# Policy Factors Influencing FDI Inflows

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- FDI can take the form of investment in new assets (greenfield investment) or acquisition of existing assets (mergers and acquisitions; M&A).
- Because of their distinctive characteristics, the two FDI modes may have different welfare effects in host countries.
- Wang and Wong (2009) find that greenfield FDI promotes economic growth while M&As promote growth only when the host country has an adequate level of human capital.
- Harms and Méon (2011) also finds that while greenfield investment substantially enhances growth, M&As have no effect, at best.
- But Ashraf, et al. (2015) find that greenfield FDI has no statistically significant effect on total factor productivity (TFP), while M&As have a positive effect on TFP in in the sample of both developed and developing host countries of FDI.

- The question is then to understand how different institutional and policy factors have differential effects on FDI so that policy makers can properly design a policy framework to attract "right" kind of FDI.
- There have been many studies linking institutional/governance variables with "aggregate" FDI (eg., Schneider and Frey, 1985; Edwards, 1992; Daude and Stein, 2007; Busse and Hefeker, 2007; and Hayakawa et al, 2013).
- However, only few studies have examined how different policies of host countries influence FDI inflows to these countries.
- For example, using the World Bank's Ease of Doing Business (EoDB) ranking, Jayasuriya (2011) shows that there is a positive relationship between EoDB ranking and FDI inflows, but when the sample is restricted to developing countries, the relationship becomes insignificant. In contrast, Corcoran and Gillanders (2015) show that the overall Doing Business is highly significant in attracting FDI.

- EoDB is not a direct measure of a country's FDI policies as it measures a country's business regulatory environments that may influence both domestic investment and FDI inflows.
- Utilizing PricewaterhouseCoopers (PwC)'s country reports on FDI policies, Wei (2000) constructs two measures of government policies towards FDI in 49 countries: FDI restrictions index and FDI incentives index.
- Wei (2000) shows empirically that FDI inflows are negatively related to FDI restrictions index and positively related to FDI incentives.

### **Two points noteworthy.**

- Most studies focus on aggregate FDI despite the fact that its two entry modes may have different welfare effects in the host countries.
- Most studies focus mostly on institutional variables such as political stability and corruption and less on business environments or FDI policy variables of host countries which might have a more direct impact on FDI decisions of multinationals.

## Main Objectives

- This paper empirically evaluates how different institutional and policy factors influence FDI flows in the modes of greenfield vs. M&A to developing countries.
- In particular, this report assesses (1) host-country specific factors such as institutional/governance indicators, business environments, and FDI regulatory restrictions as well as (2) bilateral pair-specific factors such as regional trade agreements (RTA) and bilateral investment treaties (BIT).

## **Data and empirical specification**

- ✓ This paper utilizes bilateral greenfield and M&A investments from 25 OECD countries to 96 developing countries and 46 high-income countries for the period 2003-2014.
- This paper applies Poisson Pseudo-Maximum Likelihood (PPML) estimation.
- Semi-structural gravity model to examine within-country variation effects of governance and policies on FDI.
- Full-structural gravity model to examine within country-pair variation effects of RTA and BIT.

### □ Main findings

- Among the host country-specific factors, the quality of local governance is the most important factor for both greenfield and M&A investments to developing countries, whereas FDI restrictive policies of developing countries are not significant factors in restricting FDI inflows to these countries.
- An improvement in host country's environment for doing business may have a positive effect on greenfield investment only when the host country's governance quality is very low.
- Among the pair-specific policy factors, regional trade agreements have a significantly positive impact on greenfield investment flows to developing countries, while bilateral investment treaties do not exert any positive effect either on greenfield investment or M&A investment.

## Contents of this paper

- 1. Introduction
- 2. Descriptive Statistics
- 3. Empirical Specifications
- 4. Empirical Results
- 5. Summary and Concluding Remarks

## 2. Descriptive Statistics

### **Bilateral greenfield and M&A investments**

- Bilateral greenfield FDI data was acquired from fDi Intelligence (Financial Times Ltd.) and the M&A data from the Thomson-Reuters SDC Platinum Database.
- The counts and dollar values of greenfield and M&A investments are available from these two sources. However, in the case of M&A investment, the values of the transactions are often not reported for confidentiality reasons. A complete set of counts and dollar values is reported in the case of greenfield investment, (but when the investing company does not release the dollar value, the data provider estimates the value by an algorithm).
- Therefore, we primarily use data on the counts of bilateral greenfield and M&A investments conducted by 25 OECD member countries and also use the dollar values of greenfield investment as a complement.



✓ The trend of greenfield investment and M&A investments conducted by 25 OECD countries during the period 2003-2014.

	Table 1A: Total G	Greenfield Investme	ent, during 2003-2	014	
Ranking	Home	Counts	Share (%)	Value (Million US\$)	Share (%)
1	United States	37,358	27.4	1,791,824	24.8
2	Germany	15,567	11.4	728,435	10.1
3	United Kingdom	14,840	10.9	677,578	9.4
4	Japan	11,590	8.5	744,845	10.3
5	France	9,875	7.2	546,680	7.6
6	Spain	5,762	4.2	315,551	4.4
7	Switzerland	5,124	3.8	222,909	3.1
8	Italy	4,708	3.4	244,975	3.4
9	Netherlands	4,489	3.3	298,444	4.1
10	Canada	4,299	3.1	341,305	4.7
11	Sweden	3,762	2.8	147,347	2.0
12	South Korea	2,735	2.0	286,262	4.0
13	Austria	2,574	1.9	115,022	1.6
14	Australia	2,160	1.6	177,940	2.5
15	Denmark	1,945	1.4	86,419	1.2
16	Finland	1,851	1.4	82,303	1.1
17	Belgium	1,711	1.3	67,705	0.9
18	Ireland	1,614	1.2	71,962	1.0
19	Norway	1,217	0.9	81,253	1.1
20	Luxembourg	1,039	0.8	64,549	0.9
21	Portugal	707	0.5	48,902	0.7
22	Greece	531	0.4	27,569	0.4
23	New Zealand	451	0.3	13,410	0.2
24	Czech Republic	413	0.3	20,756	0.3
25	Iceland	156	0.1	12,467	0.2
	Total	136,478	100.0	7,216,412	100.0

		Table 1B: Total M&A Investment, during 2003-2014									
Ra	nking	Home	Counts	Share (%)	Value (Million US\$)	Share (%)					
	1	United States	20,139	25.8	1,597,167	23.9					
	2	United Kingdom	9,928	12.7	890,978	13.3					
	3	Canada	7,881	10.1	456,839	6.8					
	4	Germany	4,955	6.3	478,720	7.2					
	5	France	4,708	6.0	538,001	8.0					
	6	Netherlands	3,572	4.6	421,782	6.3					
	7	Australia	3,535	4.5	228,173	3.4					
	8	Japan	3,417	4.4	335,765	5.0					
	9	Sweden	2,938	3.8	139,474	2.1					
	10	Switzerland	2,808	3.6	349,689	5.2					
	11	Spain	1,749	2.2	313,970	4.7					
	12	Italy	1,496	1.9	197,129	2.9					
	13	Austria	1,341	1.7	57,491	0.9					
	14	Norway	1,329	1.7	77,233	1.2					
	15	Belgium	1,216	1.6	167,679	2.5					
	16	Denmark	1,215	1.6	56,673	0.8					
	17	Finland	1,166	1.5	46,679	0.7					
	18	Luxembourg	1,117	1.4	96,620	1.4					
	19	Ireland	1,058	1.4	77,706	1.2					
	20	South Korea	998	1.3	71,673	1.1					
	21	New Zealand	421	0.5	24,654	0.4					
	22	Iceland	309	0.4	18,466	0.3					
	23	Portugal	299	0.4	18,288	0.3					
	24	Greece	262	0.3	15,710	0.2					
	25	Czech Republic	235	0.3	11,543	0.2					
		Total	78,092	100.0	6,688,104	100.0					

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	Table 2A: Top 25 Hosts				
Ranking	Host	Counts	Share (%)	Value (Million US\$)	Share (%)
1	China	13,319	9.8	882,577	12.2
2	United States	12,355	9.1	531,049	7.4
3	United Kingdom	9,057	6.6	334,993	4.6
4	India	7,730	5.7	360,376	5.0
5	Germany	6,062	4.4	148,692	2.1
6	France	4,976	3.6	134,847	1.9
7	Spain	4,062	3.0	153,544	2.1
8	Russia	3,984	2.9	245,417	3.4
9	Brazil	3,279	2.4	293,823	4.1
10	Poland	3,240	2.4	149,216	2.1
11	Singapore	3,100	2.3	118,602	1.6
12	Mexico	3,075	2.3	215,841	3.0
13	Canada	3,036	2.2	208,853	2.9
14	UAE	2,852	2.1	77,429	1.1
15	Australia	2,740	2.0	212,741	2.9
16	Romania	2,605	1.9	124,848	1.7
17	Hong Kong	1,969	1.4	51,133	0.7
18	Ireland	1,953	1.4	67,912	0.9
19	Japan	1,827	1.3	61,981	0.9
20	Hungary	1,805	1.3	62,553	0.9
21	Thailand	1,789	1.3	73,828	1.0
22	Vietnam	1,760	1.3	149,040	2.1
23	Italy	1,752	1.3	85,513	1.2
24	Netherlands	1,652	1.2	67,532	0.9
25	Czech Republic	1,619	1.2	49,606	0.7
	Total (25 hosts)	101,598	74.4	4,861,947	67.4
	Total (199 hosts)	136,478	100.0	7,216,412	100.0

✓ Among the developing countries, China, India, Russia, Brazil, Mexico, Romania, Thailand, and Vietnam are included in the list of top 25 recipients of greenfield investment .

