

# Learning from Incredible Commitments: Evolution and Impact of Bilateral Investment Treaties

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Dissertation submitted in partial fulfillment of the requirements for the degree of  
Doctor of Philosophy in the Department of Political Science  
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ABSTRACT

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# List of Abbreviations

## Abbreviations

|          |   |
|----------|---|
| BITs     | Bilateral investment treaties.                                  |
| FDI      | Foreign direct investment.                                      |
| ICSID    | International Centre for the Settlement of Investment Disputes. |
| IIA      | International investment agreements.                            |
| ISDS     | Investor state dispute settlement.                              |
| MNCs     | Multinational corporations.                                     |
| UNCTAD   | United Nations Conference on Trade and Development.             |
| UNCITRAL | United Nations Commission on International Trade and Law.       |

# Introduction

## 1.1 Motivation

Determining the capacity of international treaties to credibly commit governments to shift domestic policy is a topic of growing importance as research in political economy moves toward understanding the ways in which international factors coalesce with the domestic to shape state behavior (e.g., Rosendorff, 2005; Greenhill, 2010; Tir and Stinnett, 2012). Complicating analyses into the extent to which international treaties are able to influence state behavior, however, is the argument that countries choose to comply with agreements only as long as their terms remain aligned with state preferences, suggesting that the treaties themselves have no independent effect on behavior (Downs et al., 1996; Von Stein, 2005; Lupu, 2013). Simmons (2000) responds by arguing that signing onto an international treaty “raises expectations about behavior”. Once these expectations are raised, states face reputational costs for renegeing on treaty commitments that may incline governments to comply regardless of shifting state preferences. Additionally, international treaties can have built-in mechanisms to disincentivize noncompliance, such as providing opportunities for binding third party arbitration. By signing onto treaties for which these

types of compliance devices are present, states are argued to in effect be making a credible commitment – one for which the gain from deviation is less than the gain from compliance (Shepsle, 1991).<sup>1</sup> The use of these commitment devices to commit to a standard of behavior or policies are especially important for countries with a poor history of property rights protection (Kydland and Prescott, 1977).

Whether international treaties can credibly commit states to a standard of behavior has been a topic of particular interest in the foreign direct investment (FDI) literature. To attract FDI developing countries offer a variety of incentives to multinational corporations (MNCs) and make promises to treat invested assets fairly. Yet, there is a time inconsistency problem since governments, particularly those without a history of strong property rights institutions, may give in to short-term incentives to unfairly tax or expropriate the invested assets of MNCs. International investment agreements have come to be seen as a way in which developing countries can credibly commit to treat foreign invested assets fairly and thus attract greater levels of aggregate FDI inflows.

The most prominent type of international investment agreement through which developing countries have sought to make this commitment explicit are bilateral investment treaties (BITs). An UNCTAD report from 2000 even went so far as to claim that these types of agreements serve as the “most important instrument(s) for the international protection of foreign investment”. BITs are seen as providing a credible commitment because the terms that governments agree to when ratifying these agreements publicly deal with how foreign investment can be treated, and, consequently, are assumed to raise expectations about the quality of a country’s property rights institutions, reducing the riskiness of investments. Additionally, many BITs

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<sup>1</sup>Shepsle (1991) notes that a commitment may be credible in either a motivational or imperative sense. The distinction being that the former does not rule out the possibility of deviation, while for the latter actors are not free to deviate from the commitment. For most international treaties motivational commitments are the norm, which is the definition that we adopt above.

include dispute resolution mechanisms that enable investors who believe their assets have been unfairly treated to seek binding third party arbitration at independent tribunals, further disincentivizing noncompliance. A robust literature has developed to estimate the effect these agreements have on increasing FDI flows to developing countries (Egger and Pfaffermayr, 2004; Büthe and Milner, 2009a; Kerner, 2009; Allee and Peinhardt, 2011). Although findings vary, the consensus in the political science literature is that BITs serve as a credible commitment from developing countries to treat foreign invested assets fairly, which, as a result, enable developing countries to attract significantly more FDI.<sup>2</sup>

However, how can we reconcile the notion that ratifying a BIT can be considered a credible commitment with the increasing number of purported treaty violations? UNCTAD (2013a) notes that investment dispute cases have proliferated in the last decade and estimates that by the end of 2012 there were over 514 known treaty-based arbitration cases. The UNCTAD report goes on to posit that since many arbitration forums do not maintain public records, the actual number of cases is likely to be much higher. If developing countries were participating in BITs to make credible commitments, then why as the power of investors to file claims at arbitration bodies, like the International Centre for the Settlement of Investment Disputes (ICSID),<sup>3</sup> has been revealed, has the popularity of these agreements foundered (shown in Figure 1.1)?

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<sup>2</sup>See Sauvart and Sachs (2009) for a review of conflicting findings in the BITs literature.

<sup>3</sup>The ICSID is the predominant player in international investment dispute settlement. It is often explicitly referenced in the texts of BITs as a venue to resolve disputes.

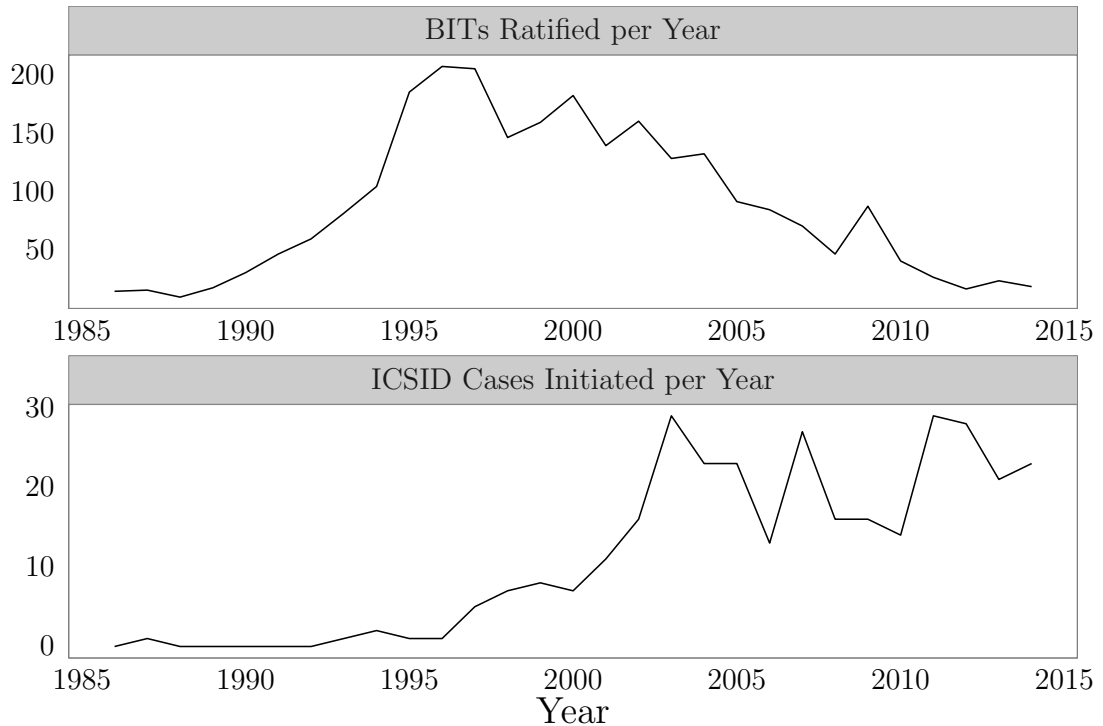


FIGURE 1.1: Number of new BITs ratified per year from 1960 to 2011 in the top frame. The bottom frame shows the number of new ICSID disputes per year over the same time frame.

In the wake of a number of disputes filed against South Africa at the ICSID, the South African Department of Trade and Industry explicitly remarked on how little was actually understood by the commitments enshrined in these agreements when they were ratified:<sup>4</sup>

“Prior to 1994, the RSA had no history of negotiating BITs and the risks posed by such treaties were not fully appreciated at that time. The Executive had not been fully apprised of all the possible consequences of BITs. While it was understood that the democratically elected government of the time had to demonstrate that the RSA was an investment friendly destination, the impact of BITs on future policies were not critically

<sup>4</sup>Bilateral Investment Treaty Policy Framework Review: Executive Summary of Government Position Paper, South African Government, Department of Trade and Industry, (June 2009)

evaluated. As a result the Executive entered into agreements that were heavily stacked in favor of investors without the necessary safeguards to preserve flexibility in a number of critical policy areas.”

South Africa is not alone in its reconsideration of the powers allotted to investors by these agreements. Following a number of recent disputes, India as well began a review of BITs with an eye towards limiting the ability of investors to take their cases to international arbitration panels. After facing multiple investor disputes, Ecuador, Bolivia, and Venezuela responded by withdrawing from the ICSID, and Argentina in 2013 announced that it is considering doing the same.<sup>5</sup> As countries have begun to realize the powers allotted to investors under BITs, they have moved to reconsider the terms prescribed by future investment agreements.

Ostensibly, BITs are the ideal international treaty. First, until just recently, they almost uniformly came with explicit dispute resolution mechanisms through which countries could face real costs for violation (Montt, 2009).<sup>6</sup> Second, the signing, ratification, and violation of them are easily accessible public knowledge.<sup>7</sup> Thus countries presumably would face reputational costs for violating these agreements. Yet, these compliance devices have not dissuaded states from violating these agreements. Even more interestingly, in recent years, both developed and developing countries have moved towards modifying the investor-friendly provisions of these agreements. These deviations from the expectations of the credible commitment argument raise important questions about the field’s assumptions regarding the ability of international treaties with commitment devices to effectively constrain state behavior.

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<sup>5</sup>Although withdrawing from the ICSID does not dismiss the ability of investors to seek compensation, these examples certainly illustrate that participating in BITs cannot just be assumed to be a commitment to economic liberalization.

<sup>6</sup>Montt (2009) notes that “numerous provisions of these treaties are identical”

<sup>7</sup>The most used international arbitration tribunal for adjudicating disputes under BITs is the ICSID, and all one has to do to determine the number of disputes a country is facing or has faced at this tribunal is to visit the ICSID website.

## 1.2 Goal of the Dissertation Project

The fact that a growing number of investors are accusing countries of breaking commitments to BITs, and that countries are responding to facing disputes at the ICSID by modifying these agreements raises questions about the validity of the credible commitment argument. In this project, I argue that in the euphoric rush to sign BITs countries made incredible commitments that did little to divert FDI flows or change expectations. The extant literature has argued that it is because of the dispute resolution mechanisms embedded within BITs and the fear of reputational damage that countries will comply with their terms. Yet, given that many countries rushed into these agreements without even taking the time to negotiate, the assumption that the primary motivation for forming these agreements is to make a credible commitment is tenuous. A senior investment lawyer called into provide expert testimony on behalf of the MNC in an ICSID proceeding asserted that, “BITs are very often pulled out of a drawer” and “not negotiated at all”.<sup>8</sup> Poulsen (2011) presents qualitative evidence from government officials responsible for negotiating these agreements that countries signed a number of these agreements without appreciating the commitments embedded within them; for them it was merely a marketing device to attract foreign investors.

If the credible commitment story is valid, BIT formation should primarily be a result of efforts to resolve credible commitment problems, meaning that “governments with little inherent credibility” should be “more likely to sign BITs than are governments known for their fair treatment of capital” (Elkins et al., 2006).<sup>9</sup> I show that resolving credible commitment problems has little to do with the formation of

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<sup>8</sup>Wintershall Aktiengesellschaft v. Argentine Republic, ICSID Case No. ARB/04/14, Award (Dec 8, 2008)

<sup>9</sup>Jandhyala et al. (2011) argue that they find evidence of this pattern of BIT formation using a directed-dyadic duration estimation approach.

these agreements. First, the literature so far has employed theoretical models that presume the formation of BITs are purely dyadic events, where countries make decision regarding the signing of BITs independent of one another. However, many of the hypotheses that have taken hold in the literature explicitly argue that state decisions to engage in BITs are tied to the actions of their FDI competitors (Elkins et al., 2006; Neumayer and Plümper, 2010; Jandhyala et al., 2011). The implication of this is that a country's decision to engage in a BIT is interdependent on the actions of others, and should be modeled in a network context to account for dependence between dyads and possible higher-order dependencies. I undertake such an analysis here, and show that the proliferation of BITs has little to do with resolving credible commitment problems. Instead an important explanation that emerges revolves around the notion that since BITs were so commonplace and perceived as costless, countries typically used these agreements to strengthen and highlight existing political relationships. Additionally, through approaching the problem of BIT formation through a network based perspective, I not only better approximate the process through which this system was created but also show that existing explanations have little support.

Given that participation in these agreements has little to do with countries seeking to make a credible commitment, I provide a reevaluation of the evidence that BITs can significantly impact the level of FDI flows that developing countries can expect to receive by participating in this system. First, I revisit an empirical piece that found evidence of a linkage between BITs and FDI, and show that even there the substantive effect of a BIT after incorporating appropriate levels of uncertainty is nil. Second, the literature so far has done little in actually evaluating the causal mechanism through which BITs are purported to affect FDI. Specifically, BITs are hypothesized to affect FDI because by participating in them countries should be able to improve perceptions of how strongly they respect the rights of foreign investors or their respect for property rights more broadly. Thus far the existence of this causal

mechanism has simply been assumed in the literature. I show that simply ratifying a BIT has no significant effect on perceptions of a country's investment climate or property rights regime, more broadly.

The obvious question the previous two chapters raise is do BITs matter at all. The principal argument that I offer in this last chapter is that BITs are certainly unique agreements, but their effect is contingent on whether the investment community believes that government commitments are credible. Credibility does not come from the agreement itself, but by the observation that governments are actually willing to stand by their commitments in the face of costs. The opportunities for countries to make these agreements credible have developed as in recent years the number of BIT-related disputes has increased. In response to these disputes, a number of states have attempted to modify the terms of existing and future BITs, so as to hinder the possibility of future disputes. This shift is important. Before the spurt of disputes in the late 1990s, most developing countries simply ratified model BITs, which led to a system of rather homogeneous investment agreements. Thus when countries such as Argentina or Chile signed a BIT with a capital-exporting partner, from the perspective of a foreign MNC there was little from the agreement itself to distinguish the relative commitments of the two to creating a more stable investment environment for foreign firms. With variation in the terms of BITs, however, foreign MNCs and other investors may be able to more clearly ascertain the relative commitments of developing countries. The last part of this dissertation project shows that countries maintaining their commitments to BITs that provide investors comprehensive rights with regards to the settlement of disputes are rewarded with substantive changes to perceptions of their investment environment and in terms of FDI.

The findings from this project extend beyond just the BITs literature. BITs are simply an ideal treaty through which to assess the effect of international treaties on state behavior because of their explicit and public devices for ensuring compliance.

The fact that these devices have not worked in enabling countries to attract FDI flows or changing expectations raises important questions for our understanding of the efficacy of commitment devices in international treaties. The failure of BITs indicates that simply participating in a treaty with strong motivational commitment devices is not enough for a country to resolve the credibility problem it faces vis-à-vis treaty targets, actors which the treaty seeks to influence (i.e., in the case of BITs the targets are foreign investors and MNCs). I argue that these treaties failed in their purported objective of increasing FDI into developing countries because treaty targets had no way in which to differentiate between countries seeking to make a credible commitment. Further much of the current political science literature on the role of treaties imparts to them a level of permanence that should not be assumed. Countries have shown themselves quite willing to exit and modify treaties that no longer suit their interests, thus for a treaty to truly have an effect a country's commitment to it needs to be made credible.

## Searching for a Costless Signal: Network Dynamics and BITs

**Abstract:** Developing countries seemingly rushed to participate in bilateral investment treaties (BITs) in the 1990s. Since then these agreements have gone on to form the edifice for “a common lexicon of investment treaty law” (McLachlan et al. 2007), which has shown itself to be uniquely adept at empowering transnational actors, such as MNCs, to extract compensation from states and even threaten domestic policy objectives. The significant costs faced by states poses an obvious question of the BIT regime, namely, what are the dynamics under which these agreements proliferated in the international system from 385 in 1989 to almost 3,000 by 2015? I argue that to understand the haphazard way in which these agreements proliferated across the international system we have to take into account political rather than economic dimensions, namely, that these agreements were seen by some countries as a costless tool through which to enhance or underscore existing interstate political relationships. Further in answering this question, much of the extant literature has utilized directed-dyadic duration models. Yet, these models

cannot account for the effect of network pressures in the international system. By disregarding these network attributes, researchers miss a wealth of structural information. Using a longitudinal network based approach, I make three contributions to the existing literature: first, I highlight the importance of studying these types of agreements in a network context, second, I show that there is little support for the extant explanations in the literature, and third, I highlight the importance of interstate political relations in explaining the proliferation of BITs.

