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On the relevance of double tax treaties

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The presentation is based on a [paper](#) co-authored with Kunka Petkova (WU) and Martin Zagler (UPO University of Eastern Piedmont).

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On the relevance of double tax treaties

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158.

Staatsvertrag vom 21. Juni 1899

zwischen Österreich-Ungarn und Preußen zur Vermeidung von Doppelbesteuerungen, welche sich aus der Anwendung der für die im Reichsrathe vertretenen Königreiche und Länder, beziehungsweise für das Königreich Preußen geltenden Steuergesetze ergeben könnten.

(Abgeschlossen in Berlin am 21. Juni 1899, von Seiner k. u. l. Apostolischen Majestät ratifizirt am 24. Juni 1900, die Ratifikationen ausgetauscht in Berlin am 9. Juli 1900.)

Seine Majestät der Kaiser von Österreich, König von Böhmen etc. und Apostolischer König von Ungarn

und

Seine Majestät der Deutsche Kaiser, König von Preußen,

geleitet von dem Wunsche, Doppelbesteuerungen zu beseitigen, welche sich aus der Anwendung der für die im Reichsrathe vertretenen Königreiche und Länder, beziehungsweise für das Königreich Preußen geltenden Steuergesetze ergeben könnten, haben beschlossen, zu diesem Behufe eine Convention zu schließen und zu Ihren Bevollmächtigten ernannt:

Seine Majestät der Kaiser von Österreich, König von Böhmen etc. und Apostolischer König von Ungarn:

Den Herrn **Sabistaus Szogyény-Marich** v. Magyar-Szogyeny und Szolnacszyháza, k. u. l. Reichsrath Ihre Kammerer und wirklichen Geheimen Rath etc. etc., außerordentlichen und bevollmächtigten Bevollmächtigten bei Seiner Majestät dem Deutschen Kaiser, König von Preußen,

Seine Majestät der Deutsche Kaiser, König von Preußen:

Den Dr. **Freiherrn von Nichtrosen**, k. u. l. Reichsrath Ihre wirklichen Geheimen Legationsrath und Unterstaatssecretär des auswärtigen Amtes,

welche, nachdem sie ihre in guter und gehöriger Form besondernem Vollmachten sich mitgetheilt, über Folgendes übereingekommen sind:

Artikel 1.

Osterreichische, beziehungsweise preussische Staatsangehörige sollen vorbehaltlich der Bestimmungen in den Artikeln 2 bis 4 zu den directen Staatssteuern nur in dem Staate herangezogen werden, in welchem sie ihren Wohnsitz haben, in Ermanglung eines solchen nur in dem Staate, in welchem sie sich aufhalten.

Osterreichische, beziehungsweise preussische Staatsangehörige, welche in beiden Staaten einen Wohnsitz haben, sollen nur in ihrem Primatstaate zu den directen Staatssteuern herangezogen werden.

Ein Wohnsitz im Sinne dieser Vereinbarung ist an dem Orte anzunehmen, an welchem Jemand eine Wohnung unter Umständen innehat, welche auf die Absicht der dauernden Beibehaltung einer solchen schließen lassen.

Artikel 2.

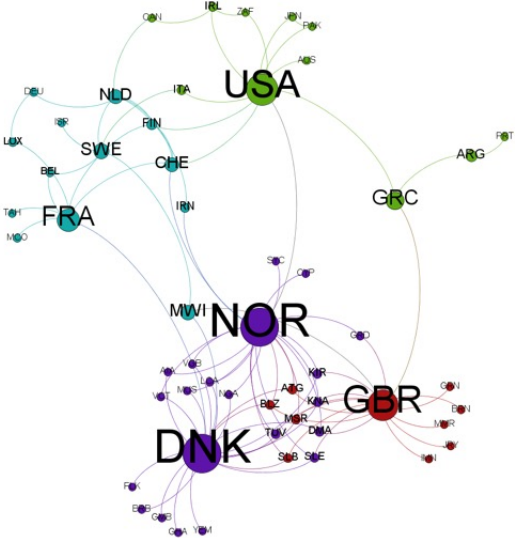
Der Grund- und Gebäudebesitz und der Betrieb eines lebenden Gewerbes, sowie das aus diesen Quellen hervührende Einkommen sollen nur in demjenigen Staate zu den directen Staatssteuern herangezogen werden, in welchem der Grund- oder Gebäudebesitz liegt, oder eine Betriebsstätte zur Ansbung des Gewerbes unterhalten wird. Als Betriebsstätten gelten Zweigniederlassungen, Fabricationsstätten, Niederlagen, Comptoire, Ein- oder Verkaufsstellen und

