# Last Year's Model? Investment Arbitration, Learning, and the Gap between Model BITs and IIAs

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#### Abstract:

With more than 3,000 international investment treaties (IIAs) worldwide, states negotiate similar agreements multiple times with numerous different partners. It is not surprising, then, that many states have developed their own template agreements, commonly known as 'Model BITs.' Even though such Model Countries use these templates during IIA negotiations, concluded IIAs commonly deviate from the corresponding Model BITs, but to varying degrees. Accounting for this variation, this paper underscores the importance of states' learning from investor-state dispute settlement (ISDS) experience. Specifically, it argues that extensive ISDS experience of the Partner Country negotiating with the Model Country increases the divergence between the concluded IIA and the latter's Model BIT. Empirically, we introduce novel measures of divergence between Model BITs and IIAs, based on the concept and scheme of state regulatory space (SRS), with respect to several key aspects of investment rules. Coding a large number of Model BITs and IIAs on these variables, taking into account selection dynamics, and controlling for a host of alternative explanations, we find strong support for the purported learning effects on substantive rules, but not on ISDS provisions. These findings underscore the need to unpack the nuanced relationships between learning, negotiations, and institutional design, with particular relevance to current ISDS reform initiatives.

#### 1. Introduction

The global international investment agreements regime (henceforth: the IIA Regime) is composed of more than 3,000 bilateral investment treaties (BITs), free trade agreements (FTAs) with an investment chapter, and other agreements that include provisions related to foreign investment. This body of international agreements reflects states' commitment to the protection of foreign investors and their assets, to varying degrees. In addition to substantive protections, many IIAs grant investors access to compulsory and binding international investor-state dispute settlement (ISDS) procedures, most often through international arbitration. This system allows private investors to file legal claims against host states, a right utilized more than a thousand times thus far.

In the absence of a multilateral agreement on investment, the large number of IIAs, the vast majority of them bilateral, requires states to negotiate similar agreements multiple times with numerous different partners. It is not surprising, then, that many states have developed their own template agreements, commonly known as 'Model BITs'. These may function as 'boilerplates' that governments use as a going-in-position for negotiations over the actual agreements (Schill 2009; Waibel 2019), arguably representing a particular country's 'ideal point' over the regulation of foreign investment (Brown 2013, 2). In addition to hoping to promote efficiency in treaty-making, states may draft Model BITs for numerous other reasons, including the consolidation or review of their IIA policy in accordance with their domestic requirements, enhancement of the coherence and consistency of concluded IIAs, signaling to potential counterparts and influencing treaty interpretation (Salacuse 1990; Sharpe 2021; Vandevelde 2011).

The first known Model BITs were developed in the 1970s by capital exporting countries, such as the United Kingdom, the Netherlands, and the United States (US).<sup>1</sup> Five decades on, Model BITs have become quite common and have been adopted by at least sixty countries around the globe. They include some of the largest economies in the world, such the US, Germany and China, as well as much smaller or poorer economies, such as Azerbaijan, Ghana, Peru and Malaysia. As reported in Table A1 in the Appendix, some countries have also updated their Model BITs at least once, and occasionally several times, bringing the total number of known Model BITs to more than one-hundred.<sup>2</sup>

Even though Model BIT Countries (henceforth: Model Countries) use these templates during IIA negotiations, the concluded IIAs commonly deviate from the Model BITs, at least to some extent, and in various different ways. Insofar as Model BITs reflect a state's most preferred outcome, why do the IIAs that they conclude in practice ultimately present such a gap and look differently from their corresponding Model BIT? Moreover, which factors account for the variation in the gaps between Model BITs and concluded IIAs? And, does such divergence vary across different types of IIA provisions and why?

Tackling these questions is important, first of all, to shed new light on the evolutionary dynamics of the IIA Regime, in particular with respect to ongoing

<sup>&</sup>lt;sup>1</sup> To be sure, IIAs and the language included in Model BITs have deeper roots, most prominently in the twenty-two "Friendship, Commerce and Navigation" (FCN) agreements concluded by the US in the late 1940s, as documented and discussed in depth by Vandevelde (2017); these are not included in the time period of our study.

<sup>&</sup>lt;sup>2</sup> Among these, the timeframe of Model BIT updates and revisions ranges from one year to more than ten years between models.

multilateral reform processes, such as in the United Nations Commission on International Trade Law (UNCITRAL), which have attracted much attention in recent years and indeed hopes for change, given strong criticisms against the legitimacy and efficiency of the IIA Regime (Puig and Shaffer, 2018; Broude et al., 2022; Roberts and St. John, 2022). As will be seen, this study has implications for understanding the manners by which states strive to strike a balance between investor protection, on the one hand, and their regulatory space in their formal commitments, on the other. Moreover, it presents a more general understanding of how states' preferences translate into negotiating positions, institutional design and international cooperation.

In addressing these questions, we underscore the importance of states' learning from ISDS claims that foreign investors file against them and their experience with arbitral tribunals' interpretation and application of IIAs. We expect an IIA to diverge from the Model Country's Model BIT when the treaty partner country (henceforth: Partner Country) has learned from its own ISDS experience and insist on incorporating these lessons into their IIAs with other states, including successfully persuading the Model Country to do so. In this context, a Model Country may accept treaty design and content that differs from its going-in negotiating position, relying on and learning from the experience of the Partner Country.<sup>3</sup> In contrast, a Model Country's learning from its own ISDS experience may be manifest in its negotiation position but is unlikely to result in systematic divergence between its Model BIT and concluded IIAs, because it

<sup>&</sup>lt;sup>3</sup> This may be analogized, at a distance, to the concept of 'vicarious learning' (Bandura 1965) or learning through observation of the experience of others, which has been identified and applied in other international relations contexts (Goldsmith 2003). However, in this study it is more evident as a process of interaction rather than observation, closer to the idea of 'narcissistic learning' (Haftel and Thompson 2018; Poulsen 2015).

occasionally and contemporaneously updates both texts in similar ways, as derived from the same experience (although the passage of time since the adoption of a Model BIT may play a role, as we assess in our empirical analysis).

To test these theoretical expectations, we introduce a novel and pertinent measure of divergence between Model BITs and IIAs, based on the concept and scheme of state regulatory space (SRS), discussed, presented and applied elsewhere (Broude et al., 2022; Thompson et al. 2019). The use of SRS as a comparative measure is appropriate because regulatory space and its balance with investor protection is a major issue in the current evolution of the IIA Regime, as previous and ongoing research shows. Coding SRS in a large number of Model BITs and IIAs, we introduce a novel measure of IIA-Model BIT divergence.

Using statistical methods that account for selection dynamics and a battery of control variables, we find strong empirical support for the effect of Partner Country's learning on gaps between Model BITs and concluded IIAs. However, while this effect is pronounced with respect to SRS in substantive IIA provisions, it is negligible in ISDS provisions. It therefore appears that states are more inclined to modify key substantive commitments and rights, such as standards of treatment, rather than rearrange the more procedural rules pertaining to ISDS. This finding, concordant with previous research (Thompson et al. 2019) may have significant implications for current multilateral reform processes of the IIA Regime, which tend to focus on dispute settlement processes, rather than on the substantive rules of investment protection, echoing some academic voices calling for deeper substantive reform (e.g., Arato 2019).

This study contributes to the growing body of research on the IIA Regime and the nascent literature on Model BITs in several ways. It highlights the significant variation in the language of formal commitments across IIAs and other investmentrelated legal instruments. Early research assumed that these agreements are largely uniform in their design and implications (Dolzer and Stevens 1995; Guzman 1997; Neumayer and Spess 2005; Tobin and Rose-Ackerman 2011; Vandevelde 2000). A subsequent wave of research has questioned this assumption and underscored the potential consequences of IIAs' contents, mainly examining a limited set of provisions: either ISDS (Allee and Peinhardt 2010, 2014; Berger et al. 2011; Link and Haftel 2019; Yackee 2008), or substantive protections such as national treatment (Blake 2013) or other standards of treatment (Zeng and Lu 2016).

Several recent studies have made an effort to conduct more comprehensive empirical analyses of IIAs' legal content and its significance, either with manual coding of entire treaties (Broude et al., 2022; Thompson et al. 2019) or with complementary computational text analysis tools (Alschner and Skougarevskiy 2016a, 2016b). These studies largely overlook the existence of Model BITs and do not consider their potential implications for treaty design and for the IIA Regime more generally. That is, they examine concluded texts that are shaped by international bargaining processes and thus represent negotiated compromises. In this sense, these studies extrapolate from the content of the treaties to national preferences, making some strong yet implicit assumptions about what states and negotiators want to achieve.

Model BITs themselves have attracted only scant scholarly attention, most of which is very useful but descriptive, doctrinal legal analysis of individual national models

(Brown 2013; Dolzer and Stevens 1995; Gagné and Morin 2006; Gallagher and Shan 2009; Sharpe 2021; Svoboda and Kunstyr 2020; Vandevelde 2009). Our study joins only two relatively recent unpublished papers that strive to offer a systematic analysis of Model BITs and how they differ from IIAs (Allee and Lugg 2016; Berge and Stiansen 2016). We offer additional insights on the basis of our data and analysis of SRS.

Theoretically, these previous studies emphasized bilateral relationships such as power imbalances and gaps in state capacity (undoubtedly important considerations that we take into account in our empirical analysis), and largely overlook the role of learning. Empirically, they employ automated text analysis, while we build on manual coding of Model BITs and IIAs. A benefit of manual coding is its reliance on a substantive interpretation of each provision and an assessment of how it affects the parties' policy flexibility as reflected in the SRS measure. Thus, a gap between a Model BIT and an IIA may reflect not just textual dissimilarity, but also a meaningful difference in the substantive balance between investor protection and SRS as formally recognized by the parties, often taking into account how different formulations have been interpreted in practice. We view the alternative methodologies utilized in these three studies as complementary and believe they are all instrumental in moving research on this topic forward. We should also note that this paper does not seek to explain when and why states adopt or adapt Model BITs, which is an intriguing but distinct matter. We are nevertheless cognizant of the potential implications of this initial step towards understanding the gap between Model BITs and IIAs and account for it in our research design.

This paper proceeds as follows. The next section elaborates on the theoretical framework and derives a testable hypothesis for our main argument. The third section discusses research design, the operationalization of dependent, independent, and control variables, sample, and data. The fourth section presents the results of the statistical analysis. The final section presents some concluding thoughts and implications for the IIA Regime and more broadly, for learning and international institutional design.

#### 2. Theoretical Framework

What might explain the divergence between a state's preferences regarding rules and regulations on the protection of foreign investment, as revealed by their Model BITs, and the IIAs they end up concluding with other states? As noted above, reflecting central themes in international political economy and international relations, recent studies that address related questions emphasize power relations (Allee and Lugg 2016) and bureaucratic capacity (Berge and Stiansen 2016). Building on research examining the development of the IIA Regime, that does not address Model BITs (Haftel and Thompson 2018; Poulsen 2015; Poulsen and Aisbett 2013; Thompson et al. 2019), we emphasize a third important factor: learning, particularly from exposure of the *Partner* Country to investment claims and ISDS.