Developing countries rushed to participate in bilateral investment treaties (BITs) in the 1990s. The purported motivation for this euphoria lay in the claim that by signing these treaties countries would be able to attract greater levels of foreign investment. The success of these agreements in matching those expectations is quite unclear, but they have certainly proven to be consequential. McLachlan et al. (2007) note that these agreements now provide the edifice for “a common lexicon of investment treaty law”. Transnational actors, such as multinational corporations (MNCs), have taken notice as they increasingly use BITs as a tool to assert their property rights in both developed and developing countries. For example, the government of Uruguay passed tobacco regulations prohibiting cigarette makers from marketing more than one product under a single brand name and requiring that 80% of cigarette cartons are covered with health warnings.<sup>1</sup> Philip Morris almost immediately requested arbitration at the International Centre for the Settlement of Investment Disputes (ICSID) under a 1991 BIT between Uruguay and Switzerland. In their request for arbitration, Philip Morris alleged that these pieces of regulation significantly harm the sale of their products and constitute a failure to respect the

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<sup>1</sup>These regulations were presented under two separate government actions. The prohibition against marketing multiple products under a single brand name was passed in August 2008 under Ordinance 514 of the Ministry of Public Health. The requirement that 80% of cigarette cartons be covered in health warnings was put forward under Presidential Decree N<sup>o</sup> 287/009 and came into force on December 12, 2009.

company's intellectual property rights.<sup>2</sup> Developed countries have dealt with legal challenges stemming from these agreements as well. Following Australia's enactment of the Tobacco Plain Packaging Act in 2011, Philip Morris requested arbitration at ICSID under the Hong Kong-Australia BIT.<sup>3</sup>

However, what makes BITs unique is not that they are being used by tobacco companies to challenge public health policies,<sup>4</sup> instead BITs are peculiar because unlike other trade and investment agreements very little actual negotiation went into many of these treaties. Alvaro Galindo, a lawyer charged with coordinating Ecuador's international arbitration defense, recently remarked at the British Institute for International and Comparative Law (BIICL) that developing countries systematically underestimated the risk associated with BITs (Peterson, 2009b). This is not surprising considering that at least some BITs were simply concluded over weekend UNCTAD conferences (Olof Karsegard and Blom, 2006). An official responsible for negotiating these agreements from Chile even remarked that "we signed a lot of treaties not knowing sometimes what we were committing ourselves to" (Poulsen, 2011).

Considering the haphazard way that some countries entered into these agreements, it is not surprising that the increasing number of ICSID disputes is leading to a reevaluation of the utility of agreements, like BITs, containing ISDS provisions. The Indonesian government recently suggested that it would terminate all of its

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<sup>2</sup>Philip Morris Brands Sàrl, Philip Morris Products S.A. and Abal Hermanos S.A. v. Oriental Republic of Uruguay, ICSID Case No. ARB/10/7, Request for Arbitration (19 February 2010)

<sup>3</sup>Philip Morris Asia Limited v. The Commonwealth of Australia, UNCITRAL, Written Notification of Claim pursuant to Agreement Between the Government of Hong Kong and the Government of Australia for the Promotion and Protection of Investments (22 June 2011). The central argument raised by Philip Morris is that the "[p]lain packaging legislation will result in the expropriation of PM Asias investments due to the substantial deprivation of the intellectual property and goodwill".

<sup>4</sup>R.J. Reynolds, for instance, has challenged plain packaging regulations in Canada under the North American Free Trade Agreement (Porterfield, 2011). Additionally, countries such as Indonesia, Cuba, the Dominican Republic, Honduras, and Ukraine have challenged tobacco regulations in the United States and Australia before the World Trade Organization (Mitchell and Sheargold, 2014).

BITs (Embassy, 2014), in response to a growing concern that these agreements enable MNCs to unduly “pressure developing countries” (Philipps and Milburn, 2014; Bland and Donnan, 2014).<sup>5</sup> Further in response to debates about whether or not to include BIT like provisions in the Transatlantic Trade and Investment Partnership (TTIP), a number of governmental officials from the European Union (EU) have voiced significant concerns. The European Commission President, Jean-Claude Juncker, in a speech to the European Parliament asserted that domestic policies of EU countries will not “be limited by special regimes for investor-to-state disputes” (Juncker, 2014). The Economic Minister of Germany, Sigmar Gabriel, also warned that many in his country fear that through ISDS provisions “states could be pressur[ed] and policy objectives circumvented by the threat of damages” (Vasagar and Oliver, 2014).

The significant monetary costs and threats to domestic policy objectives pose an obvious question of the BIT regime, namely, what were the dynamics under which these agreements proliferated in the international system from 385 in 1989 to almost 3,000 by 2015? There have been a number of pieces in the existing literature that have sought to provide an explanation,<sup>6</sup> and the two major hypotheses put forward are, first, that countries sign BITs to resolve credible commitment problems or, second, that the proliferation of BITs is a result of a competition for capital. One crucial empirical assumption underlying the testing of both these frameworks, however, is that a BIT should only take place between a developed and developing country. Yet, by 2014 BITs between developing countries account for almost 45% of the global network of BITs. By making this assumption the extant literature has been able to model the process of BIT formation through a simple directed dyadic

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<sup>5</sup>The particular ICSID case that seems to have manifested these fears was brought by Churchill Mining Plc (Ruff, 2014; Beckett et al., 2014; Tevendale and Naish, 2014).

<sup>6</sup>See Swenson, 2005; Elkins et al., 2006; Plumper and Neumayer, 2010; Jandhyala et al., 2011; Lupu and Poast, 2013; Neumayer et al., 2014.

duration framework, where the set of senders are limited to developed and receivers to developing countries. Not only does this artificial imposition of structure on the data complicate adequate testing of the extant hypothesized mechanisms underlying BIT formation but it also precludes alternative explanations.

In this paper, I make three contributions to the existing literature. First, I argue that the system of BITs in the international system should be conceptualized as a network, in which a country's decision to form a BIT is endogenous to the network of existing investment agreements.<sup>7</sup> Key to this idea is that the likelihood of an agreement between a pair of countries is influenced by already existing third party ties that the pair share. Second, when employing this network based framework I show that there is little empirical evidence to lend support to either the credible commitment or competition for capital stories. Third, I argue that to understand the haphazard way in which these agreements proliferated across the international system we have to take into account political rather than economic dimensions, namely, that these agreements were seen by some as a costless tool through which to enhance or underscore existing interstate political relationships.

The rest of this paper proceeds as follows. I discuss existing arguments about BIT formation, introduce my argument about how these agreements proliferated through political relationships, and lay out the theoretical argument for a longitudinal network based approach. Next, I outline the statistical model along with the data used in my empirical analysis. Last, I provide empirical results and conclude.

## 2.1 Credible Commitments

Elkins et al. (2006) note that in recent decades BITs have become “the most im-

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<sup>7</sup>The insight that the international system is inherently a network and must be studied as such has become increasingly prevalent. For example, see work on trade flows (Ward and Hoff, 2007), alliances (Cranmer et al., 2012), preferential trade agreements (Manger et al., 2012), and other bilateral agreements (Kinne, 2013).

portant international legal mechanism for the encouragement and governance” of FDI into developing countries. Bütthe and Milner (2009b) echo this point and add that BITs boost FDI because they enshrine commitments to open markets and liberal economic policies from the developing countries that sign them. The manner in which these international agreements provide this commitment are through the clearly defined and public rules that they prescribe for the treatment of foreign investment. The content of BITs address at least three key areas: the establishment of conditions for investment, treatment of FDI post investment, and dispute settlement (Jandhyala et al., 2011). BITs typically ban discriminatory treatment against foreign investors, and even go so far as to provide guarantees of compensation for expropriated property or funds (Neumayer and Spess, 2005). The dispute settlement mechanism included in many of these agreements allows foreign investors to challenge almost any newly passed public policy regulation affecting their investment. Further the adjudication for the violation of these agreements takes place not in the national courts of the violating country, but in international arbitration tribunals, such as the ICSID.

Given this framing scholars have argued that “governments with little inherent credibility are more likely to sign BITs” (Elkins et al., 2006). This presumes that developing countries with legal systems that are already perceived to have impartial and fair property right regimes are less likely to sign BITs, as they need not provide any additional signals of their credibility. Further the literature assumes that developing countries when signing these agreements have carefully considered the ex post costs of violating them. The implication being that only states willing and needing to make a credible commitment will participate. However, if states were seeking to make credible commitments, then why the spate of purported violations in recent years? Further why are so many (e.g., Indonesia, India, South Africa, etc.) seeking to renegotiate or terminate the BITs that they have signed?

One possible explanation is that states did not read these agreements as carefully as the literature assumes. Fecák (2011) notes that as the parliament of Czechoslovakia was ratifying over a dozen BITs between 1991 and 1992 there was no discussion about the dispute settlement mechanism embedded within these agreements. Additionally, Poulsen (2011) presents a plethora of evidence that states were neither deliberate nor cautious when signing BITs. In one interview, an official responsible for negotiating BITs for the Dominican Republic remarked that these agreements were just a “marketing sign for the country”. Even in Pakistan, the first developing country to have signed a BIT in 1959, awareness about the commitments these agreements entailed appears to have been minimal. Makhdoom Khan, the Attorney General of Pakistan from 2001 to 2007, when asked by the Secretary of Law about a case brought in the ICSID by SGS S.A., said that he had to search for the acronyms ICSID and BIT using Google (Poulsen and Vis-Dunbar, 2009).

In the wake of a number of disputes filed against South Africa at the ICSID, the South African Department of Trade and Industry explicitly remarked on how little was actually understood by the commitments enshrined in these agreements when they were ratified and began a process of reassessing the commitments it had made.<sup>8</sup> South Africa is not alone in its reconsideration of the powers allotted to investors by these agreements. Following a number of recent disputes, India as well began a review of BITs with an eye towards limiting the ability of investors to take their cases to international arbitration panels. After facing multiple investor disputes, Ecuador, Bolivia, and Venezuela responded by withdrawing from the ICSID, and Argentina in 2013 announced that it would be doing the same.<sup>9</sup>

Despite growing evidence that the formation of BITs deviated from the expect-

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<sup>8</sup>Bilateral Investment Treaty Policy Framework Review: Executive Summary of Government Position Paper, South African Government, Department of Trade and Industry, (June 2009)

<sup>9</sup>Although withdrawing from the ICSID does not dismiss the ability of investors to seek compensation, these examples certainly illustrate that participating in BITs cannot just be assumed to be a commitment to economic liberalization.

tations of the credible commitment argument, few have been willing to abandon this logic.<sup>10</sup> For example, Elkins et al. (2006) in their work, showing that the diffusion of BITs is driven by a competition for FDI, find little support for the credible commitment argument, but argue that it must still matter (see pg. 843). Jandhyala et al. (2011) attempt to provide an explanation for the null finding of Elkins et al. by showing that the formation of BITs can be divided into three periods; in the first and third periods, states acted in accordance with the credible commitment logic but in the second they were simply responding to diffusion pressures. However, Jandhyala et al. (2011) provide only an indirect test of the credible commitment argument. Instead of examining whether dyads with differential reputations for treating foreign investment are more likely to sign BITs, they examine differences in polity scores and number of veto players. Additionally, Lupu and Poast (2013) try to provide evidence that BITs follow the credible commitment logic using a “k-adic” framework.

## 2.2 Competition for Capital

The second primary argument for the proliferation of BITs is the competition for capital hypothesis suggested by Elkins et al. (2006) and refined by Plumper and Neumayer (2010). At its core the argument suggests that BIT formation is a result of capital importing countries (developing countries) competing with one another to attract FDI from capital exporters (developed countries). More specifically, BIT formation between a capital importer,  $i$ , and a capital exporter,  $j$ , is more likely when other capital importers,  $\neq i$ , sign BITs with  $j$ . Thus developing countries competing for capital feel pressure to sign BITs because not doing so could divert FDI flows from their countries.

However, there are a number of problems with the competition for capital frame-

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<sup>10</sup>The recent work of Poulsen and Aisbett (2013) is an important exception here. Additionally, legal experts such as Yackee (2010) and Montt (2009) have also challenged many aspects of this argument.

work. Though this argument has found strong empirical support in dyadic analyses, it places assumptions on how BITs should be structured in the international system. Specifically, it implies that a type of hub and spoke structure should manifest, where central nodes are capital-exporting countries and capital-importing countries are at the spokes. Links between the spokes should be rare as under this logic there is little material incentive for developing countries to sign BITs with each other.

This, however, does not at all resemble the structure of BIT formation in the international system. As an example, I trace the pattern of BIT formation between a developed and small group of developing countries in Figure 2.1. The developing countries chosen here are ones that would be considered competitors for capital under the definitions used in the extant literature. The first link in this small group occurs in 1991 when Canada signs a BIT with Argentina. The competition for capital story would predict that the linkages resulting next should involve Canada and the other countries but none between developing countries. This clearly is not what happens in the subsequent years. Following the Argentina-Canada BIT, there is no other instances of BIT formation involving Canada until 1996. Then in 2006 we see that every country in this small group is connected by a BIT thus forming a *clique*.<sup>11</sup>

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<sup>11</sup>A clique is a network term used to describe an instance where a subset of nodes in a network are all connected to each other. Thus if we were to take the five countries shown in Figure 2.1 as our subset of nodes, they could only be described as a clique from 2006 and beyond.

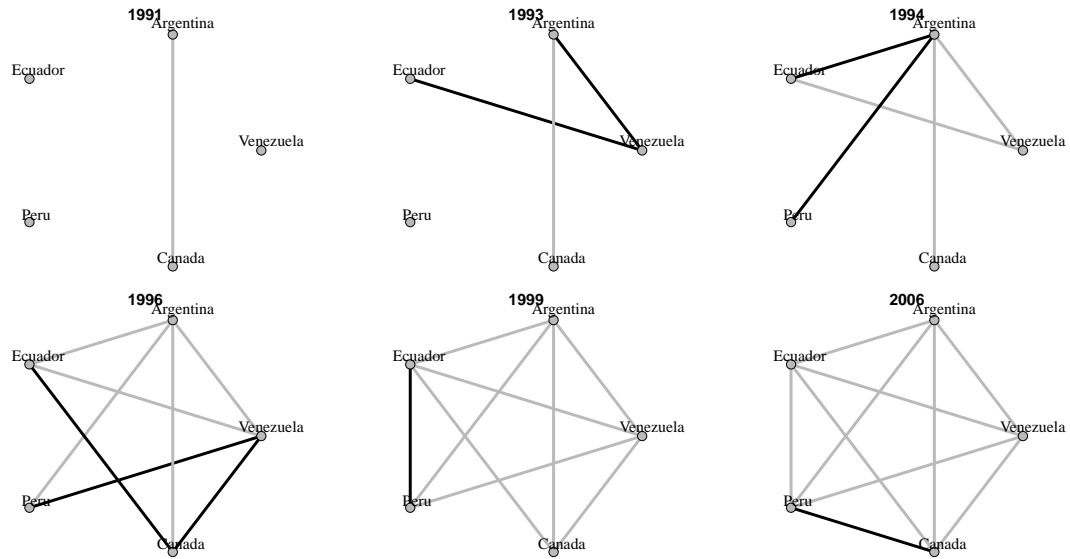


FIGURE 2.1: Pattern of BIT formation for five countries starting at the first initiation of a BIT and then updating the network every year a new treaty was signed.

Perhaps the emergence of a clique in the small group of countries in Figure 2.1 is an exception. To ensure that this is not the case, I calculate the number of cliques that emerged in the BIT network from 1960 to 2012. Cliques can range in size in the BIT network they range from two to fourteen. A clique of two simply indicates that the two signatories to the BIT have not signed a BIT with any other country that is connected by a treaty to both of the signatories. A clique of fourteen indicates that all fourteen countries are connected to each other by a BIT.

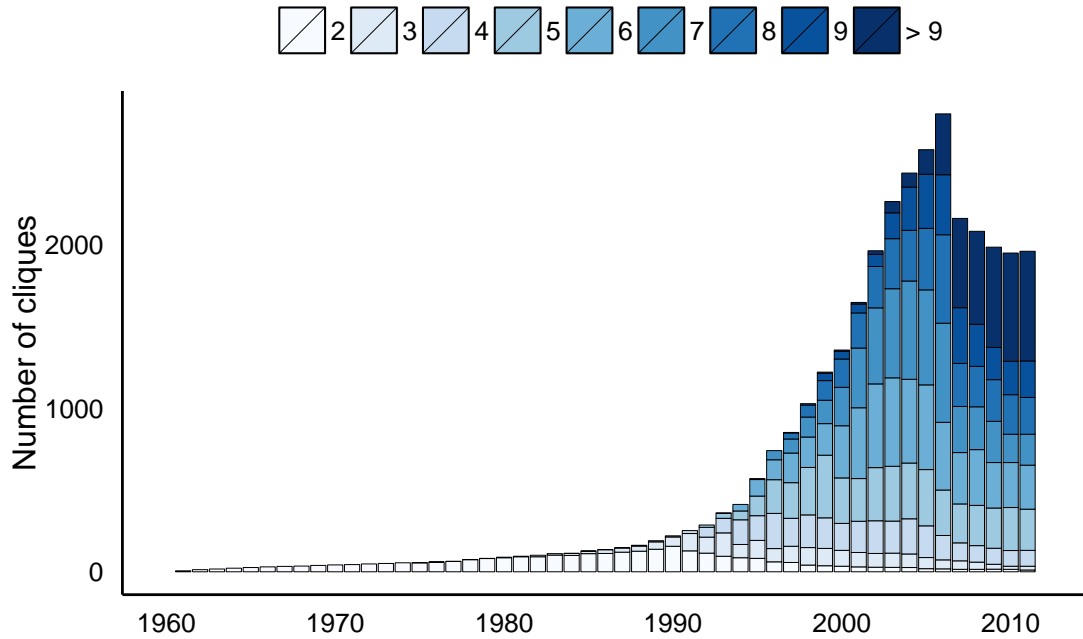


FIGURE 2.2: The number of cliques by size in the BITs network for every year from 1960 to 2011.

