

Which Countries Export FDI, and How Much?

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What is this section about:

In this section we estimate jointly the “which” and the “how much” questions in order to identify the role of setup costs in an economy with heterogeneity in countries’ productivity of capital. We show that this affects both outcomes in opposite direction as projected by the setup costs model.

Motivation:

Facts:

- i. The selection into source and host countries is often treated as exogenous.
- ii. Pairs with no FDI flows are ignored or treated as “zeros”. If setup costs are relevant this is not a trivial assumption to impose.
- iii. This is especially relevant given the fact that the fraction of pairs with no FDI flows is relatively large.
 - a. Out of $45 \times 44 = 1980$ source-host pairs of countries with potential bilateral FDI flows the number of pairs with actual flows is only 334!
 - b. OECD sub-sample the fraction of pairs actual flows less than one third.

Implications:

1. As for the "State of the Art": Standard FDI gravity equations generate biased estimators.
2. As for better understanding of the questions in the title: It is possible to distinguish between alternative theories.

By correcting for selection bias (Heckman selection model) we:

3. Standard: Generate unbiased estimators
and:
2. Less standard: Use the selection model to estimate the role of setup costs.

A simple statistical model

The flows equation

Denote by $Y_{i,j,t}$ the flow of FDI from source country i to host country j in period t .

To simplify, and without losing generality, let us assume that in a world with *no setup costs* exhibits the following linear form:

(1)

$$Y_{i,j,t} = X_{F,i,j,t}\beta + U_{F,i,j,t},$$

where:

$X_{i,j,t}$ is a vector of observed variables

β is the ceteris paribus effect of $X_{i,j,t}$ on $Y_{j,i,t}$

$U_{i,j,t}$ the error term, which is composite of unobserved heterogeneity (productivity) and i.i.d. random shocks which are pairwise-specific.

The error term $U_{F,i,j,t}$ is a composite of (i) unobserved (time-invariant) heterogeneity, and (ii) i.i.d. random shocks which are pairwise-specific ($\eta_{i,j,t}$).

That is:

(2)

$$U_{F,i,j,t} = \theta_{i,j}(\varepsilon_{i,j}) + \eta_{i,j,t}(\Delta\varepsilon_{i,j,t}),$$

The "profits" equation

Let $Z_{i,j,t}$ be a *latent* variable, indicating the maximized profit (π) from the direct investment made in host country j , by a firm in the source country i , in period t .

We assume that $Z_{i,j,t}$ exhibits the following linear form:

(3)

$$Z_{i,j,t} = X_{S,i,j,t}\gamma + U_{S,i,j,t},$$

where:

α is the ceteris paribus effect of $X_{S,i,j,t}$ on $Z_{j,i,t}$

$V_{i,j,t}$ the error term, which is composite of unobserved heterogeneity (productivity) and i.i.d. random shocks which are pairwise-specific.

The error term $U_{S,i,j,t}$, in the profit equation, is a composite of (i) the unobserved setup costs and (ii) the pairwise-specific π shocks ($v_{i,j,t}$):

(4)

$$U_{S,i,j,t} = C_{ij}(\varepsilon_{ij}) + v_{i,j,t}(\Delta\varepsilon_{i,j,t}),$$

where, $C'_{ij}(\varepsilon_{ij}) < 0$. We further assume that, for a *random* sample, the classical assumptions regarding the error term do hold.

In particular, we assume that:

$$E(U_{F,i,j,t} \mid X_{F,i,j,t}) = E(U_{F,i,j,t}) = 0,$$

and

$$E(U_{S,i,j,t} \mid X_{S,i,j,t}) = E(U_{S,i,j,t}) = 0,$$

and that:

$$U_{F,i,j,t} \sim N(0, \sigma_{U_F}^2),$$

$$U_{S,i,j,t} \sim N(0, \sigma_{U_S}^2).$$

We further assume that the cross-equation error terms $U_{F,i,j,t}$ and $U_{S,i,j,t}$ follow a bivariate normal distribution:

$$\left(U_{F,i,j,t}, U_{S,i,j,t} \right) \sim N(0, \Omega),$$

with respective variances σ_U^2 and σ_V^2 :

$$\Omega = \begin{vmatrix} \sigma_{U_F}^2 & \rho \cdot \sigma_{U_F} \cdot \sigma_{U_S} \\ & \sigma_{U_S}^2 \end{vmatrix},$$

whereas, ρ is the correlation between the cross-equation error terms.