As we elaborate below, such learning processes can sometimes (but not always) affect the gap between the content of a country's Model BIT and the IIAs it subsequently concludes, when viewed through the prism of SRS. To see this, we focus on one aspect of learning that emerges as highly significant: the ISDS experience of the Partner Country, i.e., the negotiating partner to a country that has a Model BIT, with investment claims. As

we argue below, a Partner Country 'hit' by foreign investors' complaints ought to be more insistent and persuasive on some of its preferences in light of its experience. This should result in a systematic gap between the Model Country's Model BIT and its IIAs.

#### 2.1 Partner Country Learning, Model Countries' BIT Models, and IIAs

It is now well-accepted that many countries, particularly developing ones, tended to sign (sometimes numerous) IIAs in the early post-Cold War era while paying only scant attention to the content and legal implications of these agreements (Jandhyala et al. 2011; Poulsen 2014, 2015); ISDS was especially ignored. Recent research demonstrates that investment claims filed against parties to these IIAs served as a 'wake-up call' for host governments, which led them to consider more carefully their commitments in new IIAs and renegotiate existing ones, taking into account lessons learned from these disputes (Broude et al., 2022; Haftel and Thompson 2018; Simmons 2014; Thompson et al. 2019).<sup>4</sup>

In some cases, this experience led to concurrent revisions in Model BITs. That is, the process and outcome of ISDS cases went a long way to clarify the legal implications and economic costs of IIAs, thereby compelling countries to update their IIA commitments in manners that better reflect their preferred balance between investor protection and regulatory space. Thus, as the above studies substantiate, countries commonly moved from IIAs with a low level of SRS to IIAs that reflect higher SRS levels, attempting to alter the formal normative frameworks of investment protection law.

<sup>&</sup>lt;sup>4</sup> In some more extreme cases, countries stopped signing IIAs altogether, suspended their IIA programs (Poulsen and Aisbett 2013) or terminated them (Peinhardt and Wellhausen 2016; Thompson et al. 2019).

Our point of departure in this regard is that countries faced with a large volume of ISDS claims (that may have affected their regulatory autonomy) will try to update and adjust both their IIAs and Model BITs in light of this experience. This process of SRS expansion should *not* result in a systematic divergence of SRS between the Model BITs and the IIAs of the Model Country, however. That is because when countries learn from their own ISDS experience they will tend to apply the acquired lessons broadly rather than to the specific IIA on which the dispute was based.<sup>5</sup> Thus, the accumulated insights gained from ISDS will lead Model Countries to revise the language of new IIAs or existing ones (through renegotiation) in a relatively consistent manner.

Turning to Partner Countries, which are at the heart of our theoretical argument, as they internalize the lessons from their ISDS experience, they are likely to approach their potential (for a new IIA) or existing (for a renegotiated one) treaty partners with a draft<sup>6</sup> or with proposals that reflects their updated preferences over IIA content. While these preferences are unlikely to be accepted by the negotiating partner in their entirety, especially if the latter has a Model BIT, we expect that at least some of its proposals will be accommodated in negotiations. This is not least because those issues that turned out to be important in prior ISDS arbitration, especially regarding SRS, are likely to be salient for Partner Countries, thereby compelling them to take a stronger position vis-à-vis

<sup>&</sup>lt;sup>5</sup> Canada and the US exemplify Model Countries that revised both their Model BITs and IIAs in light of their ISDS experience (Gagné and Morin, 2006; Vandevelde 2009; Alschner 2017; Sharpe 2018). This is not to say that we expect all, or even most, Model Countries to draft new Model BITs or revise existing ones in an efficient and timely manner. Drafting a Model that is acceptable to the various domestic stakeholders can be a long and protracted process. Nevertheless, insofar as at least some, if not most, countries draft their Model BITs in ways similar to their IIAs, the 'average effect' on the SRS gap between the two texts should be less pronounced and less observable.

<sup>&</sup>lt;sup>6</sup> Which may or may not be based on a Model BIT.

Model Countries, and indeed present a persuasive case for divergence on the basis of the experience acquired.

We therefore argue that a Model Country is more likely to deviate from its Model BIT when it negotiates with a Partner Country that has faced a large volume of investment claims. That said, we do not expect a Model Country to update its own Model BIT, and its other IIAs solely in light of its partner's experience, to comparable extent. Given that countries tend to have 'narcissistic learning' (Haftel and Thompson 2018; Poulsen 2015),<sup>7</sup> and may present 'status quo bias' in negotiations (Broude and Moses 2016; Broude and Shereshevsky 2021), they will be less inclined to draw broader lessons from the specific experience of their negotiating partners and incorporate them into other treaty texts. These dynamics will produce divergence between the IIA signed with a country hard hit by ISDS claims, and the Model Country's template agreement. Given this logic, our main hypothesis is as follows:

H1: a higher volume of ISDS claims filed against the Partner Country is
expected to increase the divergence between the Model Country's Model
BIT and an IIA signed between the two parties.

2.2 Illustrations of the Argument – Egypt and China

We turn now to provide some indicative expressions of our argument, before turning to the research design. Egypt's relatively recent (if idiosyncratic) experience offers a good illustration of the logic of our argument. Like other Middle Eastern and North African

<sup>&</sup>lt;sup>7</sup> Meaning that countries tend to revise their IIAs only in light of their own direct experience with investment claims and are less inclined to learn from the experience of others.

countries, Egypt has become highly involved in the IIA Regime in recent years, as a respondent to ISDS claims (Link and Haftel 2019). Egypt currently ranks fifth in the list of countries challenged by investment claims, with thirty-eight cases in total, most of them (twenty-eight) filed in the decade following the 'Arab Spring'. Although some cases were decided in its favor, several others were decided in favor of the claimants, requiring Egypt to pay compensation reaching millions and, in the case of the *Unión Fenosa v. Egypt* case filed in 2014, billions of US dollars. This negative experience is reflected in one of the justifications the Egyptian Government gave for its 2017 domestic Investment Law, of "reducing the risks resulting from investors resorting to international arbitration in the future."<sup>8</sup>

Consistent with our expectations, in the wake of these claims Egypt (the Partner Country in this example) changed its approach to IIAs in manners that enhance SRS and limit exposure to investment claims. Two of these IIAs were concluded with states having a Model BIT (the Model Country in this example): Switzerland (2010) and Mauritius (2014). Notably, both IIAs deviate from these countries' Model BITs. The treaty with Switzerland includes a security exception, providing states with important flexibilities, while the Swiss Model BIT does not. More changes between a Model BIT and concluded IIA are apparent when comparing the 2014 Egypt-Mauritius BIT with the latter's Model BIT. For example, the treaty carves out pre-existing disputes from the scope of the treaty, limits the awards the arbitral tribunal may render and restricts the time period in which investors may submit a claim to arbitration to three years, and limits

<sup>&</sup>lt;sup>8</sup> Āl-mas'ūliyah āl-mujtama'iya lilšharikat [Corporate Social Responsibility]. N.d..Translated from Arabic. Interestingly, the English version provided in the website does not include this quote.

fair and equitable treatment to the standard of protection under customary international law.

Furthermore, as we argue, neither Switzerland nor Mauritius revised their Model BITs (or other IIAs for that matter) in manners similar to those included in the IIAs with Egypt. Presumably, even if these Model Countries were willing to accept these deviations from their Model BITs in order to accommodate Egypt, or even found them attractive on the basis of Egypt's experience, they did not see these legal issues as sufficiently important or urgent to revise their own Model BITs in similar ways.

China provides another telling example. Hit by a relatively small number of ISDS claims, it is yet to update its 2003 Model BIT, which resembles older Western European BITs with low SRS levels. In his analysis of its IIA program, Berger (2015) points out that despite being the more powerful party in most negotiations, at least since the late 2000s, China tended to accommodate the preferences of the treaty partners, especially insofar as they have a Model BIT, rather than relying on its own outdated template. Thus, it accepted provisions that reflect greater SRS in IIAs with Peru and Canada, partners with extensive ISDS experience, which have also updated their approach to IIAs as a result. In contrast, China remained faithful to its Model BIT in IIAs with parties that had little ISDS experience, at least as host countries, and did not update their approach, such as Switzerland, Malta, and Mali. Similar to the case of Egypt, this practice should result in greater divergence between the Model Country's Model BIT and an IIA it signed with a country with extensive ISDS experience (compared to a country that lacks this experience and is therefore more likely to accept its partner's Model BIT, all else equal).

#### 3. Research Design

This section first discusses the construction of and data for the dependent variables. It then turns to the description and justification of the independent and control variables. Tables A2 and A3 in the Appendix reports summary statistics and a correlation matrix for all variables included in the analysis. Finally, it elaborates on the statistical estimation methods.

#### 3.1 Dependent Variables

The dependent variables capture the similarity between a Model BIT and an IIA for a given country. We construct these measures with an index of state regulatory space (SRS) developed and described in previous research (Broude et al. 2017; Thompson et al. 2019). In brief, SRS refers to the extent of the ability of governments to freely legislate and implement regulations in given public policy domains. Conceiving of SRS as a continuum dictated by their formal commitments, at one extreme states have a great deal of flexibility to pursue policies they see fit, and are relatively insulated from the potential implications of their external obligations and the threat of arbitration from foreign investors. At the other extreme, governments have little room to maneuver and are highly constrained by international rules and the ability of foreign investors to challenge their policies under IIAs and ISDS, even if not challenged in practice, or even if actual challenges are ultimately unsuccessful (a phenomenon sometimes labeled 'regulatory chill'). Thus, states often face a tradeoff between preserving regulatory space and providing better treatment or greater protection to foreign investors.

The coding of SRS in IIAs is based on a mapping exercise developed by the United Nations Conference on Trade and Development (UNCTAD), with the assistance

of several experts.<sup>9</sup> This scheme examines numerous substantive and dispute settlement provisions of IIAs and codes them on the inclusion, exclusion or degree of various elements. The UNCTAD Mapping Project focuses on the formal texts of IIAs, and was designed for 'raw' comparative purposes, not with SRS in mind. We therefore use Thompson et al.'s (2019) SRS measures in the analysis herein. Considering the large number of indicators, listed in the Appendix, we first separate them into those that pertain to substantive matters and those of a more procedural nature, that relate to ISDS.

Next, most IIAs commit the parties to a large number of substantive obligations, and not all of them may be equally important for SRS. In practice, it can be difficult to predict this relative importance, but recent studies have identified four core substantive categories that are clearly relevant to SRS and that have been subjected to substantial scrutiny, debate and reform efforts in recent years: definitions of investment and investors, standards of treatment, expropriation and compensation, and flexibility (Bonnitcha et al. 2017, Chapter 4; UNCTAD 2018, Section III). We therefore probe the effect of the independent variables on these more fine-grained categories of substantive commitments as subsets of the dependent variable of Model BIT-IIA divergence. We discuss all these variables in greater detail in turn.

Substantive obligations are, of course, an essential aspect of any IIA. They define the entities that can benefit from agreement, the rights and protections foreign investors are entitled to, and the conditions under which they can enjoy such rights. From this perspective, they serve as an essential point of reference that clarifies the legal

<sup>&</sup>lt;sup>9</sup> For details see: *Mapping of IIA Content*, n.d.

environment in the host country (Poulsen 2020). As mentioned, we discuss several specific aspects of these provisions below. The second key aspect of IIAs is procedural and includes several provisions related to ISDS. Insofar as such provisions exist in an IIA, which is often but not always the case, they give investors access to an international and impartial arbitration process. There is little doubt that the ISDS system is one of the most potent and controversial aspects of the IIA Regime. The coverage of and access to ISDS vary across IIAs, and provisions pertaining to this matter define its jurisdiction, e.g., mandatory recourse to alternative methods of dispute resolution, scope of claims, and limitations on provisions or policy areas covered by ISDS. The more limited jurisdiction is, the less exposure to claims that may have detrimental effects on SRS. Additional provisions may require transparency or attempt to restrict the ability of arbitrators to interpret the IIA.

