The Reputational Impact of Investor State Disputes

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Dear Professor Schneider,

We first would like to thank you for the opportunity to revise and resubmit our manuscript. We believe the manuscript has greatly benefited from the Reviewers' helpful and thoughtful comments. We have thoroughly revised the manuscript, taking seriously each individual point raised by the Reviewers. The revision memo is organized by first responding to your comments and then addressing the reviewers' points. Our comments and responses are shown in *BLUE* below each point.

We hope you agree that the manuscript has greatly improved through this helpful process and we are looking forward to your response.

Sincerely,

The Authors.

1. Reviewer 1

1.1. Major Comments.

(1) To what extent is the basic assumption plausible that ISDS claims tarnish reputation? A series of studies have shown that awareness of IIAs and more so of claims is very limited even among foreign investors - why would claims impact on reputation? Among well-informed investors, it has become known that a good number of claims are entirely without merits, so the fact that a state is hit by a claim does not necessarily mean that the state has done anything reproachable (the institution that has most suffered in terms of reputation lately is ISDS itself). There are so many more interactions between businesses and governments (and so few claims, overall and against individual countries) that contribute to reputation, that noise probably covers any sign that could come out of investment treaty claims. In all, the findings are likely to be artifacts.

- *The reviewer asks "To what extent is the basic assumption plausible that ISDS claims tarnish reputation?" We agree with the reviewer and devote pp. 3 to 7 at the front end of the paper to discussing and challenging the plausibility of prior research findings claiming that investment treaty arbitration has a reputational impact. The assumption re ISDS claims is plausible BECAUSE of these prior studies. IF they are wrong (and we show they are), then the assumption becomes much less plausible.*

(2) One key problem of the design is the use of FDI data (and in particular the highly volatile flow data) for the econometric analysis. Although often repeated, the use of

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this dataset is highly problematic for the purpose of the study, as has been recognized for a decade now (see first Robert E. LIPSEY (2007), "Defining and measuring the location of FDI output" Sjoerd Beugelsdijk/Jean-Francois Hennart/Arjen Slangen/Roger Smeets (2010), "Why and how FDI stocks are a biased measure of MNE affiliate activity"; and later Andrew Kerner (2014), "What We Talk About When We Talk About Foreign Direct Investment" and Andrew Kerner/Jane Lawrence (2012)). Many econometric studies that seek to assess treaty effects still use this data for lack of other available data or due to ignorance, but this is not a good reason to use this data without any discussion on its validity and implications for the exercise.

- *We do not agree that FDI flow data are inappropriate. The literature cited to make this point is simply not relevant. a) Kerner and Lawrence criticize the use of flow data on the grounds that foreign capital investment takes different forms and the level of political risk varies accordingly. We're interested in foreign investor confidence, however, not vulnerability to political risk. Fixed capital may be more vulnerable than more volatile forms of investment to political risk, but that is irrelevant for the purposes of our analysis. All kinds of investment flows, whether they end up in the stock market or investment in land, are indicators of business confidence. b) Kerner argues that FDI flow data "measure the impact that MNCs have in the host country's capital account." That is precisely what we and others are interested in-NOT MNC assets, value added, sales or employment. The reason is that we are not interested in the relative importance or the impact of foreign investments on the domestic economy. We agree with Kerner that "Different research questions demand different conceptualizations." FDI sales, assets, employment, etc. do not address questions about the impact of disputes on investment reputation. c) Beugelsdijk, Hennart, Slangen and Smeets challenge the appropriateness of using FDI stock data to measure the value-adding activity of MNCs in host countries, We are NOT using FDI stock data and we are NOT interested in measuring the value-adding activity of MNCs in host countries. d) Lipsey (2007) argues that measures of flows and stocks don't measure the relative importance of FDI in terms of employment, output, etc. to an economy or the distribution of FDI by industry. We are not interested in either. The key point is that there is nothing intrinsically problematic with using investment flow data-it just depends on what one is trying to explain.*

(3) Also: Why is the number of claims not normalised against the volume of investment that individual countries receive overall (a country that receives little investment from anywhere is unlikely to be exposed to a lot of claims, while a country that attracts a lot of foreign investment would normally be more likely to get hit by claims); those that perceive the reputation can be assumed to factor this in. Also, not all countries have concluded IIAs with countries from which they receive meaningful amounts of investment, so the exposure to such claims is very different. This is also a fact that would be known to those that know about claims.

- *Three reasons: a) In the interest of making scholarship cumulative, we are using the same indicators as used by those whose claims we are challenging. b) The commentator has a hypothesis that more investment means more claims, but this is merely a hypothesis and almost certainly wrong. Recipients of unusually low levels of FDI (e.g., Moldova, and Turkmenistan) have had more disputes lodged*

against them (20) than four of the top five recipients of FDI (UK, Hong Kong, China, and Germany-a total of 7 disputes). c) We are interested in addressing the claims of prior research. Additionally, the point about having concluded or not concluded IIAs from FDI source countries is not very pertinent. "Treaty shopping" is an intrinsic feature of investment treaty arbitration. Philip Morris, for example, brought a legal claim versus Australia under an Australian-Hong Kong BIT, a legal claim against Uruguay under a Swiss-Uruguayan treaty, etc..

(4) At FN46, the authors express the surprising view that "we expect the number of ratified BITs to be positively related to reputation". Many hold that the opposite is likely to be the case (at least among developing economies, but the text is unclear on whether advanced economies are included in the statement, given the statement after FN53). BITs would more likely be used by states to compensate for mixed reputation to international investors - see, e.g., the papers cited earlier at FN11 and FN12.

- *Our focus here is not to understand the role that BITs may have on reputation. We are aware that there is much debate in the literature about the positive or null role that BITs may have on FDI and reputation. We are not focused on engaging with this debate in our paper.*

Other Comments.

(1) When the distinctive features of ICSID are described, the second item does not set ICSID apart. In fact, all arbitration institutions and rules, in combination with the IIAs, provide binding and enforceable awards. The legal authority of ICSID, if such a thing exists, appears irrelevant, as decisions are taken by the same kind of arbitrators that also adjudicate disputes under other rules and institutions. ICSID itself only facilitates the adjudication process.

- *We have changed the length and language of our discussion of the ICSID and added a citation buttressing our points about its distinctiveness.*

(2) Slicing off upper income nations (at FN40) for unspecific reasons ("significantly different role in the system" - why?) is not a plausible and satisfying way to address this issue. The fact that advanced economies are increasingly defendants of treaty claims (without their reputation being tarnished) is interesting and questions the basic assumptions. Canada is a case in point: It got hit by a large number of claims, of which it lost some, and still does not have a "bad" reputation for foreign investors. How would you explain this fact?

- *We slice off upper income nations to make our research comparable to those of others. This is the same as Allee and Peinhart, Aisbett, Busse and Nunnenkamp, etc. have done. We cannot address the robustness of their findings if we use an entirely different case base.*
- *However, to highlight the robustness of our results we reestimate Table 4 (our models of investment profile) below with upper income countries included. As you can see the results remain similar.*

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
ICSID (past 2 years)	−0.184**					
	(0.058)					
Not ICSID (past 2 years)		0.03				
		(0.113)				
ICSID (past 5 years)			−0.126**			
			(0.046)			
Not ICSID (past 5 years)				0.024		
				(0.084)		
Cumulative $ICSID_{t-1}$					−0.092**	
					(0.034)	
Cumulative Not $ICSID_{t-1}$						-0.006
						(0.055)
%Δ GDP (past years)	0.024**	0.023**	0.025**	0.023**	0.025**	0.023**
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Ln(GDP per capita) (past years)	0.778*	0.8*	0.784*	0.791*	0.847*	0.811*
	(0.39)	(0.394)	(0.391)	(0.397)	(0.399)	(0.402)
Ln(Pop.) (past years)	2.602**	2.535**	2.637**	2.534**	2.703**	2.541**
	(0.381)	(0.387)	(0.38)	(0.386)	(0.381)	(0.387)
Ln(Inflation) (past years)	−0.224**	−0.209*	−0.234**	−0.208*	−0.252**	−0.209*
	(0.082)	(0.086)	(0.08)	(0.086)	(0.079)	(0.085)
Internal Stability (past years)	0.169**	0.171**	0.169**	0.171**	0.167**	0.17**
	(0.037)	(0.037)	(0.036)	(0.037)	(0.036)	(0.037)
External Stability (past years)	-0.052	-0.049	-0.055	-0.048	-0.058	-0.049
	(0.038)	(0.038)	(0.038)	(0.038)	(0.038)	(0.038)
Ratif. BITs (past years)	0.041**	0.038**	0.042**	0.038**	0.042**	0.039**
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Capital Openness (past years)	0.207**	0.211**	0.204**	0.211**	0.189**	0.211**
	(0.069)	(0.071)	(0.068)	(0.071)	(0.07)	(0.071)
Polity (past years)	0.011**	0.011**	0.011**	0.011**	0.011**	0.011**
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
n	3296	3296	3295	3295	3296	3296
N	126	126	126	126	126	126

TABLE 1. Regression on investment profile using country fixed effects, robust standard errors in parentheses. ** and * indicate significance at $p < 0.05$ and $p < 0.10$, respectively.

(3) Figure 1 arguably has a normalisation problem: the overall number of newspaper articles referenced on LexisNexis probably goes up every year, so a potentially useful measure of public attention would be the priority - relative frequency of mentioning - that "ICSID" gets in the news. This could be measured as a percentage of articles mentioning "ICSID" in a given year in all referenced articles in that given year. It is likely to show quite a different graph, and is more meaningful that the absolute number. The axis-title "frequency" should also be amended, as a frequency cannot be expressed in absolute numbers ("occurrences" would probably be better for this graph, but "proportion" or "share of" would be probably required if the graph was normalised as proposed here.

- *We have changed the axis-title to "Occurrences". However, we would note that if the increasing mentions of ICSID is simply an artifact of more articles every year, then we would note that we would expect a somewhat linear relationship*

from around 2000 onwards. Instead we see very few mentions of ICSID at all up until 2006, and then a substantial rise after 2010. This doesn't correspond with a story of the mentions just being tied to increasing amounts of media on LexisNexis.

(4) Why is population size (FN48) assumed to be positively correlated with international reputation? The countries with the largest populations do not normally feature on top in this regard. In the top 20, only three countries would be considered by most as having an above average reputation in foreign investors' eyes, and these are all advanced economies (and excluded from the study).

- *We are addressing claims based on prior research.*

(5) A large number of claims are now brought under multilateral arrangements (e.g. Energy Charter Treaty, NAFTA, CAFTA-DR) that have almost identical features as BITs and FTAs with respect to investment protection. Focusing exclusively on bilateral arrangements is an interesting choice in this regard (but admittedly, UNCTAD does not provide the required dataset off the shelf).

- *The vast majority of claims brought to ICSID are based on BITs. We would note that obtaining data on multilateral agreements is not very difficult either. The UNCTAD Investment Policy Hub website has information on multilateral agreements that include IIAs. Additionally, the DESTA database can also be used to ascertain PTAs that include IIAs. However, we choose to focus on BITs because of their relevance to ICSID and we have no reason to expect that accounting for multilateral agreements as well would substantively change our results re the affect of disputes on FDI or reputation.*

2. Reviewer 2

2.1. **Major Comments.**

(1) Substantively, I invite the authors to revise and update the discussions in pages 5-7. The authors said that the previous studies have found that the simple fact that a private firm brings a claim against a state on potential treaty violations regardless of the actual verdicts damages the states reputation as a law-abiding member of the international community in the previous section. Now, the authors say that the ISDS processs unique characteristics of being case-specific, decentralized, uncertain, and non-transparent may not lead to a significant reputation loss because reputations are sticky and constructed around multiple observations. These two claims seem not consistent. If only the fact that claims against a state are made matters, why do we need to care about the variations in specific designs in ISDS across treaties? If you are trying to reveal the inconsistency among the existing literatures claims, please revise your writing in this part. Currently, it is not very clear what you are trying to establish in this part.

- *We thank the reviewer for these comments. We are not asserting but rather challenging the first claim on the basis of the case-specific, decentralized, uncertain, and non-transparent nature of ISDA. We have rewritten this section of the paper and hope it is more clear.*

(2) For the sake of clarity, please state hypotheses in a separate section right below the theory part, for example. With the current format, it is somewhat hart to follow.

- *We have explicitly set out our main hypotheses on pages 14 and 15.*

(3) If simply facing a dispute either at the ICSID nor at the Non-ICSID is not associated with a meaningful change in FDI flows, why does it matter in affecting the ICRG ratings? Could you elaborate on this gap more?