The "participation" equation

Now, according to our model, FDI flows ($Y_{i,j,t}$) are positive, if and only if $Z_{i,j,t} \geq 0$. Denote by a binary $D_{i,j,t}$, whether or not country i exports positive FDI flows to country j at time t (the FDI participation variable) by:

(5)

$$D_{i,j,t} = \left\{ \begin{array}{ll} 1 & \text{if } Z_{i,j,t} \geq 0 \\ 0 & \text{otherwise.} \end{array} \right\}.$$

Note that whereas $Z_{i,j,t}$ is *not* observed, the binary variable $D_{i,j,t}$ is indeed observed. Assuming that the errors in the underlying latent equation are distributed normally:

$$U_{S,i,j,t} \sim N(0, \sigma_{U_S}^2),$$

The probability setup for the probit equation exhibits the following form:

(6)

$$\Pr(D_{i,j,t} = 1 \mid \cdot) = \Phi(X_{S,i,j,t}\gamma).$$

where Φ is the cdf of the unit normal distribution.

Setup Costs and Selection Bias

The (statistical) population-regression function for Equation (1) is:

(7)

$$E(Y_{i,j,t} \mid X_{F,i,j,t}) = X_{F,i,j,t}\beta.$$

The regression function for the *sub-sample* of countries, for which we do indeed observe positive FDI flows is:

(8)

$$E(Y_{i,j,t} \mid X_{F,i,j,t}, D_{i,j,t} = 1) = X_{F,i,j,t}\beta + E(U_{F,i,j,t} \mid D_{i,j,t} = 1)$$

If $U_{F,i,j,t}$ and $U_{S,i,j,t}$ are correlated then the mean of the error term in the flow equation (9) will be a function of the error term in the profit equation (3). If $U_{F,i,j,t}$ and $U_{S,i,j,t}$ follow a bivariate normal distribution with correlation ρ and with respective variances $\sigma_{U_F}^2$ and $\sigma_{U_S}^2$ then the expected volume of FDI flows from the source country i into the host country j in equation (9) equals to:

(9)

$$E(Y_{i,j,t} \mid X_{F,i,j,t}, D_{i,j,t} = 1) = X_{F,i,j,t}\beta + \rho \cdot \frac{\sigma_{U_F}}{\sigma_{U_S}} \cdot \lambda_{i,j,t}.$$

The $\lambda_{i,j,t}$, the inverse Mill's ratio, equals to:

(10)

$$\lambda_{i,j,t} \equiv E(U_{S,i,j,t} \mid U_{S,i,j,t} \geq -X_{S,i,j,t}\gamma) = \frac{\phi\left(\frac{-X_{S,i,j,t}\gamma}{\sigma_{U_S}}\right)}{1 - \Phi\left(\frac{-X_{S,i,j,t}\gamma}{\sigma_{U_S}}\right)} = \frac{\phi\left(\frac{X_{S,i,j,t}\gamma}{\sigma_{U_S}}\right)}{\Phi\left(\frac{X_{S,i,j,t}\gamma}{\sigma_{U_S}}\right)},$$

where ϕ and Φ are the unit normal density and distribution functions respectively.