✓ These eight developing countries account for 27.5% of total counts (or 32.5% of total value) of greenfield investment during the period.

Ranking	Host	Counts	Share (%)	Value (Million US\$)	Share (%)
1	United States	9,520	12.0	1,250,069	18.5
2	United Kingdom	6,805	8.6	878,100	13.0
3	Germany	5,628	7.1	420,250	6.2
4	Canada	4,391	5.5	315,777	4.7
5	France	3,437	4.3	296,343	4.4
6	Australia	2,891	3.6	197,961	2.9
7	China	2,877	3.6	99,294	1.5
8	Spain	2,228	2.8	223,712	3.3
9	India	2,149	2.7	109,440	1.6
10	Netherlands	2,115	2.7	290,915	4.3
11	Sweden	2,082	2.6	135,978	2.0
12	Italy	2,067	2.6	208,358	3.1
13	Brazil	1,697	2.1	143,912	2.1
14	Switzerland	1,504	1.9	180,944	2.7
15	Russia	1,445	1.8	87,219	1.3
16	United States	1,398	1.8	264,491	3.9
17	Norway	1,384	1.7	83,160	1.2
18	Belgium	1,317	1.7	135,498	2.0
19	Denmark	1,287	1.6	55,713	0.8
20	Mexico	1,232	1.6	84,252	1.2
21	Poland	1,000	1.3	52,144	0.8
22	Finland	980	1.2	45,440	0.7
23	Hong Kong	922	1.2	48,496	0.7
24	New Zealand	866	1.1	24,182	0.4
25	Japan	865	1.1	72,826	1.1
	Total (25 hosts)	62,087	78.2	5,704,475	84.2
	Total (175 hosts)	79,422	100.0	6,771,536	100.0

 $\checkmark$  There are only five developing countries among the 25 major hosts of M&A investments: China, India, Brazil, Russia, and Mexico, which altogether account for only 12 percent of the total.

 $\checkmark$  These five developing countries account for 11.8% of total counts (or 7.7% of total value) of greenfield investment during the period.

✓ Thus, as compared to greenfield investment, cross-border M&A is less common in developing countries than in high-income countries.

Table 3A: Top 25 Bilateral Greenfield Investment, during 2003-2014										
Ranking	Home	Host	Counts	Value (Million US\$)						
1	United States	China	4,247	257,032						
2	United States	United Kingdom	4,051	120,847						
- 3	United States	India	3,096	109,971						
4	United Kingdom	United States	2,341	71,759						
5	Japan	China	2,312	142,244						
6	United States	Germany	1,778	43,232						
7	United States	Canada	1,765	110,455						
8	Germany	United States	1,761	70,473						
9	Japan	United States	1,506	78,366						
10	United States	France	1,411	32,569						
11	Germany	China	1,359	123,266						
12	Canada	United States	1,309	51,902						
13	United States	Mexico	1,281	85,487						
14	United States	Singapore	1,096	40,530						
15	United States	Australia	1,038	52,729						
16	United States	Brazil	1,034	78,365						
17	France	United States	1,021	43,985						
18	United Kingdom	China	995	56,020						
19	United Kingdom	India	924	53,396						
20	United States	Ireland	880	36,174						
21	United States	Japan	873	32,621						
22	United States	UAE	858	20,871						
23	Germany	United Kingdom	848	38,233						
24	France	China	832	52,866						
25	Japan	Thailand	824	30,127						
	Тс	otal	39,440	1,833,519						

	Table 3B: Top 25 Bilater	al M&A Investment, during	2003-2014	
Ranking	Home		Counts	Value (Million US\$)
1	Canada	United States	3,469	227,840
2	United States	Canada	3,163	196,798
3	United States	United Kingdom	3,127	285,213
4	United Kingdom	United States	1,738	203,847
5	United States	Germany	1,459	151,899
6	United States	China	1,123	44,464
7	United States	Australia	1,023	68,741
8	United States	India	923	30,665
9	United States	France	878	83,292
10	United Kingdom	Germany	840	67,349
11	Australia	United States	655	74,658
12	United States	Brazil	619	27,242
13	Switzerland	Germany	591	15,494
14	United Kingdom	Australia	575	29,805
15	United Kingdom	France	574	50,299
16	United States	Netherlands	552	120,826
17	Canada	Mexico	534	3,309
18	Japan	United States	529	106,224
19	Australia	New Zealand	511	16,841
20	Germany	United States	493	88,481
21	France	United States	485	94,797
22	Canada	United States	478	47,024
23	United States	Spain	476	35,294
24	Sweden	Norway	457	16,570
25	Japan	China	429	6,003
	Т	otal	25,701	2,092,976

✓ As compared to greenfield investment, cross-border M&A is less common between high-income and developing countries.

- <u>World Bank's Worldwide Governance Indicators (WGI)</u>
- WGIs are comprised of six indicators: (1) voice and accountability; (2) political stability and absence of violence/terrorism; (3) government effectiveness; (4) regulatory quality; (5) rule of law; and (6) control of corruption.
- Each indicator ranges from -2.5 to 2.5, with higher score for higher quality of governance/institution.
- For easier comparison with other policy measures, we transform the WGIs to range between 0 and 100, by adding 2.5 and then multiplying them by 20.
- In the regression analysis, we will use the WGIs for 2003, 2006, 2009, and 2012 and match them with the averages of FDI data for 2003-2005, 2006-2008, 2009-2012, and 2012-2014.

- World Bank's Ease of Doing Business (EoDB)
- EoDBs are comprised of ten components: (1) starting a business; (2) dealing with construction permits; (3) getting electricity; (4) registering property; (5) getting credit; (6) protecting minority investors; (7) paying taxes; (8) trading across borders; (9) enforcing contracts; and (10) resolving insolvency.
- Each indicator ranges from 0 to 100, with higher score representing better environment for doing business
- In the regression analysis, we will drop the "getting electricity" component and use the nine indicators 2006, 2009, and 2012 and match them with the averages of FDI data for 2006-2008, 2009-2012, and 2012-2014.

- <u>OECD's FDI Regulatory Restrictiveness Index (RRI)</u>
- FDI RRI, originally developed in 2003, is a more direct measure of restrictions on FDI in 58 countries, including 26 developing countries.
- The FDI RRI gauges the restrictiveness of a country's FDI policies in four different dimensions: (1) foreign equity limitations; (2) screening or approval mechanisms; (3) restrictions on the employment of foreigners as key personnel; and (4) other restrictions (operational restrictions such as restrictions on branching and on capital repatriation or on land ownership)
- Each index ranges between 0 and 1, with higher value representing higher restriction for FDI. We transform the index by 100\*RRI so that transformed RRI ranges between 0 and 100, with higher value representing higher restriction for FDI.
- The RRI, available for 1997, 2003, 2006, and 2010-2014. There have been no empirical studies that utilize OECD's FDI RRI in assessing the impact of FDI policies on FDI inflows.
- In the regression analysis, we will use the RRI data for 2003, 2006, 2010 (for 2009), and 2012 and match them with the averages of FDI data for 2003-2005, 2006-2008, 2009-2012, and 2012-2014.

