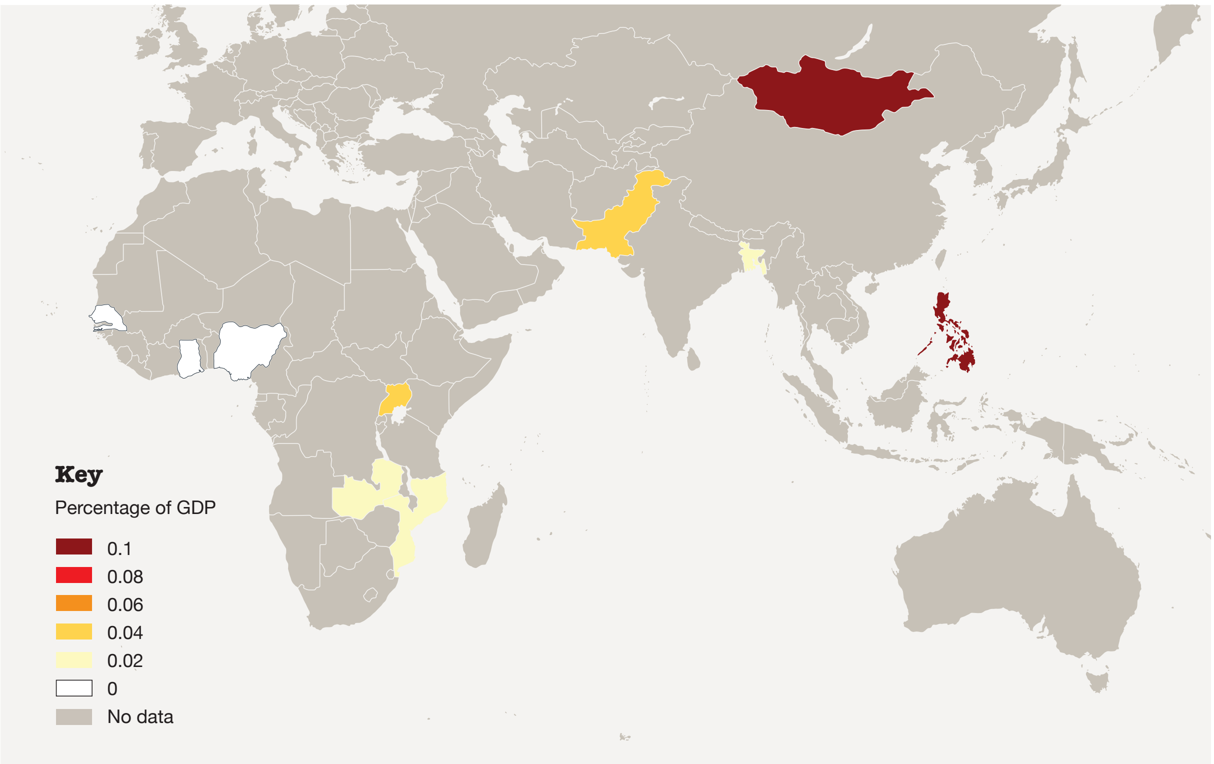
Source: Authors.
Notes: Asterisk imply that we make the estimates only on the basis of dividends data as interest is not reported, as indicated in Table 1.

Map 2: Estimated revenue loss due to dividends and interest payments (US$ '000)



Source: Authors and http://mapinseconds.com.

Map 3: Estimated revenue loss due to combination of dividends and interest payments – % GDP)



Source: Authors and http://mapinseconds.com.

In Table 2 we show which investor countries cause most of the potential revenue losses shown in Table 1. Naturally, some of the biggest investors are present in this table as well. Not surprisingly, some of the biggest investors in Philippines, including Japan, play an important role here. Japan, the Netherlands, Switzerland, and the United States are the investor countries together responsible for more than half of all the estimated potential losses.

Table 2: Top 10 investor countries associated with the highest estimated revenue losses in 14 selected developing countries, due to dividends and interests, '000 US$

Country	Dividend lost	Interest loss	Combined loss
Japan	151,960	4,144	156,104
The Netherlands	117,841	2,948	120,789
Switzerland	79,547	2,033	81,579
United States of America	70,576	2,503	73,078
Singapore	51,404	5,594	56,998
Korea, Republic of	4,408	1,655	45,764
China	35,722	3,183	38,904
United Kingdom	21,553	3,566	25,119
Saudi Arabia	16,772	27	16,799
Mauritius	15,313	147	15,461

Source: Authors.

4. Conclusions

ActionAid estimates that the annual interest and dividend withholding tax revenue losses associated with tax treaties total hundreds of millions of dollars for two countries: the Philippines (US$509 million) and Pakistan (US$130 million USD). Considering the relative indicator, i.e. the size of the loss relative to GDP, the biggest losses attributable to DTA are those of the Philippines and Mongolia (0.17% for both).