The bias term, in the population, equals to the partial derivative of the *conditional* expectation of U with respect to X :

(11)

$$bias = \frac{\partial E(U_{F,i,j,t} \mid U_{S,i,j,t} \geq -X_{S,i,j,t}\gamma)}{\partial x_{F,i,j,t}} = \rho \cdot \frac{\sigma_{U_F}}{\sigma_{U_S}} \cdot \frac{\partial \lambda_{i,j,t}}{\partial x_{F,i,j,t}}$$

or:

(12)

$$bias = -\gamma \cdot \rho \cdot \frac{\sigma_{U_F}}{\sigma_{U_S}} \cdot \delta_{i,j,t},$$

Figure 1: Selection Bias in theand Setup costs Presence of Setup Costs

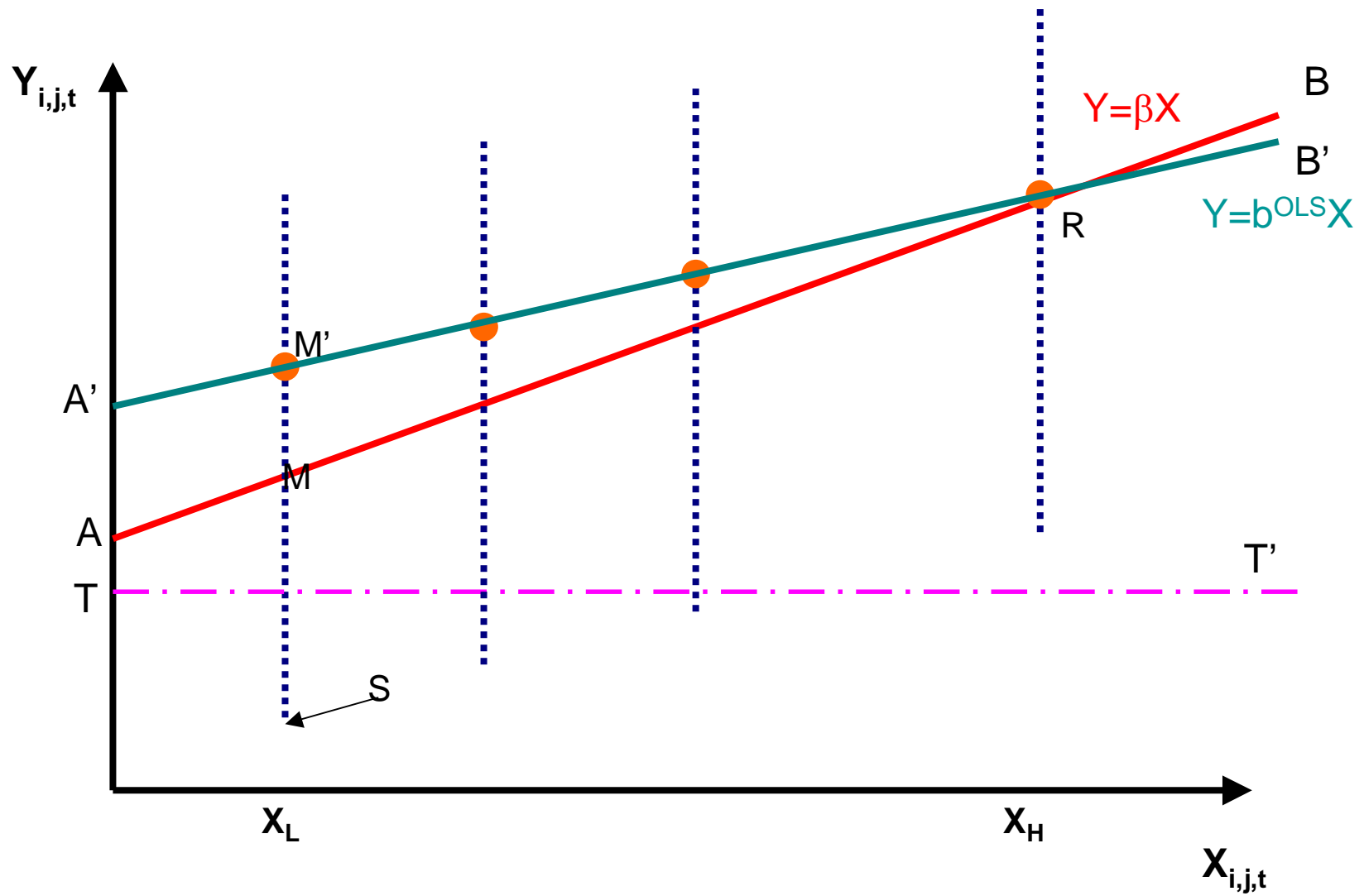


Figure 2:
Fraction of OECD Countries which Serve as a Host to FDI Inflows from other OECD Countries,
Ranked by GDP per Capita.