Table 4. Highest- and	Table 4. Highest- and Lowest-ranking countries for Governance and FDI-related policies										
		Worldwide Governace Indicators	Ease of Doing Business	Regulatory Restrictiveness Index							
	Highest	Chile (73.2)	Malaysia (73.8)	China (46.2)							
		Mauritius (65.5)	Lithuania (73.8)	India (32.6)							
		Botswana (64.5)	Latvia (73.1)	Malaysia (32.4)							
		Lithuania (64.4)	Georgia (72.2)	Indonesia (32.1)							
		Uruguay (63.3)	Mauritius (70.8)	Jordan (29.9)							
Developing countries											
		Chad (23.6)	Guinea (36.2)	Costa Rica (4.9)							
		Sudan (19.4)	Venezuela, RB (35.7)	Latvia (4.0)							
		Iraq (18.8)	Congo, Dem. Rep. (31.0)	Lithuania (3.6)							
		Myanmar (17.8)	Libya (28.9)	Colombia (2.6)							
	Lowest	Congo, Dem. Rep. (17.5)	Chad (28.6)	Romania (0.8)							
	Highest	Finland (88.0)	Singapore (91.9)	Saudi Arabia (34.9)							
		Denmark (86.7)	New Zealand (89.8)	New Zealand (24.0)							
		Sweden (85.3)	Hong Kong (87.6)	Canada (21.9)							
		New Zealand (85.2)	United States (84.9)	Australia (18.5)							
		Switzerland (84.4)	Ireland (84.6)	Italy (16.7)							
High-income											
countries		Kuwait (53.5)	Greece (59.7)	Netherlands (1.8)							
		Trinidad and Tobago (53.1)	Trinidad and Tobago (59.3)	Czech Republic (1.7)							
		Bahrain (52.4)	Brunei Darussalam (58.9)	Portugal (1.6)							
		Saudi Arabia (43.0)	Croatia (57.0)	Slovenia (1.3)							
	Lowest	Equatorial Guinea (25.5)	Equatorial Guinea (43.1)	Luxembourg (0.4)							

#### • <u>Regional Trade Agreement (RTA)</u>

- There have been many theoretical and empirical studies that investigate the effects of RTAs on FDI.
- Most theoretical studies have shown that RTA increases investments not only from intra-block firms but also from outside firms (eg. Motta and Norman, 1996; Ekholm et al., 2007; and Ito, 2013).
- None of the previous empirical studies examine how differently an RTA affects greenfield investment vs. M&A investment.
- In a theoretical analysis, Kim (2009) examines the impacts of RTA on the FDI entry mode of multinational firm focusing on greenfield investment vs. cross-border M&A. Based on an oligopoly market structure, he shows that formation of an FTA between home and host countries eliminates the tariff-jumping advantage of greenfield investment, thereby discouraging greenfield investment.
- According to the date of entry into force, we compile an RTA dummy variable for 2003, 2006, 2009 and 2012.

- <u>Bilateral Investment Treaty (BIT)</u>
- BIT is an international agreement establishing legally binding terms and conditions for FDI.
- BITs are expected to promote FDI inflows between signatories.
- In developing countries, in particular, BITs may compensate for less developed local institutions and can be expected to promote FDI inflows.
- Many studies, however, have produced ambiguous results on the effectiveness of BITs in promoting FDI inflows.
- None of the previous studies has investigated how BITs influence greenfield investment and M&As differentially.
- Because there is no theoretical model that predicts differential effects of BITs on greenfield vs. M&A investments, we do not make any a priori hypothesis and take this as an empirical question.
- Our bilateral investment treaty data are taken from the website of the United Nations Conference on Trade and Development (UNCTAD).

### **The gravity model**

- Theoretical gravity models for FDI have been developed by Bergstrand and Egger (2007), Head and Ries (2008), and Kleinert and Toubal (2010).
- Most theoretical formulations of the gravity equation specify Y<sub>ijt</sub>, flows of transactions from origin i to destination j, as the product of country and bilateral-specific terms:

$$Y_{ijt} = \alpha_t \frac{M_{it}M_{jt}}{D_{ijt}}$$

$$\begin{split} M_{jt} = \ n \ POLICY_{jt} + \gamma_1 \ ln \ POP_{jt} + \gamma_2 \ ln \ PCGDP_{jt} + \gamma_3 \ ln \ POP_{jt} + \gamma_4 \ GROWTH_{jt} + \gamma_4 \\ INFLATION_{jt} \end{split}$$

 $D_{ijt} = \beta_1 \ln RTA_{ijt} + \beta_2 \ln BIT_{ijt} + \theta PAIR_{ij} + u_{drt}$ 

#### **Three econometric issues**

(1) Many pairs of countries do not exert FDI flows and hence enter with zeros.

- Taking logs of the dependent variable would drop zero observation and result in biased estimates given that zero flows may indicate that fixed costs exceed expected variable profits (Razin et al., 2004; and Davis and Kristjánsdóttir, 2010).
- Santos Silva and Tenreyro (2006) argue that estimating a log-linearized gravity equation by ordinary least squares (OLS) results in bias and that OLS would be inconsistent in the presence of heteroskedasticity, which is highly likely in practice.
- As an alternative, Santos Silva and Tenreyro (2006) suggest that the gravity model be estimated in its multiplicative form and use a Poisson pseudo- maximum likelihood (PPML) estimator that is usually used for count data.

(2)

$$Y_i = \exp(x_i\beta) + \varepsilon_i$$

#### **Three econometric issues**

(2) "Structural" gravity models consistent with theory require that estimation of a gravity equation take into account not only bilateral distance and transaction costs but also "multilateral resistance" (Anderson and van Wincoop, 2003).

- This issue has been addressed in the empirical literature by including source-year and host-year fixed effects in the panel data estimations.
- However, including a full set of time varying source and host country fixed effects is not feasible for our purpose because with host-year fixed effects, host country-specific policy variables would not be measured.
- Therefore, for the estimation of time-varying governance/policy variables, we will only include source-year fixed effects for source countries' outward multilateral resistance.
- Arguably, FDI decisions are made by multinationals of source countries and hence host countries' inward multilateral resistance (i.e., host-year fixed effects) does not matter much.
- But for the estimation of RTA and BIT, we will utilize full "structural" gravity model by including source-year and host-year fixed effects in the panel data estimations.

#### **Three econometric issues**

(3) Possible endogeneity of policy variables.

- FDI inflows may cause the policy makers of host countries to make their FDI environment more favorable to foreign investment.
- We design three tactics to account for this concern.
- First, as an effort to reduce random volatility of FDI flows and to obtain fewer cases of zero values, we reduce the time dimension to four periods by taking the mean of the dependent variable for years 2003-2005, 2006-2008, 2009-2011, and 2012-2014.
- And then we match the dependent variable with the policy variables and other explanatory variables for the beginning year of each sub-period (i.e. 2003, 2006, 2009, and 2012), thus allowing for both contemporaneous and lagged effects (1-2 years) of policy factors on FDI inflows to accrue.

#### **Three econometric issues**

(3) Possible endogeneity of policy variables (Continued)

- As for the estimation of time-varying host-specific policy variables, we will include host-country fixed effects so as to disentangle the effects of within-country variation of policy variables rather than the effects of between-country variation of policy variables.
- That is, we ask the question of how a one-unit increase in a policy variable of a host country will impact FDI flows to the country, rather than we ask the question of how a one-unit difference in a policy variable between host countries is associated with different amounts of FDI flows to different host countries.
- As for the estimation of time-varying pair-specific policy variables (i.e., RTA and BIT dummy variables), we will include a full set of time varying source and host country fixed effects as well as bilateral pair fixed effects.

## 4. Empirical Results

- Table 5: Effects of World Banks' World Governance Index on FDI
- Table 6: Effects of "Sub-indicators of Governance" on FOF
- Table 7: Effects of World Bank's Ease of Doing Business Index on FDI
- Table 8. Effects of "Sub-indicators of EoDB" on FDI
- Table 9: Interaction effects of EoDB and WGI on FDI flows to developing countries
- Table 10: Effects of OECD's FDI Regulatory Restrictiveness Index on FDI
- Table 11: Effects of "Sub-indicators of FDI RRI" on FDI
- Table 12: Interaction effects of RRI and WGI on FDI flows to developing countries
- Table 13: Effects of RTA and BIT on FDI