In the analysis here, we are interested in SRS similarity (or lack thereof) between a Model BIT and an IIA, not in SRS values per se. To produce these values, we first coded all IIAs and Model BITs on all indicators related to SRS. We then took the absolute value of the difference in SRS between the Model BIT and the agreement for each and every indicator. Next, we summed the differences for a given set of indicators and divided it by the maximum possible difference and multiplied by one-hundred, for ease of interpretation. This provides us with a value between zero and one-hundred. Finally, we subtracted this value from one-hundred, such that higher values (i.e. those that are closer to one-hundred) reflect greater similarity between the Model BIT and the IIA and lower values (i.e. those that are closer to zero) reflect greater divergence between the two. With this method, we generated two dependent variables: *SRS Similarity* 

*Substantive* and *SRS Similarity ISDS*, based on categories 1-33 and 34-42 in the Online Appendix, respectively.

As an illustration of this methodology, the 2005 Germany-Egypt BIT includes a 'host state law' exception (meaning that the treaty specifies that an investment must be made in accordance with domestic/local/national laws of the host State). The German 1998 Model BIT includes no such exception, however. Because this exception scores 0.2 on SRS, this indicator would score 0.2 for the BIT but zero for the German Model BIT, and the absolute difference would be 0.2. We repeat this exercise for each indicator included in a given variable. In this particular case, the total difference is 4.78 out of a maximum difference of forty for all substantive indicators. The proportional difference equals 4.78/40 = -0.12 and *SRS Similarity Substantive* equals (1 - 0.12) \* 100 = 88. As it turns out, ISDS provisions in this IIA and the German 1998 Model BIT reflect identical SRS. Consequently, *SRS Similarity ISDS* equals 100. Egypt, which also has Model BIT (from 1995), scores only 80 on *SRS Similarity Substantive* and 75 on *SRS Similarity ISDS*, suggesting that this IIA is closer to the German Model BIT than to the Egyptian one with respect to both variables.

Turning to more specific elements of substantive obligations, as noted above we zero in on four sets of provisions: 1) *Definition of investors and investments* – more inclusive definitions of investors and investment increase the number of entities and activities that can benefit from protection and access to ISDS. This seemingly technical issue turned out to have a great deal of impact on the ability of investors to use IIAs; 2) *Standards of treatment* – this category forms the substantive core of IIAs, and includes such provisions as most favored nation (MFN), national treatment (NT), and fair and

equitable treatment (FET). They served as a basis for numerous claims of discrimination or maltreatment of the investor by the host state; 3) *Expropriation and compensation* – these, too, are key aspects of investment protection given the risk of expropriation and the reality that compensation is the main remedy for such state action. Whether an IIA prohibits indirect expropriation (or not) is especially important here; 4) *Flexibility* – such provisions are by definition SRS-enhancing. These are mainly exceptions and carve-outs, such as the essential security exception, public health exceptions, and the right to regulate, as well as denial of benefits provisions. Their inclusion in IIAs allows states to adopt regulatory measures during certain times or under some circumstances with reduced exposure to possible legal liability.

The categories described above are, of course, interrelated. To have a good sense of core substantive SRS in a given IIA, one has to take into account both the protections available to investors (e.g. FET and the prohibition of expropriation) and its scope of coverage (e.g. definitions and exceptions). We therefore aggregate the four categories into our main dependent variable: *SRS Similarity Core Substantive*. To probe the effect of individual categories, we also examine them separately. We label these variables: *SRS Similarity Definitions* (categories 2-3), *SRS Similarity Standards of Treatment* (categories 5-9), *SRS Similarity Expropriation and Compensation* (categories 10-11), and *SRS Similarity Flexibility* (categories 20-25). All these variables vary from zero to one-hundred.

#### 3.2 SRS Similarity Data and Coding

Given our interest in the similarity between a state's Model BIT and an IIA, we use a 'directed-dyad' set up. Thus, consistent with the theoretical discussion, there are two

observations for each agreement, one in which the first party is the Model Country and the second party is the Partner Country, and another in which it is the other way around. The sample of 2,766 IIAs is based on UNCTAD's Mapping guide and Thompson et al. (2019). For the sample of Model BITs, we started with UNCTAD's list and supplemented it with templates identified by Allee and Lugg (2016) and Berge and Stiansen (2016).<sup>10</sup> All in all, we assembled a list of 106 Model BITs published by 61 countries (because several countries published consecutive Model BITs over the years), listed in the Table A1 in the Appendix.

Here, we acknowledge that countries may sometimes use Model BITs that remain unpublished for strategic, bureaucratic or political reasons. In other instances, states may use a particular IIA as a de-facto Model BIT. In both instances, we do not account for these 'invisible' Model BITs. From a practical research perspective, it is difficult (if not impossible) to ascertain whether government officials employ a confidential or informal model across numerous states and many years. From a theoretical perspective, our interest is in gaps between 'visible' Model BITs and concluded IIAs, because within our framework of analysis it is the political and bureaucratic processes of producing a publicly available Model BIT that grant it relevant significance (Brown 2013; Sharpe 2021). In this study we therefore rely on the substantial database of assembled Model BITs.

With this comprehensive list of Model BITs in hand, we first followed the procedure used by Thompson et al. (2019) to code all Model BITs for which texts were

<sup>&</sup>lt;sup>10</sup> We thank Tarald Berge for sharing with us several Model BIT texts.

available on their SRS. Coding texts in several languages (e.g. English, French, Spanish, and Russian) allowed us to increase the number of Model BITs included in the analysis, compared to those that use automated text analysis and are circumscribed to documents in English. This manual approach also ensures that our coding examines substantially important IIA content and that variation in treaty design is not driven by semantic differences. In the final step we matched all IIAs in our sample to the most recent published template and calculated the dependent variables, as already described. That is, we consider that governments publishing a Model BIT are generally committed to having its content expressed in subsequently concluded IIAs – although this is not necessarily the case. All in all, we were able to match IIAs to Models BITs in about 1,600 out of about 5,500 directed dyads.

#### 3.3 Independent and Control Variables

Given our theoretical framework, the main independent variables account for changing circumstances that are expected to affect states' learning, that is, direct experience with ISDS. We therefore focus on states as respondents to investment claims rather than as a home to claimants, which commonly reflects indirect involvement in the dispute. Indeed, the former appears much more consequential for learning than the latter (Poulsen and Aisbett 2013; Thompson et al. 2019). The first variable, labeled *Cumulative Claims – Model Country*, is the number of investment claims filed against the party with the Model BIT until the IIA's signing year. The second variable, *Cumulative Claims – Partner Country*, is the number of investment claims filed against this party until the IIA's signing year. This second variable corresponds to the paper's main argument and

hypothesis. Data for both variables is based on UNCTAD's list of ISDS cases.<sup>11</sup>

To ensure that the effect of direct learning is not spurious, the analysis includes several control variables, mostly following previous efforts to model the similarity between IIAs and Model BITs (Allee and Lugg 2016; Berge and Stiansen 2016). We first account for the impact of accumulated global experience and changing rules and norms of the IIA Regime over time. *Years between Model BIT and IIA* is the number of years passed from the Model Country's most recent Model BIT date of publication and the date of IIA signature.

Next, IR theory expects the stronger party to have greater influence on the outcome of negotiations. We should therefore expect an IIA to exhibit greater similarity to a party's Model BIT the more powerful it is relative to its partner (Allee and Lugg 2016). We measure this variable with *Delta GDP*, which is Model Country's logged gross domestic product (GDP) minus logged Partner Country's GDP.

In addition, one might think that greater capacity will allow a party to negotiate more effectively, and thus reach an agreement that is closer to its preferred outcome. Thus, the wider the capacity gap between the two parties, the greater the similarity between the IIA and the Model BIT of the more capable party is expected to be (Berge and Stiansen 2016). We operationalize this conjecture in two ways. First, we use the level of economic development, measured with GDP per capita. *Delta GDPpc* is thus the difference between the parties' level of development. As a robustness check, we replace this variable with the difference in the bureaucratic quality of the two parties (based on

<sup>&</sup>lt;sup>11</sup>See: Investment Dispute Settlement Navigator, N.d. We take the absolute number of claims as a proxy for the volume of claims.

ICRG data), labeled *Delta Bureaucratic Quality*. Unfortunately, adding this variable results in a large number of missing observations.

Possibly, democracies are better positioned to get their way in international negotiations and are therefore more successful in signing IIAs that are similar to their Model BITs (Allee and Lugg 2016). Arguably, the development of a Model BIT went through a more deliberative public process in democratic countries than in non-democratic ones. In turn, IIAs signed after the Model BIT was adopted may be subjected to greater scrutiny by various stakeholders, thereby pushing negotiating officials to stick to their template as close as possible. We capture this possibility with *Delta Polyarchy*, which is the difference between the parties' level of democracy, based on the Polyarchy variable in the Variety of Democracies data set (Coppedge et al. 2021).<sup>12</sup>

Model BITs are commonly crafted as templates for stand-alone investment agreements. Nevertheless, more and more investment rules are embedded in more comprehensive free trade agreements (FTAs). Possibly, such investment chapters are linked to other economic issues (such as trade in services, intellectual property, etc.) and go through different domestic bureaucratic and international negotiation processes. We might therefore expect BITs to be more similar to Model BITs, compared to investment chapters in FTAs. We account for this possibility with *Chapter in FTA*, which scores one if the IIA is a chapter in an FTA, and zero if it is a stand-alone BIT.

Presumably, a party that arrives at the negotiation table with a template enjoys an advantage, as it can set the agenda and use the content of its model as a point of

<sup>&</sup>lt;sup>12</sup> Replacing this variable with either the Polity 2 measure of democracy or executive constraints does not affect the results in any meaningful manner.

departure (Alschner and Skougarevskiy 2016a; Sharpe 2021; Thompson et al. 2019). If both parties are equipped with a Model BIT, on the other hand, the outcome is likely to be further away from each of the two templates. We account for such dynamics with *Partner Country has a Model*, which scores one if the other party has a Model BIT, and zero if it does not. This is the case for only 363 observations in our sample. Finally, insofar as the parties have political ties, these might trump other considerations. In particular, states that have a shared colonial heritage may be less insistent on a particular legal provision or particular language. We account for this possibility with *Colonial Ties*, which scores one if the two parties have a shared colonial heritage, and zero otherwise.

#### 3.4 Estimation Method

As already discussed, our dependent variables pertain to the similarity between a given IIA and a Model BIT. Estimating the factors that account for such variables is complicated by the possibility that the propensity to adopt a Model BIT varies in systematic ways, and this might affect the observed similarity between the Model BITs and corresponding IIAs. For example, it may be the case that more powerful, capable, or experienced states are more likely to publish a Model BIT *and* get their way at the negotiation table, which may lead to biased results. Indeed, a glance at the list of states with Model BITs indicates that several powerful states were especially prone to publish Model BITs, and have done so early on. These include, for instance, the UK, the US, Germany, China, and Russia.