In Figure 2.2, I show the number of cliques that formed in the BIT network from 1960 to 2011, varying colors indicate differing clique sizes. Up until the late 1980s, the size of cliques in the system were uniformly restricted to two. Since then, however, we can see that the size of cliques in the network grew rapidly. The emergence of these dense subgroups cannot appear under the competition for capital framework. From Figure 2.2, we can see that after 1990 cliques in the international system involve three or more actors almost uniformly, meaning that at best the competition for capital framework may only apply to the few BITs that were signed before that time. This is not a network in which we only have capital-importing countries signing agreements with capital-exporters.

## 2.3 Political Motivations to BIT Proliferation

Often ignored in studies of how and why international agreements, such as BITs, form is the political dimension. Though there may be a hope that certain economic transfers result from the agreement, the motivations for signing are often not just about investment or trade. In policy and press briefings, the idea that countries pursue the formation of economic agreements in order to fulfill political objectives is commonplace. Former Secretary of State, Hillary Clinton, referred to the political dimension motivating the formation of treaties governing economic relations as “economic statecraft” (Clinton, 2011). The Japanese prime minister, Shinzo Abe, in a speech in front of the United States Congress remarked that the Trans-Pacific Partnership Agreement (TPP) is ultimately about a deepening in existing political relationships, and that “its strategic value is awesome”.<sup>12</sup>

The use of economic agreements in this way is a factor in why BITs propagated through the international system so rapidly. BITs are an ever easier method through which states can affirm and possibly strengthen their existing interstate political relationships. Easier because the wording of many of the provisions within BITs during their most popular phase was relatively consistent, as a result, very little negotiation was necessary (Montt, 2009). For example, officials from South Korea note that they did not foresee the implications BITs would have and that they had often simply replicated the texts of previous agreements that they had signed (Kim, 2011). Even one of the more controversial provisions, the “fair and equitable treatment” obligation, is “a standard that is repeated, more or less identically, in most of the . . . 2500 investment treaties in force at present”.<sup>13</sup>

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<sup>12</sup>“Toward an Alliance of Hope,” Address by Shinzo Abe to the United States Congress Joint Session, Washington, D.C. (April 29, 2015).

<sup>13</sup>International Thunderbird Gaming Corporation v. Mexico, UNCITRAL Ad Hoc Arbitration, Award (26 January 2006).

Given this these agreements quickly came to be seen as an easy way through which states could at least reaffirm their relationships with states that share similar preferences. A senior investment lawyer called into provide expert testimony on behalf of the claimant in an ICSID proceeding asserted that, “BITs are very often pulled out of a drawer . . . and are put forward on the occasion of state visits when the heads of states need something to sign” so they “are very often not negotiated at all”.<sup>14</sup> Additionally, in 2006, the former Attorney General of Pakistan, Makhdoom Khan, noted in a gathering of investment arbitration specialists that BITs were essentially seen as “photo-op agreements”, something that countries would sign with a visiting delegation so as to highlight and reaffirm their relationship (Peterson, 2008). Further this pattern of BIT formation did not just occur between developed and developing countries, but also between just developing countries. The process through which this would unfold is typically a developed-developing country would first sign a BIT, and then that developing country would essentially take that same BIT and sign it with a number of other developing countries (Malik, 2010b). A good example of this is the case of South Africa, which essentially used the South Africa-United Kingdom BIT as a template for future treaty negotiations with others such as Mozambique.

Thus I argue that an important explanation for the proliferation of BITs is that countries simply used what they considered costless treaties as a component of their foreign policies. Though it is obvious now that they were wrong in assuming that these agreements were costless, or that they would provide much in the way of benefits, this pattern of forming BITs with politically relevant states is an important piece to understanding how the network of BITs developed.

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<sup>14</sup>Wintershall Aktiengesellschaft v. Argentine Republic, ICSID Case No. ARB/04/14, Award (Dec 8, 2008)

## 2.4 Depicting the BIT Network

Apart from flaws in the theoretical frameworks that have been used to explain BIT formation, there is also a more general problem with how scholars have modeled BIT formation. In Figure 2.3, I trace BIT formation among dyads from 1960 to 2012. The nodes represent individual countries and colors correspond to geographic position, legend linking colors to countries shown on top left. Nodes of potential capital-exporting countries are designated by circles while capital-importing country nodes are designated by diamonds. I follow the approach of Plumper and Neumayer (2010) in defining the list of capital-exporting countries as Canada, United States, Western European countries, Japan, Australia, and New Zealand. This provides a list of 23 countries, remaining countries in the international system are classified as capital-importers.<sup>15</sup> Edges connecting nodes in the network indicate that within the noted five year interval the two countries signed a BIT.

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<sup>15</sup>Lupu and Poast (2013) also employ this approach in a recent working paper on BIT formation.

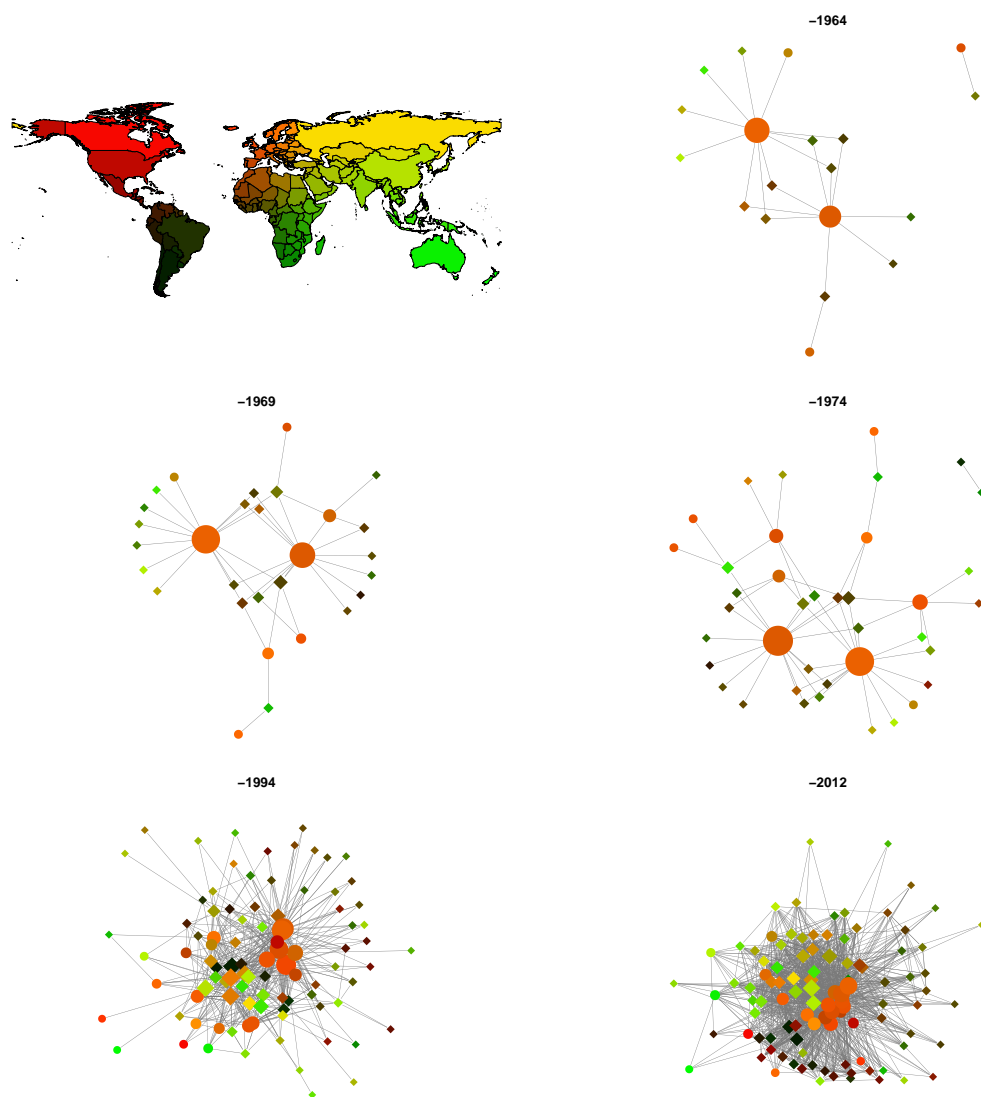


FIGURE 2.3: Network of Bilateral Investment Treaty Signings from 1960 to 2012. I show snapshots of the cumulative network by five different time points to save space. Within each network the nodes are colored by the position of countries in the map on the top left. Circular nodes represent capital-exporting countries and diamond-shaped nodes represent capital-importing countries. Size of nodes correspond to their degree relative to the other nodes in the network and edges connecting nodes indicate that by the noted time point the two countries signed a BIT.

In analyzing this network, the extant literature has exclusively used the directed-dyad as their unit of analysis. Within this directed-dyad framework, capital-exporters are modeled as the senders of BITs and capital-importers the receivers. This implies that nodes can be divided into disjoint sets and that edges should only form between nodes from differing sets. The network in Figure 2.3 does exhibit this bipartite structure for BIT formations occurring between 1960 and 1969. Yet, as early as 1970-1974, we begin to see cases of capital-importing countries signing these agreements amongst themselves.<sup>16</sup> Plumper and Neumayer (2010) and Lupu and Poast (2013) choose to resolve these abnormalities by excising those observations from the dataset. If I employed a similar approach here, I would be discarding over 900 instances of BIT formation from my analysis. Further Poulsen (2009) reports that just by 2009 40% of BITs in the global network occurred between developing countries. By simply removing datapoints which do not correspond to our assumptions about how BIT formation should occur, the obvious question that arises is what exactly are the extant studies employing this approach actually explaining.

Elkins et al. (2006) and Jandhyala et al. (2011) skirt this issue by defining the capital-exporter and importer of a BIT based on their relative level of development, as measured by GDP per capita. Here there is no assumption of a bipartite network, instead a country that is considered a capital-exporter in one dyad could be a capital-importer in another. This framework, however, is also problematic. For example, Hungary and Uruguay signed a BIT in 1989 and the GDP per capitas for the two were \$2782.71 and \$2676.19, respectively – according to the World Bank – an inconsequential difference that undermines the idea that one can be considered a capital-importer and another a capital-exporter. Further as Figure 2.4 highlights there is a high degree of variation in the relative GDP per capita values for BIT

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<sup>16</sup>Paraguay and South Africa signed and ratified a BIT in 1974 and Kuwait signed a BIT with Tunisia in 1973.

signatories. In some cases the differences are quite stark but in many others there is at most a minimal difference.<sup>17</sup>

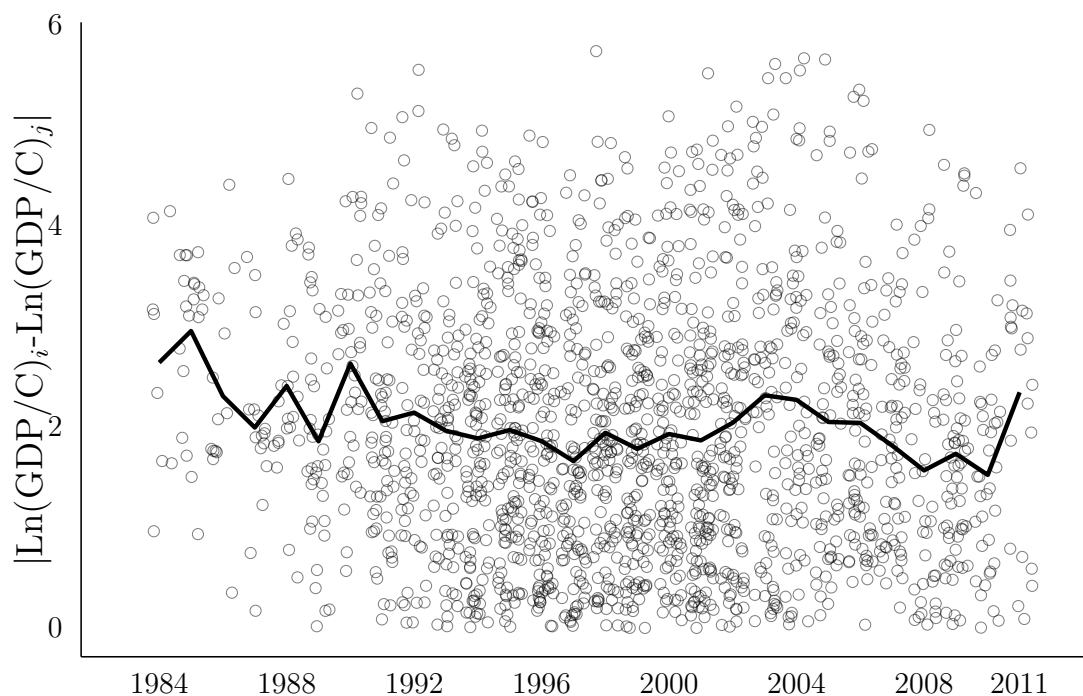


FIGURE 2.4: The line denotes the mean absolute differences in the logged, real GDP per capita values of BIT signatories from 1984 to 2011. The points represent differences in particular treaties.

This then raises the question of the appropriateness of depicting BIT formation through a directed-dyadic framework. The approach of defining a set of capital-exporting countries from the beginning forces us to excise data that does not fit our preconceptions of how BIT formation should take place, and the approach of just comparing relative levels of development can lead to trivial distinctions in capital-exporters and importers. Thus to avoid arbitrarily throwing out data or imposing artificial structure on the data, I employ an undirected approach in this analysis.<sup>18</sup>

<sup>17</sup>Trying to enforce this distinction on the data is further complicated by UNCTAD sponsored conferences during which developing countries end up negotiating BITs with each other (Karsegard, 2006).

<sup>18</sup>An undirected approach will not interfere with testing the credible commitment logic in the

## 2.5 A Network-Based Approach

The modeling approach most often used in the literature to analyze not only the formation of BITs but international treaties in general is dyadic in design.<sup>19</sup> For BITs, the extant literature has employed a directed-dyad duration approach to explain the time until a pair of countries concludes a BIT. This approach assumes that given the other covariates in the model, the formation of an agreement between countries is independent of the formation of agreements among other countries in the network (Beck et al., 1998).

To appropriately model interdependencies in dyadic data, a network based approach needs to be employed. Not accounting for interdependencies in dyadic data can cause bias in the errors and coefficients of parameters that “can range from the relatively trivial to the catastrophic” (Cranmer et al., 2012). In this project, employing a network analysis is important but even more crucial is using a model that can trace the evolution of the BIT network over time. As shown in Figure 2.3, the structure of BITs in the international system has undergone profound changes since the first BIT was signed between Pakistan and Germany in 1959.

Further a network based approach enables us to incorporate network level covariates that, I argue, are essential in explaining the evolution of the BIT network. Specifically, I focus on a class of endogenous network based effects, which enable us to examine the evolution of a network using characteristics of the network itself. The first endogenous effect that I introduce here is a concept described as “preferen-

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extant literature. The credible commitment logic simply states that countries with differential reputations with regards to the treatment of foreign investment can resolve fears of investment mistreatment by signing a BIT. The signing of the BIT bridges the reputational gap between the two countries by committing them both to a certain standard of behavior. Thus the credible commitment logic just implies that BIT formation should be more likely among dyads for which a reputational gap exists, a hypothesis that we can test in an undirected framework.

<sup>19</sup>See Mansfield and Milner (2012) for an example of this in the preferential trade agreement literature. Though this is changing, recent examples of novel network applications in IPE include Warren (2010), Cranmer et al. (2012), Manger et al. (2012), or Kinne (2013).

tial attachment” (Barabási and Albert, 1999). This is a degree-based effect, which hypothesizes that nodes in a network with a high number of linkages will attract or form even more linkages in the future because they are so “popular” in the network. In Figure 2.5, I show the top ten countries by the number of BITs signed (i.e., degree) for 1970 through 2010 by decade. Countries, such as Switzerland and Germany, have been very active participants in BITs, and were particularly active between 1980 and 2000. Since 2000, a number of developing countries such as China, Egypt, and Romania have been aggressively expanding their own BIT portfolios. Incorporating this popularity effect is important because it captures the idea that there are a set of countries in the network that have made participation in the BITs regime a core part of their economic foreign policy.

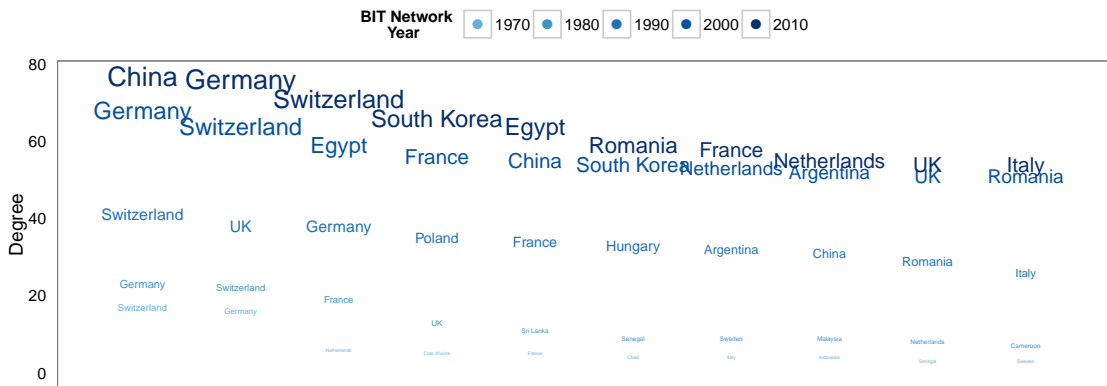


FIGURE 2.5: Degree statistics by the number of BITs countries have signed by snapshots in time from 1970 to 2010, lighter colors in the chart indicate earlier years. Only the top 10 countries in each decade are shown. Countries are ranked from left (highest) to right (lowest) and the text is sized by the number of BITs a country has signed.

