

**NO (UN)INTENDED CONSEQUENCES—THE IMPACT OF
TREATY BREACHES ON FOREIGN DIRECT INVESTMENT**

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Abstract

One of the purported objectives of bilateral investment treaties (“BITs”) is to promote investment in the territory of the host state of the investment. The relationship between BITs and FDI has attracted significant attention from academia albeit with inconsistent results to date. However, research has not dealt comprehensively with the relationship between BIT disputes and awards, and FDI. This represents a gap in the current literature in need for clarity due to the scope of investment arbitrations, and against the background of the current reform that the dispute settlement system is undergoing. This paper addresses this gap by conducting a series of regression analyses and Granger causality tests to assess the explanatory power of the frequency and size of arbitration claims and awards on FDI flows per country, both globally and on a bilateral basis, for those countries that were most frequently sued in investment arbitration. The results of these analyses indicate that BIT disputes have no apparent impact on FDI flows to host countries, irrespective of whether these are BIT or non-BIT partners, and whether these are developed or developing countries. These findings suggest that investors do not take BIT disputes into account when making a decision whether to invest in a foreign country, even if that country has repeatedly been sued. An explanation is put forward to the effect that investors primarily rely on the mere existence of a BIT as a device to obtain leverage in potential settlement negotiations, rather than relying on investment arbitrations, usually costly and lengthy. This conclusion is powerful for policymakers, especially in capital importing countries, who may want to reassess their network of BITs in order to balance the benefits and costs of having a BIT in place.

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1. INTRODUCTION

Bilateral investment treaties (“BITs”) are investment agreements entered into between two states in order to promote investment flows and to protect foreign investment in the territory of the other state.¹ Among the sources of international investment law, BITs are the most important source.² There are currently 2,852 of such agreements, of which 2,298 are in force.³ BITs are said to provide foreign investors with the broadest rights under international law by means of investor-state dispute settlement (“ISDS”).⁴ Perhaps for this reason they have attracted substantial interest from academia, notably from the field of political science. Of late, there is significant debate surrounding the legitimacy of the ISDS system itself.

To the extent that BITs are designed to promote FDI, the effectiveness of BITs remains an open question. Numerous academic contributions – including detailed empirical studies –

¹ RUDOLF DOLZER & CHRISTOPH SCHREUER, *PRINCIPLES OF INTERNATIONAL INVESTMENT LAW* 13 (2d ed. 2012). I use the terms “nation”, “state”, and “country” interchangeably.

² *Id.* Other sources include the ICSID Convention, regional treaties such as NAFTA, customary international law, general principles of law, certain unilateral declarations of states, and case law.

³ UNCTAD, INVESTMENT POLICY HUB, <https://investmentpolicy.unctad.org/international-investment-agreements/advanced-search> (last visited April 28, 2021) [<https://perma.cc/Z7SN-BVF8>] [UNCTAD Database hereinafter].

⁴ Beth A. Simmons, *Bargaining over BITs, Arbitrating Awards: The Regime for Protection and Promotion of International Investment*, 66 *WORLD POLITICS* 12, 42 (2014).

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have been carried out over the last few years with inconclusive results. Conventional thinking typically runs along the following lines: investments in the territory of another state usually feature long-term projects of up to 30 years and beyond, with significant outlays at the outset of the project.⁵ BITs operate to attract such investments by providing a stable legal framework thereby reducing the risk of such long-term investments. Crucially, BITs enable ISDS which is to act as a device to punish states for unlawful interference with foreign investment thus giving an incentive for the host state to keep its promises to investors and respect the rule of law.

The flipside for host countries entering into a BIT are transaction costs in the negotiation and implementation of such a treaty, the costs of proceedings themselves once a claim is brought against a country, and finally the amount in awards against a state in the case of successful claims of investors. There are also potential reputational costs associated with being sued. This cost-benefit analysis is entirely left to the state's sovereign decision.⁶

Earlier studies suggesting that the benefits of entering into BITs outweighed the costs of doing so has been countered by some degree of skepticism about the effectiveness of BITs. This skepticism appears to have been increased by the recent backlash against investment

⁵ DOLZER, *supra* note 1, at 21.

⁶ *Id.* at 23.

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arbitration. Extant literature in this field of research has commonly addressed the association between the existence of BITs and FDI with a focus on developing countries as receivers of FDI. But to date, research has not dealt comprehensively with the association between the consequences of BITs themselves, i.e., arbitration claims, and FDI, and has not dealt at all with the association between awards and FDI. This is the contribution this paper aims to make. To that end, I carried out a sequence of regression analyses and Granger causality tests for the years 2000 to 2019 that test the explanatory power of the frequency and size of arbitral proceedings and awards on FDI flows per country, both on a global level and on a bilateral level, for those countries that were involved most frequently in investment disputes. FDI flows were lagged by one, two, and three years for each of the analyses to allow for gradual diffusion of information around arbitral proceedings against a host country into the set of potential foreign investors. As including multiple lagged periods across all sampled countries led to a high number of hypothesis tests, I complemented regression analyses with Benjamini-Hochberg procedures to correct for false discoveries based on multiple hypothesis testing.⁷ Moreover, t-tests were carried out of global and bilateral FDI flows before and after those years in which the change in the number of claims against a given country exceeded three standard deviations. This was

⁷ Yoav Benjamini & Yosef Hochberg, *Controlling the False Discovery Rate: A Practical and Powerful Approach to Multiple Testing*, 57 J. ROYAL STATISTICAL SOCIETY: SERIES B (METHODOLOGICAL) 289-300 (1995).

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complemented by a further analysis of whether the amount recovered by investors through arbitral proceedings in relation to amount claimed can explain future FDI growth in a given host country.

The results of these analyses do not point to any generalizable statistically significant relationship between either arbitral proceedings or awards, and future FDI flows. In particular, analyses of the relationship between the number of claims filed against a country and its FDI flows showed no statistically significant relationship at the five per cent level across non-lagged and lagged FDI flows. Regression coefficients showed an inconsistent picture between increases and decreases of FDI flows as a reaction to arbitral claims filed. T-tests comparing mean FDI flows before and after a change in the number of claims filed against a country of three standard deviations or more produced only one statistically significant decrease in average FDI flows. Similar t-tests around the occurrence of noteworthy events, such as for example the annexation of Crimea, equally yielded only one statistically significant decrease in FDI flows. Analyses of the relationship between awards rendered and FDI flows yielded no statistically significant results after applying the Benjamini-Hochberg procedure to results. In relation to the impact of the size of awards on FDI, few regression analyses produced statistically significant results which showed, however, positive coefficients and were then eliminated through the Benjamini-Hochberg procedure. Analyses of stocks of total historical claims consistently produced statistically

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significant results for five countries (Argentina, Egypt, Ecuador, Mexico, and the US) across non-lagged and all lagged FDI flows. All five countries showed an increase of FDI flows as the total stock of claims piled up. Granger causality tests, however, failed to discover a statistically significant causal relationship. Analyses focusing exclusively on actively pending claims produced statistically significant results for the same five countries as before, however, without any consistency as to countries and directionality of coefficients.

Similarly, regression analyses of bilateral FDI flows reacting to claims filed between two countries produced no statistically significant results.

What these results seem to indicate is that investors do not take investment disputes into account when making a decision whether to invest in a given foreign country, even if that country has been highly involved in arbitral proceedings. This may be due to the fact that investors rely on the mere existence of a BIT which enables the investor to threaten litigation and leverage their position in obtaining relief, including a settlement. In any case, investors seem to factor in, at least partially, investment lost into their 'costs of doing business' in any given foreign country.

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2. LITERATURE REVIEW

Economic analysis of the relationship between BITs and FDI activity is extensive but inconclusive. Extant literature on the effect of BITs on FDI has not provided a definite answer as to whether BITs have any impact on FDI. Most studies feature common themes. First, most of the literature has focused exclusively on the impact of BITs on FDI and has largely ignored any potential impact of ensuing disputes on FDI, despite their far-reaching consequences. Second, studies have traditionally only accounted for the effects of BITs on FDI flows to developing countries and transition economies thereby drawing a hard line between developing and developed countries in their samples (or OECD and non-OECD countries). However, this line has diffused over the last years as developed countries have increasingly become importing more capital. Since 2013, the number of developed countries sued in investment arbitration proceedings has significantly increased which has highlighted the need to include them in analyses as recipients of FDI.⁸

Studies to date differ widely in their findings on the impact of BITs on FDI. Banga (2003)⁹

⁸ UNCTAD, *Investor-state Dispute Settlement: Review of Developments in 2015*, at 3 (2016) https://unctad.org/system/files/official-document/webdiaepcb2016d4_en.pdf [<https://perma.cc/C83N-DWEP>].

