Analysing the impact of UN and OECD Subject to Tax Rule for G-24 and South Centre Member States

Purpose of the study

- The purpose of our study is to compare the OECD and UN version of the STTR

- To estimate treaties to which this applies and revenue gains from the application of STTR

- Provide a tool kit that developing countries can use to assess based on information available to them if STTR has any gains

Data sources used

- Tax Treaty Data Explorer, ICTD
- OECD Balanced Trade in Services Data, OECD
- Global Corporate Tax Data, Tax Foundation

Methodology

- Tax treaty explorer database is used to list treaties in force with their respective withholding rates as well as the treatment of capital gains tax.

- The withholding rates in treaties and corresponding corporate tax rates prevailing in partner countries are analysed. We do not correct the numbers for related party transactions and the mark up threshold, thus the number of treaties and the revenue estimates are for UNSTTR. It can be assumed that based on further correction the OECD STTR collections will be lower. Although the rate for UNSTTR may be higher we select 9%.

Filters for margins and RPT

- Although the median mark-up in Asia exceeds 8.5%, 22 per cent of the firms report a mark-up below 8.5%. The median value of margins in Asia are 14.04 per cent for the three years, thus the application of the STTR will be relatively larger for North America. This is of course will apply alongside the criterion related to 9 per cent minimum rate.

- The 8.5% mark-up rule is particularly difficult to apply due to the complexity of verifying costs and determining whether payments meet the threshold.

- Safeguards to prevent abuse of the mark-up rule, such as through back-to-back arrangements, add further layers of complexity.

How to calculate revenue gains

$Top\ up\ tax\ on\ Export_{ij} = Export_{ij} * (9 - Gross\ tax\ paid)$

$Top\ up\ tax\ on\ Import_{ij} = Import_{ij} * (9 - gross\ tax\ rate_j)$

Gross tax rate = Nominal statutory rate in residence State + treaty withholding rates
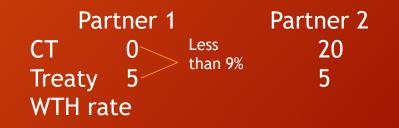
How to calculate revenue gains

1. We take the tax treaties from the ICTD tax treaty explorer database. This lists all existing treaty relationships.
2. For each of these treaties the withholding rates applicable to specific incomes is mentioned.
3. For the purpose of estimating the number of treaties to which the STTR will apply, we select interest, royalty, and capital gains articles of tax treaties.
4. The countries have been classified as South Centre and G24 member countries.
5. Thereafter the statutory corporate tax rates are compiled for the pair of countries corresponding to each treaty. This gives a full rate of tax applicable to a transaction.
6. In order to select the treaties where the STTR will be applicable the criteria used is that the sum of withholding and statutory corporate tax rate is less than 9 per cent. In order to estimate impact the following method is used- for the treaty between Country X and Y, the withholding rate applicable to the treaty X and the statutory corporate tax rate in Y are added to check if outflows from X to Y are subject to STTR. Similarly, for outflows from Y to X the corporate tax rate prevailing in X and withholding tax rates are added and checked for applicability of STTR.
    7. The income flows and the applicable tax rates are as follows:

Income: Charges for the use of intellectual property .i.e licences for the use of outcomes of research; and development; licenses to reproduce and/or distribute computer software (CIP)

Treaty Article: 12(2)C

Income: Telecommunications, computer and information services (TCI)

Treaty Article: 12(2)C

Other business services (OBS)

Treaty Article: 12 A

Results: Identifying treaty partners

Income Type	Number of South Centre and G24 Countries when minimum rate is 9%	Number of South Centre and G24 Countries when minimum rate is 15%
Interest	10	35
Interest (financial institutions)	15	40
Royalties	10	32
Royalties (copyright payments)	10	31
Royalties (use of equipment)	11	37
Technical service fees	17	102
Capital gains (land rich companies)	124	304
Capital gains (other shares)	202	502

	Partner 1		Partner 2
CT	0	Less than 9%	20
Treaty	5		5
WTH rate			

- In the case of interest and royalty - Bahrain, Guernsey and Bermuda have qualifying treaties
- 9% threshold has limited applicability, raising the rate to 15% significantly improves its coverage, potentially enabling source countries to secure a greater share of tax revenues.
- The exclusion of capital gains in the OECD STTR represents a missed opportunity, as this income type could generate substantial additional revenue for developing nations if included

