
# DOUBLE TAXATION AGREEMENT (DTA) FOR DEVELOPING COUNTRIES

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# What can be done without DTA

- Unilateral measures by **Residence** country
  - Double taxation relief
    - Foreign tax credit (FTC) / exemption (territorial)
  - Limitation:
    - High source taxation (not really "double" taxation)
    - Indirect FTC (parent-subsidiary threshold)

- Unilateral measures by **Source** country
  - Align PE definition to international norm
  - Lower source taxation so that it does not exceed residence country taxation

# What requires DTA

- Ensuring consistency between the tax systems
  - Resolving differences in definitions, etc.
  - Transfer pricing (corresponding adjustment)
  - Mutual Agreement Procedures (MAP)
- Adjusting taxing rights
  - Selectively lowering source taxation
  - Adjusting FTC creditability
- Establishing trust in the tax system
  - Stability and predictability
  - Signaling effect
  - Exchange of information (EOI), assistance in collection

# Countries likely to benefit from DTA

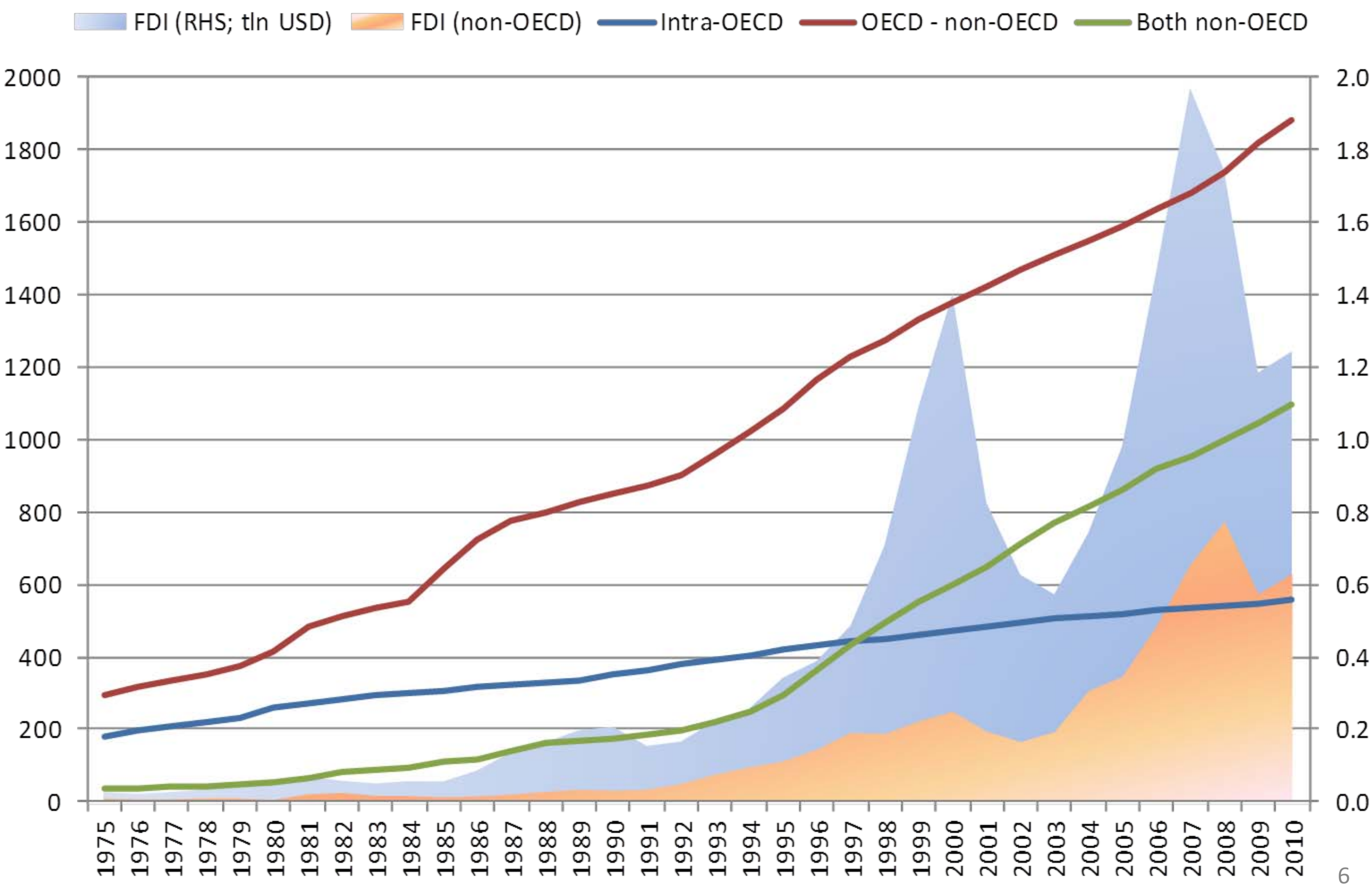
- Countries with **strong economic ties** between them
  - Large FDI flows require DTA; opposite some doubts
- Countries which weigh **facilitation of investment** flows more than revenue take
- Countries in need of winning **trust** from foreign investors
  - DTA may help, but it alone cannot address the issue
- Countries seeking appropriate taxation of investment in **natural resources**