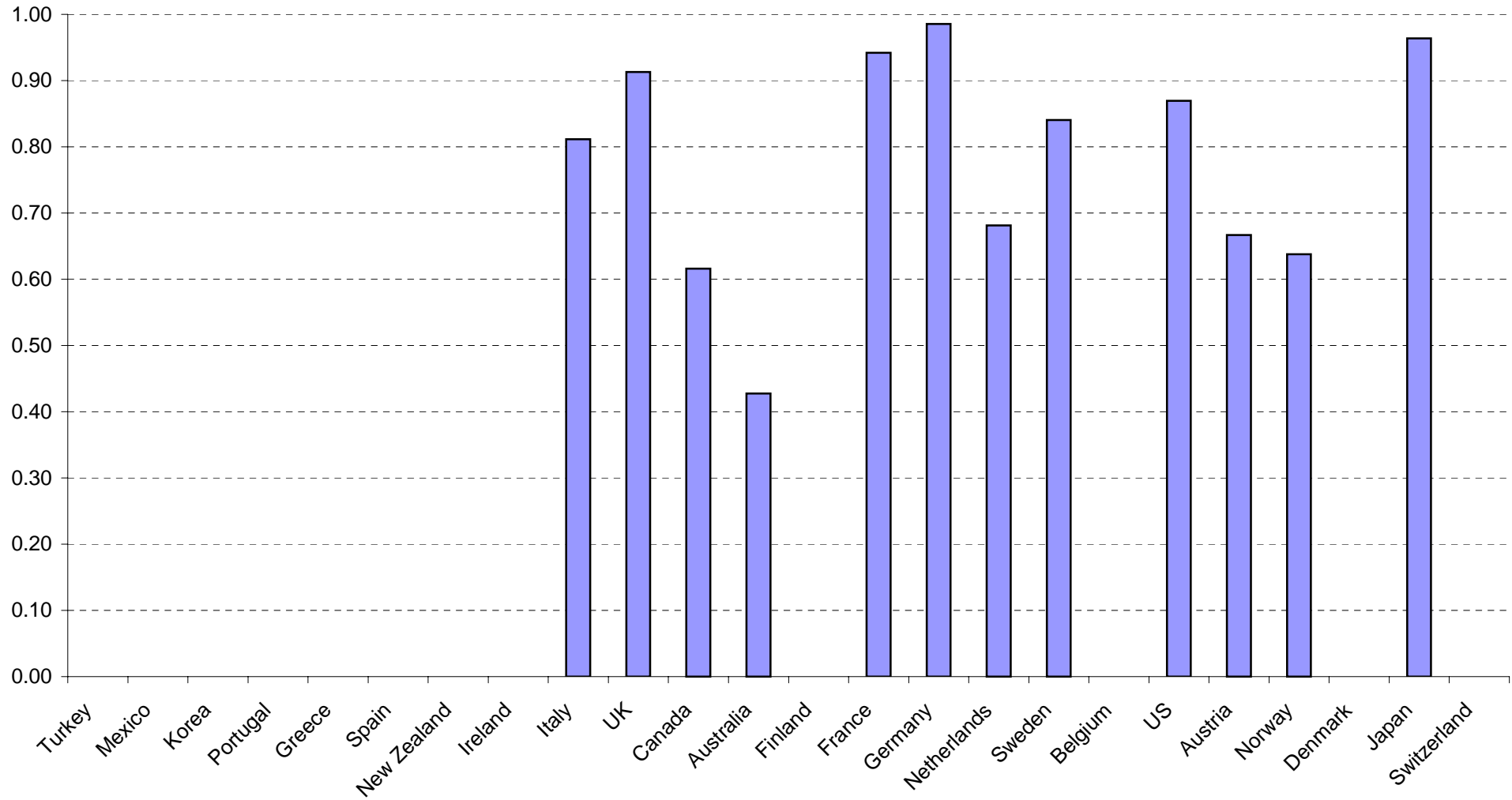


Table 1: Number of Source-Host country Pairs by GDP per capita

Host / Source	Turkey	Mexico	Korea	Portugal	Greece	Spain	New Zealand	Ireland	Italy	UK	Canada	Australia	Finland	France	Germany	Netherlands	Sweden	Belgium	US	Austria	Norway	Denmark	Japan	Switzerland	
Turkey			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Korea	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Portugal	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Greece	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spain	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Zealand	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ireland	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Italy	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
UK	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Canada	0	1	1	1	1	1	1	1	1	1		1	0	1	1	1	1	1	1	1	1	1	1	1	1
Australia	1	0	1	0	0	0	1	1	1	1	1		0	1	1	1	0	1	1	0	0	0	1	1	1
Finland	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
France	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1
Germany	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1
Netherlands	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1
Sweden	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1
Belgium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
US	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1
Austria	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1
Norway	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1
Denmark	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
Japan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1
Switzerland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Average	0.48	0.48	0.52	0.48	0.48	0.48	0.48	0.52	0.48	0.48	0.48	0.48	0.43	0.48	0.48	0.48	0.43	0.52	0.48	0.43	0.43	0.48	0.48	0.52	