- *Reputational arguments could be correct even if disputes have a limited effect on flows. We discuss this point further on p. 11 and 12.*

(4) Regarding Tables 2, 3, and 4, authors report the results with country fixed effects. However, they are only showing within country variations. Do you have the pooled results? If so and if they are similar to country fixed effects, please mention in briefly at least.

- *Below we reproduce Tables 1 (models for FDI using ICSID disputes measures), 2 (models for FDI including non-ICSID dispute measures), and 4 (models for Investment Profile) without using fixed effects. Results are similar.*

Variable	Model 1	Model 2	Model 3
ICSID (past 2 years)	0.12		
	(0.183)		
ICSID (past 5 years)		0.066	
		(0.1)	
Cumulative ICSID$_{t-1}$			-0.005
			(0.058)
%Δ GDP$_{t-1}$	0.075*	0.075*	0.075*
	(0.029)	(0.029)	(0.029)
Ln(GDP per capita)$_{t-1}$	-0.078	-0.079	-0.067
	(0.185)	(0.185)	(0.185)
Ln(Pop.)$_{t-1}$	1.276**	1.276**	1.278**
	(0.139)	(0.14)	(0.139)
Ln(Inflation)$_{t-1}$	-0.441	-0.443	-0.438
	(0.336)	(0.336)	(0.336)
Internal Stability$_{t-1}$	0.342**	0.342**	0.343**
	(0.11)	(0.11)	(0.11)
External Stability$_{t-1}$	0.313**	0.314**	0.314**
	(0.11)	(0.11)	(0.11)
Ratified BITs$_{t-1}$	0.019	0.019	0.021
	(0.014)	(0.014)	(0.014)
Capital Openness$_{t-1}$	0.072	0.072	0.07
	(0.139)	(0.139)	(0.139)
Polity$_{t-1}$	0.029*	0.029*	0.03*
	(0.012)	(0.012)	(0.012)
Property Rights$_{t-1}$	0.218**	0.219**	0.214**
	(0.045)	(0.045)	(0.045)
World FDI	0.000**	0.000**	0.000**
	(0.000)	(0.000)	(0.000)
n	2572	2572	2572

TABLE 2. Pooled regression on Ln(FDI flows) with standard errors in parentheses. ** and * indicate significance at $p < 0.05$ and $p < 0.10$, respectively.

- *Table 2 (models for FDI including non-ICSID dispute measures).*

Variable	Model 1	Model 2	Model 3
Non-ICSID (past 2 years)	-0.07		
	(0.369)		
Non-ICSID (past 5 years)		0.012	
		(0.211)	
Cumulative Non-ICSID$_{t-1}$			0.008
			(0.128)
%Δ GDP$_{t-1}$	0.075*	0.075*	0.075*
	(0.029)	(0.029)	(0.029)
Ln(GDP per capita)$_{t-1}$	-0.067	-0.07	-0.07
	(0.185)	(0.185)	(0.186)
Ln(Pop.)$_{t-1}$	1.28**	1.277**	1.277**
	(0.14)	(0.14)	(0.141)
Ln(Inflation)$_{t-1}$	-0.438	-0.438	-0.438
	(0.336)	(0.336)	(0.336)
Internal Stability$_{t-1}$	0.344**	0.343**	0.343**
	(0.11)	(0.11)	(0.11)
External Stability$_{t-1}$	0.314**	0.314**	0.314**
	(0.11)	(0.11)	(0.11)
Ratified BITs$_{t-1}$	0.021	0.021	0.021
	(0.013)	(0.014)	(0.013)
Capital Openness$_{t-1}$	0.071	0.071	0.071
	(0.139)	(0.139)	(0.139)
Polity$_{t-1}$	0.03*	0.03*	0.03*
	(0.012)	(0.012)	(0.012)
Property Rights$_{t-1}$	0.214**	0.215**	0.215**
	(0.045)	(0.045)	(0.045)
World FDI	0.000**	0.000**	0.000**
	(0.000)	(0.000)	(0.000)
n	2572	2572	2572

TABLE 3. Pooled regression of non-ICSID disputes on Ln(FDI flows) with standard errors in parentheses. ** and * indicate significance at $p < 0.05$ and $p < 0.10$, respectively.

- *Table 4 (models for Investment Profile).*

TABLE 4. Pooled Regression on investment profile. ** and * indicate significance at $p < 0.05$ and $p < 0.10$, respectively.

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
ICSID (past 2 years)	−0.244**					
	(0.057)					
Not ICSID (past 2 years)		-0.022				
		(0.175)				
ICSID (past 5 years)			−0.147**			
			(0.041)			
Not ICSID (past 5 years)				-0.011		
				(0.118)		
Cumulative $ICSID_{t-1}$					−0.082**	
					(0.023)	
Cumulative Not $ICSID_{t-1}$						-0.002
						(0.071)
$\%\Delta$ GDP_{t-1}	0.026**	0.026**	0.026**	0.026**	0.025**	0.026**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
$Ln(GDP\ per\ capita)_{t-1}$	0.384**	0.378**	0.385**	0.379**	0.388**	0.378**
	(0.082)	(0.085)	(0.082)	(0.085)	(0.082)	(0.085)
$Ln(Pop.)_{t-1}$	-0.01	-0.011	-0.011	-0.011	-0.012	-0.012
	(0.063)	(0.062)	(0.063)	(0.062)	(0.063)	(0.062)
$Ln(Inflation)_{t-1}$	−0.498**	−0.51**	−0.496**	−0.511**	−0.5**	−0.51**
	(0.109)	(0.109)	(0.109)	(0.109)	(0.109)	(0.109)
Internal $Stability_{t-1}$	0.174**	0.177**	0.174**	0.178**	0.172**	0.177**
	(0.037)	(0.037)	(0.037)	(0.037)	(0.037)	(0.037)
External $Stability_{t-1}$	0.127**	0.127**	0.126**	0.127**	0.127**	0.127**
	(0.038)	(0.038)	(0.038)	(0.038)	(0.038)	(0.038)
Ratif. $BITs_{t-1}$	0.021**	0.017**	0.022**	0.017**	0.023**	0.017**
	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.006)
Capital $Openness_{t-1}$	0.26**	0.262**	0.258**	0.262**	0.253**	0.262**
	(0.064)	(0.064)	(0.064)	(0.065)	(0.065)	(0.065)
$Polity_{t-1}$	0.016**	0.016**	0.016**	0.016**	0.016**	0.016**
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
n	2603	2603	2603	2603	2603	2603

(5) What if you include cumulative ICSID (t-1) in the Models 1,2,(3,4) in Tables 2, 3, and 4? Recent counts of claims matter but you still need to control for the past history of claims in the model. And what about the potential endogeneity? It is possible that states with lower ICRG ratings tend to have more number of investment disputes.

- *Below we reproduce Tables 1 (models for FDI using ICSID disputes measures), 2 (models for FDI including non-ICSID dispute measures), and 4 (models for Investment Profile) in which we include the cumulative version of the disputes variable in each model. Results are similar.*

Variable	Model 1	Model 2
ICSID (past 2 years)	0.135	
	(0.205)	
ICSID (past 5 years)		0.159
		(0.148)
Cumulative ICSID$_{t-1}$	-0.078	-0.122
	(0.075)	(0.091)
%Δ GDP$_{t-1}$	0.051	0.05
	(0.027)	(0.027)
Ln(GDP per capita)$_{t-1}$	-3.31^{**}	-3.274^{**}
	(1.021)	(1.022)
Ln(Pop.)$_{t-1}$	3.861^{*}	3.897^{**}
	(1.51)	(1.51)
Ln(Inflation)$_{t-1}$	-0.396	-0.4
	(0.357)	(0.357)
Internal Stability$_{t-1}$	0.322^{**}	0.321^{*}
	(0.125)	(0.125)
External Stability$_{t-1}$	0.413^{**}	0.413^{**}
	(0.131)	(0.131)
Ratified BITs$_{t-1}$	0.014	0.013
	(0.025)	(0.025)
Capital Openness$_{t-1}$	-0.213	-0.223
	(0.196)	(0.196)
Polity$_{t-1}$	0.003	0.003
	(0.013)	(0.013)
Property Rights$_{t-1}$	0.134^{*}	0.135^{*}
	(0.06)	(0.06)
World FDI	0.000^{**}	0.000^{**}
	(0.000)	(0.000)
n	2572	2571
N	101	101

TABLE 5. Fixed effects regression on Ln(FDI flows) with standard errors in parentheses. ** and * indicate significance at $p < 0.05$ and $p < 0.10$, respectively.

- *Table 2 (models for FDI including non-ICSID dispute measures).*

Variable	Model 1	Model 2
Non-ICSID (past 2 years)	-0.136	
	(0.409)	
Non-ICSID (past 5 years)		0.013
		(0.311)
Cumulative Non-ICSID$_{t-1}$	-0.184	-0.217
	(0.173)	(0.212)
%Δ GDP$_{t-1}$	0.05	0.05
	(0.027)	(0.027)
Ln(GDP per capita)$_{t-1}$	-3.257^{**}	-3.27^{**}
	(1.015)	(1.015)
Ln(Pop.)$_{t-1}$	3.726^{*}	3.716^{*}
	(1.518)	(1.518)
Ln(Inflation)$_{t-1}$	-0.378	-0.382
	(0.357)	(0.357)
Internal Stability$_{t-1}$	0.316^{*}	0.315^{*}
	(0.125)	(0.125)
External Stability$_{t-1}$	0.419^{**}	0.42^{**}
	(0.131)	(0.131)
Ratified BITs$_{t-1}$	0.017	0.017
	(0.024)	(0.024)
Capital Openness$_{t-1}$	-0.204	-0.208
	(0.195)	(0.195)
Polity$_{t-1}$	0.003	0.003
	(0.013)	(0.013)
Property Rights$_{t-1}$	0.134^{*}	0.135^{*}
	(0.06)	(0.06)
World FDI	0.000^{**}	0.000^{**}
	(0.000)	(0.000)
n	2572	2571
N	101	101

TABLE 6. Regression of non-ICSID disputes on Ln(FDI flows) with standard errors in parentheses. ** and * indicate significance at $p < 0.05$ and $p < 0.10$, respectively.

- *Table 4 (models for Investment Profile). Results are similar here as well, with the exception of the effect of the five year moving counter of ICSID disputes. This is not surprising as ICSID disputes have only recently become very frequently used, and the five year moving sum and cumulative count are highly correlated at a level of 0.82. As a result, estimating their effect jointly is difficult due to multicollinearity. Our key implications about the role that ICSID disputes play in reputation remain consistent.*

Variable	Model 1	Model 2	Model 3	Model 4
ICSID (past 2 years)	−0.058**			
	(0.022)			
Not ICSID (past 2 years)		0.02		
		(0.078)		
ICSID (past 5 years)			-0.033	
			(0.022)	
Not ICSID (past 5 years)				0.042
				(0.066)
Cumulative ICSID_{t-1}	−0.052*	−0.063*	−0.048*	−0.062*
	(0.023)	(0.027)	(0.021)	(0.027)
Cumulative Not ICSID_{t-1}	-0.033	-0.033	-0.033	-0.05
	(0.073)	(0.067)	(0.074)	(0.065)
$\%\Delta\ \text{GDP}_{t-1}$	0.016*	0.016*	0.016*	0.016*
	(0.007)	(0.006)	(0.007)	(0.006)
$\text{Ln(GDP per capita)}_{t-1}$	0.716	0.734	0.717	0.729
	(0.394)	(0.395)	(0.394)	(0.396)
Ln(Pop.)_{t-1}	2.638**	2.642**	2.639**	2.643**
	(0.384)	(0.384)	(0.385)	(0.384)
$\text{Ln(Inflation)}_{t-1}$	−0.293**	−0.294**	−0.293**	−0.295**
	(0.076)	(0.077)	(0.076)	(0.077)
$\text{Internal Stability}_{t-1}$	0.199**	0.199**	0.2**	0.199**
	(0.034)	(0.034)	(0.034)	(0.034)
$\text{External Stability}_{t-1}$	-0.01	-0.01	-0.01	-0.01
	(0.037)	(0.037)	(0.037)	(0.037)
Ratif. BITs_{t-1}	0.03**	0.03**	0.03**	0.03**
	(0.011)	(0.011)	(0.011)	(0.011)
$\text{Capital Openness}_{t-1}$	0.182**	0.18**	0.181**	0.179**
	(0.067)	(0.067)	(0.067)	(0.067)
Polity_{t-1}	0.012**	0.012**	0.012**	0.012**
	(0.003)	(0.003)	(0.003)	(0.003)
n	2603	2603	2602	2602
N	101	101	101	101

TABLE 7. Regression on investment profile using country fixed effects, robust standard errors in parentheses. ** and * indicate significance at $p < 0.05$ and $p < 0.10$, respectively.