DTT network 1950: still very bilateral



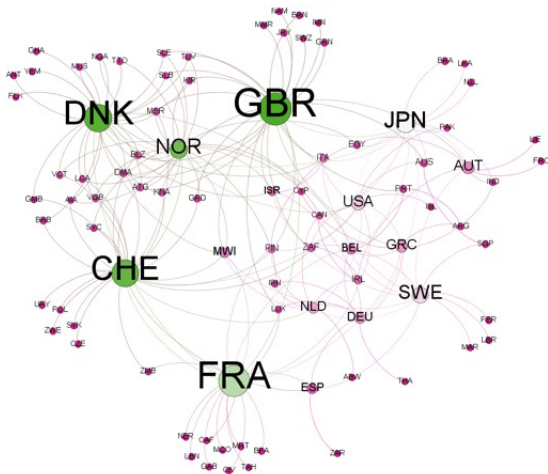
Source: CPB

DTT network 1960: first nodes arrive



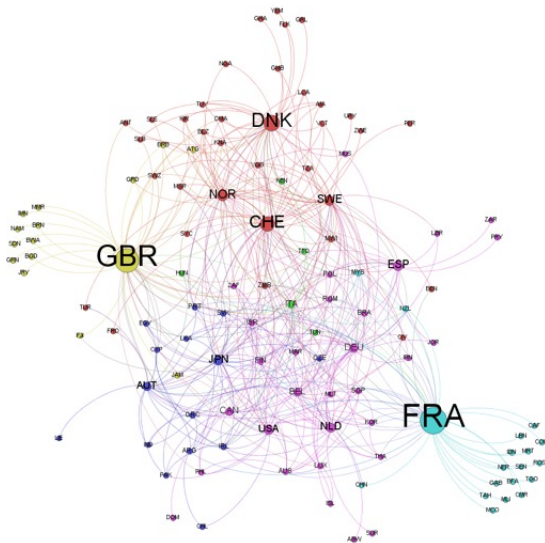
Source: CPB

DTT network 1970



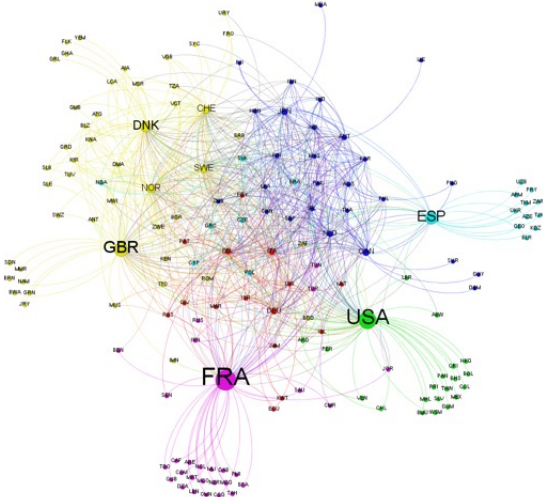
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DTT network 1980



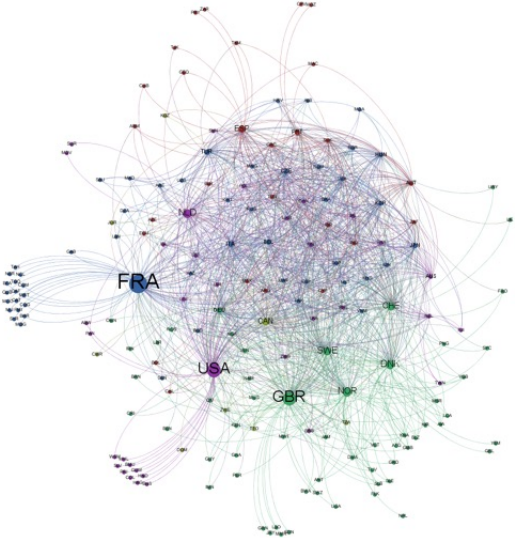
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DTT network 1990



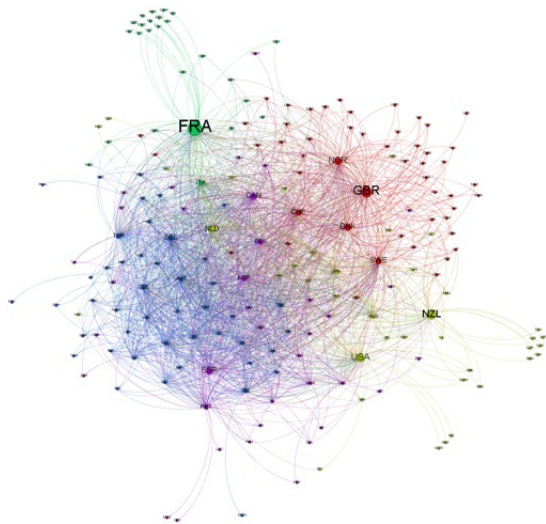
Source: CPB

DTT network 2000



Source: CPB

2011: Any one treaty is a treaty with the world (S. Shay)



Source: CPB

RQ and hypothesis

- ▶ Research question: Given the global tax treaties network, what is the effect of DTTs on FDI in the presence of treaty shopping?
- ▶ Main hypothesis: only *relevant* DTTs - i.e. tax treaties that offer investors a financial advantage over the conditions under domestic law, given the entire tax treaties network - lead to more FDI.