		Developin	g countries			High-incom	ne countries	6
	Number of proj	f greenfield ects	Number of	M&A deals	Number of proj	greenfield ects	Number of	M&A deals
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Spec1	Spec2	Spec 1	Spec2	Spec 1	Spec 2	Spec 1	Spec 2
Overall World Governance Index -	0.048***	0.049***	0.045***	0.024***	0.031***	0.005	0.050***	-0.001
host (expected sign = plus)	(0.004)	(0.007)	(0.006)	(0.008)	(0.005)	(0.008)	(0.006)	(0.007)
RTA between source and host (= 1 if	0.028	0.307***	-0.061	0.300**	-0.019	-0.100	0.184*	-0.289***
yes)	(0.114)	(0.104)	(0.159)	(0.139)	(0.143)	(0.069)	(0.111)	(0.085)
BIT between source and host (= 1 if	-0.052	-0.159**	-0.195**	-0.126	0.374***	0.218***	0.059	0.052
yes)	(0.085)	(0.063)	(0.099)	(0.119)	(0.141)	(0.080)	(0.126)	(0.113)
	0.872***	3.468***	0.793***	3.043***	0.800***	1.187***	0.798***	2.160***
InPopulation- host	(0.023)	(0.369)	(0.042)	(0.593)	(0.029)	(0.246)	(0.027)	(0.349)
	0.506***	-0.246**	0.519***	0.287**	0.133	-0.229*	0.349**	-0.096
InPCGDP - host	(0.055)	(0.101)	(0.067)	(0.136)	(0.115)	(0.139)	(0.140)	(0.118)
	0.033***	0.013***	-0.012	-0.009	0.083***	0.047***	0.016	0.000
Growth Rate - host	(0.009)	(0.005)	(0.015)	(0.009)	(0.014)	(0.008)	(0.013)	(0.009)
	-0.019**	-0.011	-0.007	-0.014**	0.137***	0.053***	0.132***	0.003
Inflation Rate - host	(0.009)	(0.010)	(0.009)	(0.007)	(0.020)	(0.009)	(0.023)	(0.013)
	-0.763***	-0.608***	-0.868***	-1.164***	-0.313***	-0.380***	-0.480***	-0.819***
In Distance between source and host	(0.072)	(0.066)	(0.083)	(0.099)	(0.075)	(0.051)	(0.070)	(0.068)
	0.623***	0.916***	0.496***	0.788***	0.733***	0.490***	0.888***	0.676***
Common language (=1 if yes)	(0.124)	(0.092)	(0.176)	(0.182)	(0.122)	(0.074)	(0.112)	(0.090)
	-0.212	0.044	-0.440	-0.795**	0.061	0.335***	0.187	0.316***
Contiguity (=1 if yes)	(0.253)	(0.183)	(0.314)	(0.380)	(0.178)	(0.089)	(0.161)	(0.113)
Constant	-0.230	-0.691	0.050	0.038	0.105	4.908**	-2.686*	2.068
	(0.633)	(1.449)	(0.891)	(2.241)	(1.237)	(2.065)	(1.442)	(2.443)
Fixed Effects								
Period(t)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Source country-Period (it)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Host country (j)		Yes		Yes		Yes		Yes
Observation	5229	5129	3458	3458	3704	3704	3319	3319
R-squared	0.802	0.894	0.704	0.765	0.818	0.932	0.896	0.944

#### Table 5: Effects of World Banks' World Governance Index on FDI

Notes: 1. Estimates are obtained with Poisson Psuedo-Maximum Likelihood (PPML) estimator. 2. Standard errors are in parenthesis are based on clustering by country-pair. 3. \*\*\*, \*\*, and \* indicate the significance levels of 1, 5, and 10 percent, respectively.

			(1)	(2)	(3)	(4)	(5)	(6)	(7)
			WGI_ave	Voice and Accountability	Political stability	Government effectiveness	Regulatory quality	Rule of law	Control corruption
		Spec 1	0.048***	0.017***	0.027***	0.037***	0.049***	0.030***	0.026***
		Spec 1	(0.004)	(0.003)	(0.004)	(0.004)	(0.004)	(0.003)	(0.004)
Developing countries	greenfield								
		Spec 2	0.049***	-0.002	0.012***	0.032***	0.036***	0.043***	0.024***
			(0.007)	(0.004)	(0.002)	(0.005)	(0.005)	(0.007)	(0.005)
		Spog 1	0.045***	0.027***	0.018***	0.025***	0.041***	0.023***	0.027***
		Spec 1	(0.006)	(0.003)	(0.004)	(0.006)	(0.005)	(0.006)	(0.005)
	M&A								
		Space 2	0.024***	0.012**	0.008**	-0.002	0.000	0.036***	0.014**
		Spec 2	(0.008)	(0.005)	(0.003)	(0.008)	(0.006)	(0.009)	(0.006)
		Spec 1	0.031***	0.002	0.010**	0.032***	0.044***	0.031***	0.025***
			(0.005)	(0.005)	(0.004)	(0.004)	(0.006)	(0.006)	(0.003)
	greenfield								
		Space 2	0.005	0.018***	0.016***	-0.005	-0.020***	-0.002	-0.011***
			(0.008)	(0.006)	(0.004)	(0.004)	(0.006)	(0.007)	(0.004)
High-income									
countries		Spec 1	0.050***	0.030***	0.006	0.034***	0.054***	0.045***	0.031***
		Speci	(0.006)	(0.005)	(0.004)	(0.004)	(0.006)	(0.006)	(0.004)
	M&A								
		Spec 2	-0.001	-0.014***	0.005*	-0.000	-0.004	-0.005	0.001
			(0.007)	(0.005)	(0.003)	(0.003)	(0.005)	(0.007)	(0.004)

Table 6: Effects of "Sub-indicators of Governance" on FDI

Notes: 1. Estimates are obtained with Poisson Psuedo-Maximum Likelihood (PPML) estimator from the specifications of Table 5, replacing overall World Governance Index (WGI) with each of the components of WGI. 2. Spec 1 includes source country-period fixed effects and period fixed effects, whereas Spec 2 includes source country-period fixed effects as well as host country fixed effects and period fixed effects. 3. Both Spec 1 and Spec 2 also include host country-specific control variables as well as pair-specific control variables as in Table 5. 4. Standard errors are in parenthesis are based on clustering by country-pair. 5. \*\*\*, \*\*, and \* indicate the significance levels of 1, 5, and 10 percent, respectively.

		Developin	g countries	g countries		High-incom	e countries	ountries	
	Number of proje	f greenfield ects	Number of	M&A deals	Number of proje	greenfield ects	Number of	M&A deals	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
	Spec1	Spec2	Spec 1	Spec2	Spec 1	Spec 2	Spec 1	Spec 2	
Overall Ease of Doing Business	0.014**	-0.026***	0.003	-0.008	0.019***	-0.057***	0.023***	-0.011*	
Index - host (expected sign = plus)	(0.006)	(0.007)	(0.007)	(0.012)	(0.007)	(0.008)	(0.007)	(0.006)	
Overall World Governance Index -	0.037***	0.080***	0.045***	0.034***	0.015**	0.031***	0.030***	0.030***	
nost (expected sign = plus)	(0.004)	(0.010)	(0.007)	(0.013)	(0.008)	(0.010)	(0.008)	(0.008)	
RTA between source and host (= 1 if	-0.078	0.345***	-0.045	0.346**	-0.028	-0.112	0.141	-0.348***	
yes)	(0.095)	(0.107)	(0.158)	(0.145)	(0.129)	(0.073)	(0.104)	(0.095)	
	. ,	, ,	. ,	, ,	. ,	, ,		, ,	
BIT between source and host (= 1 if	-0.166**	-0.161**	-0.240**	-0.126	0.367**	0.217***	0.022	0.026	
yes)	(0.081)	(0.069)	(0.108)	(0.128)	(0.149)	(0.084)	(0.119)	(0.117)	
	0.786***	5.427***	0.798***	4.215***	0.788***	0.700***	0.755***	1.227***	
InPopulation- host	(0.022)	(0.602)	(0.045)	(0.828)	(0.031)	(0.270)	(0.030)	(0.321)	
	0.366***	-0.120	0.529***	0.064	0.316**	-0.192	0.419***	-0.499***	
INPCGDP - nost	(0.050)	(0.140)	(0.071)	(0.178)	(0.130)	(0.156)	(0.141)	(0.116)	
Crowth Poto boot	0.035***	-0.003	-0.016	-0.025**	0.092***	0.021**	0.000	0.004	
Grown Rate - nost	(0.011)	(0.008)	(0.018)	(0.013)	(0.016)	(0.010)	(0.016)	(0.010)	
Inflation Poto boot	-0.022***	-0.013*	-0.000	0.006	0.161***	0.020	0.127***	-0.000	
Innation Rate - nost	(0.008)	(0.007)	(0.011)	(0.011)	(0.021)	(0.013)	(0.023)	(0.013)	
InDistance between source and host	-0.607***	-0.572***	-0.862***	-1.157***	-0.346***	-0.373***	-0.510***	-0.832***	
	(0.062)	(0.069)	(0.086)	(0.103)	(0.071)	(0.051)	(0.068)	(0.068)	
	0.537***	0.852***	0.476***	0.789***	0.612***	0.481***	0.802***	0.691***	
Common language (=1 if yes)	(0.122)	(0.090)	(0.181)	(0.186)	(0.117)	(0.074)	(0.109)	(0.088)	
	(- )	()		()	<u> </u>	()		()	
	0.121	0.061	-0.521	-0.926**	0.133	0.351***	0.239	0.298***	
Contiguity (=1 if yes)	(0.197)	(0.165)	(0.324)	(0.397)	(0.182)	(0.090)	(0.149)	(0.109)	
Constant	-0.341	-9.480***	-0.299	-1.484	-1.796	10.415***	-3.300**	10.604***	
	(0.561)	(1.926)	(0.939)	(2.479)	(1.344)	(2.206)	(1.431)	(2.139)	
Eived Effects									
Period(t)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Source country-Period (it)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Host country (i)	100	Yes		Yes	100	Yes	100	Yes	
Observation	3893	3893	2626	2622	2704	2704	2448	2448	
R-squared	0.836	0 011	0.710	0 773	0.824	0 0/1	0 008	0 950	
	0.000	0.011	0.710	0.770	0.02-	0.041		0.000	