(6) Explain the scale of the ICRG ratings in more detail to help the readers understanding of the results.

- *We have added additional descriptive information about the ICRG ratings on pp. 16.*

(7) What happens if you include ICSID and Non-ICSID in the same model so that you test their effects simultaneously?

- *In the table below, we model the effect on FDI flows as a function of our control variables and the cumulative versions of the ICSID and non-ICSID dispute measures. We find similar results as when we include them separately (see Model 3 of Tables 1 and 2 in the paper.)*

Variable	Model 1
Cumulative ICSID$_{t-1}$	-0.036
	(0.069)
Cumulative Not ICSID$_{t-1}$	-0.19
	(0.159)
%Δ GDP$_{t-1}$	0.051
	(0.027)
Ln(GDP per capita)$_{t-1}$	-3.32^{**}
	(1.02)
Ln(Pop.)$_{t-1}$	3.667^{*}
	(1.52)
Ln(Inflation)$_{t-1}$	-0.393
	(0.357)
Internal Stability$_{t-1}$	0.315^{*}
	(0.125)
External Stability$_{t-1}$	0.418^{**}
	(0.131)
Ratified BITs$_{t-1}$	0.02
	(0.025)
Capital Openness$_{t-1}$	-0.215
	(0.196)
Polity$_{t-1}$	0.003
	(0.013)
Property Rights$_{t-1}$	0.132^{*}
	(0.06)
World FDI	0.000^{**}
	(0.000)
n	2572
N	101

TABLE 8. Fixed effects regression on Ln(FDI flows) with standard errors in parentheses. ** and * indicate significance at $p < 0.05$ and $p < 0.10$, respectively.

- *In the table below, we model the effect on investment profile as a function of our control variables and the cumulative versions of the ICSID and non-ICSID dispute measures. We find similar results as when we include them separately (see Models 5 and 6 of Tables 4 in the paper.)*

Variable	Model 1
Cumulative ICSID$_{t-1}$	-0.063^{*}
	(0.027)
Cumulative Not ICSID$_{t-1}$	-0.029
	(0.072)
%Δ GDP$_{t-1}$	0.016^{*}
	(0.006)
Ln(GDP per capita)$_{t-1}$	0.734
	(0.395)
Ln(Pop.)$_{t-1}$	2.642^{**}
	(0.384)
Ln(Inflation)$_{t-1}$	-0.293^{**}
	(0.076)
Internal Stability$_{t-1}$	0.199^{**}
	(0.034)
External Stability$_{t-1}$	-0.01
	(0.037)
Ratif. BITs$_{t-1}$	0.03^{**}
	(0.011)
Capital Openness$_{t-1}$	0.18^{**}
	(0.067)
Polity$_{t-1}$	0.012^{**}
	(0.003)
n	2603
N	101

TABLE 9. Regression on investment profile using country fixed effects, robust standard errors in parentheses. ** and * indicate significance at $p < 0.05$ and $p < 0.10$, respectively.

(8) Why one point estimate is in blue? If this is an error, please correct it in Figure 4.

- *This is not an error. The colors designate the direction of the effect. Red indicates that the effect was negative and statistically significant, while blue indicates that the effect was positive and statistically significant. We would note that we agree with the increasing view that statistical significance is not the only benchmark one can use to determine the plausibility of a finding. That is why in Figure 5 we employ a simulation based approach to judge the substantiveness of our findings.*

(9) Please rewrite the Introduction to clearly present what motivates your research, in what aspects you challenge the previous studies both theoretically and empirically, and what your arguments are and how you are going to prove them. The current format is not a very effective introduction for the readers.

- *Per reviewer two's request, we have thoroughly rewritten the introduction to better highlight the motivation of our work here and our the contribution of our work.*

The Reputational Impact of Investor-State Disputes

Abstract. To what extent do alleged violations of international commitments damage state reputation? This paper explores this question with specific reference to investor-state disputes arising under the protection of international investment agreements. Its main contributions are threefold. First, building on the literature on political institutions, the study places the theoretical importance of information about the rules of the game and the actions of the participants at the center of analysis. The basic assumption is that such information shapes the consequences of dispute involvement for states, establishing the basis for hypothesizing that the impact of investment disputes varies with the accumulation of experience, knowledge and information about investment treaty arbitration over time and the relative transparency of the dispute settlement process itself. Second, in contrast to prior empirical research, the study systematically analyzes the costs of state involvement in investment treaty arbitration by examining the universe of known disputes rather than selected sub-samples of that universe. Third, the study addresses the impact of investment disputes on both foreign investment flows and state reputational rankings. Consistent with theoretical expectation, the statistical analysis shows that the consequences of investment disputes originating under international treaties have been marginal until quite recently, with reputational effects varying with the transparency of the investor-state dispute settlement process, the relative availability of information to the international community, and the accumulation of arbitral claims against a state over time. The central implication of these findings for the broader body of literature on international institutions is that reputational mechanisms for effective treaty enforcement cannot be taken as given but instead need to be explored on the basis of a more nuanced approach addressing the pivotal issues of institutional design and related information costs.

Word Count: 8,541

Introduction

Research on the compliance of states with international commitments emphasizes the deterrent effect of reputational damage. The underlying assumption is that reneging on a formal commitment damages a state's reputation and jeopardizes future opportunities for international cooperation. Agreements that institutionalize state commitments are consequently expected to constrain state actors from engaging in uncooperative behavior as well as to induce other sets of actors to monitor and punish defections. The idea has gained particular traction in the study of international economic instruments, including debt contracts, investment treaties, and free trade agreements,[1] but it has also been applied to a broader range of international issues.[2] Somewhat surprisingly, however, the argument linking reputation to compliance with formal agreements remains largely unexamined. Reputational damage has been inferred from evidence of shifting patterns of foreign lending or investment flows.[3] But prior research has not systematically explored the consequences of reneging on commitments for state reputation. This paper fills this gap by exploring the impact of investor-state disputes arising under international treaties on FDI flows as well as investment reputation.

Bilateral investment treaties (BITs) and other international investment agreements (IIAs), which are designed to attract foreign direct investment (FDI) by offering credible property rights protection to private sector actors, have become an increasingly important part of the international legal architecture. As of the end of 2014, the overwhelming majority of world states had ratified one or more of these agreements, with the total IIA universe exceeding 2,500, including 2,276 BITS and 280 other agreements with investment provisions.[4] In most cases these IIAs not only formalize commitments to treat foreign investors fairly and equitably, but also include provisions giving investors the right to take investor-state disputes to international arbitration, out of range of the host country's legal system.

[1]See, for example, Simmons (2000); Tomz (2007); Büthe and Milner (2014); Büthe and Milner (2008); Allee and Peinhardt (2011); Elkins, Guzman and Simmons (2006).
[2]See, for example, Fearon (1997) and Simmons and Danner (2010).
[3]See Tomz (2007) and Allee and Peinhardt (2011).
[4]UNCTAD (2015)

2

According to a recent survey, 93 percent of BITs include such provisions, which are intended to guarantee investors that their claims will be adjudicated in an independent, impartial, and timely manner.[5] Over the past two decades these provisions have led to a significant proliferation of investor-state dispute settlement (ISDS) cases.

Drawing on the combined records of the United Nations Conference on Trade and Development (UNCTAD 2015) and the International Centre for the Settlement of Investment Dispute (ICSID 2015) a total of 610 treaty-based arbitral claims involving 104 countries were registered at international tribunals between 1987, when the first recorded investor-state dispute was referred for international arbitration, and 2014. As arbitration often proceeds confidentially, the completeness of these records cannot be fully verified on the basis of other sources. What is known, however, is that the predominant player in international investor-state disputes is the International Centre for the Settlement of International Disputes (ICSID), which is an autonomous international institution affiliated with the World Bank. The ICSID maintains public records of all of the international investor-state conflicts brought to it for resolution, the number of which totaled 497 as of December 31, 2014, 72 percent of which were initiated under a BIT or other treaty.[6] Drawing on these records as well as those made available by UNCTAD,[7] we develop a database to analyze the impact of ISDS involvement on respondent states.

Our contributions to the existing literature on investor-state dispute settlement are threefold. First, in contrast to prior research on the impact of investor-state dispute involvement, we focus not only on ICSID disputes but also the broader universe of known disputes. Second, we analyze the consequences of dispute involvement both for investment flows and state reputation. The latter is the theoretical mechanism presumed to link dispute involvement with investment flows. Last, and most important, in contrast to

[5]Gaukrodger and Gordon (2012, p. 8)
[6]ICSID (2015, p. 7, 10)
[7]unctad:2015

the theoretical claims presented in prior research, we argue that the reputational consequences of investment treaty violations are limited and heavily contingent on the availability of information to the international community, which has varied considerably over time as well as across dispute settlement venues. Central characteristics of the ISDS process, particularly its narrow, decentralized, uncertain, and opaque monitoring and enforcement mechanisms, have limited its impact by failing to provide international investors with the information they require to update their perceptions of investment risk in a particular country. This situation has begun to change in response to increased institutional transparency, and growing media coverage; but in accordance with the logic of North's seminal work on institutions, creating an effective system of investment treaty monitoring and enforcement has been a long, slow process.[8] Thus whereas prior research has simply assumed that investor claims of treaty violations entail significant costs, our analysis offers a more qualified theoretical account emphasizing the pivotal role of information in the monitoring and enforcement of international commitments.

The Political Economy of State Reputation

Prior research in political economy has highlighted the importance of reputation for understanding the willingness of governments to comply with their international agreements. In Tomz's influential formulation, reputation establishes the basis for cooperation in a world of uncertainty, shifting preferences, and international anarchy.[9] Governments honor their debts and private investors lend money to foreigners because of reputational sanctions. Focusing on commitment and compliance in international monetary affairs, Simmons develops a similar line of argument: "The acceptance of treaty obligations raises expectations about behavior that, once made, are reputationally costly for governments to violate."[10] Büthe and Milner cite reputational effects to argue that international trade agreements provide mechanisms for making credible commitments to foreign investors: "Violating an institutionalized commitment – or not making amends to correct a violation

[8]North (1990, p. 60)
[9]Tomz (2007)
[10]Simmons (2000, p. 819)

that has occurred – damages a country's reputation for keeping commitments, making future cooperation on the same and other issues more difficult and maybe impossible to achieve."[11] Büthe and Milner and Elkins, Guzman and Simmons utilize the same logic to explain why bilateral investment treaties represent credible commitments to foreign investors.[12]

The existing literature thus suggests that by raising ex post reputational costs, formal international commitments create incentives for state compliance. The implication is that high levels of compliance with international agreements are indicative of high reputational costs, whereas low levels of compliance are likely to be observed where reputational costs are low. Arguments emphasizing the importance of reputation also run from compliance to government reputation as illustrated by Tomz's study of the interwar period, which finds that "lemons" who signal a low regard for foreign commitments lose access to international credit markets.[13] Thus not only are potential reputational costs assumed to cause compliance with international commitments; reputational damage is the expected consequence of defection from those commitments.

Prior research focused specifically on investment treaties draws on the same logic to argue that the registration of investor claims against states at an international arbitral tribunal in response to alleged violations of treaty commitments generates reputational costs, regardless of the findings of international arbitral tribunals. According to Schwenzer and Hachem, for example, "the reputation of a State may be damaged by wrongfully initiated investment treaty arbitration against the State. Such harm to reputation may have quite severe financial consequences for the entire economy of the State concerned."[14] Similarly, in their research on the ICSID, Allee and Peinhardt claim that, "The filing of a case before ICSID immediately brands the respondent country as an actor that is hostile

[11]Büthe and Milner (2008, p. 746)
[12]See Büthe and Milner (2009) and Elkins, Guzman and Simmons (2006).
[13]Tomz (2007, p. 86–94)
[14]Schwenzer and Hachem (2011, p. 426)

to investors"[15] and leads to "substantial losses in FDI."[16] A recent analysis of investment arbitration, likewise argues that "when an investor commences an ICSID arbitration against a respondent state and the investor ultimately loses, the state may have a credible argument that its 'investment reputation' has been unfairly tarnished."[17] State actors share this view as evidenced by Turkey's request in Europe Cement & Trade S.A. v. Turkey for "an award of monetary compensation for the moral damage it has suffered to its reputation and international standing through the bringing of a claim that is baseless and founded on fabricated documents."[18]

The difficulty is that these arguments fail to take into account the importance of variations among international institutions. As emphasized both by the literature on international law[19] and institutional theory[20], effective reputational sanctioning is heavily dependent upon institutional design, particularly as it relates to issues of transparency and information. On this basis we challenge the findings of prior research, emphasizing instead characteristics of the prevailing international investment regime that signficantly limit the impact of alleged investment treaty violations on state reputation.