To address this potential problem, we use Heckman selection models, in which the selection equation accounts for the existence of a Model BIT and the outcome equation accounts for the divergence between the IIA and the Model BITs. The selection

equation includes several variables that are expected to explain the propensity to adopt a Model BIT. First, states that sign more IIAs may have a stronger incentive to invest in a template agreement. Thus, *Cumulative IIAs* is the number of IIAs concluded by the Model Country up to the year in which the IIA was signed. Next, we account for economic size with *GDP*, which is the logged GDP of the Model Country. Third, in parallel to the outcome equation, we include measures of economic and bureaucratic capacity of the Model Country with *GDPpc* and *Bureaucratic Quality* in the models that include *Delta GDPpc* and Delta *Bureaucratic Quality*, respectively. Finally, states in which IIAs face a more difficult ratification process may want to publish a Model BIT in order to smooth it. We account for this with *Legislative Hurdles* (Haftel and Thompson 2013).

All models include robust standard errors and are clustered by the would-be Model country.<sup>13</sup> In addition, we note that the diagnostic tests  $\rho$  and Wald  $\chi^2$ , reported in the bottom of the tables, are statistically insignificant in most models, suggesting that selection dynamics are not pervasive in our data. Nevertheless, given that they are statistically significant in two models and the theoretical considerations mentioned above, we adopt this more demanding approach, subjecting our hypothesis to a more rigorous empirical test.<sup>14</sup> With this in mind, we turn to the results.

<sup>&</sup>lt;sup>13</sup> Of course, not all countries in the selection equation have a Model BIT.

<sup>&</sup>lt;sup>14</sup> As a further check, we run all models with a fixed-effects specification and robust standard errors clustered by the Model Country. The results remain intact for the main independent and most control variables. As one might expect, a small number of variables, such as *Delta GDP* and *Delta Bureaucratic Quality* perform better in the models that do not account for selection effects. Results are on file with Authors.

#### 4. Results

Tables 1 and 2 report the results of the statistical analysis. The first two models in Table 1 account for variation in *SRS Similarity Substantive*, with Model 1 including variables pertaining to GDP per capita, which are substituted with variables related to bureaucratic quality in Model 2. Models 3 and 4 repeat these specifications for *SRS Similarity ISDS*. The models in Table 2 replicate Model 1 in Table 1 for the five variables that capture core aspects of substantive provisions, i.e. *SRS Similarity Core Substantive*, *SRS Similarity Definitions*, *SRS Similarity Standards of Treatment*, *SRS Similarity Expropriation and Compensation*, and *SRS Similarity Flexibility*.

The statistical analysis offers strong support for the theoretical framework with respect to substantive provisions, but points to interesting nuances. As Models 1 and 2 in Table 1 indicate, *Cumulative Claims – Partner Country* is negative and statistically significant at a ninety-five percent level of confidence or higher. Substantively, moving from the minimum to the maximum value on this variable (zero and fifty-nine, respectively) reduces the similarity score from about 87 to about 64, a twenty-six percent drop (based on Model 1 in Table 1). Thus, a Model Country that negotiates with partners hard hit by ISDS claims ends up with IIAs that are less similar to its Model BIT in terms of SRS than those that are negotiated with states that faced fewer claims.

Unpacking the aggregated measure pertaining to substantive provisions provides several insights. First, the statistical and substantive effects of the Partner Country's experience with investment claims on *SRS Similarity Core Substantive* is even stronger than those of *SRS Similarity Substantive*, reinforcing the need to focus on a smaller number of key provisions in IIAs, and indeed on those that legal practice identifies as

being most important.

Second, looking into more detail, it appears that the effect of ISDS claims is especially pronounced with respect to provisions related to several substantive categories, namely the definitions of investment and investors, and flexibility clauses. In contrast, the experience of the Partner Country with investment claims falls short of statistical significance in the model pertaining to expropriation and compensation. These results suggest that negotiating states are more willing to amend those provisions that are less well-defined and those that qualify the IIA's main commitments – especially on the basis of learning from others' experience.

With respect to ISDS provisions, *Cumulative Claims – Partner Country* is negative but falls short of statistical significance in the models accounting for *SRS Similarity ISDS*. This is surprising, perhaps, given that the main driver of divergence between an IIA and a Model BIT is states' experience with ISDS. While a complete account of these results requires further research, we believe that Model Countries are reluctant to stray too far from their preferred mode of dispute settlement, as enshrined in the Model BIT. That is, they would rather adjust substantive provisions in ways that satisfy (or learn from) the Partner Country rather than change procedural provisions. The findings with respect to specific categories of substantive provisions point in the same direction, highlighting the advantages of disaggregated SRS measures. On the whole, then, we find much support for the idea that the Partner Country learns from its experience as a defendant in investment disputes and that these lessons are carried over to its IIA negotiations. This, in turn, results in greater divergence between the Model BIT of its negotiation partner and the IIA.

	(1) SRS Similarity Substantive	(2) SRS Similarity Substantive	(3) SRS Similarity ISDS	(4) SRS Similarity ISDS
main	Substantive	Substantive	1525	102.5
Connelation	0.201	0.176	0.0146	0.0922
Claims - Model Country	(1.40)	(1.14)	-0.0146 (-0.11)	-0.0822 (-0.68)
Cumulative	-0.380***	-0.344**	-0.0804	-0.0549
Claims - Partner Country	(-2.58)	(-2.40)	(-1.02)	(-0.67)
Delta GDP	0.189	0.325***	-0.0174	0.110
	(1.38)	(2.70)	(-0.15)	(1.53)
Delta GDPpc	0.559**		0.00826	
	(1.98)		(0.06)	
Delta Bureaucratic		1.022**		0.103
Quality		(2.08)		(0.50)
Delta Polyarchy	$2.180^{**}$	1.389	0.536	0.847
5 5	(2.19)	(1.17)	(0.61)	(1.08)
Years between	-0.240	-0.251	-0.199	-0.144
Model and IIA	(-1.08)	(-1.10)	(-1.32)	(-0.98)
Chapter in FTA	-17.03***	-16.31***	-11.36***	-10.91***
I	(-8.07)	(-8.22)	(-4.49)	(-4.38)
Partner has a	-2.365***	-2.171***	0.360	0.359
Model	(-2.87)	(-2.90)	(0.57)	(0.55)
Colonial Ties	0.373	-0.692	-3.331***	-4.394***
	(0.18)	(-0.32)	(-2.61)	(-2.79)
Constant	86.87***	85.95***	98.16***	97.15***
	(116.33)	(99.43)	(88.93)	(108.57)
select				
Legislative	-0.0590	0.0281	-0.0556	0.0231

**Table 1:** Heckman Selection Models of the Sources of Similarity between Model BITs and IIAs, Substantive and ISDS SRS, with *GDP per Capita* and *Bureaucratic Quality* 

Hurdles	(-0.33)	(0.16)	(-0.32)	(0.13)
Cumulative IIAs	0.0476 <sup>***</sup> (7.87)	0.0444 <sup>***</sup> (7.65)	0.0480 <sup>***</sup> (7.96)	0.0446 <sup>***</sup> (7.62)
GDPpc (logged)	-0.113 (-1.15)		-0.112 (-1.14)	
GDP (logged)	0.168 <sup>*</sup> (1.81)	0.113 (1.09)	0.160 <sup>*</sup> (1.71)	0.111 (1.06)
Bureaucratic Quality		0.0222 (0.15)		0.0195 (0.13)
Constant	-5.025** (-2.55)	-4.784** (-2.03)	-4.846** (-2.44)	-4.717 <sup>**</sup> (-1.97)
athrho				
Constant	-0.00570 (-0.05)	0.0514 (0.42)	-0.169 (-1.57)	-0.0556 (-0.72)
lnsigma		. ,	, , , , , , , , , , , , , , , , ,	, , , ,
Constant	$2.158^{***}$	$2.161^{***}$	$1.971^{***}$	1.953***
	(11.82)	(12.56)	(20.00)	(15.72)
Ν	4,873	3,879	4,873	3,879
Wald Chi <sup>2</sup>	0.00	0.18	2.47	0.52

*t* statistics in parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01. All models include robust standard errors and are clustered by Model country. All variables in the selection equation refer to the Model country. *Wald Chi*<sup>2</sup> tests the independence of the two equations.

	(1)	(2)	(3)	(4)	(5)
	SRS	SRS	SRS	SRS	SRS
	Similarity	Similarity	Similarity	Similarity	Similarity
	Core	Definitions	Standards	Expro &	Flexibility
	Cubatantiva	Definitions	Standards	Comp	Thexionity
	Substantive			Comp.	
	Provisions		Treatment		
main					
Cumulative	0 1 1 0	0 266***	0 330**	0.102	-0.252
Claims - Model	(0.73)	(2,70)	(2, 25)	(0.27)	(-0.99)
Country	(0.75)	(2.70)	(2.23)	(0.27)	( 0.77)
Country					
Cumulative	-0.513***	-0.677***	-0.295**	-0.321	-0.848**
Claims - Partner	(-3.51)	(-3.28)	(-2.03)	(-1.55)	(-2.56)
Country				(	
Dalta CDD	0.0977	0.161	0.00650	0.0002	0.216
Delta GDP	0.0877	0.161	-0.00659	-0.0802	0.316
	(0.55)	(0.89)	(-0.03)	(-0.28)	(1.25)
Delta GDPpc	$0.867^{***}$	-0.125	1.369***	1.283**	0.427
1	(3.70)	(-0.49)	(4.20)	(2.06)	(1.21)
	()	(	(	()	()
Delta Polyarchy	$3.487^{***}$	0.951	5.198***	1.843	3.510
5 5	(3.10)	(0.91)	(2.74)	(0.87)	(1.50)
	()	(012-)	()	(0.0.)	(
Years between	-0.228	-0.267**	-0.215	-0.162	-0.262
Model and IIA	(-1.27)	(-2.17)	(-0.94)	(-0.53)	(-1.14)
	( 11-1 )	()	( 0.5 .)	( 0.00)	(
Chapter in FTA	-17.63***	-8.614**	-15.95***	-8.133***	-30.67***
1	(-5.39)	(-2.24)	(-4.52)	(-2.72)	(-5.33)
	(2.27)	( /)	(	()	( = === )
Partner has a	$-2.887^{***}$	-1.614	-1.093	-3.004**	-5.793***
Model	(-2.74)	(-1.24)	(-0.99)	(-2.44)	(-2.75)
					· · ·
Colonial Ties	-1.264	0.605	0.742	1.310	$-6.762^{*}$
	(-0.63)	(0.49)	(0.39)	(0.48)	(-1.95)
Constant	89.31***	94.61***	87.45***	86.65***	90.60***
	(90.54)	(90.99)	(47.53)	(41.84)	(38.73)
	(	<u> </u>	(	()	()
select					
Legislative	-0.0507	-0.0740	-0.0580	-0.0576	-0.0336
Hurdles	(0.000)	(0.42)	(0.22)	(0.22)	(0.0550)
nurules	(-0.29)	(-0.42)	(-0.33)	(-0.33)	(-0.19)

**Table 2:** Heckman Selection Models of the Sources of Similarity between Model BITs and IIAs, Specific Substantive Provisions, with GDP per Capita