#### Table 7: Effects of World Bank's Ease of Doing Business Index on FDI

			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			EoDB_ave	Starting business	Dealing with business construction	Registering property	Getting credit	Protecting minority investors	Paying taxes	Trading across borders	Enforcing contracts	Resolving insolvency
		Spor 1	0.014**	0.001	-0.003	0.014***	0.007***	-0.001	-0.001	0.003	0.008**	0.003
		Spec 1	(0.006)	(0.003)	(0.003)	(0.003)	(0.002)	(0.004)	(0.002)	(0.003)	(0.003)	(0.002)
	greenfield											
		Spor 2	-0.026***	-0.003	-0.007**	-0.004	-0.006***	-0.007**	-0.003	-0.008**	-0.023**	0.005
Developing		Spec 2	(0.007)	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)	(0.002)	(0.003)	(0.011)	(0.004)
countries												
oouninoo		Spec 1	0.003	-0.004	-0.003	0.005	0.006**	0.012***	0.002	-0.007**	-0.001	-0.004
		Opec 1	(0.007)	(0.004)	(0.004)	(0.004)	(0.003)	(0.004)	(0.003)	(0.003)	(0.004)	(0.004)
	M&A											
		Spor 2	-0.008	0.000	-0.012**	-0.003	-0.001	0.010*	-0.003	0.002	-0.001	0.000
		Spec 2	(0.012)	(0.005)	(0.005)	(0.004)	(0.003)	(0.006)	(0.004)	(0.006)	(0.017)	(0.008)
		Spec 1	0.019***	0.003	0.006	0.001	0.011***	0.003	0.015***	0.026***	0.009*	-0.004*
		opec 1	(0.007)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.004)	(0.009)	(0.005)	(0.002)
	greenfield											
		Spec 2	-0.057***	-0.013***	-0.002	-0.022***	-0.011**	0.009	-0.006	-0.042***	-0.058***	-0.006***
High-		Opec 2	(0.008)	(0.004)	(0.002)	(0.002)	(0.005)	(0.009)	(0.004)	(0.010)	(0.007)	(0.002)
income												
countries		Spec 1	0.023***	0.012**	0.004	0.010***	0.011***	0.004*	0.005	0.006	-0.004	-0.001
		opec i	(0.007)	(0.005)	(0.004)	(0.003)	(0.002)	(0.003)	(0.003)	(0.009)	(0.004)	(0.002)
	M&A											
		Spec 2	-0.011*	0.001	-0.005**	-0.002	-0.001	-0.006	0.003	0.006	-0.003	-0.005**
		Opec 2	(0.006)	(0.003)	(0.003)	(0.002)	(0.004)	(0.008)	(0.003)	(0.005)	(0.006)	(0.002)

#### Table 8. Effects of "Sub-indicators of EoDB" on FDI

Notes: 1.Estimates are obtained with Poisson Psuedo-Maximum Likelihood (PPML) estimator from the specifications of Table 7, replacing Overall Ease of Doing Business Index (EoDB) with each of the components of EoDB. 2. Spec 1 includes source country-period fixed effects and period fixed effects, whereas Spec 2 includes source country-period fixed effects as well as host country fixed effects and period fixed effects. 3. Both Spec 1 and Spec 2 also include host country-specific control variables as well as pair-specific control variables as in Table 5. 4. Standard errors are in parenthesis are based on clustering by country-pair. 5. \*\*\*, \*\*, and \* indicate the significance levels of 1, 5, and 10 percent, respectively.

### Table 9: Interaction effects of EoDB and WGI on FDI flows to developing countries

			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			EoDB_ave	Starting business	Dealing with business construction	Registering property	Getting credit	Protecting minority investors	Paying taxes	Trading across borders	Enforcing contracts	Resolving insolvency
		E a D D	0.090***	0.005	0.015	0.078***	0.009	0.004	0.049***	0.009	0.081***	0.005
		EODB	(0.022)	(0.017)	(0.012)	(0.012)	(0.008)	(0.015)	(0.009)	(0.009)	(0.016)	(0.010)
	Sport 1		-0.002***	0.000	-0.000	-0.001***	0.000	-0.000	-0.001***	-0.000	-0.002***	-0.000
	Opec 1	LODD WGI_ave	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
		WCLown	0.135***	0.047*	0.069***	0.147***	0.031***	0.047***	0.122***	0.047***	0.149***	0.050***
		WGI_ave	(0.025)	(0.027)	(0.017)	(0.017)	(0.010)	(0.015)	(0.013)	(0.013)	(0.021)	(0.008)
greenfield												
		FoDB	0.002	0.013	0.025**	0.005	-0.000	0.013	0.030***	-0.018	0.118***	0.007
		2000	(0.018)	(0.011)	(0.012)	(0.015)	(0.007)	(0.024)	(0.011)	(0.014)	(0.029)	(0.019)
								_				_
	Spec 2	FoDB*WGL ave	-0.001*	-0.000*	-0.001**	-0.000	-0.000	-0.000	-0.001***	0.000	-0.003***	-0.000
		2000 1101_010	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
		WGIave	0.131***	0.119***	0.132***	0.106***	0.107***	0.121***	0.132***	0.074***	0.236***	0.097***
			(0.026)	(0.019)	(0.020)	(0.025)	(0.015)	(0.033)	(0.019)	(0.022)	(0.025)	(0.018)
		EoDB	0.067***	0.035**	-0.005	0.066***	0.032***	0.011	0.032***	0.008	0.069***	0.011
			(0.022)	(0.014)	(0.013)	(0.013)	(0.011)	(0.014)	(0.011)	(0.010)	(0.017)	(0.014)
	Spec 1	EoDB*WGI_ave	-0.001***	-0.001***	0.000	-0.001***	-0.001**	0.000	-0.001***	-0.000	-0.002***	-0.000
			(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
		WGI_ave	0.126***	0.109***	0.043**	0.141***	0.069***	0.038**	0.089***	0.073***	0.142***	0.054***
			(0.027)	(0.024)	(0.021)	(0.019)	(0.014)	(0.017)	(0.017)	(0.015)	(0.023)	(0.012)
M&A			0.000	0.000	0.016	0.002	0.004**	0.006	0.000		0.010	0.001
		EoDB	0.028	0.022	-0.016	-0.003	0.024***	0.026	0.020	0.020	-0.019	-0.001
			(0.032)	(0.015)	(0.017)	(0.022)	(0.011)	(0.032)	(0.020)	(0.021)	(0.040)	(0.029)
			0.001	0.000	0.000	0.000	0.001**	0.000	0.001	0.000	0.000	0.000
	Spec 2	EoDB*WGI_ave	-0.001	-0.000	0.000	0.000	-0.001	-0.000	-0.001	-0.000	0.000	0.000
			(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.001)	(0.001)
			0.079**	0.066***	0.022	0.025	0.060***	0.057	0.060**	0.062**	0.020	0.025
		WGI_ave	0.078***	(0.024)	0.032	0.035	0.069	0.057	(0.026)	0.003***	0.020	0.035
			(0.039)	(0.024)	(0.023)	(0.030)	(0.019)	(0.042)	(0.020)	(0.030)	(0.037)	(0.022)

Notes: 1. Estimates are obtained with Poisson Psuedo-Maximum Likelihood (PPML) estimator from the specifications of Table 7, replacing Overall Ease of Doing Business Index (EoDB) with each of the components of EoDB. 2. Spec 1 includes source country-period fixed effects and period fixed effects, whereas Spec 2 includes source country-period fixed effects as well as host country fixed effects and period fixed effects. 3. Both Spec 1 and Spec 2 also include host country-specific control variables as well as pair-specific control variables as in Table 5. 4. Standard errors are in parenthesis are based on clustering by country-pair. 5. \*\*\*, \*\*, and \* indicate the significance levels of 1, 5, and 10 percent, respectively.