First, unlike the WTO, where governments press complaints before an independent international forum, the current ISDS process externalizes monitoring costs to individual private firms and sanctioning to ad hoc arbitral panels enjoying considerable independence from state actors. Arbitral deliberations are also constrained to the facts of an individual case and do not establish clear legal precedents for other investment disputes. For this reason investor-state dispute arbitration has not only produced inconsistent results,[21] but even opposing ones in parallel cases involving identical sets of facts and parties but different treaties and arbitral tribunals.[22] The outcome of dispute arbitration is therefore

[15]Allee and Peinhardt (2011, p. 414)

[16]Ibid: 429

[17]Parish, Newlson and Rosenberg (2011, p. 236)

[18]Europe Cement Investment & Trade S.A. v. Republic of Turkey. 2009. ICSID Case No. ARB(AF)/07/02: 177

[19]Staton and Moore (2011); Cavallaro and Brewer (2008); Guzman (2008*b*); Guzman (2008*a*)

[20]Knight (1992, p. 59); North (1990, p. 54–60)

[21]Franck (2005)

[22]For example, see Franck (2005); Kim (2011); Egli (2006). For an example of a specific case compare the rulings issued in CME Czech Republic B.V. v Czech Republic and Lauder v Czech Republic: "Final Award in the

rather uncertain and the meaning and significance of arbitral awards, whether positive, negative, or inconclusive with respect to a government charged with treaty violations, limited to the specifics of a particular dispute. Given the narrow, decentralized, and unpredictable nature of the monitoring and sanctioning processes, the assumption that alleged investment treaty violations generate significant reputational costs is very questionable. We expect instead that a state's alleged failure to comply with a particular investment treaty in its dealing with a single private firm will not entail significant reputational costs.

Second, prior research has demonstrated that both firms and states have been slow to grasp the implications of investment treaty protections (Yackee, 2010; Poulsen and Aisbett, 2013; Poulsen, 2015), undercutting claims that investment treaty disputes tarnish a state's reputation. When the first investor claim was filed in 1987, participants had virtually no information to guide their strategies or assess their risks. The main legal precursor to investor-state arbitration was commercial arbitration, which tends to follow the rules of the legal system prevailing at the seat of arbitration rather than the provisions of bilateral and multilateral international treaties. As experience with investment dispute settlement mounted in the 1990s and early 2000s, leaders of less industrialized countries became more aware of the legal obligations they had incurred by signing investment agreements and the potential costs of violating them. Concomitantly, investor awareness of the advantages of investment treaties and ISDS also grew, leading to a major upsurge in arbitral claims.

Compounding the lack of awareness of investment dispute settlement is a third characteristic of ISDS institutions: namely, information about particular disputes remains too limited to allow the investment community to gauge the extent to which treaty violations have occurred, especially for cases arbitrated confidentially. Even for claims involving the ICSID, which unlike other international arbitration bodies maintains a public record of registered arbitral claims, information regarding the specifics of a case may remain restricted

Matter of an UNCITRAL Arbitration" 2001; "UNCITRAL Arbitration Proceedings CME Czech Republic B.V. (The Netherlands) vs. The Czech: Final Award" 2003.

if both parties do not consent to the publication of the award rendered by an arbitral tribunal.[23] To add to the lack of transparency, between 1987 and 2014, 40.4 percent of disputes were settled or discontinued before being formally arbitrated, preventing the facts of a dispute from being publicly disclosed. Such limitations on transparency come at the cost of effective reputational sanctions. In the succinct formulation of North, "By making available the relevant information, institutions make possible the policing of defections."[24]

Given the historically narrow, specific, decentralized, and opaque monitoring and sanctioning mechanisms created by the ISDS regime the presumption that the registration of an individual arbitral claim carries significant reputational costs with the international investment community warrants further investigation. The nature of the rules governing investment disputes provide little reason simply to assume that the registration of an arbitral claim adversely impacts state reputation. For this reason, we depart from the conventional wisdom about the costs of ISDS for respondent states. Our central theoretical expectation is that the reputational consequences of dispute involvement are limited by the high informational costs associated with the existing ISDS regime. We explore this claim empirically by looking first at investment flows and then turn to the analysis of the direct impact of investment disputes on state reputation.

Disputes and FDI Flows

We begin our analysis of the impact of alleged investment treaty violations by examining the linkage between FDI flows and ICSID disputes. The hypothesis that FDI flows are negatively affected by investment disputes was first put forward and tested by Allee and Peinhardt (2011) and has since been explored further by Aisbett, Busse and Nunnenkamp (2017). Works highlighting that FDI flows are adversely affected by dispute involvement,

[23]Amendments to the ICSID's arbitration rules in 2006, however, mandate the Centre to publish excerpts of the legal reasoning applied by arbitration tribunals in reaching their decisions in specific cases (Antonietti, 2006). UNCITRAL has also adopted new rules on transparency effective 1 April 2014, but they only apply to treaties concluded prior to that date at the agreement of the disputing parties. For UNCITRAL disputes brought under treaties concluded at a subsequent date, exceptions to the new rules require the agreement of both disputing parties (UNCITRAL, 2013, p. 33–40).

[24]North (1990, p. 57)

pose an important challenge to our theoretical argument about the relative ineffectiveness of ISDS in communicating information to investors. We therefore revisit the empirical linkage between disputes and FDI flows using an updated database that goes to 2014.

In choosing our model specification, we closely mirror the choices made in earlier works on FDI flows. For our dependent variable we use logged, net FDI flows at the country-year level of analysis. Allee and Peinhardt highlight the importance of choosing this dependent variable as it best enables them to test how their reputational argument should apply to both current and potential investors. Specifically, they note that, "firms who currently have investment in a country are likely to reconsider the investment climate in the host country. . . on an ongoing basis" and "potential new investors are likely to consider whether a potential host country. . . has been a defendant in ICSID disputes."[25] Accounting for both outflows and inflows introduces important variation, which extant research argues can be at least partially explained by dispute involvement.

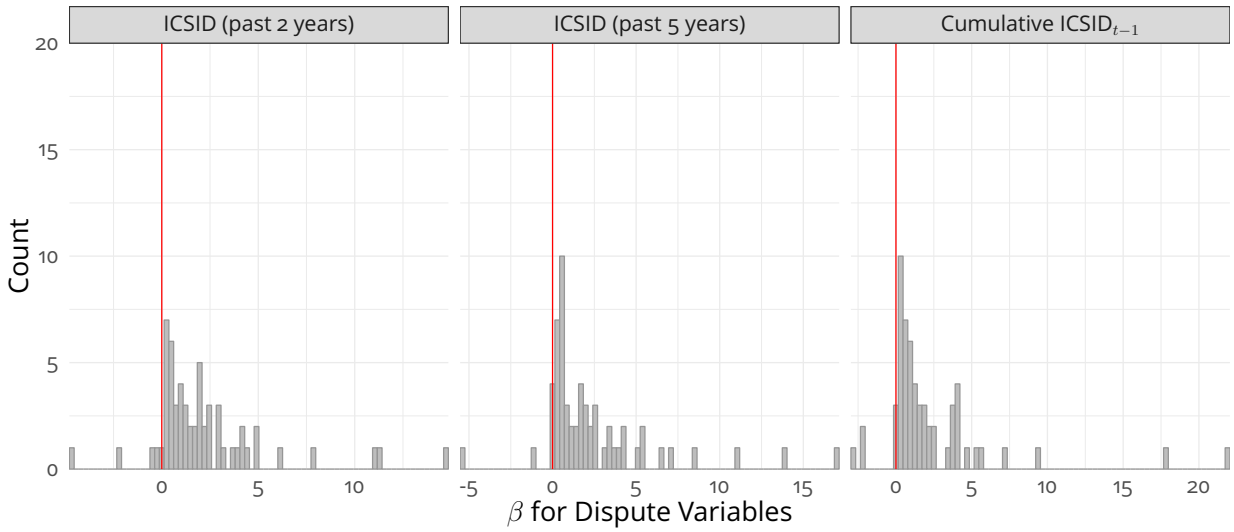
Our key independent variable also adheres to the convention established by prior research, which has focused on treaty-based ICSID disputes. Drawing on ICSID records,[26] we create three versions of the disputes variable: a counter of how many disputes a country has faced in the past two years, in the past five years, and a cumulative count. Given the arguments developed above, our expectation is that each of these variables will have a minimal effect on FDI flows prior to 2007.

Before adding in our set of control variables, we run a simple analysis to examine the bivariate relationship between our dispute variables and logged FDI flows. To do this, we take every country that had at least one treaty-based ICSID dispute in the 1987-2014 period and run simple linear models for each of our three lagged disputes measures, using logged FDI flows as our dependent variable.[27] The results are shown in Figure 1. In each of the panels, we provide a histogram of the coefficient estimates for the dispute variables from each of the country-level regressions. If disputes had costly effects on FDI

[25]Allee and Peinhardt (2011, p. 419–420)
[26]ICSID (2015, p. 7, 10)
[27]For each of these models we have 29 observations for every country.

flows, we would expect to see the majority of observations to falling to the left of the red line, as this would indicate a negative relationship between disputes and FDI flows. However, we find the exact opposite relationship for the vast majority of countries.[28]

FIGURE 1. Bivariate Relationship Between Log(FDI) and Lagged ICSID Disputes



Note: Here we show the bivariate relationship between disputes and logged FDI flows through a series of regressions for individual countries over the 1987 to 2014 period. Every observation in these histograms represents the result of a country level regression in which we model FDI flows as a function of disputes.

Though this bivariate analysis is useful as a starting point, adding in a series of controls is obviously necessary. Thus we include a set of controls that have been previously employed in the FDI literature. Specifically, to account for macroeconomic factors that might affect FDI flows we add in GDP growth, logged GDP per capita, logged population, and logged inflation.[29] Additionally, we add a set of measures from the International Country Risk Guide (ICRG) to account for the level of political violence in the country and the risk to the ruling government from foreign action.[30] Next, we add in a set of institutional

[28]We also run a model across the full panel of 112 lower income countries, including both countries that had disputes and those that did not using fixed effects for each country. The regression coefficients on the dispute variables are consistently positive, rather than negative, and significant at a 95% confidence interval.

[29]We gather each of these measures from the World Bank (2013).

[30]Political Risk Services Group (2013)

measures that have been identified as related to FDI flows: financial openness,[31] political democracy,[32] and level of property rights protection.[33] Last to account for global trends in FDI flows, we add in a yearly level variable that sums up the net FDI flows in a given year across all countries in the world.

Our sample includes all lower and middle-income nations for which data are available. We exclude upper income nations from the analysis because their role in the international investment regime differs significantly from that of lower and middle-income nations.[34] The time period covered by the statistical analysis ranges from 1987, when the first treaty-based dispute was brought to international arbitration, to 2014, yielding an unbalanced time-series panel of more than 2,500 observations covering 101 countries. To estimate our model over this sample, we utilize country fixed effects. The results of this analysis are shown in Table 1.

As expected, the results for our parameterizations of ICSID disputes consistently show that simply facing a dispute at the ICSID is not associated with a meaningful change in FDI flows. Table 2 utilizes a dataset of non-ICSID investment disputes and offers very similar results.[35] Our measure of non-ICSID disputes contains a variety of different arbitral institutions, such as the International Chamber of Commerce, the International Centre for Dispute Resolution, the London Court of International Arbitration, the Permanent Court of Arbitration, and the Arbitration Institute of the Stockholm Chamber of Commerce, which operate under the procedures established by the United Nations Commission on International Trade Law (UNCITRAL) or other set of rules. Taken together, these findings directly

[31]Chinn and Ito (2008)

[32]Specifically, we use the Polity 2 score from the Polity IV project developed by Marshall, Gurr and Jaggers (2013).