Another endogenous network effect that I measure here deals with the concept of closure. This refers to a process where nodes within a network form large clique like structures, as opposed to small groups spread evenly across the network (Wasserman and Faust, 1994). In the case of BITs, Figure 2.2 already showed evidence for these types of densely connected subnetworks. The implication of these types of networks

is that countries are more likely to form ties to others with whom they are already indirectly connected.

One reason why these types of subnetworks may be so prevalent in the context of BITs is because of the role that organizations like the United Nations Conference on Trade and Development (UNCTAD) played in promoting BITs in the 1990s and early 2000s. Specifically, UNCTAD would host multilateral conferences where participating developing countries were encouraged to negotiate and sign BITs with one another (Karsegard, 2006). A BIT negotiator who attended one of these conferences, remarked that, “UNCTAD would actively promote BITs to be signed amongst the participants – often within as little as a few hours – and I couldn’t see that any serious considerations were given by the countries whatsoever” (Poulsen, 2010). Between just 2000 to 2005, these types of UNCTAD hosted conferences led to a total of 160 new BITs (Lupu and Poast, 2013). This example illustrates a way in which the formation of linkages between any given pair of actors is not independent of linkages throughout the network.

Additionally, shared indirect ties between a pair of countries may convey information to each about what the other is willing to accept. Though, in general, BITs almost universally enshrine the “same set of core substantive standards of treatment” for foreign investment (Montt, 2009), there are notable differences in these treaties by the inclusion of investor-state dispute settlement (ISDS) provisions (Yackee, 2007b). Countries have become increasingly sensitive to the inclusion of ISDS provisions as the consequences of haphazard commitments are becoming increasingly apparent. Countries, such as Bolivia, Ecuador, South Africa, and Indonesia, have responded to facing disputes at ICSID because of BITs by unilaterally terminating agreements with ISDS provisions (UNCTAD, 2013b). Though unilateral termination does not relieve a country of its obligations, it certainly provides information about who that country will engage in BITs with next, if at all. Venezuela, for example, terminated

its BIT with the Netherlands in early 2008, and since then Venezuela has only had BITs come into force with countries which agreed to not include provisions enabling investors to take arbitration claims to the ICSID.

A more careful approach to forming BITs is not unique to Venezuela, but a part of larger trend between both developed and developing countries (Haftel and Thompson, 2013; Manger and Peinhardt, 2013). India, for instance, is turning to only signing BITs with countries that agree to exclude provisions, which India sees as, unduly privileging foreign investors (Malik, 2010a). Additionally, Switzerland and China have renegotiated an existing BIT to narrow the circumstances under which foreign investors can take claims to arbitration (Peterson, 2010). More careful negotiation on the part of countries and a reconsideration of past agreements are engendering a more meaningful structure within the BITs network. Specifically, the various ties that a given country has are reflective of that country’s preferences with regards to, for instance, the role of ISDS in BITs. Thus I expect that two countries sharing a high number of indirect ties will be substantively more likely to sign a BIT.

### *Modeling*

To incorporate endogenous network effects into a model on BIT formation, I use a framework developed by Snijders (2001) referred to as “stochastic actor-oriented models” (SAOM).<sup>20</sup> This is a longitudinal network approach that enables us to use the evolving network itself as the dependent variable. A key distinction between this approach and traditional dyadic analyses is that there are no assumptions about the independence of actors or ties within the network, which is essential if

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<sup>20</sup>The temporal exponential random graph model (TERGM) developed by Hanneke et al. (2010) and introduced to political science by Cranmer and Desmarais (2011) is a similar approach used to model binary longitudinal relational data. TERGM and SAOM share a similar mathematical core, the exponential random graph model (ERGM), but differ in their estimation approach and in how they deal with temporal dynamics (Leifeld and Cranmer, 2014). I implement the TERGM approach using the xergm R package developed by Leifeld et al. (2014), the results I obtain with the TERGM and SAOM approaches are substantively the same. I opt for the SAOM approach here because it performs more accurately out-of-sample on a variety of metrics.

states condition decisions regarding BIT formation on the behavior of others. Beck et al. (1998) have already noted that dyadic analyses rest on the assumption that the relations between all pairs of actors are independent conditional on the covariates entered into the model. If dependencies between pairs of actors exist then the models are misspecified and biased parameter estimates may result (Franzese Jr and Hays, 2006).

This approach also allows the specification of covariates exogenous to the network, meaning that we can incorporate covariates to account for the extant country and dyadic level explanations of BIT formation. The added benefit of including these covariates within this network based approach is that our estimation of the effect of those covariates will be improved. Thus producing a more precise and accurate test of, for example, the argument that dyads with greater reputational differences in the treatment of foreign investment are more likely to sign a BIT.

Utilizing this approach first requires structuring our dependent variable. I obtain data on BITs from UNCTAD’s database on International Investment Agreements.<sup>21</sup> For each treaty, information on the year in which the agreement was signed, ratified, put into force, and, if applicable, terminated is made available. In this paper, I focus on only explaining BITs that are in force, a BIT goes into force once both participating countries have ratified the agreement domestically. Once a BIT goes into force for a particular  $ij$  pair, I code that observation as one for every year starting at that time, unless the agreement is terminated.

$$y_{ij,t} = \begin{cases} 1 & : \text{if an agreement is in force} \\ & \text{between } i \text{ and } j \text{ at time } t \\ 0 & : \text{otherwise} \end{cases}$$

Focusing on explaining the formation of signed agreements is a more difficult

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<sup>21</sup>Additional information on this database can be found here: <http://investmentpolicyhub.unctad.org/IIA/>.

task as its quite uncertain what countries actually intend when they sign but do not ratify an agreement. As Hathaway (2008), a legal scholar, notes signed but unratified agreements are simply “piece[s] of paper devoid of any legal force”. On the other hand, BITs that have come into force convey at least some information to others in the network about what the signatory states are willing to accept. To structure our dependent variable in a network context, I set up  $n \times n$  matrices for every year, where  $n$  corresponds to the number of countries in the international system, and the cross-sections of the matrices denote whether a BIT is currently in force between a given pair. In the example below, at time  $t$  country  $i$  has BITs in force with  $j$  and  $k$ . Since the BIT network is undirected, a one in the cross-section for  $y_{ik}$  is also a one for  $y_{ki}$ .

$$Y_t = \begin{matrix} & i & \dots & j & \dots & k \\ \begin{matrix} i \\ \vdots \\ j \\ \vdots \\ k \end{matrix} & \begin{bmatrix} 0 & \dots & 1 & \dots & 1 \\ \vdots & \ddots & \vdots & \ddots & \vdots \\ 1 & \dots & 0 & \dots & 0 \\ \vdots & \ddots & \vdots & \ddots & \vdots \\ 1 & \dots & 0 & \dots & 0 \end{bmatrix} \end{matrix}$$

Network evolution within the SAOM framework is determined by how the actors embedded within the network evaluate their current position relative to others that could provide them with higher utility. Every observation within our time series of network observations is representative of a discrete moment in a process of network evolution. The dynamics of how the network changes over time is assumed to follow a Markov process, in which the network structure at time  $t$ , conditional on stochastic error and the exogenous covariates, determines the network structure at  $t+1$  (Steglich et al., 2010). Between each discrete moment, in this case years, the network is

assumed to evolve one tie, or “microstep”, at a time – within each “microstep” an actor can form new ties or retract existing ones. These “microsteps” instantiate the dependence between the actions of countries because each formation or termination in a step implies changes in the patterns of indirect ties between all countries (Manger et al., 2012). Since the BIT network is undirected, I employ the “unilateral initiative and reciprocal version” of the SAOM framework. This extensions requires that when a given  $i$  proposes a tie to  $j$ ,  $j$  has the option to accept or reject based on its own utility function (Snijders and Steglich, 2009).

An actor’s decision to form or retract a tie with another is based on their objective function. The objective function is representative of the utility function that each actors wants to maximize given the constraints imposed by the overall network structure and exogenous covariates. Basically, this function expresses how satisfied an actor is with its current place within the network and how likely an actor is to attempt to modify that structure. The objective function for an actor  $i$  is a linear combination of endogenous network influences and exogenous covariates with a random component (Snijders, 2001; Snijders and Steglich, 2009):

$$f_i(\beta, x(i \rightsquigarrow j)) = \sum_{i=1}^l \beta_l s_{il}(x(i \rightsquigarrow j)) + U_i(t, x, j)$$

Thus the objective function is determined by the endogenous and exogenous parameters, each statistical parameter is denoted by  $\beta_l$ , and a function of how the network would change if  $i$  were to change its relationship with  $j$ . The  $s_{il}(x(i \rightsquigarrow j))$  are the relevant values of the covariates that have been entered into the model. Interpretation of the statistical parameters,  $\beta_l$ , is similar to traditional models. If  $\beta_l = 0$ , the corresponding covariate plays no role in network dynamics. If  $\beta_l > 0$ , then the corresponding covariate increases the probability of a pair of countries signing a BIT.

To estimate the parameters, the model searches for values of  $\beta_l$  so that the expected values of the  $s_{il}(x(i \rightsquigarrow j))$  equals the observed values. The expected values are drawn from repeated Markov Chain Monte Carlo (MCMC) simulations of the network using stochastically sampled values of the parameters. For example, the model will search for a simulated network that has as many closed indirect ties as the observed network. The randomly sampled parameter values resulting from this approach are then used to construct a sampling distribution, which Ripley et al. (2011) have shown follows a normal distribution, thereby permitting the usual methods of statistical inference.

### *Covariates*

The two key explanations for BIT formation in the extant literature are that countries are signing these agreements to resolve credible commitment problems or that the proliferation of these agreements is a result of a competition for capital.

To test the credible commitment hypothesis, I follow the extant literature in turning to the “Law and Order” measure from the International Country Risk Guide (ICRG) dataset. To determine ratings for their various measures, ICRG staff use political information and economic data to provide an assessment of the political and economic risks faced by countries on a variety of dimensions. The “Law and Order” measure is meant to provide an assessment of the strength and impartiality of a country’s legal system, as well as, the extent to which the law is observed. This variable ranges from 0 to 6, where higher ratings correspond to states with stronger legal systems whose decisions are followed.<sup>22</sup> Given that I am employing an undirected framework for this analysis, simply using a country’s score on this measure as a covariate will not be very meaningful. Instead, I use the country level scores

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<sup>22</sup>Using other measures in the ICRG analysis, such as “Investment Profile” or a measure of property rights protection, see Keefer and Knack (2002) for details on construction, produce similar results.

to construct a dyadic covariate that is equal to the absolute value of the difference in ratings that an  $ij$  pair received on this measure in a given year. According to the credible commitment hypothesis, pairs of countries that have larger absolute differences on this score will be more likely to conclude a BIT with each other.

To test the competition for capital argument, I follow the procedure introduced by Neumayer and Plümper (2010) for constructing diffusion measures from dyadic data. Neumayer and Plümper tested five measures of contagion to determine the mechanism by which BITs are spatially interdependent. The weighting matrix they use to construct each is a measure of the degree to which countries export a similar basket of goods.<sup>23</sup> In this paper, I only show results using the “specific source contagion” variable, this is the weighted sum of BITs signed by other capital-importing target countries with the same capital-exporting source country.<sup>24</sup> The argument presented under the competition for capital framework is that if a set of countries,  $ijk$ , are competing for FDI with a country,  $d$ , and  $k$  ratifies an agreement with  $d$  then the likelihood of  $i$  and  $j$  ratifying an agreement with  $d$  increases.

In order to examine the role that political motivations play in BIT formation, I turn to the many proxies available for measuring state preferences in the international relations literature. The extant options fall into two broad categories: those based on alliance relationships and those on votes in the United Nations General Assembly (UNGA). I opt to use the latter as measures based on alliance behavior are rather static as formal alliances are relatively constant over time, whereas state preferences can be more fluid. Additionally, as Häge (2011) notes because formal alliances are relatively rare the relational scores derived from that data can be artificially inflated. Problems of sparsity are less present in measures derived from UNGA voting data,

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<sup>23</sup>Like Neumayer and Plümper (2010) I construct this variable to range from -1 to 1 (total dissimilarity to total similarity) and add 1 to each score so that the variable is strictly nonnegative.

<sup>24</sup>Results using other mechanisms of contagion are similar and available upon request.

and have been argued to provide a relatively representative sense of the underlying distribution of preferences in the international system (Gartzke, 2000; Voeten, 2000). To obtain a measure of state preferences from voting at the UNGA, I turn to a recent approach developed by Bailey et al. (2015). They develop a dynamic ordinal spatial model to estimate state ideal points from 1946-2012 along a single dimension, from which I calculate the difference in ideal points between countries by year. I use this measure to proxy for the strength of interstate relationships over time. My expectation for this measure is that the smaller the difference in ideal points, the greater the probability of BIT formation.

In addition to these exogenous covariates, I also include two endogenous network parameters that I expect will have a much more substantive effect than either of the covariates in the extant literature. First, is the measure of preferential attachment discussed earlier, this is simply a representation of a country’s “popularity”, or degree centrality, in the network:

$$s_{i,l}(Y_t) = \sum_j^n Y_{ij,t} \sqrt{\sum_l^n Y_{kj,t}},$$

where  $Y_t$  represents the network at a particular point in time. I expect countries that are more “popular” in the network to be more sought out in the formation of future agreements, as they have shown themselves to be willing to work with a large number of other countries. Thus the relevant  $\beta_l$  for the “Popularity” measure should be positive.

The second structural parameter I include is a measure of closure, specifically, the tendency for states to sign agreements with those to whom they are indirectly tied. To construct this measure, I effectively just count the number of transitive patterns in which an actor  $i$  is involved:

$$s_{i,l}(Y_t) = \sum_{j,k}^n Y_{ij,t} Y_{ik,t} Y_{jk,t}, i \neq j \neq k$$

The expectation here is that states will seek out agreements with countries to whom they share a larger number of indirect ties, thus the relevant  $\beta_l$  for the “Closure” measure should be positive. This can be thought of as a more general measure of transitivity than what is implied by the approach proposed by Neumayer and Plümper (2010). Whereas they claim that states will only “close” indirect ties with capital-importing countries, I argue that they are more likely to “close” indirect ties in general because shared indirect ties between a pair of countries convey information to each about what the other is willing to accept.

Last, I include several additional factors thought to affect BIT formation. First, Poulsen and Aisbett (2013) show the importance of taking into account the number of ICSID disputes a country has faced in determining whether a particular country will continue to participate in the BITs regime. To account for this, I add in a country-level covariate measuring the cumulative number of ICSID disputes a country has faced. I also include several economic variables, each of these variables are again measured at the country level, annual GDP growth, GDP per capita, and net FDI flows as a proportion of GDP.<sup>25</sup> For dyadic controls, I first include the absolute difference in an  $ij$  pair’s logged GDP values and an indicator variable that is one when both  $ij$  are OECD countries and zero otherwise. The latter control is to account for the fact that BITs between developed countries are quite rare, typically, these types of dyads negotiate more substantive agreements such as PTAs. Given limitations in data availability for the covariates selected, the sample we use to estimate the model includes 146 countries from 1987 to 2010.

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<sup>25</sup>These measures are from the World Bank’s Word Development Indicators.

### *Empirical Results*

In Figure 2.6, I show the results of three models, the first includes just controls and the extant literature’s explanation of BIT formation, the second models adds in the UNGA Ideal Points Distance measure, and the third adds in the “Popularity” and “Closure” endogenous network effects – the “Density” covariate is analogous to a constant. As Ripley et al. (2011) note, each model here is similar to running a multinomial logistic regression, which means that the exponentiated parameters represent the multiplicative increase in the probability of  $ij$  forming a tie over another pair of actors, given a one unit increase in one of the covariates from the model. For example, the coefficient estimate on the ICSID disputes variable, across each model, is approximately -0.03. This implies that if a country incurs just one additional ICSID dispute then it is  $e^{-0.03} - 1 = 3\%$  less likely to form a BIT with any country in the network.

Under the credible commitment framework, we would expect to see the “Law and Order” variable to have a significant and positive effect on the probability of two countries forming an agreement. However, I find no such relationship here, in fact it seems that countries are actually more likely to sign a BIT with a country that has a more similar investment profile. The “Specific Source Contagion” variable, which is used to test the competition for capital story, does have a positive effect on BIT formation but across each of the models it is very imprecisely measured. Thus I find little evidence for either of the extant explanations in the literature. On the other hand, the argument that BITs are more likely to form due to existing political relations does receive significant support. Specifically, I find that a pair of countries  $ij$  that have an ideal point distance of one point less than another pair – a one point change is equivalent to the interquartile range of the UNGA ideal point distance variable – are, on average, approximately 35% more likely to sign a BIT

across models 2 and 3.