Cumulative IIAs	$0.0474^{***}$	$0.0480^{***}$	$0.0476^{***}$	$0.0475^{***}$	$0.0471^{***}$
	(7.84)	(8.04)	(7.89)	(7.89)	(7.92)
	0.112	0 1 2 9	0.112	0.112	0.104
GDPpc (logged)	-0.112	-0.128	-0.115	-0.115	-0.104
	(-1.16)	(-1.30)	(-1.14)	(-1.14)	(-1.12)
GDP (logged)	$0.169^{*}$	0.169*	$0.168^{*}$	$0.168^{*}$	0.164*
	(1.84)	(1.80)	(1.81)	(1.80)	(1.86)
	F 070***	4 0 2 1 **	E 027**	<b>5 02</b> 0**	F 020***
Constant	-5.073	-4.921	-5.037	-5.038	-5.038
	(-2.59)	(-2.49)	(-2.56)	(-2.55)	(-2.64)
athrho					
Constant	0.0971	-0.232**	0.0247	0.0185	$0.254^{*}$
	(0.78)	(-2.07)	(0.21)	(0.17)	(1.86)
lnsigma					
Constant	$2.152^{***}$	$2.181^{***}$	$2.499^{***}$	$2.689^{***}$	2.683***
	(28.31)	(41.75)	(39.22)	(42.19)	(29.65)
N	4,873	4,873	4,873	4,873	4,873
Wald Chi <sup>2</sup>	0.60	$4.29^{**}$	0.04	0.03	$3.47^{*}$

*t* statistics in parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01. All models include robust standard errors and are clustered by Model country. All variables in the selection equation refer to the Model country. *Wald Chi*<sup>2</sup> tests the independence of the two equations.

Turning back to Model Country's experience with ISDS, the cumulative number of investment claims does not seem to have a systematic effect on the similarity between the country's IIAs and Model BITs. *Cumulative Claims – Model Country* is positive with in most models pertaining to substantive provisions and negative in those concerning ISDS provisions. This variable is statistically insignificant in all but two models, however. As we argued in the theoretical section, one should not take this result to mean that Model Countries do not learn from their own ISDS experience. Rather, they do draw important lessons from investment disputes, but update both their IIAs and Model BITs in similar ways, such that, on average, the divergence between the two texts does not increase in meaningful manners.

Interestingly, *Cumulative Claims – Model Country* is positive and statistically significant in the models accounting for *SRS Similarity Definitions* and *SRS Similarity Standards of Treatment*. Possibly, then, ISDS experience propels Model Countries to bring IIAs *closer* to their Model BITs, rather than the other way around, with respect to these particular sets of provisions. Alternatively, Model Countries may update their previously divergent Model BITs and IIAs in ways that make them more similar on key substantive matters, such as standards of treatment. While these findings require further examination, they further underscore the need to examine subsets of IIA provisions separately.

With respect to control variables, we do not find much support for the idea that cumulative global changes of state practices as well as the perception of the IIA Regime negatively affect the similarity between a state's IIAs and its Model BIT. *Years between BIT Model and IIA* is negative in all models, suggesting that later IIAs are less similar to

their corresponding Model BIT, compared to earlier ones, pointing to a lasting effect of Model BITs that goes beyond the attempts to revise them. This variable is statistically insignificant in all but the model related to definitions of investment and investors, however. Thus, notwithstanding the so-called 'backlash' against the IIA Regime that took shape in the late 2000s, and despite calls for reforms of the IIA Regime and the ISDS system in particular, (Aisbett et al. 2018; Franck et al. 2014; Garcia et al. 2015; Waibel 2010), as well as IOs publishing information about ISDS rulings and their implications, it seems that states are slower to incorporate broader global lessons into their IIAs, if not pushed to do so by their negotiating partners.

Other relevant control variables include *Delta GDP*, which is positive but statistically insignificant in most models. At the same time, the GDP of the Model Country is positive and (weakly) statistically significant in all selection equations pertaining to substantive provisions. Thus, it seems that economic size accounts for the propensity of states to adopt Model BITs in the first place. Once one takes this reality into account, the gap in economic size does not add much explanatory power to the similarity between an IIA and a corresponding Model BIT.

In contrast, both *Delta Bureaucratic Quality* and *Delta GDPpc* are positive and statistically significant in most models accounting for variables related to substantive provisions (but not ISDS provisions). Furthermore, *Bureaucratic Quality* and *GDPpc* are statistically insignificant in the selection equations. This suggests that richer and more capable countries are better positioned to insert their preferred level of SRS into their IIAs (Berge and Stiansen 2016), at least with respect to core substantive provisions, such as standards of treatment and expropriation and compensation. State capacity appears less

important as a source of states' inclination to develop and publish Model BITs.

*Delta Polyarchy* is positive in all models and statistically significant in some of the models pertaining to all and substantive provisions. This result offers modest support to the notion that democracies are more likely than autocracies to stick with their Model BITs. As expected, *Chapter in FTA* is negative and highly significant in all models. Substantively, the expected value on *SRS Similarity Substantive* is 87 for a stand-alone BIT and only 70 for an investment chapter in an FTA (based on Model 1 in Table 1). Hence, stand-alone BITs exhibit much greater similarity to Model BITs, compared to investment chapters in trade agreements. *Partner has a Model* is negative and statistically significant in most models accounting for substantive provisions, but not ISDS provisions. It appears, then, that Model BITs are useful for agenda setting and allow those states that have published them to negotiate an IIA that is closer to their preferred approach to SRS than those negotiated with partners that do have a Model BIT as well, at least with respect to substantive rules.

The results on *Colonial Ties* are mixed. The coefficient of this variable is negative in some models and positive in others. Even so, it is negative and statistically significant in the models related to ISDS provisions, suggesting that Model Countries are more willing to stray from their preferred mode of ISDS when negotiating with partners that have a common colonial heritage. Finally, turning to two variables in the selection equation that were not discussed thus far, *Cumulative IIAs* turns out to be an important determinant of Model BIT adoption. Apparently, signing IIAs in large numbers produces a strong incentive to develop a model agreement. *Legislative Hurdles*, on the other hand, switches signs and is never statistically significant.

In summary, the statistical analysis provides strong support to our theoretical expectations with respect to SRS in substantive provisions, all or some. The cumulative experience of the Partner Country as a respondent to investment claims pushes towards demanding a particular design of the IIAs it negotiates. This, in turn, results in greater divergence between the Model Country's template and such an IIA. Controlling for a battery of alternative explanations and accounting for selection dynamics does not change this conclusion and suggests this effect is likely to be real.

#### 5. Conclusion

Determining states' ideal preferences and their ability to realize them are pivotal questions for research on international cooperation. Examining Model BITs, templates used by many governments in the process of negotiating IIAs, makes it possible to identify states' foreign investment protection policy, and examine how these preferences are then translated into IIAs. Using new data on the divergence between Model BITs and IIAs, based on the concept of SRS- a crucial concern for governments – we explore the relationship between the two and examine the factors that account for variations in the gaps between states' Model BITs and IIAs they conclude. Emphasizing the importance of learning, we argue that ISDS experience of the Model Country is unlikely to contribute to the Model BIT-IIA gap on SRS due to contemporaneous adjustments. In contrast, it is the ISDS experience of the Partner Country that is likely to result in greater divergence between a Model BIT and an IIA. Moreover, we find strong empirical support for these theoretical expectations with respect to substantive IIA provisions, but not ISDS rules. These findings indicate that Partner Countries hard hit by investment claims are especially concerned about particular sets of substantive commitments, but are less

concerned, or ambitious, with revising dispute settlement procedures. They thus underscore the value of taking a closer look at the content and change of specific provisions and categories and provide reason to contemplate their implications for the evolution of the IIA Regime.

Being one of the first studies to explore Model BITs in a systematic manner, this study contributes to the literature on institutional design, and the design of investmentrelated instruments in particular. Expanding this line of research, which began in recent years to explore how IIAs vary in design and implications (Allee and Peinhardt 2010, 2014; Link and Haftel 2019; Thompson et al. 2019), the study examines the consequences of Model BITs for treaty-making. The study also contributes to the ongoing discussion on the desired balance between investor protection and SRS. As discontent with the IIA Regime continues – particularly with respect to the ISDS system – exploring states' responses to the threat of investment claims and their attempts to reclaim regulatory space (Broude et al. 2018; Peinhardt and Wellhausen 2016; Thompson et al. 2019) is as relevant as ever.

Indeed, this study, while based on careful examination of primarily bilateral (IIAs) and unilateral instruments (Model BITs) has implications also for multilateral reform initiatives in the IIA Regime. It is evident from the investigation of Model BITs, first, that states learn and are responsive to the concerns and experiences of other states, sometimes more from their own experience. Second, it is clear that in practice states are concerned with amending the substantive rules of investment protection no less, if not more, than the institutional and procedural ISDS rules. Both these trends should be multilateralized and taken into account more effectively.

We note other questions that have arisen. The question of *why* states make their Model BITs publicly available warrants further research. As our analysis suggests, template agreements can provide states with an advantage when negotiating new treaties, by means of setting the agenda in the negotiations. A transparent Model BIT can offer a further advantage by sending a clear signal about one's own preferences and legislative constraints, thereby serving as a hand-tying mechanism. On the other hand, a negotiating party with a transparent Model BIT may be at a negotiation disadvantage vis-a-vis a partner who has an 'invisible' Model BIT. Here, the latter may exploit information asymmetries to its own advantage. Given that systematic data on 'invisible' Model BITs is unavailable, conducting interviews with officials and IIA negotiators could shed important light on states' intentions and incentives regarding the decision to publicize their Model BITs (or not), as well as their effects on negotiation dynamics. However, even if we focus on 'visible' Model BITs only, as was done in this study, questions arise about the power of Model BITs – as observed in our results, such templates are sometimes adjusted in parallel with IIAs, and are not always steadfast when faced with Partner Country demands. Thus, it seems, they may not withstand the test of time, eventually becoming 'last year's model.'

Finally, although Model BITs reflect national preferences, states may duplicate templates – or parts of them – from other actors, namely, other states and international organizations (IOs). Research has explored the diffusion of institutional design across regional IOs ( Börzel and Risse 2012; Jetschke and Lenz 2013; Lenz 2012), and the diffusion of treaty design in particular, both with respect to trade agreements (Allee and Elsig 2019; Baccini et al. 2015) and IIAs (Alschner et al. 2020). Along similar lines, it is

possible that when creating their own Model BITs, states rely on existing templates, whether national or those promoted by IOs that play an integral role in shaping the IIA Regime, by providing governments with technical assistance and promoting best practice. Examining the diffusion patterns of Model BITs, while taking into account the role of states as well as IOs in this process, is a promising avenue of future research.

### References

Aisbett, Emma et al. 2018. "Rethinking International Investment Governance: Principles for the 21st Century." *Rethinking International Investment Governance: Principles for the 21st Century (2018)*.

Āl-mas'ūliyah āl-mujtama'iya lilšharikat [Corporate Social Responsibility]. N.d.. *Arab Republic of Egypt: General Authority for Investment and Free Zones*. https://www.investinegypt.gov.eg/arabic//pages/wecanhelp.aspx?CategoryId=3 (visited 29 September, 2021).