This paper outlines the limitations of our methodological approach, and thus of these estimated results. In addition to the assumptions needed for our empirical estimates, a further restriction is data availability. The data limit us in two important ways. First, we can estimate revenue effects of only selected FDI incomes (dividends and interest), for which data are available. We thus do not estimate tax revenue effects of other FDI incomes. Corporate income taxes and capital gains taxes fall outside the scope of this paper, but it follows that if these taxes had been included in the analysis, the estimated potential tax revenue losses would have been higher. Second, data and other required information are available for up to 14 developing countries and their investor countries. This is far more than the existing one-country studies, but less than what we hoped for from our aggregate, IMF data-based approach.

There are thus four conclusions with implications for next steps in both policy and future research.

First, the lack of data restricts what we can currently learn about the impact of tax treaties on developing countries' tax revenues. There are data gaps in both IMF sources and the easily accessible sources that detail domestic tax rates. Data only allow for calculating losses related to dividend and interest payments resulting from lower withholding taxes in treaties, and not those related to capital gains tax or profit shifting using royalties, management fees or other artificial costs in combination with treaty shopping and tax haven subsidiaries. If these were included, we would expect higher estimates of tax revenue losses. Policy makers and researchers should work towards closing these gaps and undertake more rigorous research, with better country coverage.

Second, our new results and the limited existing evidence suggest that the estimated impact varies across countries and, at least for some countries, the potential impact on revenues is substantial, both in absolute terms and relative to GDP.

Third, we hope that our detailed results can be used to highlight specific tax treaties in need of attention or revision by governments. This is relevant especially for those cases where estimated losses are relatively high. In this respect it is encouraging that recently, some developing countries have moved to renegotiate or terminate their tax treaties. A case in point is Mongolia, which in around 2011 decided to cancel tax treaties with the Netherlands, Luxemburg, Kuwait and the United Arab Emirates, arguably because of their high cost to government revenue (Jargalsaikhan, 2016).

Fourth, we briefly discuss implications for the design of tax treaties. Currently most treaties follow either the OECD or the UN model tax treaty. The UN model tax treaty allows developing countries to maintain significantly more taxing rights than the OECD model (ActionAid, 2016). ActionAid encourages developing-country governments to negotiate tax treaty provisions in their best interests and the suggested rates in the UN model treaty should be considered minimum standards. And for FDI that does not flow in through conduit countries, the main recommendation – directly related to our results – Is to renegotiate tax treaty provisions, especially the withholding tax rates related to interest and dividend payments associated with high revenue costs and no benefits.

To guard against the adverse effects of conduit FDI (where investments are set up to shift profits and avoid taxes in the country where the actual economic activity takes place), countries should aim to implement effective anti-abuse measures (for example, Action 6 of the OECD's Base Erosion and Profit Shifting (BEPS) framework on preventing the granting of treaty benefits in situations of treaty shopping). A further option (for lower-income countries that so far have not done so) would be to join the OECD's Multilateral Instrument. This convention to implement tax treaty-related measures to prevent base erosion and profit shifting was signed by 70 countries in June 2017. Lower-income countries should carefully consider if it is in their interest to sign it at this stage and, if so, consider making adjustments (such as not opting in to mandatory arbitration provisions, which effectively remove national courts' power in disputes on how a tax treaty should be implemented) before signing.

ActionAid calls upon developing-country governments to:

- *Collect, and offer access to, data about the broad range of tax avoidance facilitated by tax treaties.*
- *Use our, and other similar, results to identify treaties that would benefit from review.*
- *Carefully consider whether and under what conditions to sign the OECD's Multilateral Instrument.*
- *Urgently reconsider the treaties that restrict the tax rights of low- and lower-middle-income countries most.*
- *Subject treaty negotiation, ratification and impact assessments to far greater public scrutiny.*
- *Take a pro-development approach to the negotiation of tax treaties by adopting the UN model tax treaty as the minimum standard.*

References

ActionAid. (2016). *Mistreated: The tax treaties that are depriving the world's poorest countries of vital revenue.* ActionAid. Retrieved from http://www.actionaid.org/publications/mistreated-tax-treaties-are-depriving-worlds-poorest-countries-vital-revenue

Deloitte. (2017). *Corporate Tax Rates 2017.*

Hearson, M. (2016). Measuring tax treaty negotiation outcomes: the ActionAid Tax Treaties Dataset. *ICTD Working Paper, 2016*(47), 1–45.

International Monetary Fund. (2014). *Spillovers in international corporate taxation* (IMF Policy Paper). Retrieved from http://www.imf.org/external/np/pp/eng/2014/050914.pdf

Jargalsaikhan, S. (2016). Investment Treaties Between Mongolia and EU states: Implications for Mongolia's Development Prospects.

McGauran, K. (2013). Should the Netherlands sign tax treaties with developing countries? *Available at SSRN.* Retrieved from http://www.somo.nl/publications-en/Publication_3958/at_download/fullfile

Weyzig, F. (2013). *Taxation and development: Effects of Dutch tax policy on taxation of multinationals in developing countries*

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