Explanation of the toolkit: Step 1

	A	B	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU
						Qualifying treaties (1 it is applicable to the treaty and 0 it is not applicable to treaty based on withholding and corporate tax rate)															
				P1	P2	P1	P2	P1	P2	P1	P2	P1	P2	P1	P2	P1	P2	P1	P2	P1	P2
	Country A	Country B	Partner 2	Capital ga	Capital ga	Double_1 1(2)	Double_1 1(2)	Double_1 1(2)F	Double_1 1(2)F	Double_1 2(2)	Double_1 2(2)	Double 12(2)C	Double 12(2)C	Double 12(2)E	Double 12(2)E	Double 12(A)	Double(1 2(A)	Double 13(4)	Double 13(4)	Double 13(5)	Double 13(5)
	Turkey	Turkmenistan	8	12.5	4	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1
	Turkey	Yemen	20	12.5		0	0	0	0	0	0	0	0	0	0	0	0		0		
	Turkey	Venezuela	34	12.5	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Turkey	Ukraine	18	12.5	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Turkey	Uzbekistan	15	12.5		0	0	0	0	0	0	0	0	0	0	0	0		0		
	Turkmenistan	United States	25.768	4	0	1	0			1	0	1	0	1	0	1	0	0	0	0	0
	Turkmenistan	Uzbekistan	15	4		0	0	0	0	0	0	0	0	0	0	0	0		0		
	Turkmenistan	Ukraine	18	4	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Turkmenistan	United Kingdom	25	4	12.5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
	Turkmenistan	United Arab Emirates	9	4	4.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Uganda	United Kingdom	25	15	12.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Uganda	Zambia	30	15	0											0	0	0	0	0	0
	Ukraine	United States	25.768	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Ukraine	Uzbekistan	15	18		0	0	0	0	0	0	0	0	0	0	0	0		0		
	Ukraine	Vietnam	20	18	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Ukraine	United Arab Emirates	9	18	4.5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
	Ukraine	United Kingdom	25	18	12.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	United Arab Emirates	Yemen	20	4.5		0	0	0	0	0	0	0	0	0	0	0	0		0		
	United Arab Emirates	Uzbekistan	15	4.5		0	0	0	0	0	0	0	0	0	0	0	0		1		
	United Arab Emirates	Venezuela	34	4.5	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	United Arab Emirates	Zimbabwe	24.72	4.5	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	United Arab Emirates	Vietnam	20	4.5	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	United Kingdom	Zambia	30	12.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	United Kingdom	Zimbabwe	24.72	12.5	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	United Kingdom	Venezuela	34	12.5	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	United Kingdom	Uzbekistan	15	12.5		0	0	0	0	0	0	0	0	0	0	0	0		0		
	United Kingdom	Vietnam	20	12.5	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	United States	Uzbekistan	15	0		0	0			0	0	0	0	0	0	0	0		0		
	United States	Venezuela	34	0	17	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
	Uruguay	Vietnam	20	25	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Uzbekistan	Vietnam	20	#N/A	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

If the treaty withholding rate(WHT) +statutory corporate tax rate(CTR) <9 then treaty is said to be qualifying for STTR. We apply this for each side of the transaction, i.e. if it applies to Partner 1 or 2.

BF-BU capture this for each of the income heads

Explanation of the toolkit: Step 2

If the treaty partner 1 applies WHT+CTR<9 then partner 2 will apply the STTR. In that case we tally the number of South Centre/G24 countries that will apply STTR in that case CG-CV capture this for each of the income heads

Explanation of the toolkit: Step 3

A	B	BX	BY	BZ	CA	CB	CC	CD
		Estimating tax on services						
		Tax on services						
		CIP export_collected by Partner 2	CIP import_collected by Partner 1	TCI export_collected by partner 2	TCI import_collected by partner 1	OBS export_collected by Partner 2	OBS import_collected by partner 1	
Country A	Country B							
Turkey	Turkmenistan	0	0	0	0	0	12.4403	
Turkey	Yemen	0	0	0	0	0	0	
Turkey	Venezuela	0	0	0	0	0	0	
Turkey	Ukraine	0	0	0	0	0	0	
Turkey	Uzbekistan	0	0	0	0	0	0	
Turkmenistan	United States	1.507288	0	13.51636	0	68.61081	0	
Turkmenistan	Uzbekistan	0	0	0	0	0	0	
Turkmenistan	Ukraine	0	0	0	0	0	0	
Turkmenistan	United Kingdom	0	0	0	0	16.98994	0	
Turkmenistan	United Arab Emirates	0	0	0	0	0	0	
Uganda	United Kingdom	0	0	0	0	0	0	
Uganda	Zambia					0	0	
Ukraine	United States	0	0	0	0	0	0	
Ukraine	Uzbekistan	0	0	0	0	0	0	
Ukraine	Vietnam	0	0	0	0	0	0	
Ukraine	United Arab Emirates	0	0	0	0	0	0	
Ukraine	United Kingdom	0	0	0	0	0	0	
United Arab Emirates	Yemen	0	0	0	0	0	0	
United Arab Emirates	Uzbekistan	0	0	0	0	0	0	
United Arab Emirates	Venezuela	0	0	0	0	0	0	
United Arab Emirates	Zimbabwe	0	0	0	0	0	0	
United Arab Emirates	Vietnam	0	0	0	0	0	0	
United Kingdom	Zambia	0	0	0	0	0	0	
United Kingdom	Zimbabwe	0	0	0	0	0	0	
United Kingdom	Venezuela	0	0	0	0	0	0	
United Kingdom	Uzbekistan	0	0	0	0	0	0	
United Kingdom	Vietnam	0	0	0	0	0	0	
United States	Uzbekistan	0	0	0	0	0	0	
United States	Venezuela	0	0	0	0	0	0	
Uruguay	Vietnam	0	0	0	0	0	0	
Uzbekistan	Vietnam	0	0	0	0	0	0	
Venezuela	Vietnam	0	0	0	0	0	0	

The revenue collected will be:Payments received for exports *top up tax collected by partner country

Revenue collected will be payments made for imports *top up tax collected by the country

BX-CC for all countries; CY-DD for G24 and South Centre countries

Estimates

Service	Revenue from exports of services	Revenue from imports of services
Charges for use of intellectual property	0.026	0.0496
Telecommunications, computer and information services	9.52	0.348
Other business services	7181.09	233.08

A critical limitation highlighted in this paper is the restricted nature of publicly available data, particularly the aggregated and anonymized nature of OECD CbCR statistics, which makes precise modeling of STTR impact challenging. Access to microdata—including actual bilateral treaty provisions, related-party data, and profit margins—remains essential for accurate country-level estimates. Countries possess such data and are thus in a much better position to evaluate the true impact of different STTR designs. To support policy decisions, international cooperation on data sharing and analytical capacity building will be crucial.