# Pitfalls to avoid

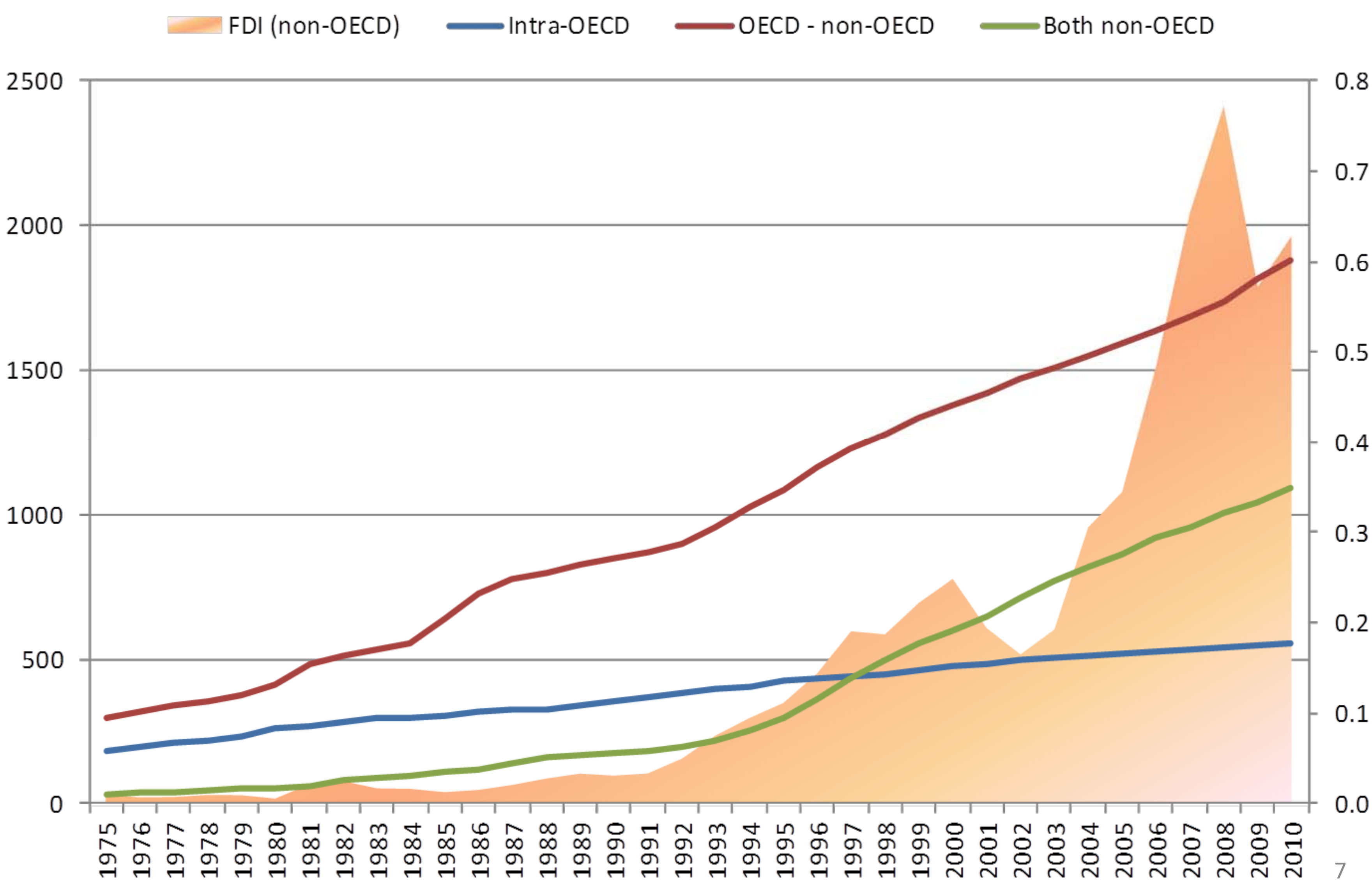
- Trying to conclude as many DTAs as possible, hoping that more DTAs will result in more FDI
  - DTAs are like traffic lights: essential infrastructure for safe and smooth flow of traffic, but putting lights in the wilderness would not invite traffic there