[33]Political Risk Services Group (2013)

[34]This is the same exclusion criteria used by Allee and Peinhardt (2011). Specifically, we follow their case selection rule of excluding those countries that were members of the OECD at the beginning of the time period of the analysis. Applying different case selection rules, such as removing upper income countries as defined by the Word Bank leads to similar results.

[35]The documentation of codings for treaty-based ICSID disputes is available on request to the authors.

TABLE 1. Regression of ICSID disputes on Ln(FDI flows) using country fixed effects, standard errors in parentheses. ** and * indicate significance at $p < 0.05$ and $p < 0.10$, respectively.

Variable	Model 1	Model 2	Model 3
ICSID (past 2 years)	0.04		
	(0.183)		
ICSID (past 5 years)		0.025	
		(0.109)	
Cumulative ICSID$_{t-1}$			-0.055
			(0.067)
%Δ GDP$_{t-1}$	0.05	0.05	0.051
	(0.027)	(0.027)	(0.027)
Ln(GDP per capita)$_{t-1}$	-3.237^{**}	-3.233^{**}	-3.343^{**}
	(1.019)	(1.022)	(1.02)
Ln(Pop.)$_{t-1}$	3.994^{**}	4.016^{**}	3.879^{*}
	(1.504)	(1.507)	(1.509)
Ln(Inflation)$_{t-1}$	-0.374	-0.374	-0.396
	(0.357)	(0.357)	(0.357)
Internal Stability$_{t-1}$	0.325^{**}	0.325^{**}	0.324^{**}
	(0.124)	(0.125)	(0.124)
External Stability$_{t-1}$	0.414^{**}	0.415^{**}	0.412^{**}
	(0.131)	(0.131)	(0.131)
Ratified BITs$_{t-1}$	0.008	0.008	0.015
	(0.024)	(0.025)	(0.025)
Capital Openness$_{t-1}$	-0.192	-0.193	-0.208
	(0.195)	(0.195)	(0.196)
Polity$_{t-1}$	0.003	0.003	0.003
	(0.013)	(0.013)	(0.013)
Property Rights$_{t-1}$	0.136^{*}	0.136^{*}	0.131^{*}
	(0.06)	(0.06)	(0.06)
World FDI	0.000^{**}	0.000^{**}	0.000^{**}
	(0.000)	(0.000)	(0.000)
n	2572	2572	2572
N	101	101	101

contradict prior research claiming that involvement in investment treaty arbitration negatively affects FDI flows.[36] More importantly, however, our findings raise questions about the causal mechanism assumed to be linking disputes to FDI flows. That mechanism is presumed to be reputational change, but this is an assumption that has not been tested directly and which might well not be reflected in investment flows. Although surveys of MNC executives show that political risk is considered the major constraint on investments

[36]Given the contrast between our findings and those reported by prior research, we conducted a replication of the study of Allee and Peinhardt (2011), which to our knowledge is the most prominent work on this subject. We find that the significant negative effects of ICSID disputes on FDI flows reported in their work are a result of a coding error. A full discussion of this issue and its effect on their results is presented in the Appendix to this paper.

in emerging markets, many other factors also drive investment decisions, including access to financing and market opportunities.[37] For this reason, we next turn to a more direct test of the proposition that becoming a respondent in an investor-state dispute carries significant reputational costs.

TABLE 2. Regression of non-ICSID disputes on Ln(FDI flows) with standard errors in parentheses. ** and * indicate significance at $p < 0.05$ and $p < 0.10$, respectively.

Variable	Model 1	Model 2	Model 3
Non-ICSID (past 2 years)	-0.329		
	(0.366)		
Non-ICSID (past 5 years)		-0.204	
		(0.227)	
Cumulative Non-ICSID$_{t-1}$			-0.209
			(0.155)
%Δ GDP (past years)	0.051	0.051	0.05
	(0.027)	(0.027)	(0.027)
Ln(GDP per capita) (past years)	-3.242^{**}	-3.245^{**}	-3.264^{**}
	(1.015)	(1.015)	(1.014)
Ln(Pop.) (past years)	3.94^{**}	3.883^{*}	3.712^{*}
	(1.505)	(1.509)	(1.517)
Ln(Inflation) (past years)	-0.371	-0.375	-0.38
	(0.356)	(0.357)	(0.356)
Internal Stability (past years)	0.325^{**}	0.324^{**}	0.315^{*}
	(0.124)	(0.124)	(0.125)
External Stability (past years)	0.413^{**}	0.414^{**}	0.42^{**}
	(0.131)	(0.131)	(0.131)
Ratified BITs (past years)	0.012	0.013	0.017
	(0.024)	(0.024)	(0.024)
Capital Openness (past years)	-0.191	-0.197	-0.206
	(0.195)	(0.195)	(0.195)
Polity (past years)	0.003	0.003	0.003
	(0.013)	(0.013)	(0.013)
Property Rights (past years)	0.134^{*}	0.134^{*}	0.134^{*}
	(0.06)	(0.06)	(0.06)
World FDI	0.000^{**}	0.000^{**}	0.000^{**}
	(0.000)	(0.000)	(0.000)
n	2572	2572	2572
N	101	101	101

INVESTMENT TREATY DISPUTES & STATE REPUTATION

Building on our theoretical arguments about the political economy of state reputation, which emphasize narrow, uncertain, and limited information conveyed by ISDS processes,

[37] For example, see Multilateral Investment Guarantee Agency (2011).

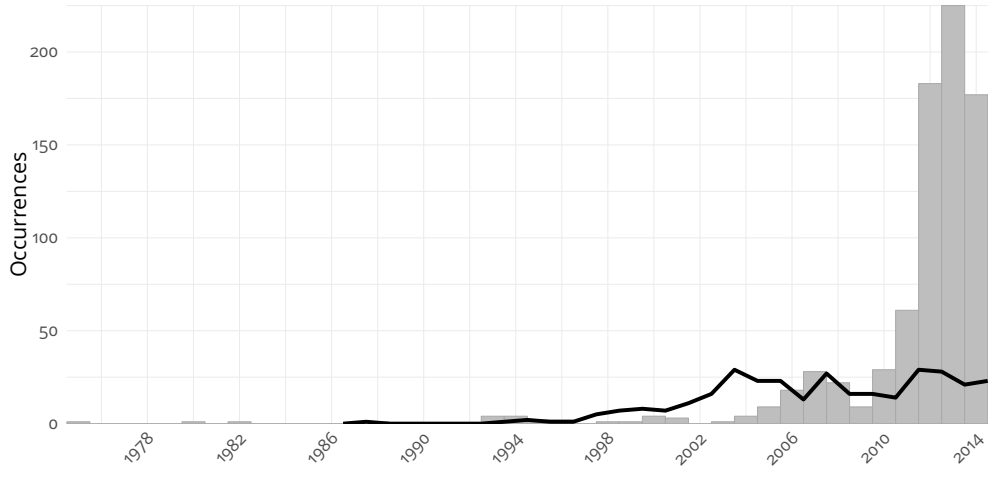
we hypothesize that the reputational impact of state involvement in an international investor-state dispute is limited both in terms of investment flows but also reputation. Since the institutional edifice upon which the arbitration system is built provides little reliable information to investors, we expect this hypothesis to hold across different dispute venues. Nevertheless, taking advantage of the theoretical leverage that variations in information coverage and institutional rules offer with respect to our argument about transparency, we focus first on the reputational impact of ICSID versus non-ICSID dispute settlement. To the extent that information matters, we expect that the institutional visibility, scope of legal authority, and transparency of the ICSID relative to alternative arbitral venues enhance the reputational costs of dispute involvement.[38] First, ICSID arbitration accounts for a higher percentage of treaty-based investment disputes than all of the other legal alternatives put together; a total of 57.2% as of the end of 2014 as compared to 27.9% for UNCITRAL. Second, the ICSID is distinctive in terms of its visibility as an institution formally affiliated with the World Bank and fully autonomous from national courts of law, enhancing both the finality and enforceability of awards. Under the ICSID Convention, awards are binding on the parties to a dispute and enforceable as if they were final awards of national courts, with the ICSID's narrowly delimited annulment rules establishing the only avenue of appeal. Awards can thus be enforced in any country that adheres to the ICSID Convention (Bernardini, 2010). Third, unlike other international arbitration bodies, the ICSID maintains a public record of registered arbitral claims, making information about allegations of investment treaty violations readily available to the international community. For this reason, we hypothesize that investor-state dispute arbitration within the ICSID framework carries higher reputational costs than in other more opaque venues.

[38]We do not advance any hypotheses about the effects of winning or losing disputes because a third of registered treaty-based disputes have not been concluded, and there is no reason to think that those belonging to the concluded set are representative of the broader universe. As suggested above, "concluded" is also a potentially misleading label even as applied to ICSID cases inasmuch as a dispute decided by an arbitral panel at one point in time is subject to further revision and annulment proceedings as well as supplementary annulment proceedings. distinction between "concluded" and "pending" cases is accordingly rather blurry.

H1: The reputational costs of investment treaty arbitration are more pronounced for disputes arbitrated at the ICSID than other venues.

A second major source of variance in ISDS is the passage of time, which has led to decreasing information costs as a result of changes in institutional design and media coverage. Figure 2 shows the results of a LexisNexis search on mentions of ICSID disputes in international newspaper sources from 1974 to 2014. The lack of media mentions between 1974 and 1990 may simply result from a lack of online media sources; however, that same argument cannot be used to explain the paucity of mentions since the 1990s. Further even after the number of disputes brought before ICSID dramatically increased in the early 2000s, mentions of ICSID in the media did not meaningfully pick up until 2007. Since that date, however, the number of ICSID related articles in newspapers has increased dramatically, with almost 200 stories filed in 2014.

FIGURE 2. Newspaper Mentions of ICSID



Note: The height of the grey bars denotes the number of times ICSID was mentioned in a newspaper source in a given year, while the dark line represents a count of the number of ICSID disputes brought in that year.

An additional significant change since the early 2000s is the dramatic expansion of electronic services monitoring ISDS processes. Table 3 lists a number of these sources and the date on which they began reporting.

TABLE 3. Listing of web-based services monitoring ICSID processes

Source	Year Established
Investment Treaty News	2002
Transnational Dispute Management	2003
Investment Treaty Arbitration	2004
Global Arbitration Review	2006
Investment Arbitration Reporter	2008
International Arbitration Database	2008
Kluwer Arbitration Blog	2009
Investor-State LawGuide	2011
International Investment Arbitration	2011

Last, since 2006 the ICSID has adopted new rules regarding transparency. Of particular importance are amendments to the ICSID's arbitration rules introduced in 2006, which provided for the opening of hearings to the public and mandated the Centre to publish excerpts of the legal reasoning applied by arbitration tribunals in reaching their decisions in specific cases.[39] The consent of both parties to a dispute is still required for the ICSID itself to publish decisions in the entirety, but either party can make an award public. These changes combined with other pressures for enhanced transparency have had a significant effect. Of the 19 disputes registered in 2010 and concluded on the basis of an arbitral award prior to November 15, 2016, for example, 18 resulted in published tribunal decisions. The allegedly high level of "secrecy" surrounding ICSID decisions is also questionable. Information on dispute outcomes (whether discontinuance, settlement, or victory for one of the parties) is available for 99.2 percent of pre-2015 disputes on the basis of published information. Accordingly, we expect that as information about ISDS has accumulated over time the likelihood of reputational damage has tended to mount. Thus our second major hypothesis addresses the passage of time.

> H2: The reputational costs of involvement in investment treaty arbitration increase with the passage of time.

[39]Yackee and Wong (2011); Antonietti (2006)

For the purposes of this analysis, reputation is defined in terms of the Investment Profile rating of the International Country Risk Guide (ICRG),[40] which is designed to offer international investors guidance with respect to the risks of investing in particular countries. The Investment Profile rating represents one component of overall investment risk in the ICRG rating system, and it focuses specifically on risk in the area of contract viability/expropriation, profit repatriation, and payment delays on a scale ranging from 1 to 12. These ratings begin in 1984 and cover a total of 140 countries. The perceptual assessments of the ICRG have been used extensively in prior research in international political economy, including Allee and Peinhart's work on the impact of ICSID investment disputes. But whereas prior research has employed the ICRG data and other perceptually based and partially overlapping rankings, such as the "rule of law," "law and order," and "property rights", as control variables, we draw upon reputational data to provide a direct assessment of the causal mechanism widely presumed to link disputes with investor behavior.

The key independent variable in the analysis is again the number of investor-state disputes registered over a two year, five year, and cumulative interval. To investigate our hypothesis about differences in the reputational impact of disputes originating at the ICSID versus other venues, we again create three additional versions of this dispute variable for non-ICSID disputes. To explore the impact of time, we rely on a simple counter variable.