Table 2: Source-Host country Pairs by GDP per capita: FDI Flows in Percentage of GDP

Host / Source	Turkey	Mexico	Korea	Portugal	Greece	Spain	Netherlands	Ireland	Iceland	UK	Canada	Australia	Finland	France	Germany	Netherlands	Sweden	Belgium	US	Austria	Norway	Denmark	Japan	Switzerland
Italy	0.7	0.3	0.1	3.6	1.5	2.5	0.0	5.7		2.7	0.5	0.2	0.3	2.2	0.4	12.2	0.8	20.1	0.4	1.1	0.2	0.3	0.1	7.8
UK	4.5	3.5	0.7	12.0	8.0	8.8	32.3	52.1	3.5		9.6	27.1	1.0	6.9	2.4	62.7	8.7	15.8	10.7	2.1	15.6	3.6	0.4	17.3
Canada	0.0	1.7	0.1	0.4	0.3	0.4	7.8	32.1	0.2	3.8		2.2	0.0	0.7	0.2	1.6	1.3	3.1	4.0	0.6	0.4	0.1	0.1	1.0
Australia	0.0	0.0	0.1	0.0	0.0	0.0	43.7	4.4	0.2	5.8	1.0		0.0	0.0	0.0	1.2	0.0	0.2	1.2	0.0	0.0	0.0	0.0	0.0
Finland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
France	3.3	1.2	1.0	8.4	2.7	12.1	1.4	7.9	6.6	11.0	4.4	3.6	0.5		3.4	27.2	6.7	44.5	3.8	2.1	2.4	1.8	0.1	16.6
Germany	4.7	3.4	1.8	9.3	4.0	9.0	0.7	69.0	6.2	16.6	4.7	2.9	2.1	8.0		19.9	6.1	39.6	4.7	22.7	4.3	4.7	0.4	18.3
Netherlands	1.0	1.5	0.5	5.8	3.8	5.5	0.0	35.1	1.2	13.1	1.3	2.2	0.5	3.3	1.3		6.5	40.0	3.3	1.3	2.8	5.6	0.1	10.0
Sweden	0.2	0.5	0.3	0.8	0.1	0.8	0.1	21.1	0.5	4.3	0.3	0.4	35.4	1.6	0.6	9.9		2.7	1.0	0.6	15.4	6.0	0.0	3.3
Belgium	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
US	3.4	36.2	4.8	6.8	1.2	6.5	26.1	127.3	6.4	57.0	47.0	27.4	4.1	8.0	4.3	60.3	5.7	35.7		4.2	16.8	3.9	1.3	39.9
Austria	0.2	0.0	0.0	0.5	0.1	0.2	0.0	2.1	0.3	0.8	0.2	0.3	0.0	0.1	0.4	0.4	0.2	0.9	0.1		0.0	0.7	0.0	1.3
Norway	0.0	0.0	0.0	1.1	0.0	0.4	0.2	4.1	0.1	1.6	0.9	0.1	1.8	0.3	0.1	1.6	8.4	0.9	0.2	0.7		7.1	0.0	0.2
Denmark	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Japan	1.8	4.1	7.7	1.2	0.5	2.7	16.7	19.1	0.8	19.1	7.7	34.2	0.6	2.6	1.3	28.3	0.3	18.2	15.7	1.0	3.3	0.2		4.5
Switzerland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Average 0.9 2.3 0.7 2.2 1.0 2.1 5.6 16.5 1.1 5.9 3.4 4.4 2.0 1.5 0.6 9.8 1.9 9.6 2.0 1.6 2.7 1.5 0.1 5.2