⁹ Rashmi Banga, *Impact of Government Policies and Investment Agreements on FDI Inflows*, Working Paper, INDIAN COUNCIL FOR RESEARCH ON INTERNATIONAL RELATIONS, 2003.

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finds a significant relationship between BITs and FDI flows to developing countries but only from developed partner countries, not from developing partner countries. Neumayer and Spess (2004)¹⁰ show further that developing countries with more BITs with developed countries receive more FDI. They also provide (limited) evidence that BITs may operate as substitution for weak domestic investment environments. More recently Frenkel and Walter (2019)¹¹ find that a given BIT increases FDI flows to the host country by 21% on average. They also show that dispute settlement provisions in particular act to increase FDI flows to the host country, i.e. the more beneficial these provisions for the investor, the more effective BITs are in attracting FDI. Falvey and Foster-McGregor (2017)¹² also find a positive relationship between BITs and FDI between developed (home) and developing (host) countries, which is stronger the greater the differences in GDP between countries. However, they find that BITs have no impact on FDI where countries show large differences in their political institutions. Rosendorff and Shin (2012)¹³ disagree and find that BITs have greater effects on FDI in those countries with the weakest institutional

¹⁰ Eric Neumayer & Laura Spess, *Do Bilateral Investment Treaties Increase Foreign Direct Investment to Developing Countries?* 33 *WORLD DEV.* 1567-1585 (2005).

¹¹ Michael Frenkel & Benedikt Walter, *Do Bilateral Investment Treaties Attract Foreign Direct Investment? The Role of International Dispute Settlement Provisions*, 42 *WORLD ECON.* 1316-1342 (2019).

¹² Rod Falvey & Neil Foster-McGregor, *Heterogeneous Effects of Bilateral Investment Treaties*, 153 *REV. WORLD ECON.* 631-656 (2017).

¹³ Peter B. Rosendorff & Kongjoo Shin, *Importing Transparency: The Political Economy of BITs and FDI Flows*, Manuscript, New York University Political Science Department (2012).

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environment, specifically those with non-democratic and opaque institutions, which are assumed to be more prone to sign BITs in the first place. Instead, they find that BITs have no significant effect on countries with a stable investment environment and strong institutions. In a more nuanced analysis, Busse (2013)¹⁴ focuses on the impact of specific BIT provisions on FDI flows to developing countries and finds that while BIT clauses relating to market access have an impact on FDI, dispute settlement clauses – the focus of this paper – only have a minor impact. In a yet more detailed study, Egger and Merlo (2012)¹⁵ analyze the impact of BITs at the enterprise level (German firms in the period 1996-2005) and find that BITs increase the number of active firms, plants and sales in the host country because it reduces investment risk. By contrast, Sauvants and Sachs (2009)¹⁶ find a small effect of BITs on FDI between BIT partners. In particular, they find that the share of FDI flowing from or to BIT partner countries is marginal and conclude that BITs play a minor role in attracting foreign investment. In that same line, Tobin and Rose-Ackerman (2011)¹⁷ find that the positive impact of BITs on FDI seems to be related to

¹⁴ Alex Berger, Matthias Busse & Peter Nunnenkamp, *Do Trade and Investment Agreements Lead to More FDI? Accounting for Key Provisions inside the Black Box*, 10 INT'L. ECON. & ECON. POL'Y 247-275 (2013).

¹⁵ Peter Egger & Valeria Merlo, *BITs Bite: An Anatomy of the Impact of Bilateral Investment Treaties on Multinational Firms*, 114 SCANDINAVIAN J. ECON. 1240-1266 (2012).

¹⁶ KARL P. SAUVANT & LISA E. SACHS. THE EFFECT OF TREATIES ON FOREIGN DIRECT INVESTMENT: BILATERAL INVESTMENT TREATIES, DOUBLE TAXATION TREATIES, AND INVESTMENT FLOWS, 323-348 (Oxford University Press, 2009).

¹⁷ Jennifer Tobin & Susan Rose-Ackerman, *When BITs Have Some Bite: The Political-Economic*

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political and economic aspects of the host country. Once factors such as political risk or economic environment are taken into account, BITs' effect on FDI is insignificant. Hallward-Driemeier (2005) had also concluded along these lines a few years earlier, suggesting that other macro-level factors play a more significant role in FDI.

In sum, despite the fact that a multitude of papers have tackled these questions with different research designs, hypotheses and data sources, they have not arrived at any common theme in their results that would allow for a meaningful substantive generalization.

In any case, scholarly work in this field has focused on the impact of BITs on FDI, largely leaving the impact of BIT disputes on FDI unanswered. To my knowledge, only four papers address this area of research. The premise of this group of studies is that the ability of BITs to increase FDI flows is not (only) contingent on the existence of BITs, but on the host country's behavior once an investment has been made. The underlying hypothesis common to extant literature is that BITs would only increase FDI flows to the host country if the host country lives up to the commitments agreed to in the BIT.

Environment for Bilateral Investment Treaties, 6 REV. INT'L ORGAN. 6, 1-32 (2011).

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In the leading empirical study in this area, Allee and Peinhardt (2011)¹⁸ find that although BITs increase FDI between those countries who sign them, when countries are taken before ICSID, they experience losses in FDI already by being sued and independent of whether the state ends up winning the case or not. Their study thus highlights the reputational costs of acting as respondent in an investment arbitration for the host country. More specifically, Wellhausen (2015)¹⁹ finds that FDI flows to a host country from the home state of the investor are reduced significantly only when the claim is filed by a conational but her focus is limited to those disputes in which the developing host state breaches a BIT with a multinational corporation. Further, Aisbett et al. (2017)²⁰ study the impact of investment claims on FDI flows to the developing host country. The focus of the paper is on the differences between BIT partner and non-partner countries. They find a positive relationship between BITs and FDI flows to the host country, as long as no claim has been filed against that country. Finally, in the most recent study by Kerner and Pelc (2021),²¹ the

¹⁸ Todd Allee & Clint Peinhardt, *Contingent Credibility: The Impact of Investment Treaty Violations on Foreign Direct Investment*, 65 INT'L ORGAN., 401-432 (2011).

¹⁹ Rachel Wellhausen, *Investor-state Disputes: When Can Governments Break Contracts?* 59 J. OF CONFLICT RESOL. 239-261 (2015).

²⁰ Emma Aisbett, Matthias Busse & Peter Nunnenkamp, *Bilateral Investment Treaties as Deterrents of Host-country Discretion: The Impact of Investor-state Disputes on Foreign Direct Investment in Developing Countries*, 154 REV. OF WORLD ECON. 119-155 (2017).

²¹ Andrew Kerner & Krzysztof J. Pelc, *Do Investor-State Disputes (Still) Harm FDI?*, BRITISH J. POL. SCI., 1-24 (2021).

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authors analyze the BIT-FDI relationship by type of claim put forward in the investment arbitration. They separate their sample cases according to whether the investor claimed direct expropriation, “fair and equitable treatment” (FET) or indirect expropriation. The FET standard requires that foreign investment be accorded fair and equitable treatment in the host state and it operates as a “catch-all” provision that permits to fill gaps within the BIT in order to reach a certain level of protection.²² It is currently the most invoked BIT standard.²³ Kerner and Pelc find that FET claims do not have an impact on FDI flows while direct expropriation claims do. However, even with direct expropriation, its effects are eroded over time. They thus conclude that reputational effects of ISDS claims appear to be less meaningful today than they used to be because of several developments in the field. In particular, they mention the following trends – which are relevant for the purposes of this paper: (i) an explosion of ISDS cases since 2007; (ii) a change in the nature of ISDS claims, which have shifted from direct expropriation claims to FET and indirect expropriation claims; (iii) a decline in investor success rate and (iv) an increase in developed (OECD) countries as respondent states in investment arbitration cases. On that basis, they break away with the traditional approach of only accounting for developing countries as receivers of FDI and include developed countries in their sample as receivers of FDI, certainly a

²² DOLZER, *supra* note 1, at 132.

²³ *Id.*

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welcome development. Yet, their study, although more encompassing, appears to fall short on two counts. First, typically investors' claims are not limited to a specific type of claim. Instead, they claim BIT breaches on a variety of grounds and it is common to see cases where all three types of claims (direct expropriation, FET, and indirect expropriation), and sometimes more, are alleged by the investor. This leads me to my second critique, i.e., accounting for direct expropriation claims necessarily reduces the sample in a significant manner. The number of claims per type is not specified, but for direct expropriation alone, I estimate that these may represent around 3% of the 812 ISDS disputes of their broader sample.²⁴ Additionally, only a few countries (the Russian Federation, Venezuela, Bolivia and Colombia)²⁵ appear as respondent states in more than one case claiming solely direct expropriation, which again reduces the sample further.