The control variables utilized in the analysis include the cumulative number of BITs ratified by a country, which we derive from the UNCTAD database.[41] Given that investment treaties are designed to convey relatively broad signals to the international investment community, we expect the number of ratified BITs to be positively related to reputation. To estimate the impact of investor-state dispute involvement vis-à-vis other variables that we expect to affect a state's reputation with the international investment community, we also include economic dynamism, market size, macroeconomic stability, internal stability, external stability, financial openness, and political democracy. We operationalize these

[40]Political Risk Services Group (2013)
[41]UNCTAD (2013)

variables, respectively, on the basis of GDP growth,[42] population,[43] the rate of inflation,[44] internal and external stability,[45] financial openness (from Chinn and Ito),[46] and polity ratings[47] – all of which with the exception of inflation we expect to exercise a positive influence on international reputation.[48] As with our FDI analysis, our sample includes all lower and middle-income nations for which data are available. Again the time period covered by the statistical analysis ranges from 1987, when the first treaty-based dispute was brought to international arbitration, to 2014, yielding an unbalanced time-series panel of approximately 2,600 observations and 100 countries.

We begin the analysis of the effects of dispute involvement on perceptions of investment climate using a fixed effects framework with robust standard errors. Table 4 displays the results of this analysis. The lagged number of ratified BITs has a positive impact on reputations with the marginal effect of ratifying an additional ten treaties, equating to a 0.3 point change in reputation. Additionally, so-called "country fundamentals" matter: countries with higher levels of economic growth, greater market size, more capital account openness, more democracy, and higher levels of internal stability have stronger reputations. Also as expected, high rates of inflation have adverse reputational effects.

Moving to our dispute measures, the first result we highlight is that the effect of non-ICSID disputes on reputation is highly uncertain. The lack of any precisely measured adverse effect remains consistent across each version of the non-ICSID dispute variable.[49] Disputes filed at ICSID, on the other hand, do have a significant and adverse effect on investment reputation. However, it is unclear how much to make of the marginal differences in coefficient estimates, since our reputation variable ranges from 0 to 12 and the

[42]World Bank (2013)
[43]Ibid
[44]Ibid
[45]Political Risk Services Group (2013)
[46]Chinn and Ito (2008)
[47]Specifically, we use the Polity 2 score from the Polity IV project developed by Marshall, Gurr and Jaggers (2013).
[48]While there other variables that might be considered theoretically relevant to the study of investment reputation, we have opted for those utilized in prior IPE research with broad country coverage and limited overlap with other variables.
[49]A simple bivariate analysis shows that the effect is highly uncertain across countries as well.

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TABLE 4. Regression on investment profile using country fixed effects, robust standard errors in parentheses. ** and * indicate significance at $p < 0.05$ and $p < 0.10$, respectively.

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
ICSID (past two years)	-0.13^{**}					
	(0.049)					
Non-ICSID (past two years)		-0.049				
		(0.131)				
ICSID (past five years)			-0.09^{*}			
			(0.039)			
Non-ICSID (past five years)				-0.046		
				(0.107)		
Cumulative ICSID$_{t-1}$					-0.066^{*}	
					(0.027)	
Cumulative Non-ICSID$_{t-1}$						-0.066
						(0.078)
%Δ GDP$_{t-1}$	0.016^{*}	0.015^{*}	0.016^{*}	0.015^{*}	0.016^{*}	0.015^{*}
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Ln(GDP per capita)$_{t-1}$	0.701	0.763	0.687	0.768	0.72	0.786
	(0.391)	(0.397)	(0.389)	(0.399)	(0.391)	(0.402)
Ln(Pop.)$_{t-1}$	2.608^{**}	2.599^{**}	2.617^{**}	2.601^{**}	2.647^{**}	2.593^{**}
	(0.382)	(0.385)	(0.382)	(0.385)	(0.382)	(0.386)
Ln(Inflation)$_{t-1}$	-0.277^{**}	-0.27^{**}	-0.283^{**}	-0.271^{**}	-0.294^{**}	-0.273^{**}
	(0.077)	(0.079)	(0.076)	(0.079)	(0.076)	(0.078)
Internal Stability$_{t-1}$	0.202^{**}	0.203^{**}	0.202^{**}	0.203^{**}	0.201^{**}	0.201^{**}
	(0.034)	(0.034)	(0.034)	(0.034)	(0.034)	(0.034)
External Stability$_{t-1}$	-0.006	-0.004	-0.008	-0.004	-0.011	-0.003
	(0.037)	(0.037)	(0.037)	(0.037)	(0.037)	(0.037)
Ratif. BITs$_{t-1}$	0.025^{*}	0.022^{*}	0.027^{**}	0.022^{*}	0.029^{**}	0.024^{*}
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.011)
Capital Openness$_{t-1}$	0.195^{**}	0.198^{**}	0.192^{**}	0.196^{**}	0.181^{**}	0.195^{**}
	(0.067)	(0.067)	(0.066)	(0.067)	(0.067)	(0.067)
Polity$_{t-1}$	0.012^{**}	0.012^{**}	0.012^{**}	0.012^{**}	0.012^{**}	0.012^{**}
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
n	2603	2603	2603	2603	2603	2603
N	101	101	101	101	101	101

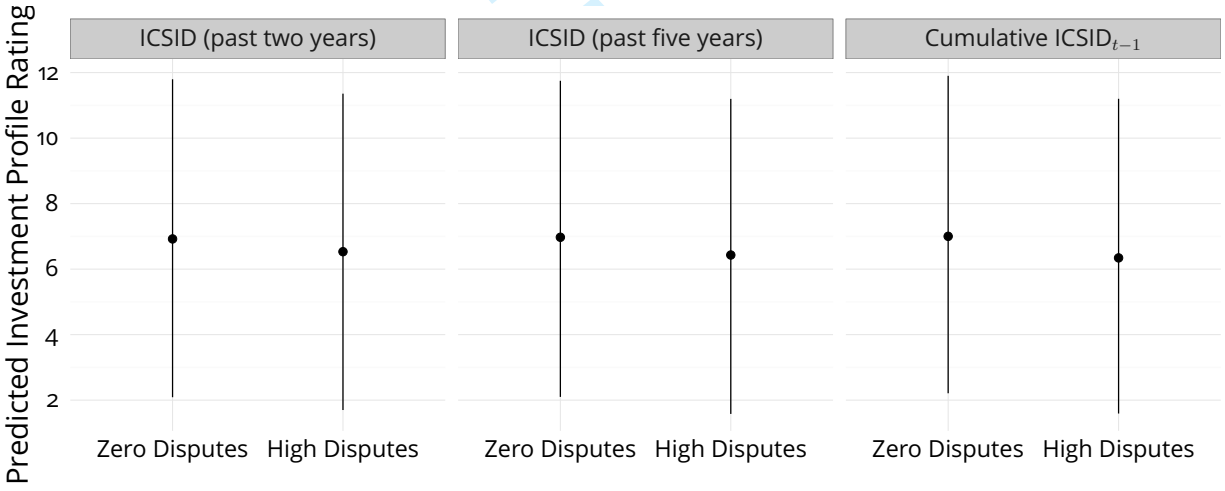
coefficient estimates only differ by fractions of a point. Additionally, even though the ICSID dispute measures show up as significant predictors in the model, their substantive impact on reputation is open to question.

To explore this issue more fully, we utilize a simulation-based approach. For each ICSID model, we set up two scenarios, one in which the disputes variable is set to zero and another where the relevant dispute variable is set to its 99^{th} percentile.[50] All other

[50]This corresponds to three for ICSID disputes over the past two years, six for disputes over the past five years, and 10 for the cumulative number of disputes.

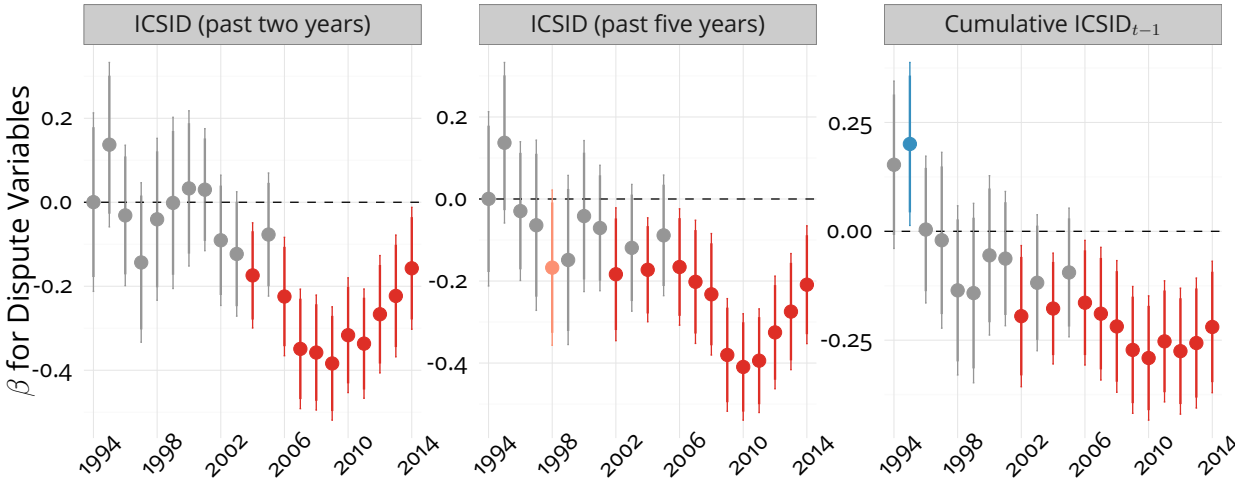
covariates are set to their median value. Next, we conduct 1,000 random draws from a multivariate normal to obtain distributions for the point estimates of each of the regression coefficients. After obtaining these distributions, we calculate the predicted value of reputation given the conditions set by the two scenarios. The result of this analysis is visualized in Figure 3. A solid circle designates the mean estimate for each scenario and the line widths designate where 95 percent of the values for a given scenario fall. Even for the ICSID dispute variable shown in the figure, there is less than a one point difference in the investment profile rating predicted by the zero and high dispute scenarios. In addition to this relatively minimal difference, the level of uncertainty around these predictions is quite large. Taken together, these characteristics of the data challenge the broad claim that dispute initiation generates significant reputational costs for offending countries.

FIGURE 3. Substantive Effect of ICSID Disputes on Investment Profile



Note: Here we show a typical country's predicted rating on investment profile under a scenario where a country faces a minimum versus the 99^{th} percentile number of ICSID disputes. Results were obtained by using simulations that accounted for inferential uncertainty. The point estimates here represent the mean predicted ratings and the line represents the 95% level of uncertainty associated with these estimates.

FIGURE 4. Change in Effect of ICSID Disputes Over Time



Note: Each point here designates the coefficient estimate for a disputes variable in that year. The thick line represents the 90% confidence interval around that point estimate, while the longer, thin line represents the 95% confidence interval. All the covariates used in the initial model shown in Table 4 were included in these pooled models as controls.