Table 3:
 Bilateral FDI Flows and Selection into Source-Host Pairs:
 OLS, Tobit and Heckman Maximum Likelihood
 Controlling for Country Fixed Effects
 OECD Countries only

Variables	Panel A: OLS	Panel B: Tobit Correction		Panel C: Heckman selection		Panel D: Heckman selection	
		Low censored 0.01	1	Equation: FDI flows Selection		FDI flows Selection	
GDP per capita - host [^]	0.283 (0.459)	0.454 (1.093)	0.351 (0.971)	0.207 (0.684)	0.237 (0.830)	0.158 (0.697)	0.082 (0.853)
GDP per capita - source [^]	0.324 (0.316)	-0.192 (1.347)	-0.186 (1.181)	-0.123 (0.609)	-1.178 (1.412)	-0.232 (0.624)	-1.882 (1.587)
Difference between source and host years of schooling	0.086 (0.060)	0.338 (0.136)*	0.263 (0.122)*	-0.052 (0.099)	0.276 (0.112)*	-0.073 (0.100)	0.261 (0.106)*
Financial risk rating - host	0.002 (0.012)	0.001 (0.029)	0.015 (0.026)	0.053 (0.017)**	-0.014 (0.025)	0.058 (0.016)**	-0.018 (0.026)
Financial risk rating - source	-0.040 (0.011)**	-0.201 (0.054)**	-0.171 (0.047)**	-0.057 (0.032)	-0.134 (0.046)**		-0.153 (0.048)**
Common language	0.529 (0.135)**	1.222 (0.152)**	1.163 (0.134)**	0.892 (0.121)**	0.491 (0.211)*	0.881 (0.123)**	0.410 (0.187)*
Distance (in logs)	-0.448 (0.077)**	-0.926 (0.090)**	-0.883 (0.079)**	-0.667 (0.084)**	-0.482 (0.107)**	-0.663 (0.083)**	-0.408 (0.098)**
Population - host [^]	1.949 (1.608)	6.878 (3.715)	4.119 (3.286)	-4.952 (2.489)*	10.438 (2.767)**	-5.331 (2.366)*	8.949 (2.792)**
Population - source [^]	0.202 (1.490)	-2.695 (4.468)	-2.629 (3.959)	-0.136 (2.864)	-0.016 (3.278)	-1.170 (2.817)	0.514 (3.400)
Lagged FDI participation variable							0.619 (0.145)**
Correlation between the error terms $\rho(U_F, U_S)$				-0.577 (0.177)		-0.605 (0.157)	
$\sigma(U_F)$				1.068 (0.051)		1.070 (0.048)	
Inverse Mills ratio				-0.616 -(0.213)		-0.648 -(0.191)	
Observations	2116	2116	2116	2116	2116	2116	2116

Note:
[^] in logs
 All specifications include year and country fixed-effects.
 Robust standard errors in parentheses
 * significant at 5%; ** significant at 1%

Table A.2:
 Bilateral FDI Flows and Selection into Source-Host Pairs:
 OLS, Tobit and Heckman Maximum Likelihood
 Without Country Fixed Effects
 OECD Countries only