#### Figure 2: Predicted number of greenfield investment due to overall EoDB: Developing countries



B: Others (overall WGI >34.70834)



#### ✓ When using the residuals obtained from regressing EoDB against the overall WGI and period dummies

		Developin	g countries			High-incom	e countrie	5
	Number of proj	f greenfield ects	Number of	M&A deals	Number of proje	greenfield ects	Number of	M&A deals
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Spec1	Spec2	Spec 1	Spec2	Spec 1	Spec 2	Spec 1	Spec 2
Overall Ease of Doing Business	-0.021***	0.031***	-0.004	0.008	-0.021***	0.053***	-0.004	0.008
Index - host (expected sign = plus)	(0.006)	(0.007)	(0.007)	(0.012)	(0.007)	(0.007)	(0.007)	(0.012)
Overall World Governance Index -	0.056***	0.072***	0.047***	0.029*	0.029***	-0.008	0.047***	0.029*
host (expected sign = plus)	(0.005)	(0.012)	(0.006)	(0.015)	(0.005)	(0.009)	(0.006)	(0.015)
RTA between source and host (= 1 if	-0.009	0.450***	-0.048	0.345**	-0.032	-0.111	-0.048	0.345**
yes)	(0.113)	(0.1.26)	(0.157)	(0.145)	(0.128)	(0.073)	(0.157)	(0.145)
	(,	(	(0.207)	(	()	()	(0.20.7)	(
BIT between source and host (= 1 if	-0.133	-0.042	-0.242**	-0.126	0.358**	0.217***	-0.242**	-0.126
yes)	(0.095)	(0.074)	(0.108)	(0.128)	(0.149)	(0.084)	(0.108)	(0.128)
	(0.055)	(0.074)	(0.100)	(0.120)	(0.145)	(0.001)	(0.100)	(0.120)
	0.895***	6 388***	0.700***	4 236***	0.780***	0.710***	0.700***	4 236***
InPopulation- host	(0.023)	(0.618)	(0.045)	(0.830)	(0.031)	(0.265)	(0.045)	(0.830)
	(0.023)	(0.010)	(0.0+3)	(0.050)	(0.031)	(0.203)	(0.0+3)	(0.050)
	0.406***	-0.151	0.526***	0.065	0318**	-0.213	0.526***	0.065
InPCGDP - host	(0.059)	(0.159)	(0.071)	(0.179)	(0.131)	(0.1.52)	(0.071)	(0.179)
	(0.055)	(0.100)	(0.07 1)	(0.17.57)	(0.131)	(0.102)	(0.071)	(0.175)
	0.023**	0.004	-0.016	-0.025**	0.092***	0.021**	-0.016	-0.025**
Growth Rate - host	(0.011)	(0.008)	(0.018)	(0.013)	(0.016)	(0.009)	(0.018)	(0.013)
	(,	(,	(,	(,	(	()	(	(,
	-0.020**	-0.021***	0.000	0.006	0.161***	0.018	0.000	0.006
Inflation Rate - host	(0.009)	(0.008)	(0.011)	(0.011)	(0.020)	(0.013)	(0.011)	(0.011)
	(0.000)	(010 00)	(01011)	(01011)	(01020)	(010 20)	(01011)	(01011)
	-0.753***	-0.660***	-0.863***	-1.157***	-0.351***	-0.372***	-0.863***	-1.157***
InDistance between source and host	(0.077)	(0.082)	(0.086)	(0.103)	(0.071)	(0.051)	(0.086)	(0.103)
	(	(	(	(	(,	(	(	(
	0.599***	0.971***	0.475***	0.789***	0.602***	0.481***	0.475***	0.789***
Common language (=1 if yes)	(0.120)	(0.091)	(0.181)	(0.186)	(0.117)	(0.074)	(0.181)	(0.186)
		()		()			()	()
	-0.263	-0.088	-0.526	-0.927**	0.141	0.351***	-0.526	-0.927**
Contiguity (=1 if yes)	(0.228)	(0.210)	(0.325)	(0.397)	(0.181)	(0.090)	(0.325)	(0.397)
				. ,		. ,		
Constant	0.058	-12.505***	-0.177	-1.836	-1.300	8.932***	-0.177	-1.836
	(0,687)	(1.954)	(0,933)	(2,453)	(1.339)	(2.077)	(0,933)	(2,453)
	(0.007)	(2.00.)	(0.000)	(2	(2.000)	(2.0777)	(0.000)	(2
Fixed Effects	<u>†</u>							
Period(t)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Source country-Period (it)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Host country (j)		Yes		Yes		Yes		Yes
Observation	3968	3968	2626	2622	2704	2704	2626	2622
R-squared	0.823	0.912	0.710	0.773	0.825	0.942	0.710	0.773

#### Appendix Table 9: Effects of "Sub-indicators of EoDB" on FDI

#### ✓ When using the residuals obtained from regressing EoDB against the overall WGI and period dummies

			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			EoDB_ave	Starting business	Dealing with business construction	Registering property	Getting credit	Protecting minority investors	Paying taxes	Trading across borders	Enforcing contracts	Resolving insolvency
		Spor 1	-0.021***	-0.007**	0.001	-0.015***	-0.011***	-0.003	0.003	-0.007**	-0.010***	-0.002
		Opec 1	(0.006)	(0.004)	(0.004)	(0.004)	(0.002)	(0.004)	(0.003)	(0.003)	(0.004)	(0.002)
	greenfield											
		Snor 2	0.031***	0.006**	0.005	0.004	0.008***	0.008**	0.003	0.008**	0.024*	-0.001
Doubloping		Opec 2	(0.007)	(0.003)	(0.004)	(0.003)	(0.002)	(0.004)	(0.002)	(0.003)	(0.013)	(0.004)
countries				_								
		Spec 1	-0.004	0.004	0.003	-0.005	-0.006**	-0.012***	-0.002	0.006**	0.001	0.003
		opec i	(0.007)	(0.004)	(0.004)	(0.004)	(0.003)	(0.004)	(0.003)	(0.003)	(0.004)	(0.004)
	M&A											
		Spec 2	0.008	-0.000	0.012**	0.003	0.001	-0.010*	0.003	-0.002	0.001	0.001
			(0.012)	(0.005)	(0.005)	(0.004)	(0.003)	(0.006)	(0.004)	(0.006)	(0.017)	(0.008)
		Spec 1	-0.021***	-0.004	-0.006	-0.001	-0.012***	-0.003	-0.017***	-0.029***	-0.009*	0.002
		00001	(0.007)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.004)	(0.008)	(0.005)	(0.002)
	greenfield											
		Spec 2	0.053***	0.013***	0.003	0.023***	0.014***	-0.002	0.008**	0.044***	0.056***	0.006***
High-		00002	(0.007)	(0.004)	(0.002)	(0.002)	(0.004)	(0.009)	(0.004)	(0.009)	(0.007)	(0.002)
income												_
countries		Spec 1	-0.004	0.004	0.003	-0.005	-0.006**	-0.012***	-0.002	0.006**	0.001	0.003
		opec (	(0.007)	(0.004)	(0.004)	(0.004)	(0.003)	(0.004)	(0.003)	(0.003)	(0.004)	(0.004)
	M&A											
		Spec 2	0.008	-0.000	0.012**	0.003	0.001	-0.010*	0.003	-0.002	0.001	0.001
		Oper 2	(0.012)	(0.005)	(0.005)	(0.004)	(0.003)	(0.006)	(0.004)	(0.006)	(0.017)	(0.008)

Notes: 1. Estimates are obtained with Poisson Psuedo-Maximum Likelihood (PPML) estimator from the specifications of Appendix Table 8, replacing Overall Ease of Doing Business Index (EoDB) with each of the components of EoDB. 2. Spec 1 includes source country-period fixed effects and period fixed effects, whereas Spec 2 includes source country-period fixed effects as well as host country fixed effects and period fixed effects. 3. Both Spec 1 and Spec 2 also include host country-specific control variables as well as pair-specific control variables as in Table 5. 4. Standard errors are in parenthesis are based on clustering by country-pair. 5. \*\*\*, \*\*, and \* indicate the significance levels of 1, 5, and 10 percent, respectively.