The addition of the network covariates leads to no substantive change in the parameter estimates from the previous model, but we can see that both of the endogenous network effects play a positive and significant role in BIT formation. Specifically, countries are much more likely to sign agreements with countries that they are connected to already through some third party, and countries are more likely to sign agreements with those in the international system that are active participants in the BIT regime. Additionally, the “Closure” effect is quite substantive. For example, if an  $ij$  pair both have already formed a BIT with a country  $k$ . This model predicts that the probability of  $i$  forming a BIT with  $j$  is 43% more likely than  $i$  forming a BIT with a country to whom it does not share an indirect tie. Given the undirected nature of our dataset this simultaneously implies that  $j$  is also 43% more likely to form an agreement with  $i$ . The “Popularity” network effect is also notable but much less important. For example, a country that has signed 10 more BITs than another is 13% more likely to form additional BITs, or receive requests for BIT formation, with states to whom it is not connected.

### *Performance*

To determine whether or not the network based approach I employ here actually approximates the data generating process behind the BITs network, I conduct rolling out-of-sample predictions across the time frame of this analysis for each model. To do this, I run a SAOM model on a four year moving window of the data, then predict agreements in the subsequent year using the derived parameter estimates, and then validate the predicted ties against the actual data. The results are displayed in Figure 2.7 using separation plots and Receiver Operating Characteristic (ROC) curves.

Separation plots provide a visual interpretation of model fit by plotting all observations, in this case country pairs, in the data set according to their predicted

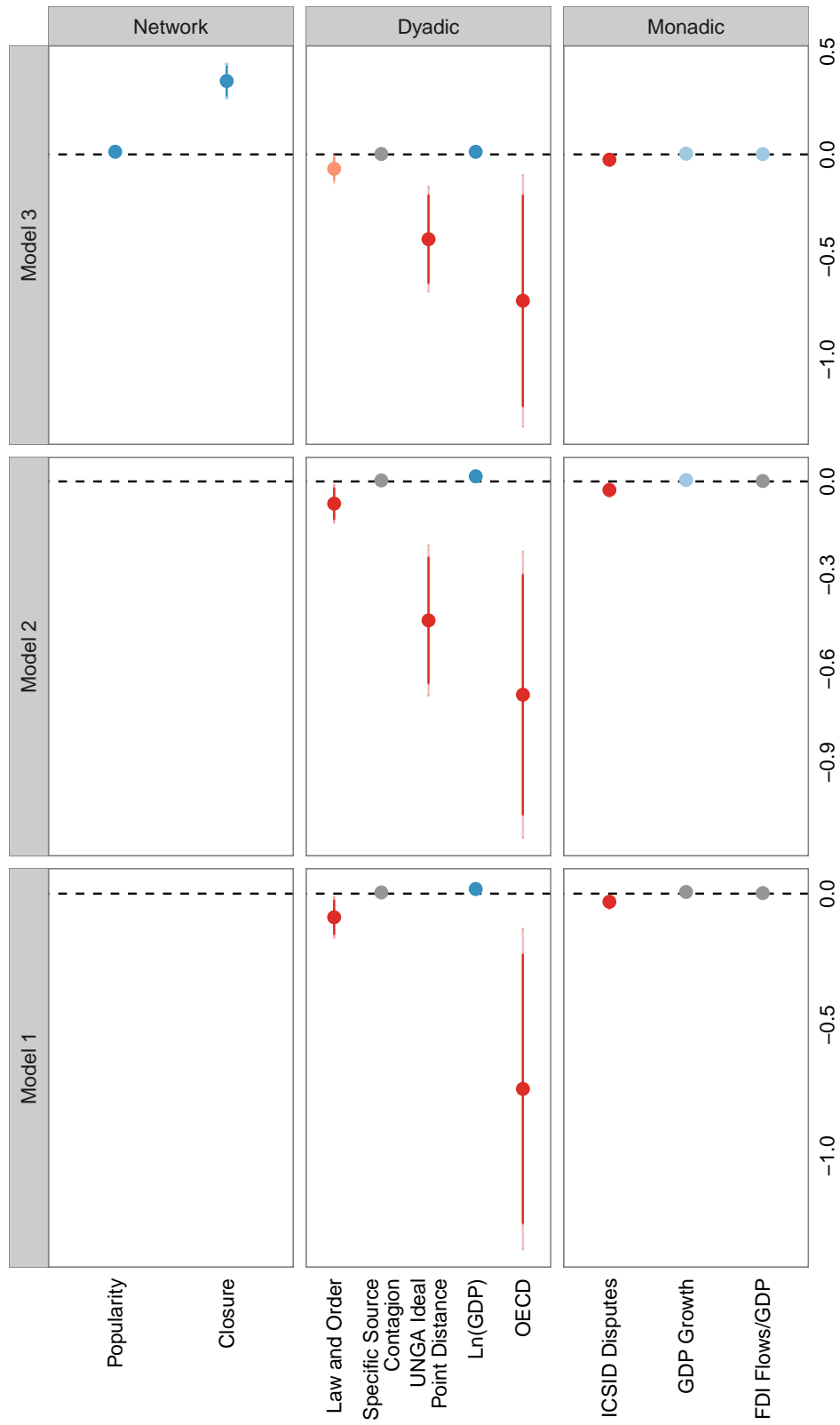


FIGURE 2.6: SAOM results regression results without key network level covariates, coefficient estimates are expressed in log odds. Darker colors indicates that the coefficient estimate is significantly different from zero at a 95% CI, while lighter the same for a 90% CI. Grey indicates that the estimate is not significantly different from zero at either of those intervals.

value from left (low values) to right (high values). Country pairs that actually have a BIT in force are colored in dark blue, while those that do not are colored in light blue. This implies that models with a good fit should have all actual (dark blue) observations towards the right of the separation plot (Greenhill et al., 2011). Through the separation plots we can see that the model fit improves as we add in the UNGA Ideal Point Distance measure, and then even more substantively improves with the addition of the endogenous network effects.

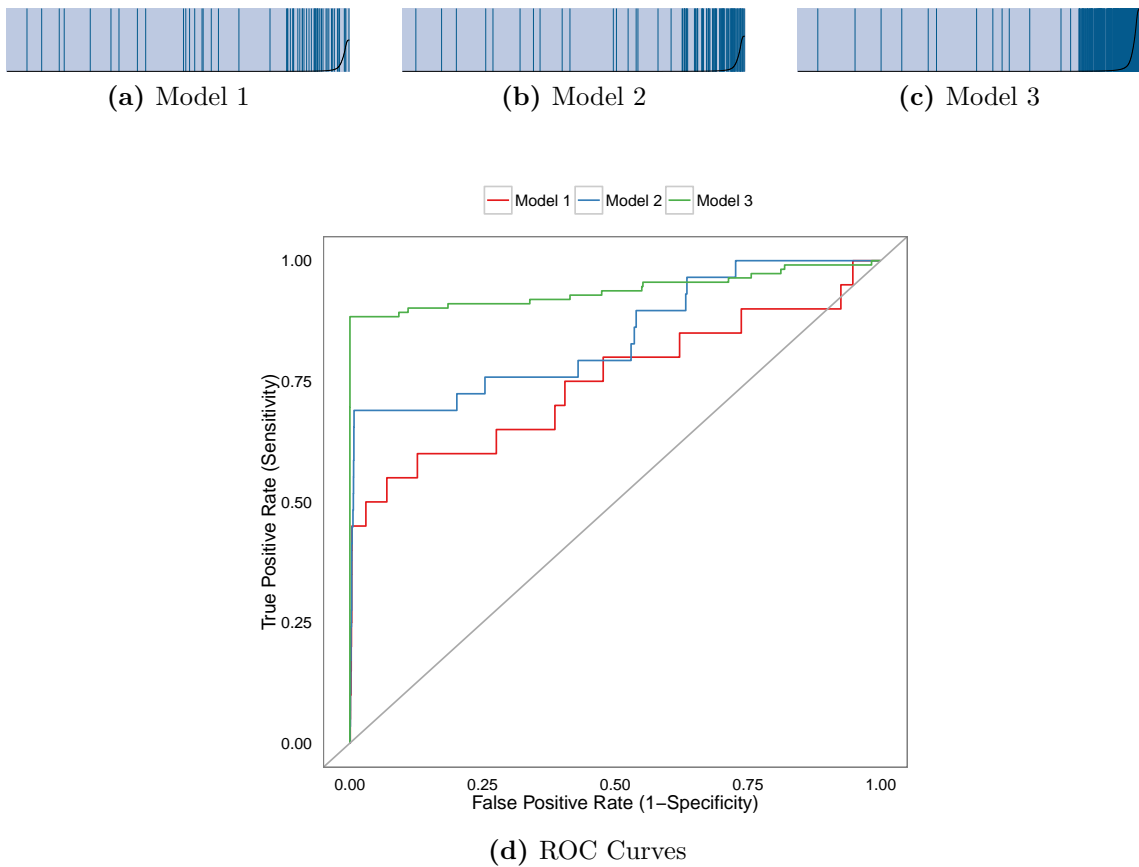


FIGURE 2.7: Top two plots show out-of-sample separation plots for model without endogenous network covariates shown on left and with those covariates shown on right. Bottom panel shows the results of the same out-of-sample analysis using Receiver Operating Characteristic (ROC) curves.

In addition, to the analysis using separation plots I also compare the sensitivity and specificity trade-off for each model using ROC curves. Models that have a better

fit according to this test should have curves that follow the left-hand border and then the top border of the ROC space. Here again it is apparent that accounting for the interstate relations and the endogenous network effects leads to noticeable improvements in performance. Last, by calculating the area under the ROC curve (AUC) we can assess the accuracy of each model, for model 1 the AUC is equal to 0.75, for model 2 0.83, and for model 3 0.94. Clearly the addition of our proxy for interstate relationships our measures for understanding the network dynamics underlying the structure of this system of agreements is very relevant in understanding how the BIT network has evolved over time.

## 2.6 Conclusion

Much of the extant literature has argued that the process through which BITs proliferated is the result of a strategic process, in which states sought to make credible commitments or compete for capital. Yet, these hypotheses disregard the evidence that states, for many years, actually had a very limited understanding of what these agreements entailed. Further it ignores the fact that as states have become more aware of the potential consequences of BITs, they have attempted to terminate or renegotiate the terms of the BITs they currently have in force. Additionally, the extant explanations provided disregard the political dimensions underlying the formation of these agreements. Given that these agreements were seen to involve little cost, some countries used them as “photo-op” opportunities in order to reaffirm existing relations with states that have similar preferences. Even though countries are now significantly more careful in evaluating BITs before they sign them and the use of “boilerplate” agreements is quickly diminishing, the haphazard way in which countries initially formed these agreements is what defines even the current network structure of BITs. Nonetheless, the story that I provide here is certainly not a causal one, simply sharing similar preferences does not cause a dyad to conclude

a BIT. However, it does highlight the often ignored connection between the political dimensions that may be driving economic integration between states. The role of politics in shaping interstate economic relations is an important issue that much of the literature has ignored.

Additionally, much of the empirical work that has gone into understanding the formation of these agreements discards or manipulates data that does not fit the underlying theoretical frameworks being tested. In doing so, they not only limit their analyses to speak to an increasingly smaller subset of BITs, but they leave unexplored alternative explanations. In this paper, I show that understanding the evolution of this system of treaties requires a network based approach. By taking this approach I am able to show that the key drivers of BIT formation have little to do with the extant explanations.

Thus as the BIT network continues to evolve we may see states further disentangle themselves from the broad and uniform commitments they had been making in the past to more nuanced communities of BITs. Understanding the evolution of the BITs network has implications beyond just the FDI literature. In many ways, BITs provided the ideal institution through which to constrain state behavior. When a country violated one of these agreements, the affected parties could easily make the violation public by requesting arbitration at the ICSID, and then have some reasonable expectation for compensation. Interestingly, as countries have realized the powers that they ceded to this institution, they have moved to take back their sovereignty. Thus it seems an international institution can end up working too well.

## Puzzling Commitments: Time-Inconsistency Problems & BITs

**Abstract:** Recent literature on foreign direct investment (FDI) has focused on the role of international investment agreements, specifically bilateral investment treaties (BITs), in explaining inflows into developing countries. The theory posits that these agreements can be used by developing countries with weak domestic property rights as a commitment device to overcome time inconsistency problems. I take a step back and explore the link through which BITs are meant to increase FDI inflows, namely perceived changes in the investment climate in the host country as a result of ratifying BITs. In doing so, I find that the causal mechanism linkings BITs to increased FDI does not hold. This finding cast serious doubt on major hypotheses in the literature about the effects of BITs on FDI flows to developing countries.

Determining the capacity of international treaties to credibly commit governments to shift domestic policy is a topic of growing importance as research in political economy moves toward understanding the ways in which international factors

coalesce with the domestic to shape state behavior.<sup>1</sup> Complicating analyses into the extent to which international treaties are able to influence state behavior, however, is the argument that countries choose to comply with agreements only as long as their terms remain aligned with state preferences, suggesting that the treaties themselves have no independent effect.<sup>2</sup> Simmons (2000) argues that signing onto an international treaty “raises expectations about behavior”. Once these expectations are raised, states face reputational costs for renegeing on treaty commitments that may incline governments to comply irregardless of shifting state preferences. Additionally, international treaties can have built-in mechanisms to disincentivize noncompliance, such as providing opportunities for binding third party arbitration. Whether international treaties can credibly commit states to a standard of behavior has been a topic of extensive interest in the foreign direct investment (FDI) literature. To attract FDI developing countries offer a variety of incentives to multinational corporations (MNCs) and make promises to treat invested assets fairly. Yet, there is a time inconsistency problem since governments, particularly those without a history of strong property rights institutions, may give in to short-term incentives to unfairly tax or expropriate the invested assets of MNCs. International investment agreements have come to be seen as a way in which developing countries can credibly commit to treat foreign invested assets fairly and thus attract greater levels of aggregate FDI inflows.

The most prominent type of international investment agreement through which developing countries have sought to make this commitment explicit are bilateral investment treaties (BITs). An UNCTAD report from 2000 even went so far as to claim that these types of agreements serve as the “most important instrument(s) for the international protection of foreign investment”. BITs are seen as providing a credible commitment because the terms that governments agree to when ratifying these

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<sup>1</sup>e.g., see Rosendorff (2005); Greenhill (2010); or Tir and Stinnett (2012).

<sup>2</sup>e.g., see Downs et al. (1996); Von Stein (2005); Lupu (2013).

agreements explicitly deal with how foreign investment can be treated, and, consequently, are assumed to raise expectations about the quality of a country's property rights institutions, reducing the riskiness of investments. Additionally, many BITs include dispute resolution mechanisms that enable investors who believe their assets have been unfairly treated to seek binding third party arbitration at independent tribunals, further disincentivizing noncompliance. A vast literature has developed to estimate the effect these agreements have on increasing FDI flows to developing countries. Although findings vary, the consensus is that BITs serve as a credible commitment from developing countries to treat foreign invested assets fairly, which, as a result, enable developing countries to attract significantly more FDI.<sup>3</sup>

The analysis presented here seeks to challenge this consensus. To do so, this paper begins by showing that the impact of BITs on FDI flows to developing countries is in fact minor and uncertain. Participation in these agreements is presumed to affect FDI inflows by raising expectations about state behavior with regards to investment risk and the credibility of property rights protection. If the causal mechanism linking BITs to greater FDI inflows is valid, we would expect to see changes in the perceptions of risk and property rights protection for countries participating in BITs. Using a multilevel random effects (RE) model, I show that there is little evidence that the accumulation of BITs leads to differing perceptions between states or within states over time.

### 3.1 The Puzzle BITs Purportedly Resolve

FDI is considered an increasingly important source of capital for developing countries to attract. Apart from the direct capital financing FDI provides, competition for outside capital is driven by the hope that it will generate growth-enhancing

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<sup>3</sup>See Sauvant and Sachs (2009) for a review of conflicting findings in the BITs literature.

knowledge and technological spillovers.<sup>4</sup> In order to attract this capital, many developing economies have established official agencies at the national and/or local levels charged with the sole task of courting MNCs. Governments of developing economies even offer substantial incentives such as favorable tax policies to MNCs for choosing their particular locale over others (Blomström et al., 2003). Yet up until recently, the share of FDI inflows going into developing economies was marginal compared to that of developed economies, and, as first argued by Lucas (1990), fell far short of the predictions of standard economic trade models.

Scholars have sought to resolve this puzzle through focusing on the poor quality of institutions in developing economies – specifically, the institutions involved in creating a less risky environment for foreign investors and a fair property rights regime.<sup>5</sup> For MNCs investing in countries with weak property rights institutions this means that they have to determine how their capital will be treated before they actually make their investment. Vernon (1971) explains the developing country’s problem of attracting capital from MNCs through a bargaining framework, with the key insight being that the bargaining power of the MNC obsolesces once they have made their investment. The game begins with governments seeking to attract foreign sources of capital and MNCs searching for locales to invest their assets. During this period governments have an incentive to make promises to MNCs regarding the benefits of choosing their country. Since most types of FDI involve long-term commitments, once the MNC has sunk its assets into a particular country their bargaining power obsolesces, while that of the host governments rises as it can now extract additional compensation from the MNC through increasing taxes or simply expropriating the assets. The key implication of the obsolescence bargaining model is

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<sup>4</sup>There is significant ambiguity in the literature over the actual effects of FDI, but this has done little to mitigate competition between countries seeking inward FDI (Charles, 2000).