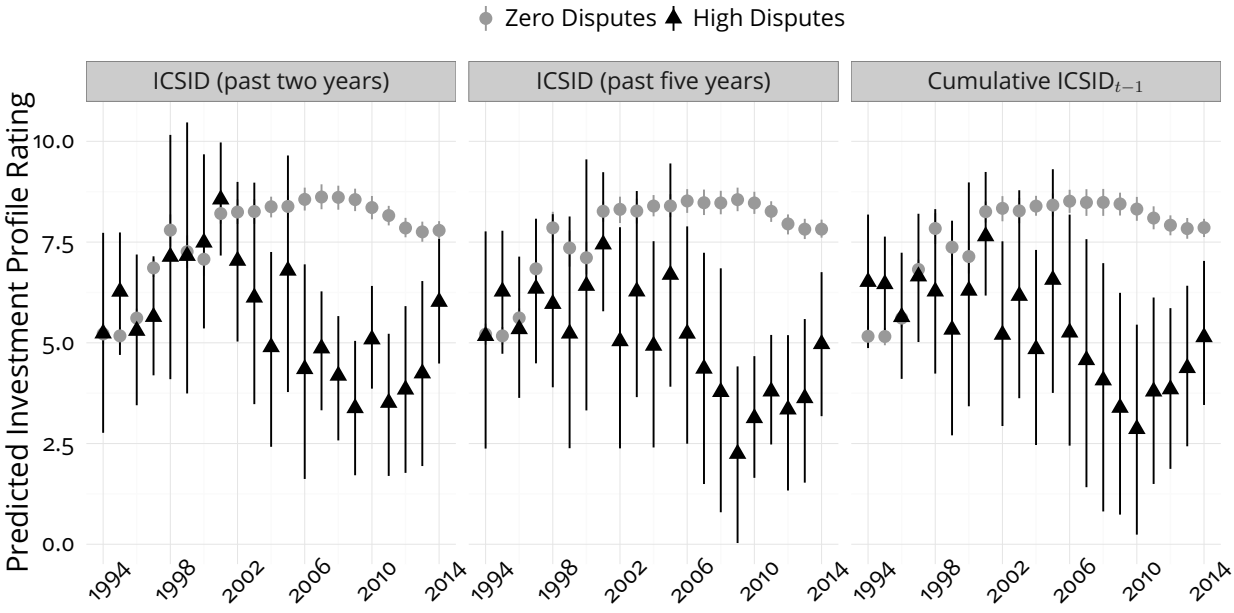
To explore our second hypothesis about the impact of time, we rerun the analysis for ICSID disputes shown in Table 4 on a series of yearly level pooled models for the 1994–2014 period.[51] All the control variables included in Table 4 are used here as well. Since our substantive interest is in how the effect of disputes has changed over time, for the sake of space we only show the coefficient results for our dispute measures. The dot in each line represents the coefficient estimate for a disputes variable in a given year, with the line width representing the 95 percent confidence interval around that point estimate.

We find significant variation in how the effect of disputes on reputation has changed over time. Prior to 2007, the estimated impact of disputes tends to be imprecisely measured. After that point in time, the precision of the estimated effect narrows dramatically.

[51]We begin our period for analysis here at 1994 because the infrequency of disputes before that date leads to cases in which no country had a dispute within the last two years.

Across each parameterization of the dispute variable in the post-2006 period, there exists a clear negative relationship between the initiation of disputes and perceptions of a country's investment reputation.[52]

FIGURE 5. Substantive Effect of Changes in ICSID Disputes



Note: Each line here shows the mean prediction and 95% interval around a given scenario using the pooled yearly level regression results. The grey line and circle denote the scenario in which all control variables are set to their median and disputes is set to zero. The black line and triangle denote the scenario in which all control variables are set to their median and the disputes variable is set to its 99^{th} percentile. Results were obtained by using simulations that accounted for inferential uncertainty.

Similar to our fixed effects analysis, we gauge the substantive meaning of this finding using a simulation-based approach. Figure 5 visualizes the results of our simulation. The grey line and circle denote the scenario in which all the control variables are set to their median and the disputes variable is set to zero. The dark line and triangle denote the

[52]As a check on the results from this series of pooled models, we add a binary variable that equals one after 2007 and zero otherwise to each of the models shown in Table 4. We then add an interaction between the binary variable and the dispute measure for each model. In each case, we find that the binary variable and the interaction term have a significant negative effect, at a 95% confidence interval, on reputation. We choose, however, to present the results from the series of pooled models to more clearly highlight the increasingly negative effect of disputes over time.

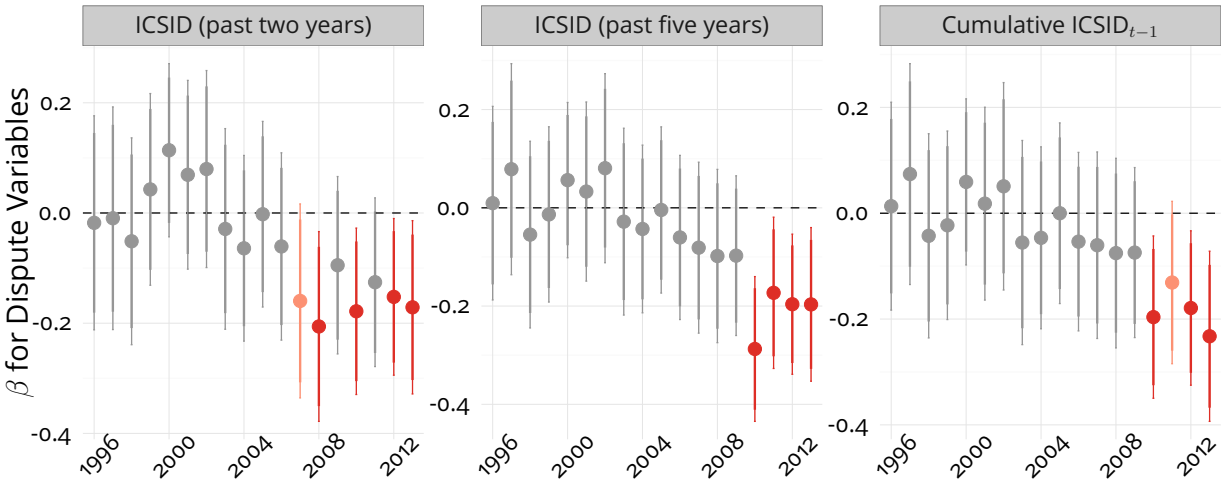
scenario in which the control variable are again set to their median but the disputes variable is set to its 99^{th} percentile value for each dispute measure. The line length again designates where 95 percent of the predicted values for a particular scenario fall.

Looking across the results shown in this figure, we can see that pre-2007, the predicted investment profile ratings given these two scenarios tends to overlap. After 2006, however, we can clearly see a divergence in the reputation of countries that have faced disputes and those have not. Countries that have not been involved in ISDS typically receive investment profile ratings of 8, while those that have had a high number of disputes within the past two years have predicted ratings that are almost two points less.

To ensure that the results we have presented in Figures 4 and 5 are not simply the result of changes in how the ICRG assesses the investment profile rating of countries, we buttress our analysis by using two additional indicators. First, we use the property rights measure from the Heritage Foundation's Index of Economic Freedom (Miles et al., 2004). This measure is the result of a qualitative assessment of the level of property rights protection within a country, which pays particular attention to the risk that private property will be expropriated by the state. Given what this variable seeks to capture it is a fitting test for assessing the reputational impact of state involvement in an international investor-state dispute. The Heritage Foundation variable, however, has a smaller temporal coverage than the ICRG: specifically, we only have yearly data available from 1995 to 2013 for 101 countries. To assess whether the temporal variation in the effect of disputes plays out for this alternative measure, we follow the same procedure that was used for the ICRG investment profile analysis and employ the same controls. The results are shown in Figure 6, and here again we find that disputes only begin to have a significant, negative effect in recent years.[53]

[53]As with our analysis involving the ICRG investment profile measure, we also run this analysis using the full dataset but interacting the disputes measures with a binary variable that equals one after 2007 and zero otherwise, and here again we find that the interaction and its constitutive terms have a significant negative effect. Additionally, the simulation analysis that was shown in Figure 5 for the ICRG investment profile variable returns similar results for the Heritage Foundation property rights measure. For the sake of space, however, we choose to only present the coefficient estimates for the dispute variables.

FIGURE 6. Change in Effect of ICSID Disputes Over Time for Property Rights from Heritage Foundation

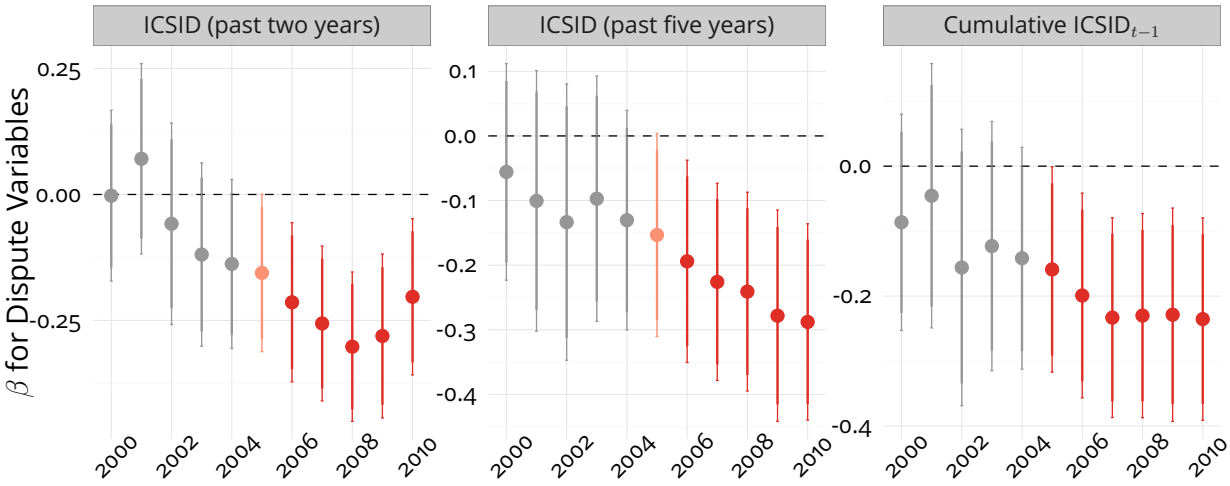


Note: Each point here designates the coefficient estimate for a disputes variable in that year. The thick line represents the 90% confidence interval around that point estimate, while the longer, thin line represents the 95% confidence interval. All the covariates used in the initial model shown in Table 4 were included in these pooled models as controls.

The third indicator we employ to validate our result is the property rights measure from the Fraser Institute's Economic Freedom of the World Index (Gwartney and Lawson, 2004). This measure also captures the degree to which a country protects the property rights of investors and businesses, and is available, at a yearly level, for 91 countries from 2000 to 2010. The results using the Fraser measure as the dependent variable are shown in Figure 7. Using this third indicator, we again consistently find that disputes have had a significant impact on state reputation in recent years.[54]

[54]Here again if run this model using the full panel but with an interaction effect, we find that the interaction and its constitutive terms have a significant negative effect. Additionally, a simulation based analysis assessing the effect of disputes shows similar results as what was shown in Figure 5.

FIGURE 7. Change in Effect of ICSID Disputes Over Time for Property Rights from Fraser Institute



Note: Each point here designates the coefficient estimate for a disputes variable in that year. The thick line represents the 90% confidence interval around that point estimate, while the longer, thin line represents the 95% confidence interval. All the covariates used in the initial model shown in Table 4 were included in these pooled models as controls.

SHORT VERSUS LONG TERM EFFECTS

A key limitation of the preceding set of results is that they do not directly address the issue of reputational change nor allow us to distinguish between the short and long-term effects of alleged treaty violations. For this reason, we probe the impact of investment disputes further below on the basis of an error correction model (ECM). Whereas prior research has assumed that investment disputes lead investors to reassess political risk, our central theoretical expectation is that reputational costs only emerge slowly over time with the accumulation of arbitral claims and the growth of information about state behavior. In other words, the arguments relating state reputation to treaty compliance are arguably best understood as reflecting long-term equilibria rather than transitory or short-term effects. To the extent that the impact of dispute involvement is heavily dependent on information flows, we also expect that reputational damage is more likely in the post-2006

period than earlier. Finally, given the relative visibility and transparency of the ICSID, we expect more reputational damage from arbitration at the ICSID than alternative venues.

Utilizing the same set of cases and variables as in the previous analysis, we assess these expectations on the basis of a model that includes the lagged dependent variable as well as both changes and lags of the independent variables as follows:

$$\Delta Y_{i,t} = \alpha + \Delta X_{i,t-1}\beta + \Phi(Y_{i,t-1} - X_{i,t-1}\gamma) + \epsilon_{i,t} \quad (1)$$

where $Y_{i,t}$ is the reputation of country i during year t, Δ is a first difference operator, X is a vector of independent variables, and $\epsilon_{i,t}$, is an error term. The dependent variable is thus the change in state reputation in a given year and the independent variables include lagged investment reputation, the lagged values of the independent variables, and lagged changes in the independent variables. Rewriting the equation in the form in which it is actually estimated, yields

$$\Delta Y_{i,t} = \alpha + Y_{i,t-1}\beta_1 + \Delta X_{i,t-1}\beta_2 + X_{i,t-1}\beta_3 + \epsilon_{i,t} \quad (2)$$

in which β_1 is the same as Φ in the error correction version of the equation, β_2 equivalent to β, and $\Phi(Y_{i,t-1})$ is rendered by β_3. The short-term relationship between the registration of arbitral claims and reputation is thus captured by β_2 and the longer-term relationship by β_3.