International Tax System: Barrios et al (2012)

- ▶ In a one-period model, where all profits are repatriated, FDI is decreasing in the relative effective tax rate T where $1 - T = (1 - t_{SR}) / (1 - t_R)$, and t_{SR} is the effective tax rate on overseas profits (Davies, 2003, 2004), with:

$$t_{SR}(\text{no relief}) = t_S + w_{SR} - t_S w_{SR} + t_R - t_S t_R \quad (1)$$

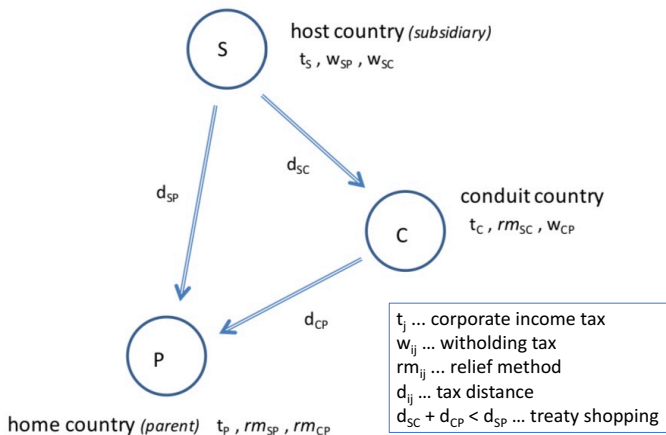
$$t_{SR}(\text{deduction}) = 1 - (1 - t_S)(1 - w_{SR})(1 - t_R) \quad (2)$$

$$t_{SR}(\text{direct credit}) = \max\{1 - (1 - t_S)(1 - w_{SR}), 1 - (1 - t_S)(1 - t_R)\} \quad (3)$$

$$t_{SR}(\text{indirect credit}) = \max\{1 - (1 - t_S)(1 - w_{SR}), t_R\} \quad (4)$$

$$t_{SR}(\text{exemption}) = 1 - (1 - t_R)(1 - w_{SR}) \quad (5)$$

Treaty shopping and the international tax system



Source: (Van't Riet & Lejour, 2017)

International Tax System: Van't Riet & Lejour (2017)

- ▶ Depending on the relief method, the combined effective tax rate t_{SR} can be then defined as $1 - (1 - t_S)(1 - d_{SR})$, where d_{SR} accounts for the tax “distance” between the two countries measured in taxes paid en route, with:

$$d_{SR}(\text{no relief}) = t_P + w_{SR} \quad (6)$$

$$d_{SR}(\text{deduction}) = 1 - (1 - w_{SR})(1 - t_R) \quad (7)$$

$$d_{SR}(\text{direct credit}) = \max\{w_{SR}, t_R\} \quad (8)$$

$$d_{SR}(\text{indirect credit}) = \max\{w_{SR}, (t_P - t_R)/(1 - t_R)\} \quad (9)$$

$$d_{SR}(\text{exemption}) = w_{SR} \quad (10)$$

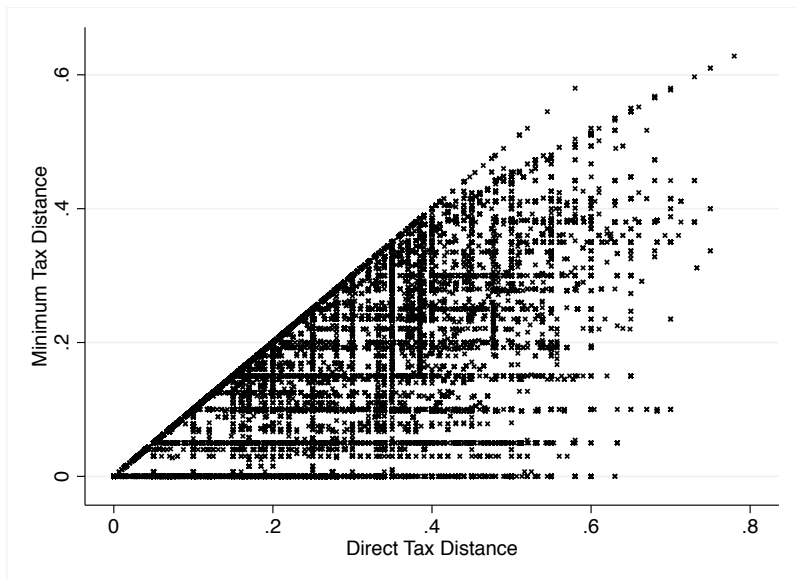
International tax network

		2005	2012
Number of countries:		138	146
Number unique country pairs:		18,906	21,170
Unilateral methods of double tax relief:	no relief	12	13
	deduction	7	7
	direct credit	37	35
	indirect credit	13	14
	exemption	69	77
Bilateral taxation (in absence of DTTs):	no relief	10%	11%
	deduction	6%	5.5%
	direct credit	29%	27%
	indirect credit	11%	10%
	exemption	44%	46.5%
Bilateral taxation (in presence of DTTs):	no relief	9%	10%
	deduction	5%	5%
	direct credit	29%	27.5%
	indirect credit	11.5%	10.5%
	exemption	45.5%	47%

Network analysis

- ▶ 146 countries between 2005 and 2012
- ▶ For every country-pair we calculate:
 - ▶ direct tax distance under domestic law
 - ▶ direct tax distance under a DTT
 - ▶ minimum indirect tax distance (up to 440 million cases!)