<sup>5</sup>e.g., see Javorcik (2004); Seyoum (1996); Bnassy-Qur et al. (2007).

that host governments – particularly, developing countries with less stable property rights institutions – are unable to credibly commit to treating the assets of foreign investors fairly.<sup>6</sup>

Resolving this credible commitment problem became an issue of increasing concern for MNCs following a rash of expropriations from the mid-1960s to early 1980s (Kobrin, 1984). In recent years, overt expropriation is a rare event. More troubling for MNCs are subtle government interventions undertaken after MNC assets have been invested in a host country. Extracting greater rents can be achieved through a myriad of mechanisms, such as changes in regulations, taxation, trade restrictions, or even forcing MNCs to buy inputs from domestic suppliers. Nimac et al. (2012) find that foreign investors consistently rank these types of risks as a key concern in making investment decisions. Thus a central question facing developing countries seeking to attract FDI is how to assure potential investors of their commitment to liberal economic policies that guarantee a safe investment environment and fair treatment of property rights. The panacea seemingly came in the form of BITs, which are agreements typically signed between a developed, capital-exporting country and a developing, capital-importing country that are believed to “tie the hands” of host government policymakers (Guzman, 1998).

The hypothesis in the extant literature is that these agreements are akin to international institutions that are able to constrain the actions of states and allow for a more credible form of commitment than domestic legislation. Drawing on this idea, a large and growing body of literature has sought to link increases in FDI flows to developing countries with the signing or ratification of BITs. The current consensus is that entering into multiple BITs leads to significant increases in aggregate FDI inflows to developing economies as each additional treaty communicates a credible

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<sup>6</sup>This is also referred to as the fundamental “holdup” or “dynamic inconsistency” problem.

commitment sealed in international law to treat invested assets fairly.<sup>7</sup>

### 3.2 How BITs Empower Investors

Elkins et al. (2006) assert that in recent decades BITs have become “the most important international legal mechanism for the encouragement and governance” of FDI into developing countries. Bütthe and Milner (2008) echo this point and add that BITs boost FDI because “they enshrine commitments to open markets and liberal economic policies” from the developing countries that sign them. The manner in which these international agreements provide this commitment are through the clearly defined and public rules that they prescribe for the treatment of foreign investment. The content of BITs address at least three key areas: the establishment of conditions for investment, treatment of FDI post investment, and dispute settlement (Jandhyala et al., 2011). BITs typically ban discriminatory treatment against foreign investors, and even go so far as to provide guarantees of compensation for expropriated property or funds (Neumayer and Spess, 2005). The dispute settlement mechanism included in many of these agreements allows foreign investors to challenge almost any newly passed public policy regulation affecting their investment. Further the adjudication for the violation of these agreements takes place not in the national courts of the violating country, but in international arbitration tribunals, such as the International Centre for Settlement of Investment Disputes (ICSID).

Even developed countries have started to wrestle with the powers allotted to investors by BITs. Phillip-Morris Asia (PM Asia) brought actions against Australia after the enactment of its Tobacco Plain Packaging Act in 2011 (Kurtz, 2012). The act prohibits the display of graphic symbols on cartons that could have the effect of advertising the product. PM Asia soon called for investor-state arbitral proceedings

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<sup>7</sup>e.g., see Egger and Pfaffermayr (2004); Bütthe and Milner (2008); Kerner (2009); Allee and Peinhardt (2011).

against the legislation under the Hong Kong-Australia BIT. The central argument raised by the company is that the “[p]lain packaging legislation will result in the expropriation of PM Asias investments due to the substantial deprivation of the intellectual property and goodwill”.<sup>8</sup>

Australia is not alone in facing the consequences of passing domestic legislation perceived to conflict with the rights of foreign investors. South Africa has faced a number of disputes in recent years as well and its Department of Trade and Industry asserts that, “BITs extend far into developing countries’ policy space, imposing damaging binding investment rules with far-reaching consequences”.<sup>9</sup> UNCTAD (2013a) estimates that investment dispute cases have proliferated in the last decade and estimates that by the end of 2012 there were over 514 known treaty-based arbitration cases. The UNCTAD report goes on to posit that since many arbitration forums do not maintain public records, the actual number of cases is likely to be much higher. Ecuador, for example, was taken to the ICSID by Occidental Petroleum Corporation and ordered to pay nearly \$1.77 billion in damages.<sup>10</sup> Ecuador has appealed the ruling but its situation provides further evidence for the cost that can be incurred by countries taken to an international arbitration tribunal. Thus as countries signs more and more investment agreements, scholars argue that they are entangling themselves in an international legal framework that constrains the set of policy choices available to them regarding not only the rights of foreign investors, but the management of their property rights regime more broadly.

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<sup>8</sup>Philip Morris Asia Limited v The Commonwealth of Australia, UNCITRAL, Written Notification of Claim pursuant to Agreement Between the Government of Hong Kong and the Government of Australia for the Promotion and Protection of Investments (22 June 2011)

<sup>9</sup>Bilateral Investment Treaty Policy Framework: For public comments, South African Government, Department of Trade and Industry (July 2009)

<sup>10</sup>Occidental Petroleum Corporation and Occidental Exploration and Production Company v. Republic of Ecuador, ICSID Case No. ARB/06/11, Award (October 05, 2012)

### 3.3 Are Investors Paying Attention?

The theoretical argument is certainly compelling but are investors actually paying attention? Yackee (2010), in a survey of in-house legal counsel in American MNCs, finds that the majority are not even familiar with BITs. Additionally, Poulsen (2011) draws on interviews with negotiators of BITs in capital-importing countries to find little evidence that MNCs are basing their investment decisions on the presence of BITs. One negotiator from Germany remarked that, “I think it is unlikely that even big German companies take BITs into account in their investment decisions”. Another from Denmark noted that, “I don’t think many Danish companies have heard of these treaties, and it is highly unlikely that they will be taken into account when they make their investment decisions”. This qualitative evidence is further buttressed by a recent set of surveys conducted by Kenyon and Margalit (2014), who find that a majority of respondents indicated that treaties such as BITs have no influence on investment allocation decisions.

Despite evidence such as this, much of the extant empirical literature analyzing the effects of BITs on FDI inflows argues that these agreements substantively increase the level of FDI inflows going into developing countries. Each generally argues that by signing a greater number of these agreements countries are committing to providing a high standard of protection for the property rights of foreign investors, and thereby should expect to receive a greater level of aggregate FDI inflows. Yet, in their analyses of substantive effects most simply analyze the predicted change in FDI inflows after signing or ratifying some number of BITs without taking into account the uncertainty associated with those predictions.

By not taking uncertainty into account, previous research has overstated our confidence in the positive effect that BITs have on FDI. I show that by taking the uncertainty associated with these predictions into account, any impact these agree-

ments have on FDI flows is not only minor but extremely uncertain. To estimate substantive effects we use a statistical simulation technique that enables us to present the empirical effect of BITs with appropriate levels of uncertainty. I use recent work by Allee and Peinhardt (2011) to reassess the relationship between FDI and these investment agreements. The purpose of this replication is not to undermine the detailed and valuable work done by Allee and Peinhardt (2011) but to better understand the substantive meaning of these agreements to international actors investing in developing countries.

Allee and Peinhardt's sample includes 102 developing countries from 1984 to 2006. Their dependent variable is logged net FDI inflows and their key covariates include the number of BITs a country has signed.<sup>11</sup> The results of this model are shown in Figure 3.1a. Since recent research has argued that formal BIT ratification, as opposed to mere signatory status, makes the international commitment more credible, I replace the signed BITs term used by Allee and Peinhardt with a ratified BITs variable in Figure 3.1b.<sup>12</sup> The results differ slightly across the two models, but the coefficient estimate on the signed and ratified BITs are similar. Allee and Peinhardt note that even after controlling for the number of ICSID disputes a country has lost, "BITs consistently have a robust, positive effect on FDI flows".

Although the effect of ratified and signed BITs on FDI inflows is significant the more important question is whether these variables have a substantive impact on FDI. To examine this, I compare the difference in the level of FDI inflows a country can expect if they have signed no BITs compared to a country that has signed 105 BITs, the maximum number of signed BITs in Allee and Peinhardt's sample. I then repeat this procedure for the number of BITs a country has ratified. The first step

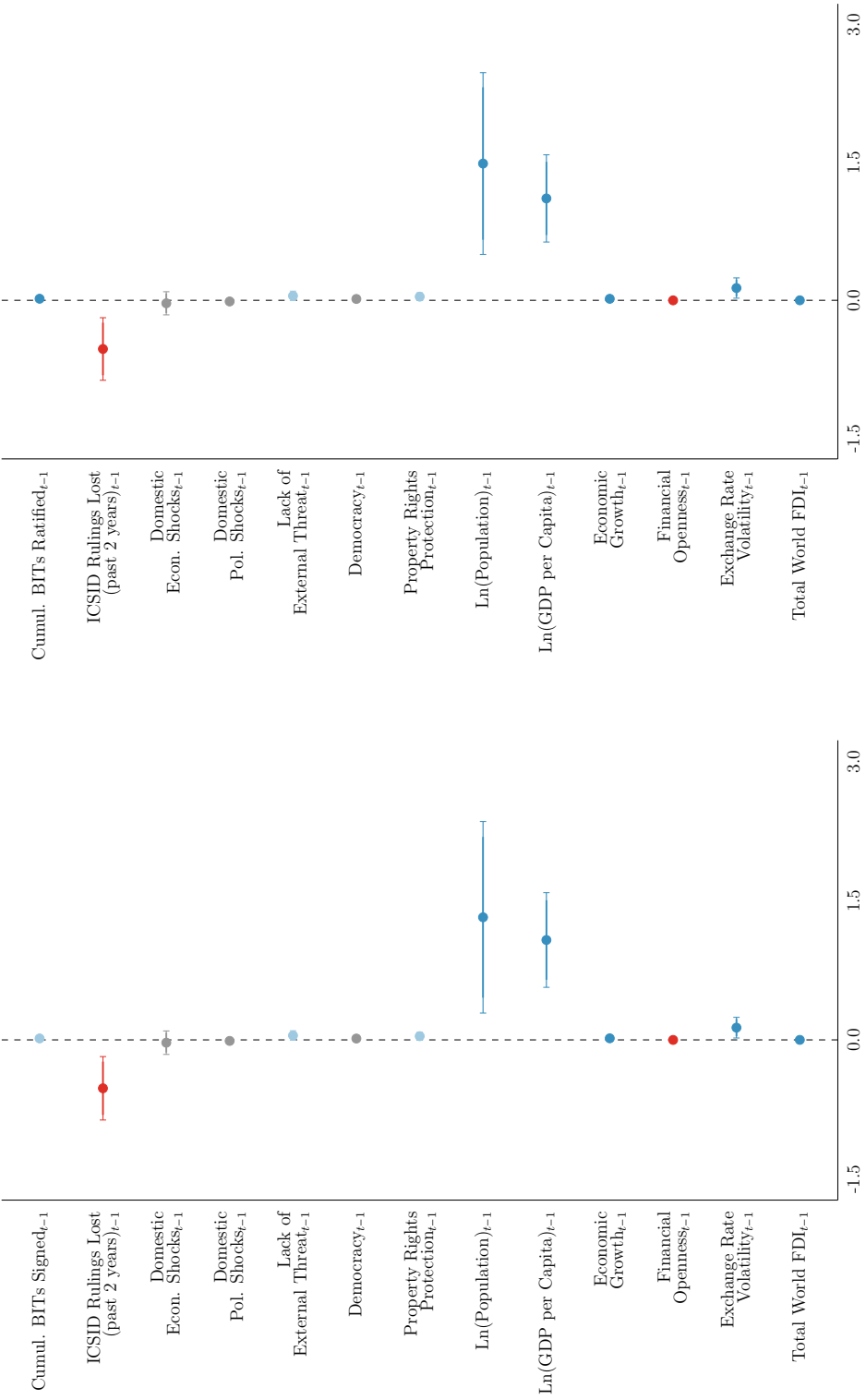
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<sup>11</sup>This model was chosen because it is the most supportive of their argument that BITs and the violation of them substantively affects FDI inflows.

<sup>12</sup>This argument has been most recently made by Haftel (2010) and Bütke and Milner (2014).

in doing so is to construct a set of scenarios where the only value varying is that of the independent variable whose substantive effect is to be measured. I set up two scenarios, one where the number of BITs a country has signed is set to its minimum in the dataset and another where it is set to its maximum – all other variables were set to their median value.

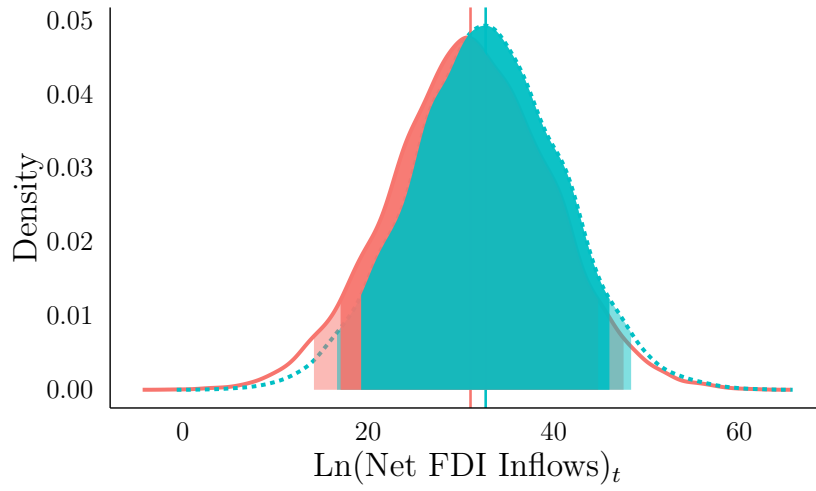
Next, I conduct 1,000 random draws from a multivariate normal to obtain distributions for the point estimates of each of the regression coefficients. After obtaining these distributions, I calculate the predicted value of FDI inflows based on the conditions set by the two scenarios. An additional step suggested by King et al. (2000) is to resample from a univariate normal to account for uncertainty in the model itself. However, this may be too high of a standard to impose here as the goal of Allee and Peinhardt was not to develop a predictive model of FDI flows, but simply to infer whether a relationship exists between ICSID disputes and BITs and FDI. Thus we do not go beyond accounting for inferential uncertainty. The result of this analysis is visualized in Figure 3.2a. The same analysis for the number of BITs a country has ratified is shown in Figure 3.2b.



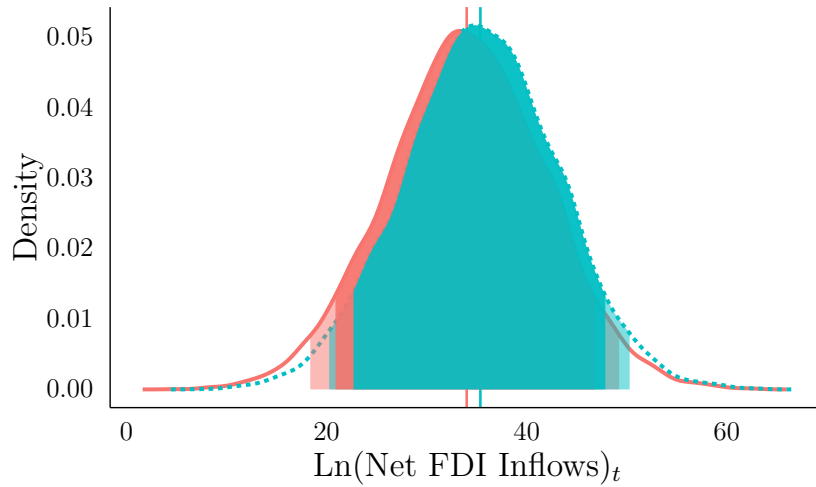
(a) Signed BITs

(b) Ratified BITs

FIGURE 3.1: On the left, are regression results on net, logged FDI flows to a country using the model specification 4.2 from Allee and Peinhardt (2011). The coefficient plot on the right uses the same model specification replacing signed BITs with ratified BITs. Darker colors indicates that the coefficient estimate is significantly different from zero at a 95% CI, while lighter the same for a 90% CI. Grey indicates that the estimate is not significantly different from zero at either of those intervals.



(a) Cumul. BITs Signed<sub>t-1</sub>



(b) Cumul. BITs Ratified<sub>t-1</sub>

FIGURE 3.2: On the left, distributions of expected values for logged Net FDI inflows based on two scenarios, one, where the number of signed BITs was set to its minimum, shown in red, and another where the number of BITs signed was set to its maximum, shown in blue, values shown. On the right, I show a similar analysis but using the number of BITs ratified. The 90% interval of each distribution is shaded in a dark blue or red color and the 95% in a lighter color.

The results show that the distributions of the predicted value of FDI inflows even when going from the minimum of zero to the maximum in either the number of BITs a country has signed or ratified are indistinguishable from each other. This analysis highlights that though BITs may often turn out to be a significant predictor of FDI, their substantive effect is highly doubtful. The results of this analysis stand in stark contrast to past research about the implications of signing and ratifying BITs.