Allee, Todd, and Manfred Elsig. 2019. "Are the Contents of International Treaties Copied and Pasted? Evidence from Preferential Trade Agreements." *International Studies Quarterly* 63(3): 603–613.

Allee, Todd, and Andrew Lugg. 2016. "Do BITs Reflect the Interests of Powerful States." In *57th Annual Convention of the International Studies Association*.

Allee, Todd, and Clint Peinhardt. 2010. "Delegating Differences: Bilateral Investment Treaties and Bargaining over Dispute Resolution Provisions." *International Studies Quarterly* 54(1): 1–26.

——. 2014. "Evaluating Three Explanations for the Design of Bilateral Investment Treaties." *World Politics* 66(1): 47–87.

Alschner, Wolfgang. 2017. "The Impact of Investment Arbitration on Investment Treaty Design: Myth Versus Reality." *Yale J. Int'l L.* 42. Available at SSRN: http://www.ssrn.com/abstract=2781525 (visited September 1, 2020).

Alschner, Wolfgang, Manfred Elsig, and Rodrigo Polanco. 2020. "Introducing the Electronic Database of Investment Treaties (EDIT): The Genesis of a New Database and Its Use." *World Trade Review*: 1–22.

Alschner, Wolfgang, and Dmitriy Skougarevskiy. 2016a. "Mapping the Universe of International Investment Agreements." *Journal of international economic law* 19(3): 561–588.

———. 2016b. "The New Gold Standard? Empirically Situating the Trans-Pacific Partnership in the Investment Treaty Universe." *The Journal of World Investment & Trade*: 339–373.

Arato, Julian. 2019. "The Private Law Critique of International Investment Law". *The American Journal of International Law* 113(1): 1-53.

Baccini, Leonardo, Andreas Dür, and Yoram Z. Haftel. 2015. "Imitation and Innovation in International Governance: The Diffusion of Trade Agreement Design." In Andreas Dür and Manfred Elsig (Eds.), *Trade Cooperation: The Purpose, Design and Effects of Preferential Trade Agreements* (167–194). Cambridge University Press. Bandura, Albert. 1965. "Influence of Model's Reinforcement Contingencies on the Acquisition of Imitative Response". *Journal of Personality and Social Psychology* 1(6): 589-595.

Berge, Tarald Laudal, and Øyvind Stiansen. 2016. "Negotiating BITs with Models: The Power of Expertise." *PluriCourts Research Paper*. Available at SSRN: https://www.ssrn.com/abstract=2851454.

Berger, Axel, Matthias Busse, Peter Nunnenkamp, and Martin Roy. 2011. "More Stringent BITs, Less Ambiguous Effects on FDI? Not a Bit!" *Economics Letters* 112(3): 270–272.

Bonnitcha, Jonathan, Lauge N. Skovgaard Poulsen, and Michael Waibel. 2017. *The Political Economy of the Investment Treaty Regime*. Oxford University Press.

Börzel, Tanja A., and Thomas Risse. 2012. "When Europeanisation Meets Diffusion: Exploring New Territory." *West European Politics* 35(1): 192–207.

Broude, Tomer and Shai Moses. 2016. "The Behavioural Dynamics of Positive and Negative Listing in Services Trade Liberalization: A Look at the Trade in Services Agreement (TiSA) Negotiations." In Pierre Sauvé and Martin Roy (Eds.), *Research Handbook on Trade in Services* (385-411). Edward Elgar Publishing.

Broude, Tomer and Yahli Shereshevsky. 2021. "Explaining the Practical Purchase of Soft Law: Competing and Complementary Behavioral Hypotheses". In Harlan Grant Cohen and Timothy Meyer (Eds.), *International Law as Behavior* (98-127). Cambridge University Press

Broude, Tomer, Yoram Z. Haftel, and Alexander Thompson. 2017. "The Trans-Pacific Partnership and Regulatory Space: A Comparison of Treaty Texts." *Journal of International Economic Law* 20(2): 391–417.

——. 2018. "Who Cares about Regulatory Space in BITs? A Comparative International Approach." In *Comparative International Law*, Oxford: Oxford University Press, 527–545.

———. 2022 "Legitimation Through Renegotiation: Do States Seek More Regulatory Space in Their BITs?" In Daniel Behn, Fauchauld, Ole Kristian and Langford, Malcolm, (Eds.), *The Legitimacy of Investment Arbitration: Empirical Perspectives*. Cambridge University Press.

Brown, Chester. 2013. *Commentaries on Selected Model Investment Treaties*. Oxford University Press.

Coppedge et al. 2021. "V-Dem [Country–Year/Country–Date] Dataset v11.1" Varieties of Democracy Project. https://doi.org/10.23696/vdemds21 (visited 29 September, 2021).

Dolzer, Rudolf, and Margrete Stevens. 1995. *Bilateral Investment Treaties*. Martinus Nijhoff Publishers.

Franck, Susan D. James Freda, Kellen Lavin, Tobias Lehmann and Anne Van Aaken. 2014. "The Diversity Challenge: Exploring the Invisible College of International Arbitration." *Colum. J. Transnat'l L.* 53: 429–506.

Gagné, Gilbert, and Jean-Frédéric Morin. 2006. "The Evolving American Policy on Investment Protection: Evidence from Recent FTAs and the 2004 Model BIT." *Journal of International Economic Law* 9(2): 357–382.

Gallagher, Norah, and Wenhua Shan. 2009. *Chinese Investment Treaties: Policies and Practice*. Oxford University Press.

Garcia, Frank J., Lindita Ciko, Apurv Gaurav, and Kirrin Hough. 2015. "Reforming the International Investment Regime: Lessons from International Trade Law." *Journal of International Economic Law* 18(4): 861–892.

Goldsmith, Benjamin. 2003. "Imitation in International Relations: Analogies, Vicarious Learning, and Foreign Policy". *International Interactions: Empirical and Theoretical Research in International Relations* 29(3): 237-267.

Guzman, Andrew T. 1997. "Why LDCs Sign Treaties That Hurt Them: Explaining the Popularity of Bilateral Investment Treaties." *Va. j. Int'l L.* 38: 639–688.

Haftel, Yoram Z., and Alexander Thompson. 2013. "Delayed Ratification: The Domestic Fate of Bilateral Investment Treaties." *International Organization* 67(2): 355-387.

——. 2018. "When Do States Renegotiate Investment Agreements? The Impact of Arbitration." *The Review of International Organizations* 13(1): 25–48.

Investment Dispute Settlement Navigator. N.d.. *Investment Policy Hub*. https://investmentpolicy.unctad.org/investment-dispute-settlement (visited: 29 September, 2021).

Jandhyala, Srividya et al. 2011. "Three Waves of BITs: The Global Diffusion of Foreign Investment Policy." *Journal of Conflict Resolution* 55(6): 1047–1073.

Jetschke, Anja, and Tobias Lenz. 2013. "Does Regionalism Diffuse? A New Research Agenda for the Study of Regional Organizations." *Journal of European Public Policy* 20(4): 626–637.

Lenz, Tobias. 2012. "Spurred Emulation: The EU and Regional Integration in Mercosur and SADC." *West European Politics* 35(1): 155–173.

Link, Morr, and Yoram Z. Haftel. 2019. "Islamic Legal Tradition and the Choice of Investment Arbitration Forums." *Review of International Political Economy*: 1–25.

Mapping of IIA Content. N.d.. *Investment Policy Hub*. http://investmentpolicyhub.unctad.org/IIA/mappedContent#iiaInnerMenu (visited 24 August 2021). Neumayer, Eric, and Laura Spess. 2005. "Do Bilateral Investment Treaties Increase Foreign Direct Investment to Developing Countries?" *World Development* 33(10): 1567– 1585.

Peinhardt, Clint, and Rachel L. Wellhausen. 2016. "Withdrawing from Investment Treaties but Protecting Investment." *Global Policy* 7(4): 571–576.

Poulsen, Lauge N. Skovgaard. 2014. "Bounded Rationality and the Diffusion of Modern Investment Treaties." *International Studies Quarterly* 58(1): 1–14.

———. 2015. Bounded Rationality and Economic Diplomacy: The Politics of Investment Treaties in Developing Countries. Cambridge University Press.

———. 2020. "Beyond Credible Commitments: (Investment) Treaties as Focal Points." *International Studies Quarterly* 64(1): 26-34.

Poulsen, Lauge N. Skovgaard, and Emma Aisbett. 2013. "When the Claim Hits: Bilateral Investment Treaties and Bounded Rational Learning." *World Politics* 65(2): 273–313.

Puig, Sergio and Gregory Shaffer. 2018. "Imperfect Alternatives: Institutional Choice and the Reform of Investment Law." *American Journal of International Law* 112(3): 361-409.

Roberts, Anthea and Taylor St. John. 2022. "Complex Designers and Emergent Design: Reforming the Investment Treaty System." *American Journal of International Law* 116(1): 96-149.

Salacuse, Jeswald W. 1990. "BIT by BIT: The Growth of Bilateral Investment Treaties and Their Impact on Foreign Investment in Developing Countries." *The International Lawyer* 24(3): 655–75.

Schill, Stephan W. 2009. *The Multilateralization of International Investment Law*. Cambridge University Press.

Sharpe, Jeremy K. 2018. "The Agent's Indispensable Role in International Investment Arbitration." *ICSID Review-Foreign Investment Law Journal* 33(3): 675–701.

———. 2021. "Negotiating from a Model Bilateral Investment Treaty,." *International Arbitration Institute (IAI) Series* (10-Treaty-Making in Investment Law): 1–28.

Simmons, Beth A. 2014. "Bargaining over BITs, Arbitrating Awards: The Regime for Protection and Promotion of International Investment." *World Politics* 66(1): 12-46.

Svoboda, Ondrej, and Jan Kunstyr. 2020. "The Curious Case of the Czech Model Bilateral Investment Treaty." *Manchester Journal of International Economic Law* 17(3): 383–402.

The 11th Annual Forum of Developing Country Investment Negotiators: The Changing World of Investment Negotiations: From Bilateral Protection To...? 2018. Nairobi, Kenya: the International Institute for Sustainable Development.

https://www.southcentre.int/wp-content/uploads/2018/06/Ev\_180207-09\_11th-Annual-Forum-of-Developing-Country-Investment-Negotiators-Report\_EN.pdf (visited February 8, 2021).

Thompson, Alexander, Tomer Broude, and Yoram Z. Haftel. 2019. "Once Bitten, Twice Shy? Investment Disputes, State Sovereignty, and Change in Treaty Design." *International Organization* 73(4): 859-880.

Tobin, Jennifer L., and Susan Rose-Ackerman. 2011. "When BITs Have Some Bite: The Political-Economic Environment for Bilateral Investment Treaties." *The Review of International Organizations* 6(1): 1–32.

Vandevelde, Kenneth J. 2000. "The Economics of Bilateral Investment Treaties." *Harv. Int'l. LJ* 41(2): 469-502.

. 2009. US International Investment Agreements. Oxford University Press.

———. 2011. "Model Bilateral Investment Treaties: The Way Forward." *Southwestern Journal of International Law* 18(1): 307–316.

———. 2017. The First Bilateral Investment Treaties: U.S. Postwar Friendship, Commerce, and Navigation Treaties. Oxford University Press.