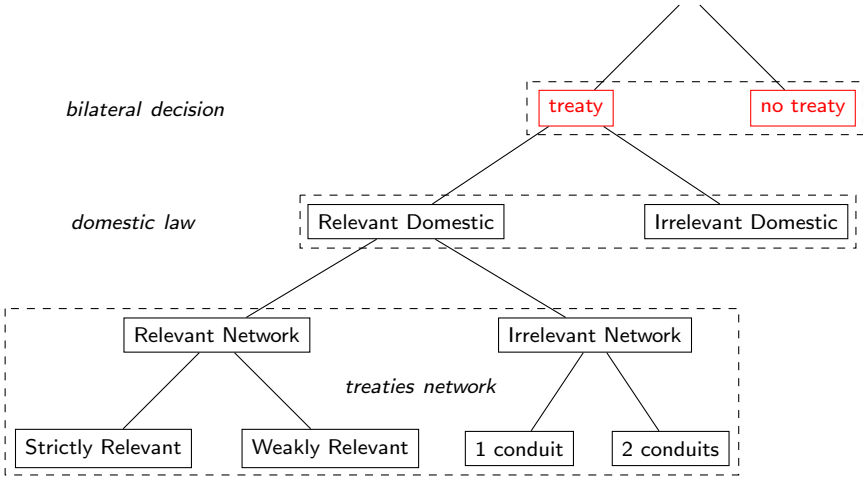
Potential gains from treaty shopping



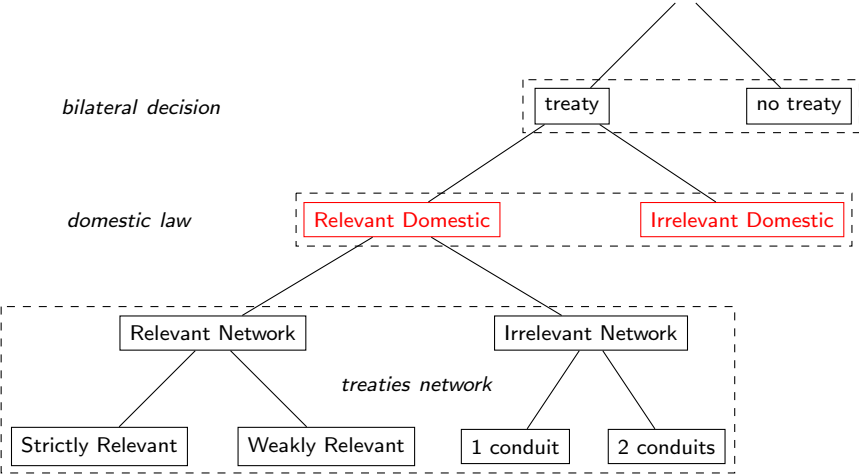
International tax network

		2005	2012
Shortest distance:	direct	55%	52.5%
	one conduit	35%	36.5%
	two conduits	10%	11%
Number of zero tax distance connections:		6,780	9,116
Share of zero tax connections:	direct	51%	47%
	one conduit	42%	43%
	two conduits	7%	10%
Number of country-pairs with an effective tax treaty:		3,439	4,539
Number of effective tax treaties per type:	relevant domestic	1,519	2,152
	irrelevant domestic	1,920	2,387
	relevant network	761	1,088
	strictly relevant	321	356
	weakly relevant	440	732
	irrelevant network	758	1,064
	irrelevant network1	722	984
irrelevant network2	36	80	