In line with this area of research that focuses on the relationship between BIT disputes and FDI flows, this paper aims at examining the impact of investment disputes on FDI, by incorporating information relating to the abovementioned trends. To that end, this paper examines data relating to 983 known cases filed before all arbitration fora available to

²⁴ I have calculated this figure based on the master database I used for my analyses: 31 direct expropriation cases out of the 983 records.

²⁵ Specifically, the Russian Federation 7 times, Venezuela 6 times, Bolivia 3 times and Colombia twice.

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investors (thus, not limited to ICSID);²⁶ it examines both aggregate and bilateral FDI flows; it includes a comprehensive dataset of FDI time series beyond 2012, the cut-off year for most studies; it looks at a broad range of potential explanatory variables; and, crucially, it includes both developed and developing host countries as respondent states and potential receivers of FDI. The focus of this paper on the impact of disputes on FDI is driven by the increasing number of investment disputes, which has arguably shifted the attention in the international community from treaty conclusion to treaty dispute resolution. The paper aims at providing a holistic view of the consequences of BIT disputes in relation to FDI with the benefit of hindsight, that is, more than 20 years of data, accounting for recent trends, thereby producing a stocktaking assessment of the value of BITs in general as a means to inform the current reform debate.

²⁶ Although ICSID represents the most frequently used forum (62% of all known cases), it is certainly not the only one. Others include: The International Chamber of Commerce (ICC), the Permanent Court of Arbitration (PCA), the Stockholm Chamber of Commerce (SCC), the Hong Kong International Arbitration Center (HKIAC), LCIA (London Court of International Arbitration), as well as *ad hoc* cases under the UNCITRAL Rules.

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3. DATA & METHODOLOGY

i. Dataset

Data on arbitral proceedings initiated from the year 2000 to the year 2019 were sourced from the United Nations Conference on Trade and Development (UNCTAD) Investment Policy Hub's Investment Dispute Settlement Navigator (IDSN).²⁷ The IDSN includes every known case filed globally by way of investment arbitration proceedings for 118 countries and supplies a comprehensive and detailed set of information on all aspects of the cases. Of salience to the analyses of this paper were data on the year of initiation, status of the case, respondent state, home state of investor, amount claimed, and amount awarded.

Data on FDI flows were sourced from the UNCTAD database on statistics and trends²⁸ for the years 2001 to 2012 complemented with data from the database of statistics maintained by the OECD²⁹ for the years 2013 to 2019.

²⁷ Original source data can be found at <https://investmentpolicy.unctad.org/investment-dispute-settlement> [<https://perma.cc/5SA7-TM2J>].

²⁸ Source data can be found at <https://unctad.org/topic/investment/investment-statistics-and-trends> [<https://perma.cc/A8WJ-TPWL>].

²⁹ Source data can be found here: database: https://stats.oecd.org/Index.aspx?DataSetCode=FDI_FLOW_PARTNER

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ii. Methodology

To narrow down the global set of countries to a selection that provides a meaningful pool of data on arbitral proceedings, I first calculated for each country the total number of claims brought against it, the sum of damages claimed against it, and the sum of awards rendered against it. I then ranked all 118 countries from highest to lowest for all three metrics (claims brought, sum of damages claimed, sum of awards rendered). The country scoring highest in the respective metric was then assigned 118 points, the country with the second highest metric received 117 points and so on. To create an aggregated ranking that incorporates all three metrics and gives proper weight to the importance of each individual metric, I then assigned the number of claims brought against a country a weight of 3, the sum of damages awarded against a country a weight of 2, and the sum of damages claimed a weight of 1. The reason for this weighting is that the number of claims brought against a country appears to be the strongest indicator for systematic treaty breaches, potentially serving as a potent warning signal to investors to allocate investment elsewhere. The sum of damages awarded to investors against a country then is of slightly lower albeit still clear relevance as an indicator for the merits and gravity of claims brought against a country. Finally, the sum of damages claimed, while potentially a complementary indicator as to the gravity of treaty breaches, is accorded the lowest ranking as claimants might systematically ‘over-claim’ in the hope of optimizing potential awards, not receive an award at all, or both. These

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weightings were then multiplied with the score per metric for each country, the three resulting products summed, and finally divided by the sum of the weights to arrive at an overall score per country. All countries were then ranked by their overall score and the eleven countries with the highest overall scores plus the United States of America selected for further analyses. Although scoring merely 43rd in the overall ranking, the US was included in analyses due to its significance to the global economy. The sample includes both developed and developing economies, according to the UNCTAD classification. This reflects the change in trend whereby developed countries are increasingly being sued in investment arbitration proceedings. Please refer to Table 1 for an overview of the sample of countries included in analyses. The core of analyses conducted on the sample revolved around ordinary least-squares regressions shedding light onto the explanatory power of different metrics around arbitral proceedings on FDI flows for each country within the sample. This was done for aggregate metrics on global arbitral proceedings against a country and aggregate FDI flows as well as on a bilateral basis for select country pairs.

Details on the dependent and independent variables and equations for each regression analysis, further statistical tests, and results are provided below paired with the discussion of corresponding results.

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Table 1. Selection of Countries in Sample

Rank	Country	Total Score
1	Argentina	116.7
2	Venezuela, Bolivarian Republic of	116.5
3	Russian Federation	113.0
4	Egypt	113.0
5	Poland	112.3
6	Spain	111.8
7	Czechia	109.3
8	Ecuador	107.3
9	Mexico	106.5
10	Kazakhstan	105.5
11	Canada	105.3
...		
43	USA	71.5

Note: Table shows all countries sampled, sorted by total score. Total score is used as an indicator for the frequency and severity of treaty breaches committed by host countries between 2000 and 2019. Total score is calculated by ranking all 118 countries contained in the United Nations Conference on Trade and Development Investment Policy Hub's Investment Dispute Settlement Navigator thrice by categories a) number of claims against a given host country, b) sum of damages awarded to investors to be paid by host country, c) sum of damages claimed by investors from host country. Country with highest statistic in each category is awarded 118 points, second highest figure 117 points, and so on. Total score is the calculated as weighted average with claims receiving weight 3x, sum awards weight 2x, sum claims weight 1x. The higher the total score of a country, the more frequent and significant were treaty breaches.

The regression analysis conducted uses a time-lag response between dispute and FDI of zero (the time the dispute arose, year 0), as well as 1, 2, and 3 years. To my knowledge there is no commonly agreed understanding of the response lag of investors to investment policy

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changes. However, there is some evidence in extant literature assessing the impact of BITs on FDI that suggests a time lag between 1 and 3 years.³⁰

4. RESULTS GLOBAL

i. Summary Statistics

Before turning to inferences about the impact of arbitral proceedings on a country's FDI it was first of interest to get a view on the potential size and significance of arbitral proceedings in the context of a given country's FDI flows and stock. Therefore, I generated summary statistics for claims and awards brought against the respective countries to then contextualize them in relation to their relative size versus stocks and average annual flows of FDI for each country. Summary statistics for arbitral claims filed against the countries sampled show a very large range in claim sizes from comparatively minute minimum claims as small as USD1 million all the way to mega-claims of up to USD91 billion (see Table 2). Mega-claims in the billions are no rare occurrence as every country sampled has seen at least one of such claims and half of all countries sampled even saw double digit billion-

³⁰ SAUVANT *supra* note 15, at 347.

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dollar claims brought against them.

Table 2. Descriptive Statistics for Arbitral Claims Against Countries (USD million, except skewness and kurtosis)

Country	min	median	mean	max	stdev	skewness	kurtosis
Argentina	11	247	693	10,500	1,645	5	31
Venezuela	1	300	2,051	30,305	5,861	4	20
Russia	3	233	7,733	91,200	20,933	4	16
Egypt	5	200	1,115	15,000	3,258	4	19
Poland	2	180	726	10,000	2,019	5	22
Spain	7	107	252	2,200	383	4	18
Czechia	2	43	187	1,900	409	3	10
Ecuador	5	80	310	1,516	412	2	4
Mexico	2	83	330	3,540	683	4	19
Kazakhstan	14	212	674	2,631	805	1	1
Canada	2	135	354	3,500	665	4	20
USA	8	200	1,494	15,000	3,707	3	13

Mean claims show no clear pattern between developing and developed nations while the standard deviation of claims is rather high across the board, often lying between 2x and 3x of mean claims. This further confirms the observation of claims being fairly widely spread across the probability distribution, a theme that is being underscored by very high kurtosis in the double digits for all countries except two (Ecuador and Kazakhstan). Argentina showed the highest reading with a kurtosis of 31. Overall, this not only pointed to a wide dispersion of claims but specifically to a few claims of extreme size having defined much of the properties of the probability distribution of claims leading to fat tails. On the level of individual countries, Russia clearly stands out with both a very high mean claim size of

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USD7.7 billion and the largest maximum claim in the entire sample of USD91 billion. Other countries with high mean claims above a billion USD brought against them were Venezuela, Egypt, and the US.