- Concluding a very unfavorable DTA with a country, without understanding the cost
  - Damages not limited to that particular DTA
  - The weakest link of DTA network matters

# Numbers of DTA and FDI



# Numbers of DTA and FDI



# All DTAs are different

- DTAs are adopted to specific situations of the two contracting states
- A DTA should not be analyzed in isolation
  - Domestic tax system
  - DTA network
- Too much generalization is misleading
  - Source vs. Residence
  - Territorial vs. Worldwide

# Source vs. Residence

- Four possible approaches:
  - Full taxation by Residence Country (**Full R**)
  - Full taxation by Source Country (**Full S**)
  - First by Source, then Residence Country (**2-step**)
  - Apportion (**AP**)

- No **Full R** in practice

- **2-step** may allocate the same taxing right to Source country as under **Full S**

# Territorial vs. Worldwide

- Trend from worldwide to territorial?
  - From **Full R** to **Full S**? (No, as no **Full R** in practice)
  - Is **2-step** so different from **Full S**?
    - Even under FTC regime, unless profit is actually repatriated, 2-step = Full S

- Active business income = **Full S**

- Passive income = **2-step**
  - Use CFC-type regime as necessary

# Implications for Source Country : Passive income

- NB: countries mostly apply FTC to passive income
- **2-step** = **Full S**, if $\tau_S \geq \tau_R$
- What if $\tau_S \geq \tau_R > \tau_{S\_DTA}$ ?
  - In effect, DTA converts **Full S** to **2-step**
- Does it matter?
  - Revenue loss: rate reduction = $(\tau_S - \tau_{S\_DTA})$
  - Increase investment?
    - Investors get $(\tau_S - \tau_R)$
    - Country R gets $(\tau_R - \tau_{S\_DTA})$ = transfer tax from S to R
  - Possible increase of investment, to the extent that DTA reduces Country S tax to Country R level

# Implications for Source Country: Active business income

- Same arguments as Passive, for FTC regime
- Always Full S, if Country R is territorial regime
- Allocation of benefits

| Country R regime: Benefit to | FTC | Territorial |
|---|---|---|
| Country S | $-(\tau_S - \tau_{S\_DTA})$ | |
| Investors | $\tau_S - \tau_R$ | $\tau_S - \tau_{S\_DTA}$ |
| Country R | $\tau_R - \tau_{S\_DTA}$ | 0 |

- NB: Capital Export Neutrality (CEN) holds only when (Country R = FTC) and ($\tau_S \leq \tau_R$) and (income is actually repatriated to Country R)

# Implication of DTA for Source Country

- Revenue loss: direct
- Impact on investment: indirect, uncertain
- Too low treaty rate may not benefit Country S

| Country R regime: Benefit to | FTC | Territorial (FTC on passive) |
|---|---|---|
| Passive income: | | |
| Country S | $-(\tau_S - \tau_{S\_DTA})$ | |
| Investors | $\tau_S - \tau_R$ | |
| Country R | $\tau_R - \tau_{S\_DTA}$ | |
| Active income: | | |
| Country S | $-(\tau_S - \tau_{S\_DTA})$ | |
| Investors | $\tau_S - \tau_R$ | $\tau_S - \tau_{S\_DTA}$ |
| Country R | $\tau_R - \tau_{S\_DTA}$ | 0 |

# Comparing rates

- Country S tax could easily become higher than Country R tax, because…

- Gross vs. Net
  - Treaty WHT = gross tax
  - 10% WHT = 20% net tax with 50% profit margin