Decision



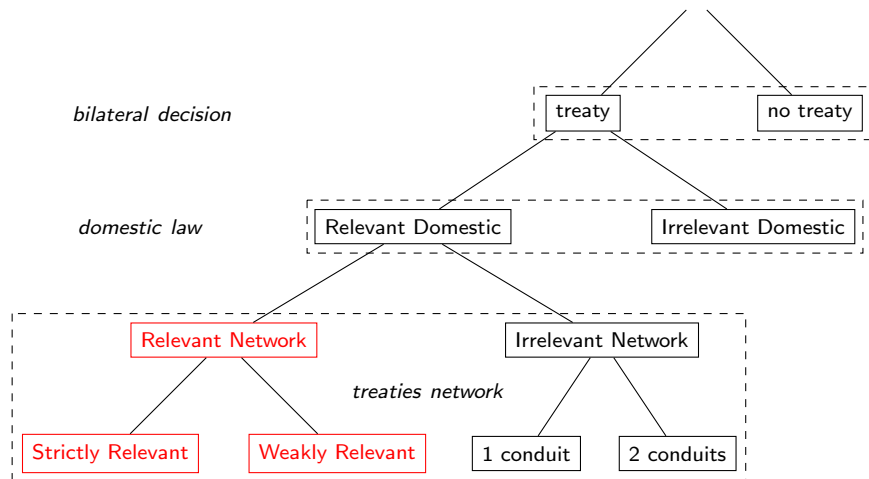
Decision



Definition of variables I

- ▶ *DirectTaxDistance*
 - ▶ the direct tax distance between any two countries taking into account a possible bilateral DTT between the two countries
- ▶ *RelevantDomestic*
 - ▶ a dummy variable indicating DTTs that offer investors a financial advantage over the conditions under domestic law
- ▶ *IrrelevantDomestic*
 - ▶ a dummy variable indicating DTTs that do not offer investors a financial advantage over the conditions under domestic law

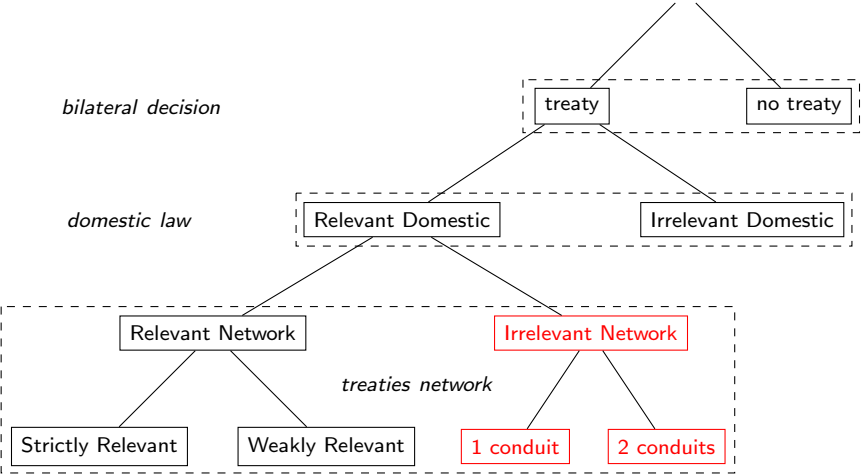
Decision



Definition of variables II

- ▶ *RelevantNetwork*
 - ▶ a dummy variable indicating tax treaties that reduce the effective tax rate on overseas profits not only below the one under domestic law, but also below the minimum one in the network
- ▶ *StrictlyRelevant*
 - ▶ a dummy variable indicating DTTs that are strictly better than the tax treaties network
- ▶ *WeaklyRelevant*
 - ▶ a dummy variable indicating DTTs that just cut the tax cost of the direct route to the minimum in the network

Decision



Definition of variables III

- ▶ *IrrelevantNetwork*
 - ▶ a dummy variable indicating tax treaties that reduce the direct tax distance, but not the minimum (indirect) tax distance between the source and the residence country
- ▶ *IrrelevantNetwork1*
 - ▶ a dummy variable indicating irrelevant DTTs where the tax minimising indirect investment route involves one conduit country
- ▶ *IrrelevantNetwork2*
 - ▶ a dummy variable indicating irrelevant DTTs where the tax minimising indirect investment route involves two conduit countries

Estimation Methodology

- ▶ Poisson Pseudo-Maximum-Likelihood-Estimation (PPML)
 - ▶ resolves null observation problem
- ▶ Home-year, host-year and country-pair fixed effects
 - ▶ accounts for any unobserved heterogeneity
 - ▶ accounts for endogeneity of DTTs
- ▶ Standard errors clustered by total inward FDI
 - ▶ controls for dependent bilateral FDI flows
- ▶ Additional control: bilateral investment treaties

Results I

	(1)	(2)	(3)	(4)	(5)	(6)
<i>BIT</i>	-0.0116 (0.0777)	-0.0096 (0.0747)	-0.0074 (0.0742)	-0.0073 (0.0740)	-0.0046 (0.0742)	-0.0050 (0.0740)
<i>DirectTaxDistance</i>	0.0415 (0.2153)	0.1549 (0.2175)	0.2490 (0.2267)	0.2483 (0.2322)	0.3242 (0.2191)	0.3295 (0.2235)
<i>Treaty</i>	0.0642 (0.0556)					
<i>IrrelevantDomestic</i>		-0.0025 (0.0541)	-0.0022 (0.0546)	-0.0023 (0.0542)	-0.0049 (0.0541)	-0.0045 (0.0538)
<i>RelevantDomestic</i>		0.1457* (0.0578)				
<i>RelevantNetwork</i>			0.1788** (0.0635)		0.1709** (0.0621)	
<i>StrictlyRelevant</i>				0.1782** (0.0647)		0.1753** (0.0642)
<i>WeaklyRelevant</i>				0.1790** (0.0652)		0.1697** (0.0637)
<i>IrrelevantNetwork</i>			0.1136 (0.0606)	0.1137 (0.0614)		
<i>IrrelevantNetwork1</i>					0.0652 (0.0597)	0.0646 (0.0603)
<i>IrrelevantNetwork2</i>					0.2297** (0.0702)	0.2294** (0.0708)