Table 3. Descriptive Statistics for Arbitral Awards Against Countries (USD million, except skewness and kurtosis)

Country	min	median	mean	max	stdev	skewness	kurtosis
Argentina	0	131	383	5,000	1,020	4	20
Venezuela	1	372	815	8,446	1,800	4	18
Russia	2	45	4,672	40,000	11,966	3	10
Egypt	2	54	430	2,013	885	2	5
Poland	0	13	576	4,379	1,538	3	8
Spain	0	56	90	324	91	2	5
Czechia	0	34	117	281	145	1	-3
Ecuador	4	70	269	1,769	575	3	8
Mexico	1	17	27	77	27	1	0
Kazakhstan	0	16	110	497	195	2	5
Canada	0	13	26	123	43	3	7
USA	<i>data on awards/settlements not disclosed</i>						

Turning from statistics on claims to those of awards helps to paint a clearer picture both on ‘claim sizing’ of investors and the actual ‘damage’ arbitral tribunals found was done to investor interests abroad. The range of awards follows many of the themes observed for the claims. There is a wide spread between minimum awards from as low as USD1 million all the way up to USD40 billion (see Table 3). However, looking at mean awards in relation to mean claims, it seems evident that investors routinely and significantly ‘over-claim’ by an average factor of 4.3x relative to the average sums that are finally awarded in the cases

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of successful claims. That mean falls between a minimum multiple of 1.2x claim-to-award for Ecuador to a maximum of 13.7x in the case of Canada. When comparing this ratio for the largest of claims and awards looking at only the maxima, it widens to an average of 10x. The standard deviation again typically falls between 2x and 3x of mean awards and the kurtosis across the twelve countries appears more muted although still with widely varying figures ranging from a minimum of -3 (Czechia) to a maximum of 20 (Argentina). On the level of individual countries, it is again Russia that stands out with very high mean awards of USD4.7 billion and a the largest of all awards at USD40 billion.

These statistics in and of themselves certainly provide a sense for the general size of arbitral proceedings and an indication as to the resulting significance to investors involved in such. To further flesh out the point of relative importance, I then set the size of arbitral proceedings in relation to the respective stocks and flows of FDI for each country. First, I divided the maximum and mean claim and award for each country by the corresponding stock of the respective country's FDI in year 2019. This provides insight into what percentage of a country's stock of FDI was at risk both in light of the largest and average claim brought and award rendered against it. Then I divided the maximum and mean claim and award by the mean annual FDI flow for each country over the years 2000 to 2019. This served to understand how many years' worth of FDI flow was at risk or effectively being 'wiped out' by the average and maximum claim brought or award

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rendered. For results, please see Table 4.

Table 4. Claims and Awards in Relation to FDI Stock 2019 and Mean Annual FDI Flows 2000 to 2019 by Country

Country	Max Claim to Stock FDI 2019	Max Award to Stock FDI 2019	Max Claim to Mean Flow FDI	Max Award to Mean Flow FDI	Mean Claim to Stock FDI 2019	Mean Award to Stock FDI 2019	Mean Claim to Mean Flow FDI	Mean Award to Mean Flow FDI
Argentina	15%	7%	141%	67%	1%	1%	9%	5%
Venezuela	123%	34%	1586%	442%	8%	3%	107%	43%
Russia	20%	9%	336%	147%	2%	1%	28%	17%
Egypt	12%	2%	277%	37%	1%	0%	21%	8%
Poland	4%	2%	89%	39%	0%	0%	6%	5%
Spain	0%	0%	7%	1%	0%	0%	1%	0%
Czechia	1%	0%	30%	4%	0%	0%	3%	2%
Ecuador	8%	9%	227%	265%	2%	1%	46%	40%
Mexico	1%	0%	13%	0%	0%	0%	1%	0%
Kazakhstan	2%	0%	37%	7%	0%	0%	10%	2%
Canada	0%	0%	8%	0%	0%	0%	1%	0%
USA	0%		7%		0%		1%	

Analyses of claims in relation to FDI showed that for most of the developing nations sampled, maximum claims in relation to FDI stocks in 2019 were much too large to be ignored. Venezuela (123% of FDI stocks), Russia (20%), Argentina (15%), and Egypt (12%) saw significant portions of the national FDI stock at risk through the largest claims brought against them. Developed nations showed overall more modest exposures with Poland (4%) having the highest reading. Mean claims brought overall were not very substantial in relation to FDI stocks with the exception of Venezuela (8%). Claims in relation to average annual FDI flows expectedly played a more impactful role as for five countries, one mega-

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claim could have wiped out at least one year's worth of FDI flows. Venezuela (15x), Russia (3x), Egypt (2.7x), and Ecuador (2.3x) showed more than two years' worth of FDI flows exposed to just a single claim. Mean claims to average FDI flows show a less dramatic but still impactful picture for the same countries as mentioned above.

Turning to actual awards rendered, maximum awards painted a less dramatic picture than claims due to over-claiming on the part of investors. On the higher end, Venezuela saw an award of 34% of 2019 FDI stocks rendered against it and Russia an award of 9% of FDI stocks. Mean awards to stocks of FDI appeared negligible across the board. However, when using mean annual FDI flows as the basis of reference, maximum awards consumed more than 33% of a year's worth of FDI flows for half the sampled countries. Mean awards to FDI flows were of relevance in the cases of Venezuela, Russia, and Ecuador. The US did not report any data on settlements reached with investors.

These data overall point to two conclusions. Average claim and award sizes are indeed sizeable enough for investors to be aware of a tangible risk to their capital base when investing abroad. On the other hand, of the countries receiving foreign direct investment, it is primarily developing nations that are at a tangible risk of incurring painful awards rendered against them on the basis of treaty breaches, mainly due to lower baseline figures for FDI in relation to claim and award sizes. This suggests that while especially developed nations receiving FDI might shrug off the adverse consequences of arbitral awards in favor

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of investors, this should not be the case for developing nations. Investors, however, should have a clear incentive to penalize those countries that engage in treaty breaches leading to arbitral proceedings by rechanneling their investments to other, more reliable host countries.

ii. **Arbitral proceedings and influence on FDI flows**

a) Number of claims filed explaining FDI flows

At the outset, I was interested whether the variation in the aggregate number of claims filed against each country in the sample in a given year could explain the variation in aggregate FDI flows into the respective country. I conducted regression analyses with claims filed against a country per year at t as the independent variable and FDI flows at t , $t+1$, $t+2$, $t+3$ the dependent variable. By lagging the dependent variable, I allowed for gradual diffusion of information on a country's treaty breaches into the realm of foreign investors, who would adjust their investment activity accordingly. The regression model was:

$$FDI\ Inflow_{n,t,t+1,t+2,t+3} = \beta_0 + \beta_1 \times No.\ Claims\ Against_{n_t} + \varepsilon_t \quad (1)$$

Where n is the host country being analyzed, β_0 is a constant, β_1 is the claim-coefficient to be estimated, and ε is the model error term. The results show that there is no generalizable

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statistically significant relationship between the number of claims against a country in a given year and aggregate FDI flows both in that same year and for each of the following three years. Only two out of twelve countries show a statistically significant relationship at the five percent level, one with a positive coefficient, one with a negative coefficient. The same results are produced by the analysis using one-year lagged FDI flows as the dependent variable, albeit with two different countries than the analysis with un-lagged FDI flows. The analysis using two-year lagged FDI flows shows only one country with a statistically significant relationship at the ten percent level, here with a positive coefficient. No statistically significant relationship was found for three-year lagged FDI flows.

Due to the relatively high number of regression analyses conducted on the samples and the potential for a false discovery rate to produce random significant results, I applied the Benjamini-Hochberg procedure to all results calibrated to a false discovery rate of 25%. After application of the Benjamini-Hochberg procedure, all of the previously statistically significant results were rejected.