### 3.4 Does the Causal Mechanism Work?

The question that results is why aren't investors paying attention to these agreements? The theoretical mechanism through which BITs presumably attract aggregate FDI inflows is by reducing the risk profile of countries participating in these agreements, particularly, with respect to their property rights regime and investment climate (Haftel, 2007). Vandevelde (1998) was one of the first to argue that BITs “symbolize a commitment to economic liberalism” and that the “implementation of a BIT . . . results in a more liberal investment regime”. Salacuse and Sullivan (2005) note that though BITs themselves do not explicitly mention the goal of a stronger property rights regime, they “can have the effect of liberalizing developing countries’ whole economy”. Bütte and Milner (2008) have also argued that “BITs constitute a commitment to economically liberal policies”, and that this commitment is more credible than those made only through domestic political processes because it is sealed in international law. This would imply that as states ratify a greater number of BITs, we should expect to see the development of a more favorable property rights regime and investment climate within their countries.

The theory in the literature about how BITs affect FDI flows relies on a specific causal mechanism, as depicted in Figure 3.3. Namely, that BITs lead to changes in FDI because they first alter perceptions about country commitments to the treatment of assets invested by foreign companies. Yet, most scholars ascribing to this theory

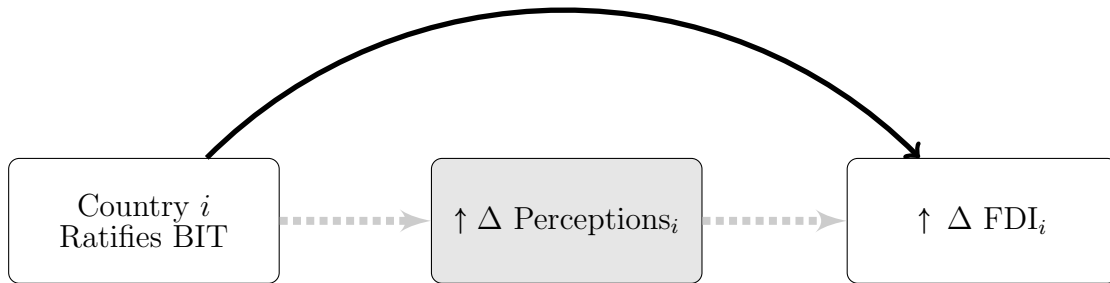


FIGURE 3.3: Theoretical mechanism linking the ratification of BIT to higher FDI flows.

have skipped examining whether BITs have any effect on perceptions in favor of exploring their relationship with higher aggregate FDI inflows.

Rather than countries signing these agreements to credibly commit to certain policies, countries may view the signing of these agreements as nothing more than window dressing to attract foreign investors. Some government officials have even said as much. An official responsible for negotiating BITs for the Dominican Republic remarked that these agreements were just a “marketing sign for the country” and another from Chile remarked that “we signed a lot of treaties not knowing sometimes what we were committing ourselves to” (Poulsen, 2011). The intention to not substantially alter domestic policies is also evident in the lack of negotiation when it comes to entering BITs. A senior investment lawyer called into provide expert testimony in an ICSID proceeding asserted that, “BITs are very often pulled out of a drawer . . . and are put forward on the occasion of state visits when the heads of states need something to sign” so they “are very often not negotiated at all”.<sup>13</sup> The lawyer went onto say, “I have heard several representatives who have actually been active in this Treaty-making process . . . say that, ‘We had no idea that this would have real consequences in the real world’ ”.

The attitude of political risk insurance (PRI) agencies towards these agreements

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<sup>13</sup>Wintershall Aktiengesellschaft v. Argentine Republic, ICSID Case No. ARB/04/14, Award (Dec 8, 2008)

brings the assumption in the extant literature further into question.<sup>14</sup> PRI agencies provide MNCs with insurance against threats such as expropriation and political instability. If BITs were changing the risk profile of countries that have ratified these agreements, these agencies would have a profit incentive to take them into account when negotiating rates with MNCs. Yet, in an interview with Poulsen, an industry-representative reported that using BITs to conduct risk assessments is “rather unusual within the industry” and another that they have never “factored into an underwriting decision in any material way”. A reason provided in these interviews for not using BITs to conduct risk assessments is that countries can “unilaterally pull out of international arbitrations, so ultimately we give the structure no credit” and that “Governments wanting to expropriate will do it irrespective of their BITs, so they are not a primary consideration at all”.

The anecdotal evidence provided above certainly casts some doubt over the argument that countries are signing and ratifying these treaties due to a desire to commit to economic liberalization. Even so, there are still substantive costs that can be imposed on countries by arbitration tribunals, and these dispute resolution mechanisms are touted to be one of the key features committing countries to the terms of these agreements. Thus, what happens when state preferences collide with the commitments enshrined in BITs? The dispute brought by Phillip-Morris Asia against Australia was the first that it had experienced and its response has been to limit the powers granted to commercial investors going forward. Near the time of the dispute filed by Phillip-Morris the government announced that it would no longer include investor-state arbitration clauses in future international investment agreements.<sup>15</sup> The policy statement put out by the government explicitly stated

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<sup>14</sup>e.g., see Yackee (2010) and Poulsen (2011).

<sup>15</sup>Gillard Government Trade Policy Statement: Trading Our Way to More Jobs and Prosperity, Australian Government, Department of Foreign Affairs and Trade, (April 2011)

that, “The Government has not and will not accept provisions that limit its capacity to put health warning or plain packaging requirements on tobacco products”.

Australia is not alone in its increasing anxiety about the inclusion of broad investment arbitration mechanisms within BITs. South Africa has actually gone as far as terminating a number of its BITs and has indicated that it will no longer including any investment arbitration mechanisms in future BITs. Further in South Africa’s 2009 review of its BIT framework, its Department of Trade and Industry explicitly remarks on how little was actually understood in terms of the commitments enshrined by these agreements:<sup>16</sup>

“Prior to 1994, the RSA had no history of negotiating BITs and the risks posed by such treaties were not fully appreciated at that time. The Executive had not been fully apprised of all the possible consequences of BITs. While it was understood that the democratically elected government of the time had to demonstrate that the RSA was an investment friendly destination, the impact of BITs on future policies were not critically evaluated. As a result the Executive entered into agreements that were heavily stacked in favor of investors without the necessary safeguards to preserve flexibility in a number of critical policy areas.”

Even in Pakistan, the first developing country to have signed a BIT in 1959, awareness about the commitments these agreements entailed appears to have been minimal. Makhdoom Khan, the Attorney General of Pakistan from 2001 to 2007, said that when asked by the Secretary of Law about a case brought in the ICSID by SGS S.A. that he had to search for the acronyms ICSID and BIT using Google (Poulsen and Vis-Dunbar, 2009). Khan went onto say that, “no ministry – except that in charge – even knew that the BITs had been signed”.

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<sup>16</sup>Bilateral Investment Treaty Policy Framework Review: Executive Summary of Government Position Paper, South African Government, Department of Trade and Industry, (June 2009)

After facing multiple investor disputes, Ecuador, Bolivia, and Venezuela responded by simply withdrawing from the ICSID, and Argentina in 2013 announced that it would be doing the same. Although withdrawing from the ICSID does not dismiss the ability of investors to seek compensation, these examples certainly illustrate that participating in BITs should not be likened to a commitment to economic liberalization. Thus in the following section, I examine if the ratification of BITs leads to any changes in how states are expected to behave with respect to their property rights regime and investment climate. If it does not affect expectations, then the finding that BITs have no affect on FDI flows to developing countries is certainly less surprising as the causal mechanism linking the two loses support.

#### *Measuring the Domestic Effect of BITs*

The key independent variable is the cumulative number of BITs a country has ratified by a given year.<sup>17</sup> UNCTAD keeps a record of bilateral investment treaties with information on the countries involved and the date on which the agreement went into force. I use this information to construct a cumulative measure of the number of BITs a country has put into force by the end of a given year. A cumulative approach is chosen to account for the hypothesis in the extant literature that each agreement a country ratifies further commits it to liberal economic policies domestically.

To measure the changes that result in an economy post-BIT ratification, I employ a set of indices measuring a country's degree of property rights protection and investment climate from the International Country Risk Guide (ICRG) dataset. To determine ratings for their various measures, ICRG staff use political information and economic data to provide an assessment of the political and economic risks faced by countries on a variety of dimensions. Obviously, no index measuring complex attributes of a country's institutional structure is perfect but the ICRG dataset has

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<sup>17</sup>I use the ratified BITs variable because these are argued to make the commitments from these international legal agreements binding and more credible (Haftel, 2010; Bütthe and Milner, 2014.)

gained increasing usage in the political economic literature and provides comparable ratings for a wide set of countries over time. If ratifying these investment agreements does send a credible signal with respect to a country's investment climate, then gauging changes in perceptions subsequent to the ratification of BITs provides an ideal test of the theory in the extant literature. The specific measures I gather from the ICRG dataset are the following:<sup>18</sup>

- Investment Profile: ranges from 0 to 12, with lower scores indicating weaker investment profiles
- Bureaucracy Quality: ranges from 0 to 4, with lower scores indicating less bureaucratic quality
- Corruption: ranges from 0 to 6, with lower scores indicating less corruption
- Law and order: ranges from 0 to 6, with lower scores indicating less law and order

The investment profile measure is meant to provide an assessment of the factors affecting the risk of investing in a particular country. The ratings for this measure are the additive result of three subcomponents: contract expropriation, profit repatriation, and payment delays. A country that engages in, for example, outright expropriation in a given year receives a score of 0 for the contract expropriation subcomponent. This measure provides a glimpse into the treatment of foreign held capital and profits in a given country. If ratifying investment agreements is a sign of diminishing risk for investing in a country, then we would expect higher ratings on this measure as countries entangle themselves in more and more BITs.

To test the cumulative effect of BITs on the development of a stronger property right regimes I again turn to measures from the ICRG. Following the prescriptions

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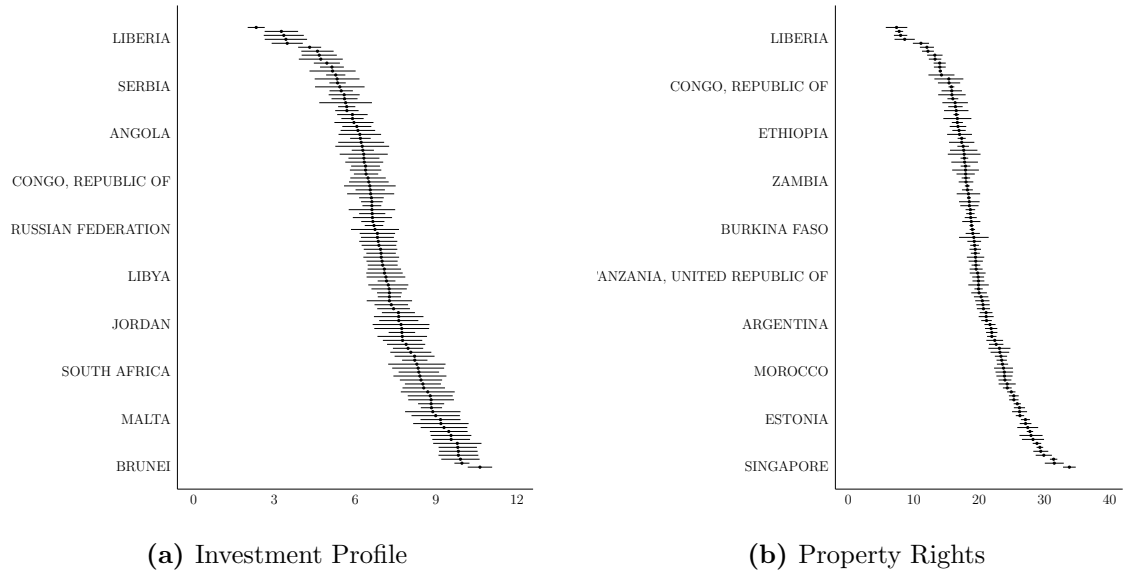
<sup>18</sup>Additional details on each of these measures can be found at the following address: [http://www.prsgroup.com/ICRG\\_methodology.aspx](http://www.prsgroup.com/ICRG_methodology.aspx)

of Keefer and Knack (2002) and Jakobsen and De Soysa (2006), I use four indicators to construct an overall index for the credibility and predictability of property and contractual rights in developing countries: *Investment Profile*, *Bureaucracy Quality*, *Corruption*, and *Law and Order*. There are different scales for these measures, so as to not assign additional weight to any one of the variables I rescaled each to be between 0 and 10. I then took the sum of each of the scores to generate a representative measure of property rights protection for each of the developing countries in the sample. The expectation of the literature would be that signing more BITs should be associated with higher ratings on this measure.

A concern with using these type of perceptual indices is that differences in ratings between countries can be marginal and, more importantly, we may see little variation within countries over time. In Figures 3.4a and 3.4b, I show the range of ratings given to a country by the ICRG from 1986 to 2014, depicted by the horizontal lines, and the mean rating over the time period, designated by the points. Both of these visualizations show that there is noticeable variation between the ratings that countries receive on these measures over time.

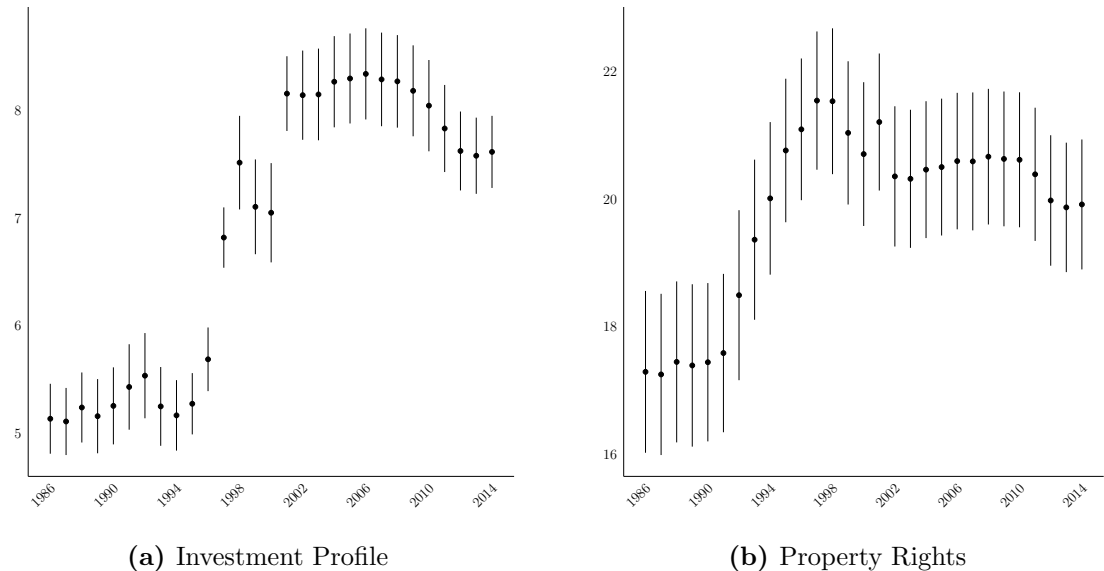
Additionally, both dependent variables have a noticeable increasing trend over time, as can be seen in Figures 3.5a and 3.5b. If BITs do have a meaningful impact on the domestic policies of ratifying countries, then some of this positive increasing trend for the two dependent variables should be explained by the increasing usage of these agreements.

Before delving into a full model specification for examining the relationship between BITs and reputation, I run a simple analysis to determine the bivariate relationship between these agreements and the perceptual measures from the ICRG. To do this, I take every country that has ratified at least one BIT and run a simple linear model with the perceptual measures as dependent variable and a lagged version of BITs as the sole independent variable over the period of 1986 to 2014. The results



**(a) Investment Profile** **(b) Property Rights**

FIGURE 3.4: Variation between countries and over time in ratings on the investment profile and protection of property rights measures by country. The points here represent the mean value a given country received over the years for which I have data, and to highlight the variation a country sees over time in its ratings on these measures I show the full range of ratings a country received. All developing countries for which the ICRG provides data are depicted on this chart but only a select few are labeled due to space constraints.



**(a) Investment Profile** **(b) Property Rights**

FIGURE 3.5: Change in ratings on investment profile and protection of property rights measures from 1986 to 2014 across the sample. Points here represent the means across countries in a given year and the line the 95% CI.

are visualized in Figure 3.6. In the panel on the left, I show the parameter estimates for the BITs variable when using investment profile as the dependent variable, and the panel on the right shows the same analysis when using property rights as the dependent variable – 95% confidence intervals are included for all point estimates. To more clearly highlight the general trend of the point estimates, I color positive BIT effects in blue and negative effects in red. If BITs were correlated with positive changes in reputation, we would expect to see the majority of the points to be positive, as this would indicate a positive relationship between disputes and these two reputational measures. However, for both investment profile and property rights we find the opposite relationship for the vast majority of countries.