Results II

	(6)	(7)
<i>BIT</i>	-0.0050 (0.0740)	-0.0004 (0.0727)
<i>DirectTaxDistance</i>	0.3295 (0.2235)	0.4284 (0.2451)
<i>IrrelevantDomestic</i>	-0.0045 (0.0538)	-0.0268 (0.0607)
<i>StrictlyRelevant</i>	0.1753** (0.0642)	0.3520** (0.0865)
<i>WeaklyRelevant</i>	0.1697** (0.0637)	0.1857** (0.0662)
<i>IrrelevantNetwork1</i>	0.0646 (0.0603)	0.1000 (0.0859)
<i>IrrelevantNetwork2</i>	0.2294** (0.0708)	0.4348** (0.1034)
<i>DTD*IrrDomestic</i>		0.1596 (0.3168)
<i>DTD*StrictlyRel</i>		-1.5468** (0.5358)
<i>DTD*WeaklyRel</i>		0.1193 (0.6367)
<i>DTD*IrrNetwork1</i>		-0.4285 (0.6606)
<i>DTD*IrrNetwork2</i>		-3.1217** (0.9745)

Relation to the literature

- ▶ Analysis of the effects of DTTs
 - ▶ DTTs as binary variable leads to mixed results in prior literature (Blonigen & Davies, 2004; Egger, Larch, Pfaffermayr, & Winner, 2006; Egger & Merlo, 2011; Blonigen, Oldenski, & Sly, 2014)
 - ▶ limited role of DTTs in avoiding double taxation and the importance of network effects (Owens, 1962; Mintz & Weichenrieder, 2010)
- ▶ Network approach
 - ▶ international tax system (Barrios et al., 2012)
 - ▶ shortest path algorithm (Van't Riet & Lejour, 2017; Hong, 2017)
- ▶ PPML estimation
 - ▶ standard procedure in trade (Santos-Silva & Tenreyro, 2006; Anderson & Yotov, 2016)

Conclusions

- ▶ Only *relevant* tax treaties increase bilateral FDI.
 - ▶ network relevant tax treaties increase FDI by roughly 20%.
 - ▶ the effect increases with reductions in the direct tax cost at almost 8% for a 10-percentage-point tax reduction below the minimum rate in the network.
- ▶ *Irrelevant* DTTs have no impact.
 - ▶ but, extensive and intensive effect on FDI in cases where the alternative involves two conduits.

Thank you! Questions?

- ▶ Additional material

Definition of variables II

- ▶ *NetworkBenefit*
 - ▶ the reduction in the minimum tax distance between any two countries due to treaty shopping
- ▶ *NetworkConnection*
 - ▶ a dummy variable taking the value of 1 if an indirect route is cheaper than the direct route, i.e. when *NetworkBenefit* is positive

Robustness I: Network variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>IrrelevantDomestic</i>		-0.0104 (0.0538)	-0.0062 (0.0545)	-0.0063 (0.0542)	-0.0083 (0.0543)	-0.0081 (0.0540)	-0.0360 (0.0623)
<i>RelevantDomestic</i>		0.1425* (0.0568)					
<i>RelevantNetwork</i>			0.1664** (0.0646)		0.1604* (0.0641)		
<i>StrictlyRelevant</i>				0.1649** (0.0640)		0.1637** (0.0638)	0.3365** (0.0887)
<i>WeaklyRelevant</i>				0.1675* (0.0715)		0.1581* (0.0711)	0.1641* (0.0727)
<i>IrrelevantNetwork</i>			0.1259* (0.0621)	0.1259* (0.0621)			
<i>IrrelevantNetwork1</i>					0.0767 (0.0609)	0.0765 (0.0610)	0.1277 (0.0902)
<i>IrrelevantNetwork2</i>					0.2379** (0.0711)	0.2380** (0.0710)	0.4557** (0.1059)
<i>DTD*IrrDomestic</i>							0.2086 (0.3234)
<i>DTD*Dominant</i>							-1.4972** (0.5529)
<i>DTD*Neutral</i>							0.1026 (0.6397)
<i>DTD*IrrNetwork1</i>							-0.5699 (0.6821)
<i>DTD*IrrNetwork2</i>							-3.2327** (0.9846)
<i>NetworkConnection</i>	-0.0689 (0.0369)	-0.0732* (0.0368)	-0.0414 (0.0519)	-0.0405 (0.0573)	-0.0354 (0.0511)	-0.0371 (0.0567)	-0.0544 (0.0601)
<i>NetworkBenefit</i>	0.3393 (0.3183)	0.4266 (0.3066)	0.3640 (0.3277)	0.3668 (0.3379)	0.3111 (0.3213)	0.3049 (0.3299)	0.2820 (0.3466)