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As for the entire sample period from 2000 to 2019 the number of claims filed against a country in each year therefore seems to have neither a statistically significant nor directionally instructive impact on FDI flows, I further tested whether particularly strong changes in the number of claims filed from year to year would lead to a statistically significant change in the average FDI flow into a country. I conducted standard t-tests comparing means for the four years preceding and following a change in the number of claims brought against a country equal to or larger than three standard deviations. For an overview of how prevalent such events were, please refer to Table 5.

Table 5. Number of Year-Over-Year Changes in Number of Claims and Awards Larger Than Three Standard Deviations

Country	Claims	Awards
Argentina	1	0
Venezuela	1	0
Russia	1	1
Egypt	1	1
Poland	1	0
Spain	1	1
Czechia	1	1
Ecuador	1	2
Mexico	1	1
Kazakhstan	1	0
Canada	0	1
USA	0	1

Here also, I lagged the analyzed timeframe of four years following such a three-sigma event by one, two, and three years to allow for gradual diffusion of information to investors. These

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analyses yielded one statistically significant negative change in average FDI flows following a three-sigma change in claims filed, namely for the case of Kazakhstan. Directionally, about half the analyses showed a decrease and half an increase in average FDI flows following a three-sigma change in the number of claims filed against a country.

To complement the purely quantitative event-based analysis of three-sigma jumps in cases filed against a country with a more qualitative perspective, I then identify events of particular importance for the standing of a country in the international investment context. See Table 6 for an overview of these events. Again, I conducted standard t-tests comparing mean FDI flows four years before and after the occurrence of such an event and additionally lagged FDI flows by one, two, and three years. Once more, only one t-test produced a statistically significant result with a decrease in average FDI flows for Russia, following the annexation of Crimea.

These results therefore point to the conclusion that the number of annual cases filed against a country overall does not seem to have a statistically significant or directionally instructive explanatory power for FDI flows.

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Table 6: Qualitative Events

Country	Event	Year(s)
Argentina	Argentinian crisis & emergency law	2001 - 2002
USA	Enactment of anti-dumping duties and countervailing duties on imports of softwood lumber from Canada to the US	2001 - 2002
Mexico	Adoption of a tax on beverages	2002
Venezuela	A sequence of expropriation decrees	2010
Czechia	Modification of renewable energy incentive scheme	2011
Spain	Abrogation of renewable energy incentive scheme	2013 - 2014
Russia	Annexation of Crimea	2014

Note: Table displays those events that have marked a break in certain policies with a bearing on foreign direct investment activity. Such events were analyzed for their potential impact on FDI flows into the countries implementing the measures listed on the table.

b) Stock of claims filed explaining FDI flows

As the change in claims filed year-over-year does not seem to be able to explain changes in FDI flows, it could also be that a certain aggregate stock of claims ‘piling up’ against a country might lead to lowered investor confidence and a corresponding adjustment of capital investments that flow into such a country. An aggregate stock of claims in this sense can be either the sum of all cases ever brought against a country accumulated up to any given year or the sum only of actively pending claims against a country in any given

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year. I conduct regression analyses with both types of aggregate stock of claims at t as the independent variable and FDI flows at t , $t+1$, $t+2$, $t+3$ as the dependent variable. The regression models were:

$$\begin{aligned} FDI\ Inflow_{n_{t,t+1,t+2,t+3}} & \quad (2) \\ & = \beta_0 + \beta_1 \times Total\ Stock\ Claims\ Against_{n_t} + \varepsilon_t \end{aligned}$$

and

$$\begin{aligned} FDI\ Inflow_{n_{t,t+1,t+2,t+3}} & = \beta_0 + \beta_1 \times \\ Pending\ Stock\ Claims\ Agst_{n_t} & + \varepsilon_t. \end{aligned} \quad (3)$$

For the all-time total stock of claims (including both pending and decided cases) explaining FDI flows, five countries showed consistently statistically significant and positive relationships for both current and lagged FDI time series (see Table 7). These countries were Argentina, Egypt, Ecuador, Mexico, and the US. This is surprising as intuitively, a rising stock of claims against a country should depress rather than elevate FDI flows into a country. A possible explanation might, however, be that rather than the stock of claims explaining FDI flows, an increasing volume of FDI flows goes hand in hand with increasing potential for disputes. Here, also, I conducted the Benjamini-Hochberg procedure to

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discard significant results produced at random with a false discovery rate of 25%.

Table 7. Regression Parameters for Stocks of Claims Predicting Flows of FDI

Subsample	Country	Coefficient	R-Squared	Benjamini-Hochberg q
Stock Claims - Flow T	Argentina	96*	0.18	0.094
Stock Claims - Flow T+1	Argentina	103**	0.25	0.052
Stock Claims - Flow T+2	Argentina	103**	0.29	0.016
Stock Claims - Flow T+3	Argentina	103***	0.32	0.005
Stock Claims - Flow T	Ecuador	17*	0.16	0.099
Stock Claims - Flow T+1	Ecuador	17*	0.15	0.104
Stock Claims - Flow T+2	Ecuador	19**	0.21	0.078
Stock Claims - Flow T+3	Ecuador	20**	0.22	0.068
Stock Claims - Flow T	Egypt	140*	0.18	0.089
Stock Claims - Flow T+1	Egypt	167**	0.24	0.063
Stock Claims - Flow T+2	Egypt	184**	0.25	0.047
Stock Claims - Flow T+3	Egypt	203**	0.26	0.036
Stock Claims - Flow T	Mexico	587**	0.30	0.010
Stock Claims - Flow T+1	Mexico	557**	0.27	0.031
Stock Claims - Flow T+2	Mexico	560**	0.27	0.026
Stock Claims - Flow T+3	Mexico	562**	0.28	0.021
Stock Claims - Flow T	USA	10810*	0.19	0.083
Stock Claims - Flow T+1	USA	10604**	0.22	0.073
Stock Claims - Flow T+2	USA	10202**	0.24	0.057
Stock Claims - Flow T+3	USA	9779**	0.26	0.042

*Note: Table shows regression results for analyses using the total stock of all historical claims as independent and flows of FDI as dependent variable with lags of one, two, and three years. *Significant at the 10% level, **significant at the 5% level, ***significant at the 1% level.*

None of the previously statistically significant results was rejected by the procedure. To shed further light on the question in which direction causality might run, I therefore conducted Granger causality tests for both the total stock of claims predicting FDI flows

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and FDI flows predicting the total stock of claims. The tests yielded one statistically significant relationship for each of the two directions. This seems therefore to indicate that there is no causal relationship between the total stock of claims and FDI flows.

Turning to discussions of results for analyses focusing on stocks of actively pending cases only, two aspects are worth noting that can help shed further light on results obtained focusing on the total stock of claims as well. If foreign investors indeed paid attention to any stock of claims filed against a country when making current or future investment decisions, then it should be expected that the same countries would produce statistically significant results for regression analyses of both the total stock of claims and the stock of actively pending claims. Moreover, the more current variable, stock of actively pending cases, should show even higher explanatory power for FDI flows than total stock of claims, as present information on pending cases should figure even more prominently in investors' minds than historical data. If, however, stocks of actively pending claims showed less explanatory power than total stocks of claims, this would have pointed to a contradiction of any stocks of claims overall having explanatory power for FDI flows. Indeed, all five countries that showed statistically significant results for the total stock of claims did so, too, for the stock of actively pending claims. However, these results were scattered less frequently and more inconsistently across countries and lagged or non-lagged FDI time series. Only the US showed a consistently negative and statistically significant relationship

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between its stock of pending claims and FDI flows for t , $t+1$, and $t+2$. FDI flows at $t+3$ still produced a negative regression coefficient, albeit with a p value of 0.16. Moreover, the Benjamini-Hochberg procedure at a false discovery rate of 25% rejected six out of twelve statistically significant results including one for the US, breaking even this one seemingly consistent strand of findings.

Therefore, statistically significant positive relationships for some countries between stocks of claims and FDI flows seem to be predominantly driven by the fact that a larger pool of investment flowing into a country leads to a higher overall potential for disputes rather than a deliberate reaction of investors to information contained in the stocks of claims themselves.

c) Number of awards for investor explaining FDI flows

While cases filed do not seem to be an instructive proxy for changes in FDI flows, this might be due to the fact that cases filed per se do not automatically indicate wrongdoing of any sort of a given country. A more informationally rich proxy might rather be the number of claims ultimately decided in favor of the investor. Favorable decisions in this case might either be claims that result in awards for an investor or claims that were ultimately settled.