Variables	Panel A: OLS	Panel B: Tobit Correction		Panel C: Heckman selection		Panel D: Heckman selection	
		Low censored 0.01	1	Equation: FDI flows Selection		FDI flows Selection	
GDP per capita - host [^]	0.026 (0.156)	-0.183 (0.260)	-0.091 (0.229)	0.357 (0.216)	-0.111 (0.140)	0.400 (0.214)	0.068 (0.103)
GDP per capita - source [^]	1.589 (0.155)**	3.910 (0.323)**	3.251 (0.282)**	0.261 (0.442)	1.432 (0.146)**	0.487 (0.480)	1.419 (0.150)**
Difference between source and host years of schooling	-0.033 (0.028)	0.013 (0.046)	-0.009 (0.041)	-0.062 (0.035)	-0.006 (0.028)	-0.095 (0.036)**	0.003 (0.027)
Financial risk rating - host	0.068 (0.017)**	0.128 (0.029)**	0.131 (0.026)**	0.104 (0.020)**	0.027 (0.015)	0.104 (0.019)**	
Financial risk rating - source	0.047 (0.014)**	0.244 (0.042)**	0.210 (0.037)**	0.126 (0.033)**	0.050 (0.017)**		0.055 (0.019)**
Common language	0.590 (0.224)**	1.075 (0.230)**	1.099 (0.200)**	1.242 (0.220)**	0.128 (0.150)	1.186 (0.214)**	0.152 (0.152)
Distance (in logs)	-0.349 (0.082)**	-0.779 (0.085)**	-0.744 (0.075)**	-0.541 (0.090)**	-0.111 (0.053)*	-0.505 (0.098)**	-0.101 (0.052)
Population - host [^]	0.327 (0.078)**	0.642 (0.086)**	0.621 (0.076)**	0.643 (0.079)**	0.096 (0.055)	0.611 (0.086)**	0.105 (0.053)
Population - source [^]	1.350 (0.059)**	2.344 (0.092)**	2.111 (0.082)**	0.844 (0.136)**	0.790 (0.065)**	0.749 (0.206)**	0.773 (0.069)**
Correlation (U _{i,j} , V _{i,j})				0.055 (0.214)		-0.275 (0.323)	
SD of U _{i,j} (flow equation)				1.462 (0.055)		1.504 (0.083)	
Inverse Mills ratio				0.081 (0.313)		-0.414 (0.503)	
Observations	2116	2116	2116	2116	2116	2116	2116

Note:

[^] in logs

All specifications include year fixed-effects.

Robust standard errors in parentheses

* significant at 5%; ** significant at 1%

Table A.3.1:
 Bilateral FDI Flows and Selection into Source-Host Pairs:
 OLS, Tobit and Heckman Maximum Likelihood
 Controlling for Country Fixed Effects
 OECD and Non-OECD Countries

Variables	Panel A: OLS	Panel B: Tobit Correction		Panel C: Heckman selection		Panel D: Heckman selection	
		Low censored		Equation:		FDI flows Selection	
		0.01	1				
GDP per capita - host [^]	0.104 (0.077)	-0.593 (0.543)	-0.611 (0.517)	0.297 (0.381)	-0.206 (0.394)	0.346 (0.386)	-0.292 (0.369)
GDP per capita - source [^]	0.087 (0.034)*	0.668 (1.036)	0.367 (0.911)	-0.141 (0.466)	0.715 (1.249)	-0.264 (0.483)	-0.112 (1.171)
Financial risk rating - host	-0.001 (0.004)	0.013 (0.017)	0.022 (0.015)	0.034 (0.010)**	-0.009 (0.014)	0.036 (0.010)**	-0.017 (0.014)
Financial risk rating - source	-0.028 (0.003)**	-0.207 (0.042)**	-0.189 (0.037)**	-0.076 (0.027)**	-0.097 (0.034)**		-0.127 (0.036)**
Difference between source and host years of schooling	0.081 (0.026)**	0.316 (0.111)**	0.262 (0.101)**	0.060 (0.083)	0.222 (0.081)**	0.038 (0.084)	0.216 (0.079)**
Common language	0.187 (0.070)**	0.962 (0.115)**	0.925 (0.102)**	0.721 (0.101)**	0.352 (0.124)**	0.715 (0.101)**	0.278 (0.107)**
Distance (in logs)	-0.321 (0.039)**	-1.059 (0.069)**	-1.007 (0.061)**	-0.762 (0.071)**	-0.503 (0.083)**	-0.754 (0.068)**	-0.399 (0.075)**
Population - host [^]	1.289 (0.356)**	9.334 (1.687)**	7.529 (1.529)**	-0.317 (1.438)	7.904 (1.505)**	-0.488 (1.285)	6.606 (1.470)**
Population - source [^]	-0.929 (0.197)**	-7.247 (3.506)*	-5.797 (3.127)	2.899 (2.442)	-7.142 (2.655)**	1.608 (2.345)	-5.665 (2.613)*
Lagged FDI participation variable							0.809 (0.098)**
Correlation between the error terms $\rho(U_F, U_S)$				-0.520 -(0.213)			-0.632 (0.100)
$\sigma(U_F)$				1.071 -(0.051)			1.091 (0.0381)
Inverse Mills ratio				-0.557 -(0.252)			-0.689 (0.128)
Observations	6724	6724	6724	6724	6724	6724	6724