Robustness II: Clustered standard errors by total home outward FDI: (2) and (5); and country pair: (3) and (6)

	(1)	(2)	(3)	(4)	(5)	(6)
<i>BIT</i>	-0.0050 (0.0740)	-0.0050 (0.0623)	-0.0050 (0.0915)	-0.0004 (0.0727)	-0.0004 (0.0625)	-0.0004 (0.0906)
<i>DirectTaxDistance</i>	0.3295 (0.2235)	0.3295 (0.2479)	0.3295 (0.3213)	0.4284 (0.2451)	0.4284 (0.2641)	0.4284 (0.3503)
<i>IrrelevantDomestic</i>	-0.0045 (0.0538)	-0.0045 (0.0661)	-0.0045 (0.0678)	-0.0268 (0.0607)	-0.0268 (0.0725)	-0.0268 (0.0792)
<i>StrictlyRelevant</i>	0.1753** (0.0642)	0.1753** (0.0651)	0.1753* (0.0768)	0.3520** (0.0865)	0.3520** (0.0887)	0.3520** (0.1078)
<i>WeaklyRelevant</i>	0.1697** (0.0637)	0.1697** (0.0639)	0.1697** (0.0658)	0.1857** (0.0662)	0.1857** (0.0722)	0.1857* (0.0773)
<i>IrrelevantNetwork1</i>	0.0646 (0.0603)	0.0646 (0.0613)	0.0646 (0.0769)	0.1000 (0.0859)	0.1000 (0.0891)	0.1000 (0.1187)
<i>IrrelevantNetwork2</i>	0.2294** (0.0708)	0.2294** (0.0747)	0.2294* (0.1109)	0.4348** (0.1034)	0.4348** (0.1002)	0.4348** (0.1550)
<i>DTD*IrrDomestic</i>				0.1596 (0.3168)	0.1596 (0.3303)	0.1596 (0.4608)
<i>DTD*Dominant</i>				-1.5468** (0.5358)	-1.5468** (0.4409)	-1.5468* (0.7646)
<i>DTD*Neutral</i>				0.1193 (0.6367)	0.1193 (0.6988)	0.1193 (0.8668)
<i>DTD*IrrNetwork1</i>				-0.4285 (0.6606)	-0.4285 (0.6834)	-0.4285 (0.8946)
<i>DTD*IrrNetwork2</i>				-3.1217** (0.9745)	-3.1217** (0.7613)	-3.1217* (1.3682)

Robustness III: Intervals: from '05 (2) and (5); and from '06 (3) and (6)

	(1)	(2)	(3)	(4)	(5)	(6)
<i>BIT</i>	-0.0050 (0.0740)	0.0386 (0.1008)	-0.0467 (0.1122)	-0.0004 (0.0727)	0.0403 (0.0992)	-0.0399 (0.1098)
<i>DirectTaxDistance</i>	0.3295 (0.2235)	-0.0615 (0.3144)	0.7260* (0.2905)	0.4284 (0.2451)	0.0661 (0.3363)	0.8065* (0.3233)
<i>IrrelevantDomestic</i>	-0.0045 (0.0538)	0.0189 (0.0920)	-0.0198 (0.0564)	-0.0268 (0.0607)	-0.0100 (0.1053)	-0.0376 (0.0630)
<i>StrictlyRelevant</i>	0.1753** (0.0642)	0.1176 (0.1050)	0.2691** (0.0796)	0.3520** (0.0865)	0.3201* (0.1329)	0.4353** (0.1173)
<i>WeaklyRelevant</i>	0.1697** (0.0637)	0.1289 (0.0919)	0.2436** (0.0839)	0.1857** (0.0662)	0.1538 (0.1002)	0.2377** (0.0835)
<i>IrrelevantNetwork1</i>	0.0646 (0.0603)	0.0122 (0.0917)	0.1519 (0.0820)	0.1000 (0.0859)	-0.0434 (0.1206)	0.2392* (0.1121)
<i>IrrelevantNetwork2</i>	0.2294** (0.0708)	0.1561 (0.1224)	0.2962** (0.1077)	0.4348** (0.1034)	0.2991 (0.1829)	0.4346** (0.1560)
<i>DTD*IrrDomestic</i>				0.1596 (0.3168)	0.3045 (0.4485)	0.0448 (0.4468)
<i>DTD*Dominant</i>				-1.5468** (0.5358)	-1.5740* (0.6826)	-1.6764* (0.8437)
<i>DTD*Neutral</i>				0.1193 (0.6367)	-0.7298 (0.8598)	1.1918 (0.7639)
<i>DTD*IrrNetwork1</i>				-0.4285 (0.6606)	0.8514 (0.7789)	-1.3220 (0.8769)
<i>DTD*IrrNetwork2</i>				-3.1217** (0.9745)	-2.2510 (1.4541)	-1.9294 (1.6031)

Robustness IV: FDI sample zero (2) and (5); and Tax Havens (3) and (6)