#### Table 10: Effects of OECD's FDI Regulatory Restrictiveness Index on FDI

		Developin	g countries		High-income countries					
	Number of proj	f greenfield ects	Number of	M&A deals	Number of proje	greenfield ects	Number of M&A deals			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
	Spec 1	Spec2	Spec 1	Spec2	Spec 1	Spec 2	Spec 1	Spec 2		
Overall FDI Regulatory	0.022***	0.018***	0.002	0.013*	-0.029***	-0.016**	0.003	0.005		
Restrictiveness Index - host	(0.003)	(0.005)	(0.007)	(0.007)	(0.005)	(0.008)	(0.007)	(0.005)		
Texpected sign - minus										
Overall World Governance Index -	0.031***	0.077***	0.030***	0.020*	0.030***	0.006	0.045***	0.004		
host (expected sign = plus)	(0.005)	(0.010)	(0.009)	(0.010)	(0.005)	High-income countries           ar of greenfield projects         Number of M&A d           (6)         (7)         (8)           1         Spec 2         Spec 1         Spec           1         Spec 2         Spec 1         Spec           (0.008)         (0.007)         (0.007)         (0.007)           (1         -0.016**         0.003         0.006           (0.008)         (0.007)         (0.007)         (0.007)           (1         -0.176**         0.142         -0.296           (1         -0.176**         0.142         -0.296           (1         -0.176**         0.142         -0.296           (1         -0.176**         0.142         -0.296           (1         -0.176**         0.142         -0.296           (1         -0.176**         0.142         -0.296           (1         -0.176**         0.142         -0.066           (1         -0.176**         0.142         -0.067           (1         -0.125         (0.029)         (0.149           (0.117)         (0.167)         (0.106)           (0.016)         (0.029)         (0.016)           (1         -0.511*	(0.006)			
RTA between source and host (= 1 if	-0.179*	0.190*	-0.035	0.361*	-0.071	-0.176**	0.142	-0.298***		
yes)	(0.099)	(0.113)	(0.187)	(0.193)	(0.097)	(0.087)	(0.106)	(0.092)		
BIT between source and host (= 1 if	-0.307***	-0.206***	-0.300**	-0.057	0.003	0.110	-0.048	-0.083		
yes)	(0.075)	(0.079)	(0.142)	(0.159)	(0.115)	(0.118)	(0.149)	(0.140)		
	. ,	. ,	. ,	. ,	. ,	. ,	. ,	Image         (8)           (8)         Spec 2           0.005         0.005           0.005         0.005           0.005         0.004           0.005         0.004           0.006         -0.298***           0.0092)         -0.083           0.0.0140)         -0.083           0.0.010         -0.0135           0.0010         -0.005           0.0010         -0.005           0.0010         0.0101           0.0011         -0.029           *         -0.0135           0.0010         (0.014)           *         -0.824***           0.0697***         (0.091)           0.307***         (0.118)           *         -4.868           0.307***         (0.118)           *         -4.868           0.307***         (0.118)           *         -4.868           *         Yes           Yes         Yes           Yes         Yes           Yes         Yes           Yes         2702           0.945         -0.945		
	0.688***	4.018***	0.800***	5.032***	0.878***	3.506***	0.801***	3.382***		
InPopulation- host	(0.033)	(0.679)	(0.051)	(1.165)	(0.032)	(1.025)	(0.029)	(0.532)		
		. ,	. ,	. ,	. ,	. ,		. ,		
	0.504***	-0.398***	0.574***	0.438***	-0.079	-0.401***	0.442***	-0.135		
InPCGDP - host	(0.058)	(0.120)	(0.088)	(0.151)	(0.099)	(0,117)	(0.167)	(0,103)		
	(	(,	(/	(	(,	(,		(,		
	-0.006	-0.012	-0.046*	-0.031*	0.083***	0.083***	0.017	-0.005		
Growth Rate - host	(0.012)	(0.011)	(0.026)	(0.017)	(0.016)	(0.009)	(0.016)	(0.009)		
								. ,		
	0.007	-0.022*	-0.001	-0.032***	0.218***	0.024	0.199***	0.010		
Inflation Rate - host	(0.011)	(0.013)	(0.016)	(0.009)	(0.030)	(0.016)	(0.029)	(0.014)		
						. ,				
	-0.626***	Jumber of greenfield projects           (1)         (2)           Spec1         Spec2           0.028***         0.018***           (0.003)         (0.005)           0.031***         0.077***           (0.005)         (0.010)           -0.179*         0.190*           (0.099)         (0.113)           -0.307***         -0.206***           (0.075)         (0.079)           0.307***         -0.206***           (0.033)         (0.679)           0.504***         -0.398***           (0.058)         (0.120)           -0.006         -0.012           (0.012)         (0.011)           0.007         -0.022*           (0.012)         (0.011)           0.626***         0.587***           (0.065)         (0.071)           0.856***         0.867***           (0.132)         (0.102)           -0.057         -0.152           (0.183)         (0.208)           -0.059         -7.454**           (0.704)         (3.210)           -0.942         Yes           Yes         Yes           Yes         Yes	-0.937***	-1.235***	-0.381***	-0.436***	-0.511***	-0.824***		
InDistance between source and host	(0.065)	(0.071)	(0.101)	(0.123)	(0.060)	(0.058)	(0.073)	(0.075)		
	0.856***	0.867***	0.739***	0.806***	0.829***	0.531***	0.841***	<ul> <li>(8)</li> <li>Spec 2</li> <li>0.005</li> <li>0.004</li> <li>(0.005)</li> <li>0.004</li> <li>0.0083</li> <li>-0.298***</li> <li>(0.092)</li> <li>-0.083</li> <li>(0.140)</li> <li>3.382***</li> <li>(0.532)</li> <li>-0.135</li> <li>(0.103)</li> <li>-0.005</li> <li>(0.009)</li> <li>-0.005</li> <li>(0.009)</li> <li>-0.005</li> <li>(0.009)</li> <li>-0.135</li> <li>(0.103)</li> <li>-0.005</li> <li>(0.009)</li> <li>-0.010</li> <li>(0.010)</li> <li>(0.010)</li> <li>(0.011)</li> <li>0.007***</li> <li>(0.091)</li> <li>0.307***</li> <li>(0.091)</li> <li>-4.868</li> <li>(3.539)</li> <li>Yes</li> </ul>		
Common language (=1 if yes)	(0.132)	(0.102)	(0.213)	(0.216)	(0.103)	(0.077)	(0.119)	(0.091)		
	-0.057	-0.152	-0.823**	-1.123***	0.078	0.279***	0.198	0.307***		
Contiguity (=1 if yes)	(0.183)	(0.208)	(0.362)	(0.430)	(0.128)	(0.092)	(0.160)	(0.118)		
Constant	-0.059	-7.454**	1.053	-11.214**	2.758***	-5.907	-3.121*	-4.868		
	(0.704)	(3.210)	(1.251)	(5.184)	(0.945)	(6.083)	(1.732)	(3.539)		
xed Effects			†							
Period(t)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Source country-Period (it)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Host country (j)		Yes		Yes		Yes		Yes		
Observation	1438	1438	1246	1246	2775	2775	2702	2702		
R-squared	0.912	0.942	0.782	0.800	0.890	0.938	0.897	0.945		

#### Table 11: Effects of "Sub-indicators of FDI RRI" on FDI

			(1)	(2)	(3)	(4)	(5)
			All types of restrictions	Equity restriction	Screening & approval	Key foreign personnel	Other restrictions
		Spec 1	0.022***	0.023***	0.028***	-0.066**	0.064***
		Spec 1	(0.003)	(0.006)	(0.006)	(0.028)	(0.017)
	greenfield						
		Spee 2	0.018***	0.047***	0.026***	-0.435**	-0.055***
Developing		Sher 5	(0.005)	(0.011)	(0.007)	(0.176)	(0.017)
countries							
		Spor 1	0.002	-0.001	-0.016	-0.002	0.124***
		Sher I	(0.007)	(0.010)	(0.012)	(0.049)	(0.017)
	M&A						
		Spor 2	0.013*	0.020	0.015*	-0.404**	0.013
		Shec 5	(0.007)	(0.013)	(800.0)	(0.161)	(0.019)
		Spec 1	-0.029***	-0.048***	-0.032**	-0.056*	-0.036*
		00001	(0.005)	(0.008)	(0.013)	(0.033)	(0.018)
	greenfield			_			
		Spec 2	-0.016**	0.012	-0.072***	0.002	-0.104**
High-			(0.008)	(0.013)	(0.010)	(0.013)	(0.042)
income							
countries		Spec 1	0.003	-0.014*	0.032*	-0.030	0.013
		•	(0.007)	(0.008)	(0.017)	(0.020)	(0.017)
	M&A			-	_		
		Spec 2	0.005	0.008	0.000	0.001	0.026
		-	(0.005)	(0.009)	(0.015)	(0.006)	(0.024)

Notes: 1. Estimates are obtained with Poisson Psuedo-Maximum Likelihood (PPML) estimator from the specifications of Table 10, replacing Overall FDI Regulatory Restrictiveness Index (RRI) with each of the components of RRI. Spec 1 includes source country-period fixed effects and period fixed effects, whereas Spec 2 includes source country-period fixed effects and period fixed effects. 3. Both Spec 1 and Spec 2 also include host country-specific control variables as well as pair-specific control variables as in Table 5. 4. Standard errors are in parenthesis are based on clustering by country-pair. 5. \*\*\*, \*\*, and \* indicate the significance levels of 1, 5, and 10 percent, respectively.