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In the arena of investment law awards and settlements can serve as an indicator of treaty breaches and therefore wrongdoing of a state which then might influence investor perception of a country and allocation of foreign direct investment elsewhere. I therefore conduct regression analyses using the number of awards in favor of the investor including settlements as the independent variable and FDI flows at t , $t+1$, $t+2$, and $t+3$ as the dependent variable. The regression model was:

$$FDI\ Inflow_{n_{t,t+1,t+2,t+3}} = \beta_0 + \beta_1 \times No.\ Awards\ Investor_{n_t} + \varepsilon_t. \quad (4)$$

The analyses produced no statistically significant results for FDI flows at t , $t+1$, and $t+2$. Only one analysis with FDI at $t+3$ showed a statistically significant result with a positive coefficient which, however, was later rejected by the Benjamini-Hochberg procedure as a false discovery. For FDI at t , half of the countries show a positive, half a negative coefficient. For $t+1$, $t+2$, $t+3$, four out of the twelve sampled countries showed a positive and eight a negative coefficient. Consistency in the sign for countries across lagged FDI figures was low. Overall, the number of claims decided in favor of investors therefore does not seem to explain foreign direct investment flows into host countries.

However, while overall numbers of awards by year might not be a particularly useful indicator, sudden increases in the number of decisions in favor of investors might be more instructive. Rather than monitor the number of awards in favor of investors as a proxy for

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a host country's propensity to breach treaties, investors might become aware of this statistic only when there is a particularly strong increase in the number of awards. To test for such effects, I identify changes in the number of awards in favor of investors per year larger than three standard deviations. Then, I conduct standard t-tests comparing mean FDI flows for the four years preceding and following such a three-sigma jump in awards in favor of investors. If investors indeed interpreted news of a particularly high number of awards in favor of investors for a given year as an indicator of a host country's lack of reliability, then foreign direct investment flows should decrease following such news. Out of the seven countries in the sample that had three-sigma changes in the number of awards in favor of investors, the analyses produced statistically significant results only for Egypt and Russia. Mean FDI flows for Egypt even increased after the three-sigma change but decreased for Russia. Overall, five out of seven countries showed a decrease in mean FDI flows but p values were > 0.05 across the board, limiting the weight of these results.

d) Amount awarded explaining FDI flows

While the number of awards in favor of investors seems like an intuitive metric, the amounts at stake vary greatly from case to case. Single individual cases of tremendous volume might receive much more attention in the global investment community and the public opinion

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than a particular number of awards for a given year. In the realm of international investment disputes, it is not unusual for the amount claimed in one individual case to overshadow the sum total of amounts claimed in all other cases brought against a country. I therefore analyzed, whether annual amounts awarded to investors can explain changes in annual FDI flows. The regression model was:

$$\begin{aligned} FDI\ Inflow_{n,t,t+1,t+2,t+3} & \quad (5) \\ & = \beta_0 + \beta_1 \times Amount\ awarded\ to\ investors_{n_t} + \varepsilon_t. \end{aligned}$$

Once again, there was no indication of a generalizable effect both in significance and sign of the coefficients. While one country each for FDI flows in t , $t+2$, and $t+3$ showed a statistically significant relationship, these three results were distributed across three different countries and all with a positive coefficient. Moreover, the Benjamini-Hochberg procedure rejected this one finding as a false discovery.

Neither the number of claims filed, nor the number of awards in favor of investors, nor the amount awarded to investors, nor particularly strong changes in the above metrics appear to have any particularly strong bearing on FDI flows as an indicator of investor decisions to allocate foreign direct investment away from countries that could be identified as unreliable due to investment treaty breaches.

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iii. Recovery of invested capital as a factor

While investors seem to be undeterred by the risks and costs of foreign direct investment, rather than simply accepting impairment of the value of their investments, investors might count on arbitral proceedings as a remedy to recover economic damage. Rather than the global frequency of claims and awards, it might be the ratio between economic value recovered via arbitral proceedings to economic damage sustained at the hands of host countries that dominates capital allocation decisions. Was there any sensitivity on the part of investors to the likelihood of recovering all or part of an investment via arbitral proceedings once damage was sustained? I calculated two versions of a ‘recovery ratio’ that specifies what proportion of investors’ investments were recovered once damages were claimed. The first recovery ratio was arrived at by simply calculating the sum of all awards rendered against a given country and dividing it by the sum of all claims brought against that same country. The second recovery ratio was arrived at by first calculating the above ratio of amount claimed by amount awarded for each individual case and then taking the mean across all cases for a given country. That way, the impact of individual outsized claims and awards on overall results is identified to potentially allow for more precise interpretation.

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As can be seen from data presented on Table 8, investors were able to recover anywhere between 9% and 63% on an average case brought against a country. The total dollar value awarded across all cases against a given country in relation to the total dollar value of claims brought fell in a similar band between 8% and 58%. No clear pattern emerges from the recovery ratios themselves although, naturally, over-claiming on the part of investors is reflected also in these data.

Table 8. Recovery Ratio of Awards Rendered to Amounts Claimed

Country	Mean Recovery Ratio by Case	Mean Recovery by Total USD Values
Argentina	39%	42%
Venezuela	40%	27%
Russia	56%	50%
Egypt	50%	23%
Poland	63%	45%
Spain	30%	58%
Czechia	26%	28%
Ecuador	29%	41%
Mexico	44%	58%
Kazakhstan	21%	14%
Canada	9%	8%
USA	<i>data not available</i>	

FDI growth was measured by three proxies. First, by calculating the compound annual growth rate (CAGR) of FDI per country across the entire sample period (2000 to 2019). Second, by calculating the mean year-over-year growth rate of FDI and third, by

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calculating the median year-over-year growth rate of FDI for each country.

I then conducted regression analyses with both recovery ratios and all three measures of FDI growth. If investors indeed paid attention to the recovery ratio as a significant indicator for the real risk of treaty breaches on FDI to make investment decisions, then *ceteris paribus* those countries with higher recovery ratios should show stronger FDI growth and vice versa. Both recovery ratios paired with all three measures of FDI growth did not produce statistically significant results. The hypothesis that investors accept the occurrence of treaty breaches and impairment of foreign direct investment on the basis of being able to recover investments by way of arbitral proceedings therefore needed to be rejected. Based on global FDI flows, it therefore seems that investors indeed simply accept possible impairment of their investment as cost of doing business.

5. RESULTS BILATERAL

Although global FDI flows into countries do not seem to be impacted by global arbitral proceedings against a given host country, the question remains whether effects are more clearly observable for bilateral relationships between specific pairs of investor home countries and host countries. To complement the global study by country with the

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appropriate bilateral relationships, I first identify for each of the twelve sampled host countries those home countries of investors from which the highest number of arbitral claims has historically emanated. I then conduct regression analyses using the number of claims filed against a given host country by investors from the respective home country that produced the highest number of claims per year on bilateral FDI flows at $t+1$, $t+2$, $t+3$. The regression model was:

$$FDI\ Flow_{(o,p)t+1,t+2,t+3} = \beta_0 + \beta_1 \times No.\ of\ claims_{(o,p)t} + \varepsilon_t \quad (6)$$

where o denotes the home country of investors from which the highest total number of claims has historically emanated from against p , which denotes the host country receiving FDI and being the respondent to claims. For the entirety of regression analyses (three lagged periods for twelve countries sampled) only three yielded a statistically significant result. Of those three results, two regression coefficients were negative and one was positive. After conducting the Benjamini-Hochberg procedure, all of the previously statistically significant results were now rejected. Consistent with that finding, for the entirety of regression coefficients – whether significant or not – two thirds were negative, one third was positive. While directionally, these results appear to be more in line with investors possibly shifting FDI allocations away from certain host countries due to treaty breaches, the evidence remains less than compelling. However, as two-thirds of regression analyses do produce a

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negative coefficient, albeit mostly non-statistically significant, it could be that this tendency is brought to the fore more strongly when analyzing those episodes of particularly high arbitral activity against a host country.

I therefore conducted standard t-tests comparing mean FDI flows from the investor home country into the host country four years before and after those years in which the number of claims against a host country increased by more than three standard deviations year over year. These episodes of particularly high arbitral activity against a host country might act as a ‘shock’ that alerts other investors from the corresponding investor home country to the frequency of treaty breaches which in turn could potentially lead to a reallocation of FDI flows away from this particular host country.

The t-tests show that only in two instances was there a statistically significant change in FDI flows into a host country following such a shock of severely heightened arbitral activity. Moreover, only in one instance was there a decrease observable in mean FDI flows following such an episode.

These results once more underscore the conclusion that treaty breaches of a given host country do not seem to have statistically significant effects on FDI inflows, neither globally nor on a bilateral basis.