Waibel, Michael. 2010. *The Backlash against Investment Arbitration: Perceptions and Reality*. Kluwer Law International BV.

———. 2019. "Fair and Equitable Treatment As Boilerplate". *The American Review of International Arbitration* 30(1): 85-111.

Yackee, Jason Webb. 2008. "Bilateral Investment Treaties, Credible Commitment, and the Rule of (International) Law: Do BITs Promote Foreign Direct Investment?" *Law & Society Review* 42(4): 805–832.

Zeng, Ka, and Yue Lu. 2016. "Variation in Bilateral Investment Treaty Provisions and Foreign Direct Investment Flows to China, 1997–2011." *International Interactions* 42(5): 820–848.

# Appendix

# Table A1: List of Model BITs

Country	Year
Austria	1994
Austria	2002
Austria	2008
Azerbaijan	2016
Belgium-Luxembourg	2002
Belgium-Luxembourg	2019
Benin	2002
Bolivia	2002
Brazil	2015
Burkina Faso	2012
Burundi	2002
Cambodia	1998
Canada	2004
Canada	2014
Chile	1994
China	1984
China	1989
China	1994
China	1998
China	2003
Colombia	2007
Colombia	2008
Colombia	2009
Colombia	2011
Colombia	2017
Croatia	1998
Czech Republic	1993
Czech Republic	2016
Denmark	1991
Denmark	2000
Egypt	1995
Finland	2001
France	1996
France	1999
France	2006

CountryYearGermany1998Germany2005Germany2008Ghana2003Ghana2003Greece2011Guatemala2013India2013India2013India2013India2013India2013India2013India2013India2013India2013India2013India2013India2013Israel2003Jamaica1995Kenya2003Macedonia2009Malaysia1998Mongolia1998Netherlands1979Netherlands1971Netherlands1997Netherlands2004Netherlands2005Norway2015Peru2007	Germany	1991
Germany1998Germany2005Germany2008Ghana2003Ghana2003Ghana2003Greece2001Guatemala2003India2003India2003India2015India2003India2003Indonesia1995Iran2003Jamaica1995Kenya2003Latvia2009Malaysia1998Mauritius2002Mexico2008Mongolia1998Netherlands1997Netherlands1997Netherlands2004Netherlands2015Peru2007Norway2015Peru2007	Country	Year
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Germany2008Ghana2003Ghana2008Greece2001Guatemala2003Guatemala2010Hong Kong1995India2003India2003India2003Indonesia1995Iran2003Jamaica1995Kenya2003Latvia2009Malaysia1998Mauritius2002Mexico2008Mongolia1998Netherlands1979Netherlands1997Netherlands2014Netherlands2018Netherlands2018Netherlands2018Netherlands2018Netherlands2018Netherlands2018Netherlands2018Netherlands2019Norway2015Peru2005	Germany	2005
Ghana2003Ghana2008Greece2001Guatemala2003Guatemala2010Hong Kong1995India2013India2015India2015Indonesia1995Iran2001Israel2003Italy2003Jamaica1995Kenya2003Latvia2009Macedonia2009Malaysia1998Mongolia1998Netherlands1979Netherlands1997Netherlands1997Netherlands2014Netherlands2015Netherlands2017Norway2015Peru2007	Germany	2008
Ghana2008Greece2001Guatemala2003Guatemala2010Hong Kong1995India2003India2015Indonesia1995Iran2003Italy2003Jamaica1995Kenya2003Latvia2009Malaysia1998Mauritius2002Mexico2008Mongolia1998Netherlands1979Netherlands1979Netherlands1997Netherlands2004Netherlands2005Netherlands2018Netherlands2018Netherlands2018Netherlands2019Norway2015Peru2000Peru2000	Ghana	2003
Greece2001Guatemala2003Guatemala2010Hong Kong1995India2003India2015Indonesia1995Iran2001Israel2003Jamaica1995Kenya2003Latvia2009Macedonia2002Masico2003Indingia1995Kenya2003Latvia2009Macedonia2009Malaysia1998Mongolia1998Netherlands1979Netherlands1977Netherlands1997Netherlands2018Netherlands2019Norway2015Peru2000Peru2000	Ghana	2008
Guatemala2003Guatemala2010Hong Kong1995India2003India2015Indonesia1995Iran2001Israel2003Italy2003Jamaica1995Kenya2003Latvia2009Macedonia2009Malaysia1998Mongolia1998Netherlands1979Netherlands1979Netherlands1997Netherlands1993Netherlands2014Netherlands2018Netherlands2018Netherlands2018Netherlands2018Netherlands2018Netherlands2015Peru2000	Greece	2001
Guatemala2010Hong Kong1995India2003India2015Indonesia1995Iran2001Israel2003Jamaica1995Kenya2003Latvia2009Macedonia2002Masico2008Mongolia1998Netherlands1998Netherlands1997Netherlands1997Netherlands2004Netherlands2015Netherlands2018Netherlands2018Netherlands2018Netherlands2018Netherlands2019Norway2015Peru2000	Guatemala	2003
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Israel2003Italy2003Jamaica1995Kenya2003Latvia2009Macedonia2009Malaysia1998Mauritius2002Mexico2008Mongolia1998Namibia2005Netherlands1979Netherlands1997Netherlands1997Netherlands2018Netherlands2018Netherlands2018Netherlands2019Norway2007Norway2015Peru2000	Iran	2001
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Macedonia2009Malaysia1998Mauritius2002Mexico2008Mongolia1998Namibia2005Netherlands1979Netherlands1987Netherlands1993Netherlands1997Netherlands2004Netherlands2018Netherlands2019Norway2007Norway2015Peru2000	Latvia	2009
Malaysia1998Mauritius2002Mexico2008Mongolia1998Namibia2005Netherlands1979Netherlands1987Netherlands1993Netherlands1993Netherlands2004Netherlands2004Netherlands2018Netherlands2019Norway2007Norway2015Peru2000	Macedonia	2009
Mauritius2002Mexico2008Mongolia1998Namibia2005Netherlands1979Netherlands1987Netherlands1993Netherlands1997Netherlands2004Netherlands2018Netherlands2019Norway2007Norway2015Peru2000	Malaysia	1998
Mexico2008Mongolia1998Namibia2005Netherlands1979Netherlands1987Netherlands1993Netherlands1997Netherlands2004Netherlands2018Netherlands2019Norway2007Norway2015Peru2000	Mauritius	2002
Mongolia1998Namibia2005Netherlands1979Netherlands1987Netherlands1993Netherlands1997Netherlands2004Netherlands2018Netherlands2019Norway2007Norway2015Peru2000	Mexico	2008
Namibia2005Netherlands1979Netherlands1987Netherlands1993Netherlands1997Netherlands2004Netherlands2018Netherlands2019Norway2007Norway2015Peru2000	Mongolia	1998
Netherlands1979Netherlands1987Netherlands1993Netherlands1997Netherlands2004Netherlands2018Netherlands2019Norway2007Norway2015Peru2000	Namibia	2005
Netherlands1987Netherlands1993Netherlands1997Netherlands2004Netherlands2018Netherlands2019Norway2007Norway2015Peru2000	Netherlands	1979
Netherlands1993Netherlands1997Netherlands2004Netherlands2018Netherlands2019Norway2007Norway2015Peru2000	Netherlands	1987
Netherlands1997Netherlands2004Netherlands2018Netherlands2019Norway2007Norway2015Peru2000	Netherlands	1993
Netherlands2004Netherlands2018Netherlands2019Norway2007Norway2015Peru2000	Netherlands	1997
Netherlands2018Netherlands2019Norway2007Norway2015Peru2000	Netherlands	2004
Netherlands2019Norway2007Norway2015Peru2000	Netherlands	2018
Norway2007Norway2015Peru2000	Netherlands	2019
Norway2015Peru2000	Norway	2007
Peru 2000	Norway	2015
	Peru	2000

Romania	2004
Russia	1987
Country	Year
Russia	1992
Russia	1995
Russia	2001
Russia	2002
Russia	2016
Senegal	
Serbia	2014
Slovakia	2010
Slovakia	2019
South Africa	1998
South Korea	2001
Sri Lanka	1995
Sudan	
Sweden	2002
Switzerland	1986
Switzerland	1995
Thailand	2002
Turkey	2000
Turkey	2009
Uganda	2003
UK	1972
UK	1991
UK	2005
UK	2008
USA	1982
USA	1983
USA	1987
USA	1991
USA	1992
USA	1994
USA	1998
USA	2004
USA	2012

 Table A2: Summary Statistics

Variable	Ν	Mean	Std. Dev.	Min	Max
SRS Similarity Substantive	1,599	87.20	9.54	47.49	100.00
SRS Similarity ISDS	1,599	85.69	10.35	44.33	100.00
SRS Similarity Core Substantive Provisions	1,599	88.48	10.99	40.76	100.00
SRS Similarity Definitions	1,599	95.07	9.40	5.12	100.00
SRS Similarity Standards of Treatment	1,599	90.77	10.93	23.33	100.00
SRS Similarity Expropriation & Compensation	1,599	88.05	14.22	31.25	100.00
SRS Similarity Flexibility	1,599	86.16	15.61	18.75	100.00
Cumulative Claims – Model Country	5,532	0.70	2.65	0.00	59.00
Cumulative Claims – Partner Country	5,532	0.70	2.65	0.00	59.00
Delta GDP	4,876	0.00	3.55	-25.23	25.23
Delta GDPpc	4,874	0.00	2.29	-8.49	8.49
Delta Bureaucratic Quality	3,906	0.00	1.65	-4.00	4.00
Delta Polyarchy	5,378	0.00	0.43	-0.90	0.90
Years between Model and IIA	1,598	4.28	4.06	0.00	22.00
Chapter in FTA	5,532	0.02	0.14	0.00	1.00
Partner has a Model	2,838	0.56	0.50	0.00	1.00
Colonial Ties	5,484	0.10	0.30	0.00	1.00
Legislative Hurdles	5,510	1.31	0.73	0.00	4.00
Cumulative IIAs	5,344	22.08	21.21	0.00	117.00
GDP (logged)	4,496	2.55	1.06	0.00	4.00
GDPpc (logged)	5,189	25.43	2.27	3.40	30.34