- P-S dividend
  - 20% CIT on dividend paying sub
  - 10% WHT on dividend
  - Aggregate 28% tax

# Comparing rates

- Highest / lowest specified rates in DTAs
- 4 major income types
  - Portfolio dividend
  - Parent-subsidiary dividend
  - Interest
  - Royalty

Treaty Rates for Developing Countries (OECD and non-OECD partners)

| Source Country | Treaty Partner | Num. of DTAs 2/ | Lowest Treaty Rates 3/ Dividend Porfolio | Lowest Treaty Rates 3/ Dividend P-S 4/ | Lowest Treaty Rates 3/ Interest | Lowest Treaty Rates 3/ Royalty | Highest Treaty Rates 3/ Dividend Porfolio | Highest Treaty Rates 3/ Dividend P-S 4/ | Highest Treaty Rates 3/ Interest | Highest Treaty Rates 3/ Royalty |
|---|---|---|---|---|---|---|---|---|---|---|
| **All Developing Countries** | | | | | | | | | | |
| All | OECD | 1,226 | 13.3 | 8.1 | 7.5 | 7.7 | 13.5 | 8.5 | 9.6 | 9.5 |
| | Non-OECD | 1,533 | 10.8 | 7.9 | 9.0 | 9.8 | 10.9 | 8.0 | 10.0 | 10.5 |

Sources: IBFD treaty rate tables and the Fund staff calculations.

# Comparing rates

For many countries (regions), rates are higher when contracting with OECD countries…

Treaty Rates for Developing Countries (OECD and non-OECD partners)

| Source Country | Treaty Partner | Num. of DTAs 2/ | Lowest Treaty Rates 3/ | | | | Highest Treaty Rates 3/ | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Dividend | | Interest | Royalty | Dividend | | Interest | Royalty |
| | | | Porfolio | P-S 4/ | | | Porfolio | P-S 4/ | | |
| SSA | OECD | 133 | 15.0 | 9.1 | 9.7 | 9.4 | 15.0 | 9.3 | 10.4 | 9.8 |
| | Non-OECD | 149 | 10.7 | 7.4 | 8.9 | 8.6 | 10.7 | 7.4 | 9.2 | 9.0 |
| Dev_ Asia | OECD | 258 | 13.3 | 10.3 | 10.3 | 10.0 | 13.4 | 11.0 | 12.2 | 12.5 |
| | Non-OECD | 352 | 10.9 | 9.4 | 10.8 | 11.4 | 11.2 | 9.6 | 11.7 | 12.6 |
| MENA | OECD | 137 | 12.6 | 8.1 | 9.0 | 9.1 | 13.0 | 8.2 | 10.6 | 11.0 |
| | Non-OECD | 242 | 8.3 | 6.6 | 7.3 | 9.4 | 8.4 | 6.7 | 8.9 | 9.5 |

Sources: IBFD treaty rate tables and the Fund staff calculations.

# Comparing rates

… while others follow patterns similar to those of advanced economies

Treaty Rates for Developing Countries (OECD and non-OECD partners)

| Source Country | Treaty Partner | Num. of DTAs 2/ | Lowest Treaty Rates 3/ | | | | Highest Treaty Rates 3/ | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Dividend | | Interest | Royalty | Dividend | | Interest | Royalty |
| | | | Porfolio | P-S 4/ | | | Porfolio | P-S 4/ | | |
| LAC | OECD | 164 | 13.3 | 7.8 | 5.8 | 8.3 | 13.4 | 8.2 | 12.1 | 11.4 |
| | Non-OECD | 84 | 11.4 | 7.5 | 6.9 | 10.9 | 11.7 | 7.7 | 12.2 | 12.6 |
| CIS | OECD | 236 | 12.8 | 7.0 | 5.2 | 4.7 | 12.9 | 7.6 | 7.1 | 6.1 |
| | Non-OECD | 307 | 11.2 | 8.0 | 8.3 | 9.4 | 11.3 | 8.2 | 9.2 | 9.8 |
| CEE | OECD | 298 | 13.5 | 6.7 | 6.3 | 6.4 | 13.6 | 6.9 | 7.5 | 7.8 |
| | Non-OECD | 399 | 11.4 | 7.4 | 9.0 | 9.2 | 11.5 | 7.4 | 9.4 | 9.8 |
| Memo: | | | | | | | | | | |
| G7 | OECD | 197 | 14.6 | 6.9 | 3.9 | 3.4 | 14.6 | 7.7 | 7.3 | 5.9 |
| | Non-OECD | 413 | 14.2 | 9.1 | 6.8 | 6.7 | 14.3 | 9.3 | 9.8 | 9.2 |

Sources: IBFD treaty rate tables and the Fund staff calculations.