6. DISCUSSION

The results of the analyses carried out in this paper that BIT disputes do not seem to have a statistically significant or directionally meaningful impact on FDI flows to host countries – whether BIT partners or third parties to the BIT, and whether developed or developing countries – carries a number of implications. In particular, it raises the question; *why do investors ignore* BIT disputes, which are potentially a powerful signal of the legal stability of the country where they plan to invest? The answer to this question is especially relevant nowadays against the backdrop of reform processes of the ISDS system as it may help inform policymakers at the national and international levels. In the following I present an assessment of potential reasons for investors disregard for BIT disputes.

In assessing investor's apparent indifference to BIT disputes, three hypotheses present themselves: (i) investors are aware of ISDS but they only care about the existence of BITs; (ii) investors are aware of ISDS but do not care about it or about the existence of BITs; (iii) investors are not aware of ISDS.

Investors are aware of ISDS but they only care about the existence of BITs. The reasoning behind this hypothesis is that BITs appear to be protecting foreign investment, thus fulfilling *at least* one of their objectives. It is almost unquestionable that the ISDS system has been successful against the backdrop of the vast number of investment arbitration cases initiated under a

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BIT since the early 1990s.³¹ Interestingly, the number of arbitral awards decided in favor of states currently outweigh the amount of those decided in favor of investors,³² but it is arguably the mere availability of a BIT the yardstick for the success of the investment arbitration regime. BITs represent important leverage in the settlement of a dispute. Already by threatening arbitration proceedings – typically lengthy and costly³³ – investors have a powerful tool at their disposal. Even if a claim is not eventually filed it can be said that this mechanism operates to protect foreign investment. To the extent that BITs resemble contracts between individuals, some insights can be drawn via analogy from the field of contract law. To be sure, BITs have been sometimes conceptualized as ‘sovereign contracts’ between states in which the investor is treated as a third-party beneficiary.³⁴ As in regular contracts, the threat of legal enforcement can be used to press the breaching party to live up to its commitments under the BIT. In this case, legal costs can prevent a legal dispute from arising because the dispute would be costly or the respondent state simply does not have the resources to defend itself or to pay for an eventual award.³⁵ By one count,

³¹ DOLZER, *supra* note 1, at 11.

³² See *supra* note 3, the UNCTAD Database currently records 204 cases decided in favor of the investor and 266 decided in favor of the state.

³³ SUSAN D. FRANCK, ARBITRATION COSTS 134-140 (2019).

³⁴ Ahmad Ali Ghouri, *Positing for Balancing: Investment Treaty Rights and the Rights of Citizens*, 4 CONTEMP. ASIA ARB. J. 95, 102 (2011).

³⁵ Benjamin E. Hermalin et al., *Chapter 1: Contract Law*, in HANDBOOK OF LAW AND ECONOMICS 3, 121 (A. Mitchell Polinsky, Steven Shavell eds. 2007).

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approximately 20% of all known and concluded investment disputes are settled.³⁶ It is fair to say that this figure is an underestimation, as it only accounts for those known disputes that were initially filed but eventually settled. Admittedly, there may also be disputes amounting to valid claims but too insignificant for the state to settle or to provide any other relief to the investor. In any case, settlements in the field of investment law have received criticism from some of the more critical corners³⁷ but there is as of today nothing to prevent an investor from availing itself of this strategy, i.e. the existence of a BIT suffices for an investment to be protected under international law, if only indirectly. This implies that countries which typically export capital may have a greater interest in keeping their BITs in force with those countries in which their nationals typically invest.

Investors are aware of ISDS but do not care about the system as a whole. There are two interrelated arguments that might support this hypothesis: (i) ISDS is seen as a weak system against the background of the substantial scrutiny and reform that it is undergoing and/or (ii) ISDS

³⁶ See *supra* note 3, UNCTAD Database, filtered by “settled”.

³⁷ Lise Johnson & Brooke Skartvedt Guven, International Institute for Sustainable Development (IISD), *The Settlement of Investment Disputes: A Discussion of Democratic Accountability and the Public Interest* (Mar. 13, 2017), <https://www.iisd.org/itn/en/2017/03/13/the-settlement-of-investment-disputes-a-discussion-of-democratic-accountability-and-the-public-interest-lise-johnson-and-brooke-skartvedt-guven/> [<https://perma.cc/SG5Z-DFQL>] (arguing that settlements “raise threats to principles of good governance, including government accountability, respect for the rule of law, transparency, and respect for citizens’ rights and interests”).

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disputes do not say much about the reputation of the host country.

Despite the breadth of rights conferred upon investors and the potential far-reaching consequences for foreign investment, it seems that the usefulness of the BIT, and that of the ISDS included therein, have eroded over the years.³⁸ A reason may be that the economic and political background for which BITs were initially designed has dramatically changed. The BIT was born largely in response to the mounting threats to expropriation in the former colonies at the end of the Second World War.³⁹ Already then, BITs included the remarkable innovation of ISDS which effectively removed investment disputes from the field of politics and turned them into a legal matter.⁴⁰ The 1990s saw an explosion of BITs partly due to developing countries' perception of the value of BITs as a means to increase foreign investment in their territories.⁴¹ In the meantime, the traditional distinction between developed (capital-exporting) and developing (capital-importing) countries that had prevailed started to blur as developing countries eventually became capital exporters.⁴²

³⁸ SAUVANT *supra* note 15, at 348.

³⁹ Kenneth J. Vandewelde, *A Brief History of International Investment Agreements*, 12 U.C. DAVIS J. INT'L LAW & POL. 157, 168 (2005).

⁴⁰ *Id.* at 174.

⁴¹ *Id.* at 177. Two elements played a role in this change of heart: the embracement of the free market ideology, and the reduced availability of private lending.

⁴² *Id.* at 183.

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Thereafter, the number of investment disputes exploded, and developed countries have increasingly found themselves on the respondent side in investment disputes.⁴³ The last few years have witnessed a significant backlash against the BIT regime in general, and the ISDS system in particular, partially due to concerns about the impact of disputes on the sovereignty of the state, the inconsistency of arbitral awards, their size, or the manner in which damages are calculated.⁴⁴ States have adopted diverging strategies in response: some have started to incorporate new provisions relating to issues such as sustainability of investments; others have commenced a process of treaty modernization of their older treaties; yet others have disengaged from the investment agreements regime altogether.⁴⁵ These changes have effectively diluted investors' rights.⁴⁶ Most importantly, state interference with private investment has become more *sophisticated* and the type of claim brought before investment tribunals has evolved. The pure direct expropriation claim has turned into more nuanced claims of state wrongdoing such as indirect expropriation or

⁴³ DOLZER, *supra* note 1, at 11.

⁴⁴ See UNCTAD, *Reforming Investment Dispute Settlement: a Stocktaking* (2019), https://unctad.org/system/files/official-document/diaepcbinf2019d3_en.pdf [<https://perma.cc/H829-CY3G>]; UNCTAD, *Taking Stock of IIA Reform: Recent Developments* (2019) https://unctad.org/system/files/official-document/diaepcbinf2019d5_en.pdf [<https://perma.cc/8YZ5-H794>].

⁴⁵ UNCTAD, *World Investment Report 2014*, at 116.

⁴⁶ Wojciech Sadowski, *The Rule of Law and the Roll of the Dice. The Uncertain Future of Investor-State Arbitration in the EU*, in DEFENDING CHECKS AND BALANCES IN EU MEMBER STATES 333, 340 (Armin von Bogdandy et al. eds., 2021).

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breaches of the FET standard, and many have failed.⁴⁷

In sum, the future of the ISDS system may appear uncertain. Investors may have seen changes in the investment law landscape as a signal of the weakness of the system and may have looked elsewhere for an assessment of the host country's investment climate.

In relation to the reputational costs associated with being sued before an international tribunal, the conventional thinking has been that being sued acts as a potent warning sign to the investment community thereby affecting investment flows to the host country.⁴⁸ It is important to highlight now that BITs – despite their surprising brevity – are not simply a declaration of principles.⁴⁹ BITs include a set of broad procedural and substantive provisions reflecting investors' rights and states' duties in a seemingly asymmetrical legal relationship. Crucially, the reputational costs associated with state wrongdoing – if any – operate through the ISDS mechanism included in most BITs. This is the case because investment disputes are frequently publicized⁵⁰ and the outcome of the proceedings and

⁴⁷ KERNER, *supra* note 20, at 3.

⁴⁸ *Id.*

⁴⁹ BITS typically contain 12-14 articles, and are comprised of a preamble, a section on procedural rights, and a section on substantive rights. *See* DOLZER, *supra* note 1, at 13.

⁵⁰ *See* CAMPBELL MCLACHLAN ET AL., INTERNATIONAL INVESTMENT ARBITRATION 3.77 (2d ed. 2017).