				(1)	(2)	(3)	(4)	(5)
				Overall RRI: All types of restrictions	Equity restriction	Screening & approval	Key foreign personnel	Other restrictions
			551	-0.015	-0.064**	-0.044	0.200	0.379***
			RKI	(0.016)	(0.028)	(0.041)	(0.261)	(0.088)
		Spec 1	RRI*WGI_ave	0.001** (0.000)	0.002*** (0.001)	0.002*	-0.007 (0.007)	-0.008*** (0.002)
			WGII_ave	0.025***	0.015**	0.031***	0.026***	0.046***
	groonfield			(0.007)	(0.000)	(0.003)	(0.007)	(0.000)
	greenieu		RRI	0.072*** (0.021)	0.196*** (0.058)	0.106*** (0.037)	3.409*** (0.816)	-0.897*** (0.260)
		Spec 2	RRI*WGI_ave	-0.001*** (0.000)	-0.003*** (0.001)	-0.002** (0.001)	-0.015* (0.008)	0.013***
			WG Lave	0.145*** (0.016)	0.150*** (0.019)	0.129*** (0.014)	0.142*** (0.017)	0.085*** (0.019)
	M&A	Spec 1	RRI	-0.038 (0.024)	-0.094** (0.045)	-0.063 (0.073)	-1.620*** (0.445)	0.388*** (0.120)
			RRI*WGI_ave	0.001* (0.000)	0.002** (0.001)	0.001 (0.002)	0.040*** (0.011)	-0.005** (0.003)
			WGI_ave	0.022* (0.012)	0.019* (0.011)	0.028*** (0.010)	0.007 (0.012)	0.053*** (0.011)
		Spec 2	RRI	-0.037 (0.032)	-0.265*** (0.082)	-0.011 (0.052)	0.379 (1.037)	-1.016** (0.433)
			RRI*WGI_ave	0.001	0.004***	0.001	0.012	0.018**
				(0.001)	(0.001)	(0.001)	(0.011)	(0.007)
			WGI_ave	0.030	-0.000	0.045***	0.034	-0.009
				(0.022)	(0.025)	(0.017)	(0.021)	(0.029)

#### Table 12: Interaction effects of RRI and WGI on FDI flows to developing countries

#### Table 13: Effects of RTA and BIT on FDI

		Nu	Imber of Greer	nfield Investmer	nts			Number of M&A projects						
	Developing	High-inc ome	All	All	All	All	All	Developing	High-income	All	All	All	All	All
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
PTA (- 1 if yes)	0.095	-0.050	0.109***		0.422***	0.121**	0.020	0.062	0.082	0.098*		-0.173	0.078	0.146**
RTA (= 1 II yes)	(0.093)	(0.065)	(0.041)		(0.136)	(0.051)	(0.047)	(0.080)	(0.065)	(0.051)		(0.192)	(0.055)	(0.072)
			_											
BIT (- 1 if ves)	0.041	0.092	0.054		0.055	0.061	-0.029	-0.064	0.239	-0.055		-0.553	-0.086	0.005
DIT (= Thryedy	(0.069)	(0.091)	(0.056)		(0.209)	(0.057)	(0.053)	(0.098)	(0.203)	(0.094)		(0.375)	(0.098)	(0.110)
RTA * developing host				0.166***							0.128			
it in actorophig hoot				(0.052)							(0.080)			
RTA * high-income host				0.009							0.265			
i tint ingininoenionoot				(0.067)							(0.220)			
BIT * developing host				0.045							-0.102			
				(0.061)							(0.103)			
BIT * high-incom e host				0.116							0.265			
				(0.090)							(0.220)			
RTA * WGL ave of host					-0.006**							0.004		
					(0.002)							(0.003)		
BIT * WGL ave of host					-0.000							0.011		
					(0.004)							(0.008)		
RTA * BIT						-0.042							0.093	
						(0.076)							(0.101)	
RTA, t-1 (= 1 if ves)							0.101*							0.036
,,,							(0.056)							(0.086)
BIT, t-1 (= 1 if ves)							0.008							0.083
							(0.052)							(0.103)
Ν	5899	3748	9647	9647	9647	9647	7041	3723	3350	7086	7086	7086	7086	5121
R-sq	0.982	0.994	0.988	0.988	0.988	0.988	0.994	0.994	0.995	0.994	0.994	0.994	0.994	0.994

Notes: 1. Estimates are obtained with Poisson Psuedo-Maximum Likelihood (PPML) estimator. Spec 2 includes source country-period fixed effects and host country-period fixed effects as well as period fixed effects. 3. Standard errors are in parenthesis are based on clustering by country-pair. 4. a, b, and c indicate the significance levels of 1, 5, and 10 percent, respectively. 4. The non-Aid dummies (NAD) are included but not reported for the sake of brevity.

# **5. Summary and Concluding Remarks**

### Main findings

- Among the host country-specific governance/policy factors, the quality of local governance is the most important factor for both greenfield and M&A investments to developing countries, whereas FDI restrictive policies of developing countries are not significant factors in restricting FDI inflows to these countries.
- Specifically, governance quality of host countries has a significant effect on both greenfield and M&A investment flows to both developing and high-income countries.
- The effect of governance quality of host countries on both modes is greater in developing host countries than in high-income host countries.
- When host countries are developing countries, the effect of governance quality is greater for greenfield investment than M&A investment.

# **5. Summary and Concluding Remarks**

### Main findings (Cont.)

- An improvement in host country's environment for doing business may have a positive effect on greenfield investment only when the host country's governance quality is very low.
- Among the various factors of local business environments, dealing with business construction", "paying taxes", and "enforcing contracts" may have a positive effect on greenfield investments only when the host country's governance quality is very low. For M&A investment, this relation is evident with ease of "getting credit".
- Among the pair-specific policy factors, regional trade agreements have a significantly positive impact on greenfield investment flows to developing countries, while bilateral investment treaties do not exert any positive effect either on greenfield investment or M&A investment.

# **5. Summary and Concluding Remarks**

### □ Main findings (Cont.)

- Among various governance factors, "regulatory quality", "rule of law", "government effectiveness", "control of corruption", and "political stability" of host developing countries appear to be particularly important for MNEs' decision on greenfield investment to developing countries.
- "Voice and accountability", "political stability", "rule of law", and control of corruption" are also important governance factors for M&A investment in developing countries.
- Among the various factors of local business environments, dealing with business construction", "paying taxes", and "enforcing contracts" may have a positive effect on greenfield investments only when the host country's governance quality is very low.
- For M&A investment, this relation is evident with ease of "getting credit".

# 5. Concluding observations

## Policy suggestions for ADB

- OECD's FDI RRI does not deal with FDI promotion policies and covers only 22 developing countries.
- ADB may take an initiative in developing an index measuring FDI policies, similarly to Wei (2000).
- Utilizing PricewaterhouseCoopers (PwC)'s country reports on FDI policies, Wei (2000) constructs two measures of government policies towards FDI in 49 countries: FDI restrictions index and FDI incentives index.
- "FDI restrictions" index was created based on the presence of restrictions in four sub areas such as

   (1) controls on foreign exchange transactions, (2) exclusion of foreign firms from certain strategic sectors, (3) exclusion of foreign firms from other sectors, and (4) restrictions on the share of foreign ownership.
- "FDI incentives" index was created based on the presence or absence of FDI promoting policies in the following four areas: (1) special incentives for foreigners to invest in certain industries or certain geographic areas; (2) tax concessions specific to foreign firms; (3) cash grants, subsidized loans, reduced rent for land use, or other nontax concessions, when these are specific to foreign firms; and (4) special promotion for exports (including the existence of export processing zones, special economic zones, and the like).