# Comparing rates

Source countries' income level (or level of development) actually reflected in higher DTA rates

Treaty Rates for Developing Countries (by income level)

| Source Country | Num. of DTAs /2 | Lowest Treaty Rates 3/ | | | | Highest Treaty Rates 3/ | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Dividend | | Interest | Royalty | Dividend | | Interest | Royalty |
| | | Porfolio | P-S 4/ | | | Porfolio | P-S 4/ | | |
| **All Developing Countries** | | | | | | | | | |
| All | 2,739 | 11.9 | 8.0 | 8.3 | 8.8 | 12.1 | 8.2 | 9.8 | 10.0 |
| **By income group:** | | | | | | | | | |
| Low | 183 | 13.4 | 9.8 | 9.7 | 9.7 | 13.4 | 10.1 | 10.8 | 10.1 |
| Lower-Middle | 798 | 12.8 | 9.2 | 9.1 | 9.8 | 13.0 | 9.6 | 10.4 | 11.0 |
| Upper-Middle | 1,395 | 11.6 | 7.6 | 8.0 | 8.5 | 11.7 | 7.8 | 9.8 | 10.0 |
| High | 363 | 10.7 | 5.9 | 6.7 | 7.4 | 10.8 | 6.0 | 7.6 | 8.0 |

Sources: IBFD treaty rate tables and the Fund staff calculations.

# DTA rates: Hypothesis

(1) The higher the income level of the **source** country, the lower the rates

(2) The higher the income level of the **residence** country, the lower the rates

(3) If the income level of the residence country is higher than that of source country, the larger the gap, the higher the rates

$$\textbf{Treaty rate} = \beta_0 + \beta_1\, \text{Income}^S + \beta_2\, \text{Income}^R + \beta_3 \max(\text{Income}^R - \text{Income}^S, 0) + \varepsilon$$

# DTA rates: Hypothesis

Results of the Econometric Analyses

| Source Country | Lowest Treaty Rates 3/ | | | | Highest Treaty Rates 3/ | | | |
|---|---|---|---|---|---|---|---|---|
| | Dividend | | Interest | Royalty | Dividend | | Interest | Royalty |
| | Porfolio | P-S 4/ | | | Porfolio | P-S 4/ | | |
| Income (source country) | -5.885 *** | -4.912 *** | -1.349 | -2.192 *** | -5.857 *** | -4.708 *** | -2.658 *** | -3.070 *** |
| | (0.776) | (0.766) | (0.910) | (0.846) | (0.778) | (0.761) | (0.869) | (0.907) |
| Income (resident country) | 1.027 | -6.307 *** | -11.245 *** | -8.138 *** | 1.403 | -6.972 *** | -5.067 *** | -5.792 *** |
| | (1.227) | (1.219) | (1.447) | (1.302) | (1.229) | (1.212) | (1.380) | (1.389) |
| Income gap | 0.826 | 5.983 *** | 9.389 *** | 5.675 *** | 0.495 | 7.051 *** | 4.131 *** | 4.312 *** |
| | (1.287) | (1.279) | (1.508) | (1.361) | (1.290) | (1.272) | (1.439) | (1.452) |
| Constant | 11.790 *** | 9.230 *** | 10.122 *** | 10.807 *** | 11.855 *** | 9.350 *** | 10.904 *** | 11.489 *** |
| | (0.147) | (0.145) | (0.152) | (0.142) | (0.147) | (0.144) | (0.145) | (0.152) |
| Adjusted R-squared | 0.077 | 0.066 | 0.088 | 0.110 | 0.077 | 0.069 | 0.033 | 0.052 |
| Number of observations | 2,566 | 2,584 | 2,507 | 2,587 | 2,568 | 2,585 | 2,530 | 2,591 |

Sources: IBFD treaty rate tables and the Fund staff calculations.

Thank you