Given problems of heteroskedasticity associated with cross-sectional time series research designs, as well as the relatively high ratio of panels to periods, the models are estimated with OLS and panel-corrected standard errors in accordance with the recommendations of Beck and Katz.[55] The estimations are also corrected for panel-specific autocorrelation and country and time fixed effects to eliminate bias arising from omitted

[55]Beck and Katz (1995)

or unmeasured variables, which may not be completely exogenous with respect to other explanatory variables.

The estimates for changes in investment reputation are presented in Table 5. Beginning with the control variables, we see results that are weaker and only partially consistent with those reported above in Table 4. The evidence again suggests that GDP growth, population, and internal and external stability matter to reputation; but the other coefficients are statistically weak, with the exception of the coefficient for lagged reputation, which underlines the tendency for investment profile ratings to remain relatively stable over time.

For the variables of central theoretical interest, changes in dispute involvement and lagged levels of accumulated dispute involvement, the coefficients are decidedly weak. In accordance with theoretical expectation, in none of the columns are short-term increases in the number of arbitral claims registered against a state in the prior year statistically significant. Consistent with our earlier analysis, we also find that investor-state disputes had no reputational impact over the 1987-2006 period. With the analysis extended to cover the post-2006 period, however, the coefficients for cumulative dispute involvement at the ICSID becomes statistically significant. This finding further underlines the importance of information availability and the relative transparency of dispute settlement processes for reputational sanctioning.

TABLE 5. The Impact of Investor-State Disputes on International Investment Risk Profile

	ICSID		All Treaty Based Disputes	
	1987-2006	1987-2014	1987-2006	1987-2014
ΔDisputes	-0.016	-0.011	-0.004	-0.004
	(0.026)	(0.015)	(0.014)	(0.009)
Disputes_{t-1}	-0.004	-0.003*	-0.002	-0.001
	(0.003)	(0.001)	(0.002)	(0.001)
ΔLog(GDP)	6.692*	5.140*	6.585*	5.060*
	(3.187)	(2.259)	(3.185)	(2.258)
Log(GDP)_{t-1}	-0.059	-0.022	-0.055	-0.020
	(0.075)	(0.049)	(0.076)	(0.049)
ΔLog(Population)	67.285**	53.966**	67.924**	54.273**
	(20.765)	(12.915)	(20.804)	(12.935)
$\text{Log(Population)}_{t-1}$	-0.019	-0.026	-0.024	-0.027
	(0.181)	(0.073)	(0.182)	(0.073)
ΔLog(Inflation)	-0.049	-0.055	-0.049	-0.055
	(0.058)	(0.039)	(0.058)	(0.039)
$\text{Log(Inflation)}_{t-1}$	0.031	0.031	0.031	0.031*
	(0.020)	(0.016)	(0.020)	(0.016)
ΔInternal Stability	0.014	0.015	0.014	0.016
	(0.020)	(0.017)	(0.020)	(0.017)
$\text{Internal Stability}_{t-1}$	0.015**	0.011**	0.015**	0.011**
	(0.006)	(0.004)	(0.006)	(0.004)
ΔExternal Stability	0.084**	0.088**	0.084**	0.088**
	(0.026)	(0.024)	(0.026)	(0.024)
$\text{External Stability}_{t-1}$	-0.002	0.000	-0.002	0.000
	(0.005)	(0.004)	(0.005)	(0.004)
ΔRatified BITs	0.002	0.000	0.003	0.000
	(0.008)	(0.008)	(0.008)	(0.008)
$\text{Ratified BITs}_{t-1}$	-0.000	-0.000	-0.000	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)
ΔCapital Openness	0.000	0.000	0.000	0.000
	(0.002)	(0.002)	(0.002)	(0.002)
$\text{Capital Openness}_{t-1}$	0.004	-0.001	0.004	-0.001
	(0.010)	(0.007)	(0.010)	(0.007)
ΔPolity	-0.003	-0.002	-0.003	-0.002
	(0.002)	(0.002)	(0.002)	(0.002)
Polity_{t-1}	0.001	0.001	0.001	0.001
	(0.001)	(0.000)	(0.001)	(0.000)
Investment Profile_{t-1}	-0.095**	-0.079**	-0.094**	-0.079**
	(0.012)	(0.008)	(0.012)	(0.008)
n	1,708	2,499	1,708	2,499
N	101	101	101	101

Note: Dispute variables succeeded by $t-1$ measure the lagged cumulative total of disputes; variables preceded by Δ measure percentage changes. OLS estimates with fixed effects and panel-corrected standard errors in parentheses. Coefficients for time and country dummy variables not shown.

Estimating the substantive effects of dispute involvement on the basis of the error correction form of the model presented above helps to clarify these results. Drawing on the coefficients for ICSID treaty-based disputes over the 1987-2014 period, for example, it can be calculated that with all other variables held constant the registration of a new arbitral claim against a state will only lead to a 0.01 point decline in investment reputation over the short run, which is roughly equivalent to a 0.1 percent decrease relative to the mean value of reputation for the set of cases under consideration. Although reputation will continue to decline further over time by an additional 0.003 points, the costs of an individual investor-state dispute are still not very significant substantively. Even for the registration of three new ICSID disputes in a single year, the short-term impact is only an estimated 0.03 point decline in reputation (roughly 0.5 percent) with a further adjustment over the long run of 0.01.

Conclusion

This paper makes an original contribution to the growing body of literature on international investor-state disputes by systematically studying their consequences for both FDI flows and investment reputation over the full 1987–2014 time period. Whereas prior research has claimed that involvement in treaty-based investment dispute arbitration is predictably translated into reduced foreign direct investment flows, we find no evidence of such an effect. We therefore turn to the analysis of reputational damage, which is the mechanism presumed to be brought into play by perceptions that a state has violated its treaty commitments. Drawing upon an original dataset that covers the investor-state dispute involvement of lower and middle income countries both at the ICSID and other international venues, we analyze the impact of investment disputes on investment reputation as well as changes in that reputation over the 1987-2014 period. Contrary to the expectations generated by the theoretical literature on international political economy, as well as prior research on ISDS, our research suggests that the reputational costs of investment dispute involvement are restricted and heavily dependent on information flows.

Focusing initially upon the impact of disputes registered over the prior two years, our evidence indicates that investor-state disputes have a distinctly modest and contingent impact on reputation. Observable reputational differences revolve around observations for the post-2006 period during which access to information about dispute settlement processes exploded, both in response to changes in the rules governing international arbitration and mounting international publicity about ISDS. Exploring the impact of arbitral claims on changes in investment reputation on the basis of an error correction model, we find very similar results. Reputational shifts are completely unrelated to short-term increases in the number of challenges registered against a state. More significant is the record of dispute involvement accumulated by a state over the long run, particularly at the ICSID; but these results again revolve around the inclusion of observations for the post 2006-period.

Taken together our three sets of findings on the impact of disputes on foreign investment, investment reputation, and changes in investment reputation challenge the conclusions of prior research focusing on disputes registered at the ICSID between 1984 and 2006. Only in the post-2006 period have disputes manifested a reputational impact. Thus whereas the logic underlying the credible commitment story espoused in the political economy literature assumes that states incur statistically and substantively significant costs from allegations that they have violated their international agreements, we show that these costs are dependent on institutional design and information flows.

These findings have significant implications for the broader body of literature on international institutions. Existing theory suggests that formal international commitments raise the ex post cost of defection, thereby creating incentives for states to comply with their treaty obligations. Our analysis significantly modifies this expectation by suggesting that the strength of the incentives for compliance vary with the monitoring, sanctioning, and enforcement mechanisms brought into play by particular sets of international institutions. Under the current ISDS regime, the monitoring of treaty compliance is externalized to individual private firms and ad hoc arbitral tribunals, whose deliberations are limited

to the facts of a particular case, unpredictable, and often less than transparent. Notwithstanding the legal powers enjoyed by investors under international treaty agreements, the reputational risks of state involvement in ISDS processes have been accordingly attenuated and dependent upon information costs. It is only since 2006, when important shifts begin to take place in the access of investors to information about dispute processes, that the reputational costs of dispute involvement began to become significant. The central implication for future research is that reputational mechanisms for effective enforcement of international commitments are fundamentally dependent on institutional design and associated information costs, creating room for major variations in the capacity of international commitments to constrain state actors from engaging in uncooperative behavior.

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Appendix

Allee & Peinhardt 2011 Analysis. The difference between our results and those of Allee and Peinhardt's (2011) result from the way in which they logged the FDI variable. In doing so, they disregard the fact that logarithms of zero and negative numbers are not defined and therefore registered as missing in most statistical programs. As a result, they mistakenly exclude a notable number of country-year observations with negative or zero flows. Given their argument about the adverse reputational ramifications of ICSID disputes involvement on FDI flows, one could argue that the observations with negative flows are the most relevant portion of their dataset. In our replication of their analysis, we correct for this error by following the simple procedure suggested by Li, which calls for adding a constant so that each value is greater than zero before logging.[56]

The impact of Allee and Peinhardt's error is readily apparent in Table A.1. Using their data and statistical approach, the first column of the table exactly replicates their base model that assesses the impact of pending ICSID disputes over the 1984-2007 period. In column two, we follow the exact same procedure except we add a constant to negative and zero FDI values before logging the data. Comparing the results of columns one and two, it becomes evident that after including zero and negative FDI observations, ICSID dispute involvement does not significantly affect FDI flows. The results presented in other columns of the table are consistent with this finding. Columns three and four compare the results for the effect of disputes filed in the past two years, and columns five and six use disputes filed in the past five years. In each case we see that Allee and Peinhardt's original findings do not hold after including observations with negative or zero FDI in the analysis. For reasons of space, we do not report our findings with respect to other sets of Allee and Peinhardt's results, which address the impact of ICSID disputes lost or settled over the past two and five years as well as the impact of disputes lost over the past two years controlling for pending disputes. The results for these additional estimations, however,

[56] Li (2009)

follow the same pattern as those reported in Table A.1. Estimates using unlogged FDI data are very similar.

TABLE A.1. The Impact of ICSID Arbitration on FDI Inflows

	(1)		(2)		(3)	
	A & P	Corrected	A & P	Corrected	A & P	Corrected
Signed BITs	0.015	0.001	0.015	0.001	0.016	0.001
	(0.010)	(0.000)	(0.009)	(0.000)	(0.010)	(0.000)
Pending Claims	-0.036	0.000				
	(0.011)	(0.003)				
Disputes filed (past 2 years)			-0.057	-0.000		
			(0.018)	(0.003)		
Disputes filed (past 5 years)					-0.040	-0.000
					(0.011)	(0.002)
Economic Shocks	-0.032	-0.004	-0.031	-0.004	-0.031	-0.004
	(0.066)	(0.003)	(0.065)	(0.003)	(0.065)	(0.003)
Political Shocks	-0.011	-0.000	-0.011	-0.000	-0.011	-0.000
	(0.010)	(0.001)	(0.010)	(0.001)	(0.010)	(0.001)
External Threat	-0.046	-0.003	-0.047	-0.003	-0.047	-0.003
	(0.026)	(0.001)	(0.026)	(0.001)	(0.026)	(0.001)
Polity	0.015	-0.000	0.015	-0.000	0.015	-0.000
	(0.018)	(0.001)	(0.018)	(0.001)	(0.018)	(0.001)
Property Rights	0.039	-0.001	0.039	-0.001	0.039	-0.001
	(0.021)	(0.002)	(0.022)	(0.002)	(0.022)	(0.002)
Log(Population)	1.30	-0.032	1.32	-0.032	1.31	-0.032
	(0.525)	(0.032)	(0.525)	(0.032)	(0.526)	(0.032)
GDP per capita	1.06	0.051	1.05	0.051	1.05	0.051
	(0.265)	(0.020)	(0.264)	(0.020)	(0.264)	(0.020)
GDP growth	0.018	0.000	0.018	0.000	0.018	0.000
	(0.007)	(0.000)	(0.006)	(0.000)	(0.007)	(0.000)
Financial Openness	0.126	0.005	0.127	0.005	0.125	0.005
	(0.059)	(0.004)	(0.059)	(0.004)	(0.058)	(0.004)
Exchange rate	-0.001	0.000	-0.001	0.000	-0.001	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
World FDI	0.438	0.024	0.430	0.024	0.438	0.024
	(0.072)	(0.008)	(0.073)	(0.008)	(0.073)	(0.008)
n	1,796	1,956	1,796	1,956	1,796	1,956
N	102	102	102	102	102	102

Note: All variables (except World FDI) lagged one year. Fixed-effects estimation with standard errors clustered on country. Standard errors in parentheses.