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content of the awards are typically made public,⁵¹ with some proceedings even featuring public hearings.⁵² The idea of reputational costs in investment law is analogous to the non-legal sanction of “loss of reputation among market participants”⁵³ from the field of contract law. According to this idea, the reputation built by a promisor among market participants (potential counterparties) is damaged when she breaches a promise, thereby reducing the chances of future transactions.⁵⁴ In investment law these reputational costs are said to affect states at both the filing stage, and at the outcome stage if the state loses the arbitration.⁵⁵

Nevertheless, the hypothesis put forward here that investors do not care about the ISDS system as a whole implies that reputational costs do not matter as much. One potential explanation is that investors only respond to harm inflicted by the host state in areas that are relevant to the investors’ business, that is, an investor in the manufacturing business may not care about claims against the host country in the oil and gas sector. Another explanation may lie in the type of claim raised, that is, wrongdoing may be perceived

⁵¹ See ITALAW database at <https://www.italaw.com/browse> [<https://perma.cc/T5NX-357V>].

⁵² See for example the highly publicized case of Vattenfall v. Germany: <https://icsid.worldbank.org/resources/multimedia/vattenfall-ab-and-others-v-federal-republic-germany-arb1212-hearing-tribunal-4> [<https://perma.cc/JYM7-Q4KD>].

⁵³ David Charny, *Nonlegal Sanctions in Commercial Relationships*, 104 HARV. L. REV. 373, 393 (1990).

⁵⁴ *Id.*

⁵⁵ See ALLEE AND PEINHARDT, *supra* note 17.

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differently whether a direct expropriation is claimed (suggesting stronger and more obvious interference with foreign investment) or an indirect expropriation or a breach of the FET standard is claimed (typically much more nuanced and less clear whether there is state wrongdoing). Investors have increasingly invoked indirect expropriation and FET claims as state interference has grown more sophisticated over the years,⁵⁶ which may have operated to dilute the effect of reputational costs. These ideas surrounding the issue of reputation are relevant for policymakers worried about the implication of disputes on FDI to their countries.

Investors are not aware of ISDS. This is arguably the most remote possibility, especially when it comes to multinationals. However, not all businesses investing abroad are big companies, and medium and small sized companies may simply not be aware of the existence of ISDS.

Of the above hypotheses, the first one, namely, that investors are aware of ISDS but only care about the existence of BITs is the most plausible for a number of reasons. First, it is reasonable to believe that investors, especially bigger companies, are aware of the existence of BITs, as well as any other legal instruments that may protect their investments. Second, assuming that knowledge, just like in a regular contract, BITs can easily be seen as

⁵⁶ DOLZER, *supra* note 1, at 130.

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protecting investments because of the potential threat of litigation initiated by the investor. This type of litigation is lengthy, costly and publicly controversial enough that investors may count on certain level of leverage for a settlement. Additionally, BITs are already in place, so there are no additional transaction costs for the investor other than proofing that their investment qualifies under the BIT. This is consistent with some of the literature that has found a relationship between BITs and FDI, even if marginal, to the effect that investors care that there is a BIT in place, even if they only care a little or only some investors do. Third, because of the costly and lengthy nature of investment arbitration, investors may not be counting on this method as the primary means of resolving their disputes. Resort to negotiation and mediation for example may feature more prominently in the mind of the investor. Thus, a potential loss of investment may be factored in in the cost of doing business in a foreign country. This idea is strongly suggested by the finding of this paper that investors do not care about the number of claims filed against the host country, nor about the number of awards in favor of the investor, nor about the amounts eventually awarded. It is also reinforced by the further finding that investors altogether disregard the possibility of recovering damages to their investments through investment arbitration. This conclusion has a number of important policy implications that I discuss in the next section.

7. SUMMARY & CONCLUSION

In this paper I found that BIT disputes have no apparent impact on influencing FDI flows to host countries, whether BIT partners or third parties to the BIT, and whether developed or developing countries. The findings of this paper can be summarized as follows. First, the number of claims filed against a state – whether on an annual basis, or in the aggregate – as well as the number of awards in favor of the investor in disputes against a state, and the amounts awarded in those disputes, do not carry explanatory power for FDI flows to the host country. This finding refutes Allee and Peinhardt’s idea that filed claims against a state have an impact on FDI, but it is aligned with their study in that subsequent outcomes of the proceedings are irrelevant. While Allee and Peinhardt only included ICSID cases until 2007 and only for non-OECD countries, I included all known cases to date, in any forum, and including non-OECD countries. Second, investors pay no attention to the possibility of recovering potential damages to their investments through ISDS. Third, these conclusions apply to BIT partners as well as non-partners, which refutes Wellhausen’s finding that claims filed by conationals have an impact on FDI.

In sum, investors largely ignore any arbitration proceedings against the host country when they decide to make an investment in that country. These conclusions highlight the fact that – assuming awareness of the ISDS system on the part of the investor – reputational costs in the field of investment arbitration do not matter as much as previously thought. In

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this sense, my findings align with those of Kerner and Pelc, refuting at the same time those of Allee and Peinhardt, and Wellhausen.

The findings of this paper have important implications for policymakers in the area of investment law. At the outset, it seems that the main purported goals of BITs, to promote FDI, and to protect foreign investment, are in tension with each other. One of the causes may lie in their very design. For years now, a recurrent criticism of BITs has been their apparent asymmetry in that they are “largely unidirectional in its allocation of rights between private actors and public authorities”; i.e. while states have only obligations without rights, investors have only rights without obligations.⁵⁷ For that reason, they are alleged to be “great for investors” but “ill-suited to democratic governance generally”.⁵⁸ This is indeed reflected in some of the discussions under the auspices of the UNCITRAL Working Group III, the modernization of the Energy Charter Treaty, the agreement to terminate all intra-EU BITs, or the new wave of BITs – which include some clauses that effectively protect and expand state’s sovereignty under the BIT.⁵⁹ In sum, when it comes to policymaking, the focus should be on balancing rights and obligations under the BIT, for example by introducing the possibility of raising counter-claims. To the extent that

⁵⁷ SIMMONS, *supra* note 4, at 42.

⁵⁸ *Id.*

⁵⁹ UNCTAD, *supra* note 44.

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countries typically take the role of importers or exporters of capital, approaches by policymakers may differ along that dichotomy. In particular, capital importing countries may have more at stake when renegotiating old BITs or deciding whether to terminate current BITs or conclude new ones.

The core policy issue seems to come down to a cost-benefit analysis on the side of the policymakers, especially in the host state. In that analysis, the costs of concluding, renegotiating, or terminating a BIT may outweigh any potential benefits brought by the maintenance of an amicable relationship with the BIT partner. More importantly, this exercise should include the political implications of terminating or renegotiating a treaty – whether by consensus or unilaterally – with another country, thereby disturbing the status quo. In practice, termination is a practice welcomed by countries, as long as it is followed by a new treaty.⁶⁰ As suggested by the analyses carried out in this paper, reputational costs should not be included. The cost side should include, however, an *ex-ante* assessment of the costs associated with threats of arbitration, as well legal costs and awards. The finding of this paper that sizeable awards may be rendered against the host state – especially if a

⁶⁰ UNCTAD, *Phase 2 Of IIA Reform: Modernizing The Existing Stock Of Old-Generation Treaties*, at 19, https://unctad.org/en/PublicationsLibrary/diaepcb2017d3_en.pdf [<https://perma.cc/5H2Q-BWUJ>].

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developing nation – should feature prominently on the cost side.

The benefit side, on the basis of the findings of this paper and others in this field, should not attach significance to the promotion of FDI. It should include any potential benefits stemming from the conclusion of a treaty between states, which may be simply a symbolic gesture affecting other aspects of the relations between the two, including but not limited to trade. Again, here, an analogy to contract law is useful. Potential benefits of a BIT may include the possibility that BITs align the expectations of the parties and induce them to act in good faith, preventing opportunist behavior. These tensions between the goals of protecting and promoting investment, between the cost and benefit of the BIT for the state at hand, and between the conversations at the domestic and international level highlight, once again, the unique and controversial nature of investment law in general and the ISDS in particular.⁶¹ Many questions once settled – if only for a brief period of time – are now open to discussion. What has become increasingly clear, however, is that BITs and their implications, namely BIT disputes, do not contribute to their stated purpose of increasing FDI to the host country, and this alone justifies a deeper look into the workings of the current system and a re-assessment of the BIT network on the part of policymakers.

⁶¹ See Beth A. Simmons, *International Law and State Behavior: Commitment and Compliance in International Monetary Affairs*, 94 AM. POL. SCI. REV. 819-835. (2000).