## Table A3: Correlation Matrix

	SRS Similarity Substantive	SRS Similarity ISDS	SRS Similarity Core Substantive Provisions	SRS Similarity Definitions	SRS Similarity Standards of Treatment	SRS Similarity Expropriation & Compensation	SRS Similarity Flexibility	Cumulative Claims – Model Country	Cumulative Claims – Partner Country	Delta GDP	Delta GDPpc	Delta Bureaucratic Quality	Delta Polyarchy	Years between Model and IIA	Chapter in FTA	Partner has a Model	Colonial Ties	Legislative Hurdles	Cumulative IIAs	GDP (logged)
SRS Similarity ISDS	0.31																			
SRS Similarity Core Substantive Provisions	0.45	0.18																		
SRS Similarity Definitions	0.72	0.22	0.26																	
SRS Similarity Standards of Treatment	0.55	0.17	0.23	0.37																
SRS Similarity Expropriation & Compensation	0.62	0.27	0.33	0.35	0.24															
SRS Similarity Flexibility	0.87	0.30	0.48	0.80	0.61	0.76														
Cumulative Claims – Model Country	-0.05	-0.12	0.01	0.00	-0.05	-0.18	-0.10													
Cumulative Claims – Partner Country	-0.18	-0.08	-0.19	-0.12	-0.11	-0.22	-0.22	0.27												
Delta GDP	0.23	0.08	0.19	0.18	0.13	0.12	0.21	-0.01	-0.13											
Delta GDPpc	0.27	0.08	0.11	0.34	0.22	0.17	0.33	-0.10	-0.10	0.52										
Delta Bureaucratic Quality	0.30	0.09	0.15	0.35	0.21	0.22	0.36	-0.07	-0.14	0.41	0.77									
Delta Polyarchy	0.22	0.06	0.09	0.30	0.17	0.17	0.29	0.04	-0.10	0.18	0.61	0.65								
Years between Model and IIA	-0.11	-0.11	-0.09	-0.04	-0.06	-0.15	-0.12	0.25	0.13	-0.03	0.07	0.07	0.15							
Chapter in FTA	-0.35	-0.33	-0.19	-0.26	-0.13	-0.39	-0.37	0.16	0.12	-0.07	-0.11	-0.14	-0.08	0.09						
Partner has a Model	-0.22	-0.05	-0.17	-0.15	-0.15	-0.23	-0.25	0.08	0.27	-0.32	-0.21	-0.28	-0.20	0.09	0.09					
Colonial Ties	-0.03	-0.20	-0.03	0.00	0.02	-0.14	-0.06	0.05	-0.01	0.10	0.05	0.05	0.07	0.07	0.13	-0.07				
Legislative Hurdles	-0.05	-0.03	-0.07	0.11	-0.01	-0.08	0.00	0.11	-0.04	0.12	0.22	0.17	0.27	-0.07	0.06	-0.07	0.01			
Cumulative IIAs	0.10	0.11	0.12	0.14	0.04	-0.06	0.07	0.00	0.02	0.30	0.32	0.33	0.25	0.27	-0.07	-0.06	-0.11	0.03		
GDP (logged)	0.15	-0.05	0.03	0.31	0.14	0.10	0.24	-0.09	-0.10	0.26	0.63	0.77	0.57	0.08	0.00	-0.18	0.02	0.20	0.33	
GDPpc (logged)	0.05	-0.08	0.08	0.06	0.00	-0.05	0.01	0.07	0.01	0.68	0.30	0.26	0.06	-0.0	0.08	-0.18	0.02	0.21	0.33	026

#### State Regulatory Space (SRS) - Coding Rules

#### I. Substantive Provisions

- 1. Preamble (Cumulative)
  - a. Right to regulate = 0.25
  - b. Sustainable development = 0.25
  - c. Social investment policy = 0.25
  - d. Environmental investment aspects = 0.25
- 2. Definition of Investment
  - a. Asset vs. Enterprise Based (Ordinal)
    - i. Asset based = 0
    - ii. Enterprise based = 1
  - b. Limitations (Cumulative)
    - i. Excluding portfolio investment = 0.2
    - ii. Excluding other specific assets = 0.2
    - iii. Characteristics of investment = 0.2
    - iv. Host state laws = 0.2
    - v. Closed list = 0.2
- 3. Definition of Investor Specifying a Natural Person (Cumulative)
  - a. \*Exclusion\* (no mention of) of permanent resident = 0.25
  - b. Exclusion of dual nationality = 0.25
  - c. Substantial business activity required = 0.25
  - d. Owner and control defined = 0.25
- 4. Limiting Substantive Scope of the Treaty (Cumulative)
  - a. Taxation = 0.25
  - b. Subsidies & grants = 0.25
  - c. Government procurement = 0.25
  - d. Other subject matters = 0.25
- 5. Most Favored Nation (MFN)
  - a. Establishment (Ordinal)
    - i. Pre and post establishment = 0
    - ii. Post establishment = 0.5
    - iii. No MFN = 1
  - b. Exceptions (Cumulative)
    - i. REIOs = 0.25
    - ii. Taxation = 0.25
    - iii. Procedural ISDS = 0.25
    - iv. No MFN = 1

- 6. National Treatment (NT)
  - a. Establishment (Ordinal)
    - i. Pre and post establishment = 0
    - ii. Post establishment = 0.5
    - iii. No NT = 1
  - b. Like Circumstances (Ordinal)
    - i. No = 0
    - ii. Yes = 0.5
    - iii. No NT = 1
- 7. Fair and Equitable Treatment (FET)
  - a. International Law Qualification (Ordinal)
    - i. Non-qualified FET = 0
    - ii. International law = 0.25
    - iii. Customary IL = 0.5
    - iv. CIL + minimum standard of treatment = 0.75
    - v. No FET = 1
    - b. FET Elements Listed (Ordinal)
      - i. No = 0
      - ii. Yes = 0.5
      - iii. No FET = 1
- 8. Full Protection and Security (Ordinal)
  - a. Unqualified FPS = 0
  - b. FPS with reference to domestic laws = 0.5
  - c. No FPS = 1
- 9. Prohibition on Unreasonable, Arbitrary, Discriminatory Measures (Ordinal)
  - a. Yes = 0
  - b. No = 1
- 10. Expropriation
  - a. Scope of Expropriation Clause
    - (Ordinal)
    - i. Direct and indirect expropriation = 0
    - ii. Only direct expropriation = 0.5
    - iii. No expropriation clause = 1
    - iv.
  - b. Limitations on Expropriation
    - (Cumulative)
    - i. Indirect expropriation defined = 0.25
    - ii. General regulatory measures = 0.25
    - iii. Compulsory licenses = 0.25
    - iv. No expropriation clause = 1

- 11. Compensation
  - a. Relative Rights to Compensation (Ordinal)
    - i. MFN & NT = 0
    - ii. MFN or NT = 0.5
    - iii. No compensation clause = 1
  - b. Absolute Right to Compensation in Certain Circumstances (Ordinal)
    - i. Absolute rights to compensation = 0
    - ii. No compensation clause = 1
- 12. Prohibition on Performance Requirements (Ordinal)
  - a. Clause exists (TRIMs or list) = 0
  - b. No clause = 1
- 13. Umbrella Clause (Ordinal)
  - a. Clause exists = 0
  - b. No clause = 1
- 14. Entry and Sojourn of Personnel (Ordinal)
  - a. Clause exists = 0
  - b. No clause = 1
- 15. Senior Management and/or Boards Mandatory Clause (Ordinal)
  - a. Clause exists = 0
  - b. No clause = 1
- 16. Free Transfers (Cumulative)
  - a. BOP exception = 0.33
  - b. Other specific exceptions = 0.33
  - c. No free transfers clause = 1
- 17. Subrogation Clause (Ordinal)
  - a. Clause exists = 0
  - b. No clause = 1
- 18. Non-Derogation Clause (Ordinal)
  - a. Clause exists = 0
  - b. No clause = 1
- 19. Good Governance (Cumulative)
  - a. No good governance provisions = 0
  - b. \*NO\* transparency clauses directed at States = 0.15
  - c. Transparency clauses directed at investors = 0.15
  - d. Health & environment = 0.14
  - e. Labor standards = 0.14
  - f. Corporate social responsibility = 0.14
  - g. Corruption = 0.14
  - h. Not lowering standards = 0.14

- 20. Denial of Benefits (DoB) (Cumulative)
  - a. Substantive business operations = 0.34
  - b. Diplomatic relations = 0.33
  - c. \*Unilaterally\* discretionary DoB = 0.33
- 21. Scheduling & Reservations (Ordinal)
  - a. No S & R = 0
  - b. Reservations (negative list) = 1
- 22. Essential Security Exception (ESE) (Cumulative)
  - a. ESE clause exists = 0.25
  - b. ESE defined = 0.25
  - c. ESE self-judging = 0.50
- 23. Public Policy Exceptions (Cumulative)
  - a. Public health and environment = 0.5
  - b. Other = 0.5
- 24. Prudential Carve-Outs (Ordinal)
  - a. No clause = 0
  - b. Clause exists = 1
- 25. Right to Regulate (Ordinal)
  - a. No clause = 0
  - b. Clause exists = 1
- 26. Mechanism for Consultations between State Parties (Ordinal)
  - a. No = 0
  - b. Yes =1
- 27. Institutional Framework (Committee) (Ordinal)
  - a. No = 0
  - b. Yes =1
- 28. Limiting Temporal Scope of IIA (Ordinal)
  - a. Silence or pre-existing investment = 0
  - b. Post-BIT investment only = 1
- 29. Preexisting Disputes Covered (Ordinal)
  - a. Silence = 0
  - b. No = 1
- 30. Treaty Duration (Ordinal)
  - a. No duration specified = 0
  - b. 15 years or more = 0.33
  - c. 10 years = 0.66
  - d. Less than 10 years = 1
- 31. Automatic Renewal (Ordinal)
  - a. Yes, indefinite = 0 (or if initial duration is indefinite)
  - b. Yes, fixed term = 0.5
  - c. No = 1

- 32. Modalities for Denunciation (Ordinal)
  - a. No = 0
  - b. A year or more = 0.5
  - c. Less than a year = 1
- 33. Survival Clause Length (Ordinal)
  - a. 15 years or more = 0
  - b. 10 years = 0.33
  - c. Less than 10 years = 0.66
  - d. No survival clause = 1

#### II. Procedural provisions (ISDS)

34. Alternatives to Arbitration (Ordinal)No clause (compulsory ISDS) = 0

- a. Clause exists voluntary recourse to alternatives = 0.25
- b. Clause exists mandatory recourse to alternatives = 0.75
- c. No ISDS = 1

35. Scope of Claims (Ordinal)

- a. Any dispute relating to investment = 0b. Listing specific basis of claim beyond
- treaty (e.g. contractual disputes) = 0.33
- c. Limited to treaty claims = 0.66
- d. No ISDS = 1

36. Limitation on Provisions Subject to ISDS (Ordinal)

- a. No limitations = 0
- b. Limitation of provisions subject to ISDS = 0.75
- c. No ISDS = 1

#### 37. Limitation on Scope of ISDS (Cumulative)

- a. No limitations = 0
- b. Exclusion of policy areas from ISDS = 0.33
- c. Special mechanism for taxation or prudential measures = 0.33
- d. No ISDS = 1
- 38. Type of Consent to Arbitration (Ordinal)
  - a. Expressed or implied consent = 0
  - b. Case-by-case consent or no ISDS at all =
  - 1

- 39. ISDS Rules: Domestic Courts Forum
- Selection (Ordinal)

a. No mention of domestic courts or nvestor

- option = 0 (\*collapsed two categories\*)
- b. Yes, pre-condition for international
- arbitration = 0.5
- c. No ISDS = 1
- 40. Particular Features of ISDS (Cumulative)
  - a. None = 0
  - b. Limitation period = 0.25
  - c. Provisional measures = 0.25
  - d. Limited remedies = 0.25
  - e. No ISDS = 1
- 41. Interpretation (Cumulative)
  - a. None = 0
  - b. Binding interpretation = 0.25
  - c. Renvoi = 0.25
  - d. Rights of non-disputing contracting
  - party = 0.25
  - e. No ISDS = 1

42. Transparency in Arbitral Proceedings

(Cumulative)

- a. None = 0
- b. Making documents publicly available = 0.25
- c. Making hearings publicly available = 0.25
- d. Amicus curiae = 0.25
- e. No ISDS = 1