	(1)	(2)	(3)	(4)	(5)	(6)
<i>BIT</i>	-0.0050 (0.0740)	0.0159 (0.0742)	-0.0111 (0.0783)	-0.0004 (0.0727)	0.0200 (0.0731)	-0.0073 (0.0767)
<i>DirectTaxDistance</i>	0.3295 (0.2235)	0.3305 (0.2231)	-0.1425 (0.3102)	0.4284 (0.2451)	0.4183* (0.2450)	0.3604 (0.3161)
<i>IrrelevantDomestic</i>	-0.0045 (0.0538)	-0.0031 (0.0538)	-0.0621 (0.0671)	-0.0268 (0.0607)	-0.0249 (0.0608)	-0.0541 (0.0817)
<i>StrictlyRelevant</i>	0.1753** (0.0642)	0.1780** (0.0642)	0.1298 (0.0765)	0.3520** (0.0865)	0.3456** (0.0863)	0.3604** (0.1116)
<i>WeaklyRelevant</i>	0.1697** (0.0637)	0.1720** (0.0636)	0.0911 (0.0707)	0.1857** (0.0662)	0.1828** (0.0661)	0.1739* (0.0836)
<i>IrrelevantNetwork1</i>	0.0646 (0.0603)	0.1680 (0.1603)	-0.0155 (0.0683)	0.1000 (0.0859)	0.0796 (0.0858)	0.1451 (0.1012)
<i>IrrelevantNetwork2</i>	0.2294** (0.0708)	0.2331** (0.0707)	-0.0220 (0.0704)	0.4348** (0.1034)	0.4310** (0.1039)	0.2730** (0.0958)
<i>DTD*IrrDomestic</i>				0.1596 (0.3168)	0.1626 (0.3166)	-0.0981 (0.3722)
<i>DTD*Dominant</i>				-1.5468** (0.5358)	-1.4771** (0.5364)	-1.7613** (0.5481)
<i>DTD*Neutral</i>				0.1193 (0.6367)	0.1690 (0.6286)	-0.3265 (0.6000)
<i>DTD*IrrNetwork1</i>				-0.4285 (0.6606)	-0.1214 (0.6635)	-1.7491** (0.7109)
<i>DTD*IrrNetwork2</i>				-3.1217** (0.9745)	-3.0341** (0.9992)	-3.5289** (0.8509)

Robustness V: Lagged FDI: one-year (2) and (5); and two-year (3) and (6)

	(1)	(2)	(3)	(4)	(5)	(6)
<i>BIT</i>	-0.0050 (0.0740)	-0.0259 (0.0773)	-0.0487 (0.0741)	-0.0004 (0.0727)	-0.0215 (0.0760)	-0.0499 (0.0736)
<i>DirectTaxDistance</i>	0.3295 (0.2235)	0.4441* (0.2264)	0.3974 (0.2478)	0.4284 (0.2451)	0.4852* (0.2449)	0.3876 (0.2613)
<i>IrrelevantDomestic</i>	-0.0045 (0.0538)	0.0231 (0.0543)	-0.0103 (0.0533)	-0.0268 (0.0607)	-0.0066 (0.0598)	-0.0332 (0.0576)
<i>StrictlyRelevant</i>	0.1753** (0.0642)	0.2326** (0.0745)	0.2032** (0.0743)	0.3520** (0.0865)	0.3944** (0.0947)	0.3549** (0.0982)
<i>WeaklyRelevant</i>	0.1697** (0.0637)	0.2208** (0.0768)	0.2099** (0.0679)	0.1857** (0.0662)	0.2178** (0.0750)	0.2312** (0.0690)
<i>IrrelevantNetwork1</i>	0.0646 (0.0603)	0.1226* (0.0740)	0.0889 (0.0696)	0.1000 (0.0859)	0.1453 (0.1013)	0.1036 (0.1092)
<i>IrrelevantNetwork2</i>	0.2294** (0.0708)	0.2022* (0.0943)	0.2351* (0.0945)	0.4348** (0.1034)	0.4108** (0.1278)	0.4906** (0.1241)
<i>DTD*IrrDomestic</i>				0.1596 (0.3168)	0.2660 (0.3196)	0.4419 (0.3231)
<i>DTD*Dominant</i>				-1.5468** (0.5358)	-1.4004* (0.5794)	-0.9765 (0.6631)
<i>DTD*Neutral</i>				0.1193 (0.6367)	0.8787 (0.7058)	0.1720 (0.7508)
<i>DTD*IrrNetwork1</i>				-0.4285 (0.6606)	-0.3352 (0.7650)	0.0395 (0.8395)
<i>DTD*IrrNetwork2</i>				-3.1217** (0.9745)	-3.0341** (1.1087)	-4.0042** (1.0958)
<i>LagFDI1year</i>		1.21e-06** (3.12e-07)	1.64e-06** (3.19e-07)		1.17e-06** (3.07e-07)	1.60e-06** (3.15e-07)
<i>LagFDI2years</i>			-1.01e-06* (3.96e-07)			-1.03e-06** (3.92e-07)

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