Note:

[^] in logs

All specifications include year fixed-effects.

Robust standard errors in parentheses

* significant at 5%; ** significant at 1%

Table A.3.2:
Bilateral FDI Flows and Selection into Source-Host Pairs:
OLS, Tobit and Heckman Maximum Likelihood
Without Country Fixed Effects
OECD and Non-OECD Countries

Variables	Panel A:	Panel B:		Panel C:		Panel D:	
	OLS	Tobit Correction		Heckman selection		Heckman selection	
		Low censored		Equation:			
		0.01	1	FDI flows Selection		FDI flows Selection	
GDP per capita - host [^]	0.273 (0.047)**	0.639 (0.111)**	0.655 (0.099)**	0.764 (0.088)**	0.107 (0.059)	0.729 (0.103)**	0.264 (0.048)**
GDP per capita - source [^]	0.944 (0.048)**	4.264 (0.223)**	3.588 (0.193)**	0.319 (0.353)	1.402 (0.100)**	0.401 (0.391)	1.361 (0.102)**
Difference between source and host years of schooling	-0.063 (0.014)**	-0.078 (0.034)*	-0.087 (0.030)**	-0.093 (0.027)**	-0.022 (0.019)	-0.121 (0.028)**	-0.012 (0.019)
Financial risk rating - host	0.024 (0.005)**	0.104 (0.014)**	0.099 (0.013)**	0.056 (0.010)**	0.031 (0.008)**	0.055 (0.010)**	
Financial risk rating - source	0.012 (0.004)**	0.226 (0.028)**	0.190 (0.025)**	0.136 (0.027)**	0.053 (0.009)**		0.059 (0.011)**
Common language	0.333 (0.084)**	1.060 (0.165)**	1.108 (0.146)**	1.067 (0.161)**	0.159 (0.095)	0.981 (0.155)**	0.158 (0.093)
Distance (in logs)	-0.243 (0.052)**	-0.732 (0.070)**	-0.688 (0.062)**	-0.490 (0.077)**	-0.123 (0.043)**	-0.432 (0.079)**	-0.126 (0.043)**
Population - host [^]	0.207 (0.036)**	0.766 (0.062)**	0.728 (0.055)**	0.635 (0.065)**	0.175 (0.037)**	0.567 (0.073)**	0.206 (0.035)**
Population - source [^]	0.809 (0.036)**	2.321 (0.067)**	2.094 (0.060)**	0.863 (0.130)**	0.727 (0.044)**	0.713 (0.142)**	0.704 (0.046)**
Correlation (U _{i,j} , V _{i,j})				0.059 (0.229)		-0.379 (0.205)	
SD of U _{i,j} (flow equation)				1.443 (0.042)		1.517 (0.079)	
Inverse Mills ratio				0.086 (0.331)		-0.575 (0.337)	
Observations	6724	6724	6724	6724	6724	6724	6724

Note:

[^] in logs

All specifications include year fixed-effects.

Robust standard errors in parentheses

* significant at 5%; ** significant at 1%