FIGURE 3.6: Bivariate Relationship Between Log(FDI) and Lagged Disputes

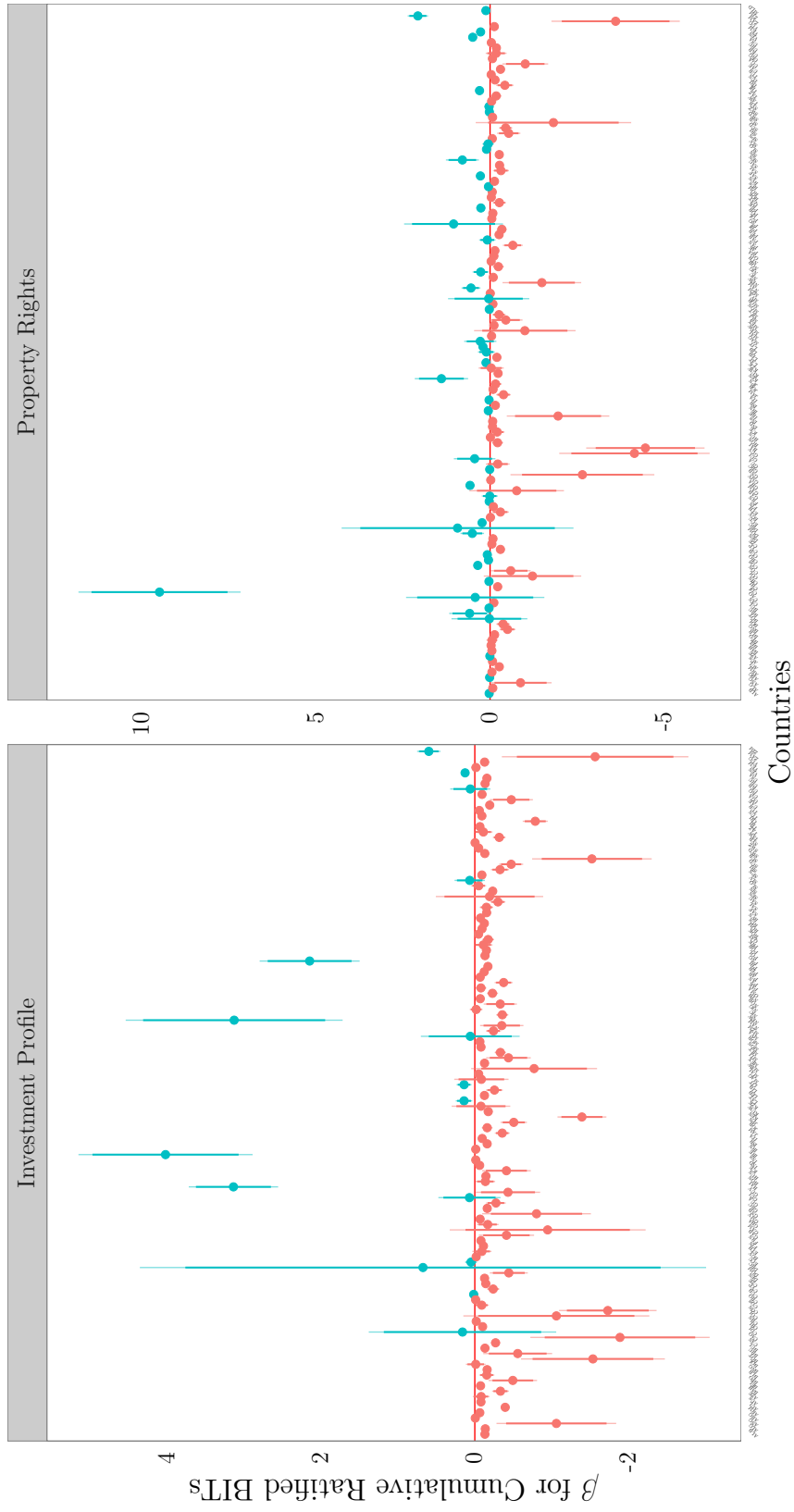


FIGURE 3.7: Here I show the bivariate relationship between BITs and investment profile, left panel, and BITs and property rights, right panel, through a series of country-level regressions from the period of 1986 to 2014. Lines around points represent the 95% confidence interval of the parameter estimate.

Though this bivariate analysis is useful as a starting point, adding in a series of controls is obviously necessary. To provide an adequate test of the potential link between the commitments purportedly engendered by the investment agreement in regards to the dependent variables I include a number of control measures that have been shown to affect a state's reputation with the international investment community. First are a set of macroeconomic controls, specifically, logged GDP, logged population, a logged rate of inflation, and measures for trade and capital account openness.<sup>19</sup>

There is also an extensive literature asserting the importance of democratic institutions in relation to property rights. North (1995) argues that “well specified and enforced property rights . . . are only secure when political and civil rights are secure”. De Haan and Sturm (2003) have found empirical evidence that democratic institutions are a precursor to the the development of economic freedom, along dimensions like investment protection and property rights liberalization. Thus I include polity as a control variable here as well. Last, given the uncertainty that a serious internal war can wreak on a country's institutional structure, I include the internal stability measure from the ICRG. This measure ranges from 0 to 12 where the highest rating is given to countries where there is no armed conflict against the government, and the lowest to countries engaged in civil war.

The final sample contains data for 105 developing countries from 1986 to 2014.<sup>20</sup> To estimate the effect of accumulating BITs on investment profile and property rights I use a multilevel random effects model. Standard practice in political economy is to use fixed effect (FE) models to account for any time-invariant omitted variable bias, these models come with the cost of only providing insight into the effect of

<sup>19</sup>GDP, population, inflation, and trade openness data all collected from Group (2013). To construct a measure of trade openness I use the sum of exports and imports as a share of GDP. Capital account openness is taken from Chinn and Ito (2008b).

<sup>20</sup>In choosing the sample of countries, I follow the standard in this literature which is independent non-OECD countries with a population of at least 1 million.

a covariate for a given country over time. Yet, FE models are often preferred to approaches using RE models because the assumption that residuals are independent of the included covariates is typically not satisfied.

Bell and Jones (2015) offer a solution to this endogeneity problem and provide a path to estimate both the between and within effects of covariates in a parsimonious framework.<sup>21</sup> To do this they suggest, adding country means to the model for each time-varying covariate. The coefficients on these variables capture the between-country effect. The within country effect of each covariate is determined by also including demeaned versions of each of the variables. Employing this approach enables me to capture both the cross-sectional and over time effect of each covariate. This enables us to explore both the effect that BITs have on reputation in a given country over time and whether ratifying a high number of BITs aids the reputation of a country relative to those that have ratified relatively few or none.

### *Results*

Figures 3.8a and 3.8b show the within and between effects for the regressions on the investment profile and property rights indices. For many of the covariates, the within and between effects generally mirror each other. More democratic countries with higher levels of GDP and greater levels of financial openness tend to receive higher ratings on both investment profile and property rights cross-sectionally and over time – though the cross-sectional effect of financial openness is not significant for property rights. Additionally, higher levels of inflation are associated with lower ratings on both reputational indices cross-sectionally and over time.

The results across the investment profile and property rights models generally agree, but there are some notable differences. The effect of higher levels of population on investment profile differ in terms of the within and between effects, and for the

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<sup>21</sup>Bell and Jones (2015) develop this solution using past work by Mundlak (1978).

model on property rights the effect of population is negative in both cases. The effect of trade openness also differs between the two models, while it is positively related to the property rights measure both cross-sectionally and over time, its effect on investment profile is insignificant.

Next, I turn to our key independent variable, the cumulative number of BITs a country has ratified by a given year. The assumption in the literature has been that BITs should lead investors to alter their perceptions in a positive way about how fairly their property will be treated. However, the analysis presented in Figure 3.8 shows that in the case of investment profile this variable has no cross-sectional or over time effect, and in the case of property rights it has a slight negative effect over time.<sup>22</sup> This casts serious doubt on the causal mechanism used by many monadic studies that link increasing BIT usage to FDI inflows and clarifies why there is no meaningful relationship between these agreements and investment.

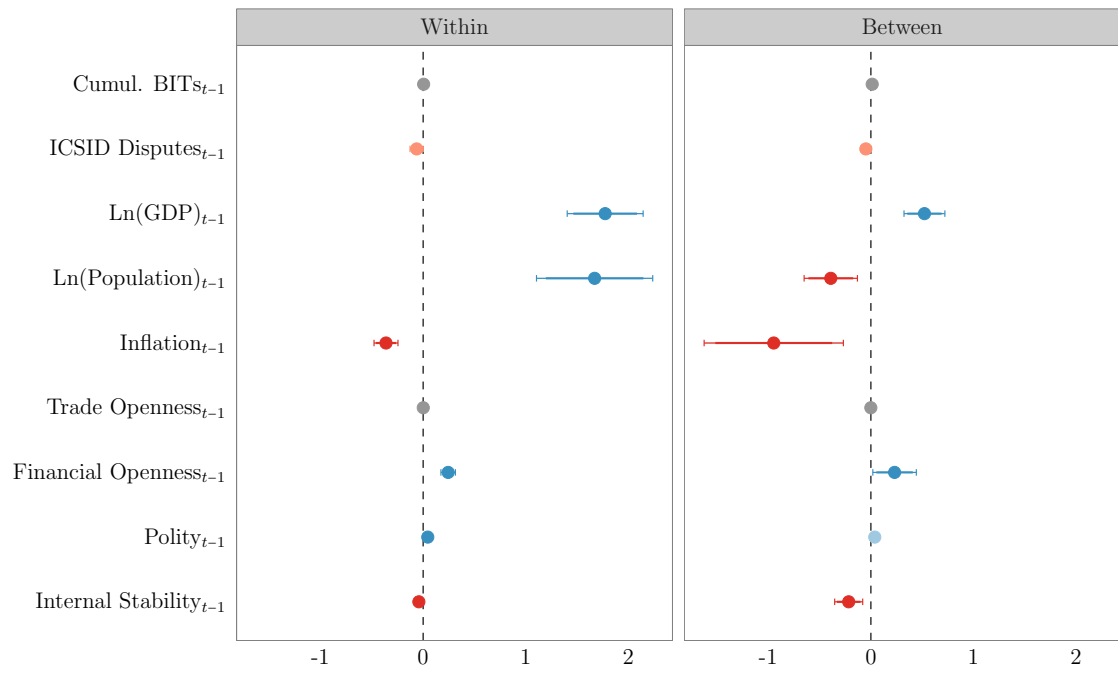
#### *Explanations of the Null Finding*

One possible explanation for the null findings is that the effect of ratifying these investment agreements on the manner in which a country is perceived to treat foreign capital takes longer than just a year to manifest. To test for this, I reran the model lagging the cross-sectional and over time components of the BIT coefficients by two and three years. The results of this analysis are shown in Figures 3.9a and 3.9b – no changes were made in the specifications of the other covariates.

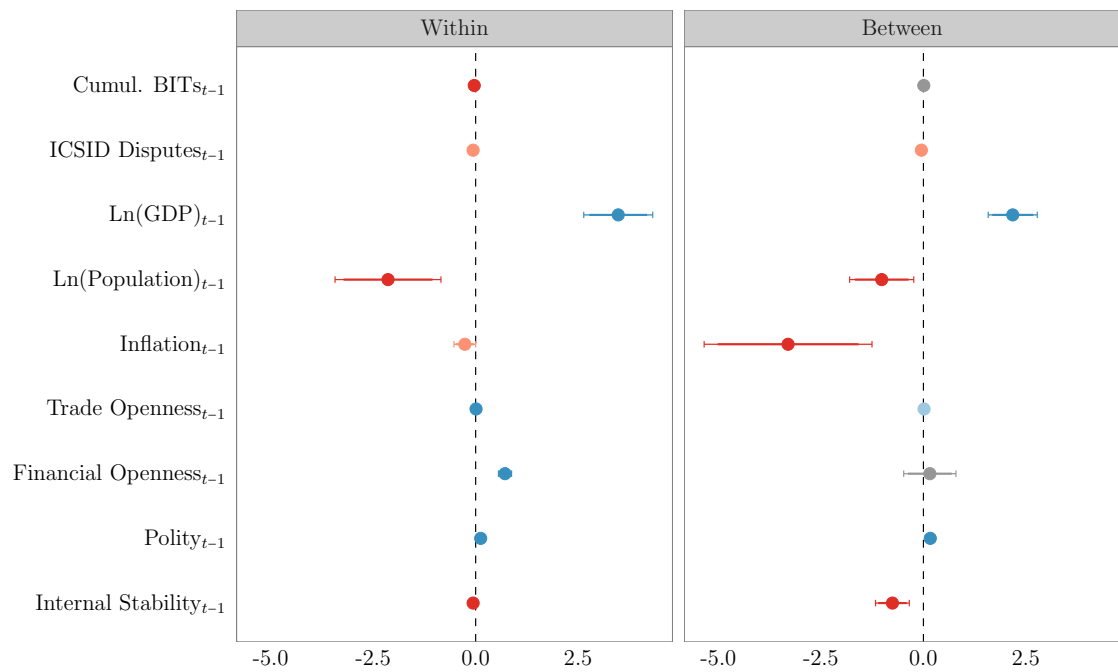
Figures 3.9a and 3.9b provide little support for the argument that there is a delayed effect in these agreements. Further the over time effect of BITs on investment profile and property rights actually declines over time. The cross-sectional effect of BITs on investment profile does see a slight increase with the number of lags, however,

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<sup>22</sup>I refer to the within effect of BITs on property rights as slight because the marginal effect of moving from the minimum number of BITs to the maximum is associated with a less than 2 point decline in the property rights index, which ranges from 0 to 40.



(a) Investment Profile

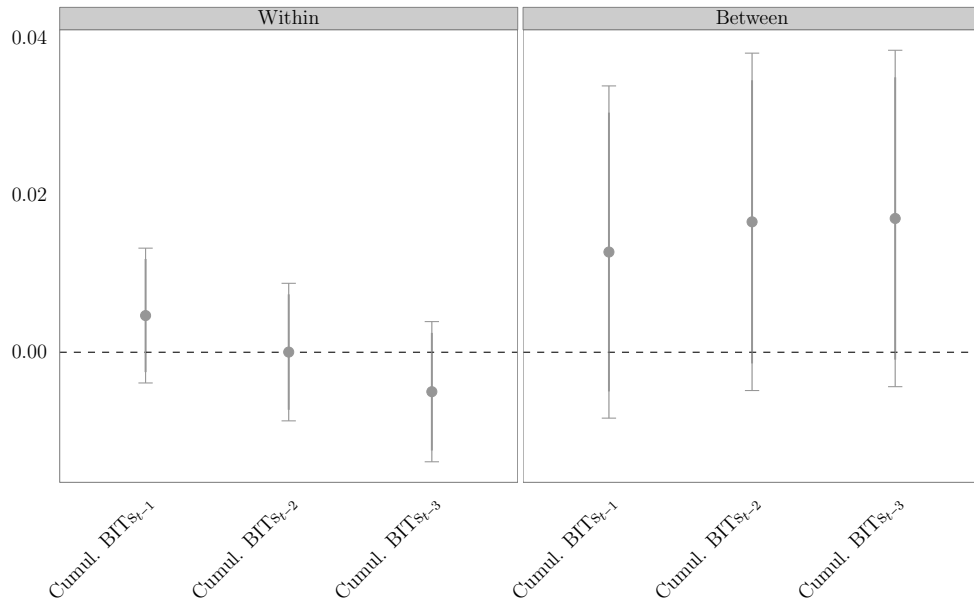


(b) Property Rights

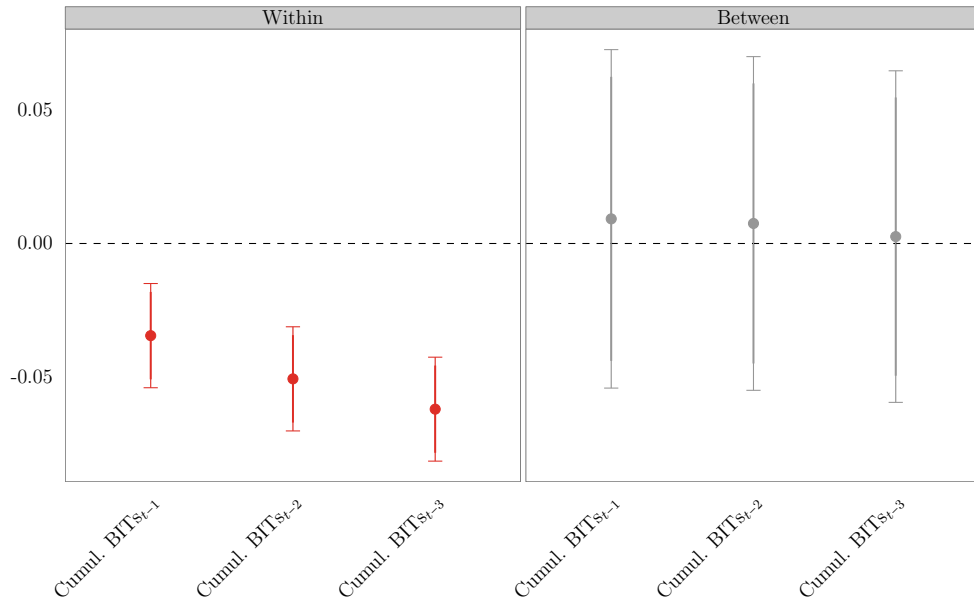
FIGURE 3.8: Regression results on investment profile (top row) and property rights protection (bottom row), left-most panels show the within effect and right-most panels the between effect. Darker colors indicates that the coefficient estimate is significantly different from zero at a 95% CI, while lighter the same for a 90% CI. Grey indicates that the estimate is not significantly different from zero at either of those intervals.

the change across the lagged variables here is too small to be consistent of any type of trend. Suggesting that any benefit that comes from ratifying another BIT is realized early on or not at all.

Another possibility is that running the models on our large sample of developing countries is masking the effect that BITs may have on random subsamples. To test for this, we randomly divide our dataset into five subsamples of approximately twenty countries each with a total of five hundred observations. I rerun the models on each subsample and show the resulting model estimates in Figures 3.10a and 3.10b. As these visualizations make clear, however, there is little support for the idea that BITs may be having a positive effect on random subsamples in the dataset.

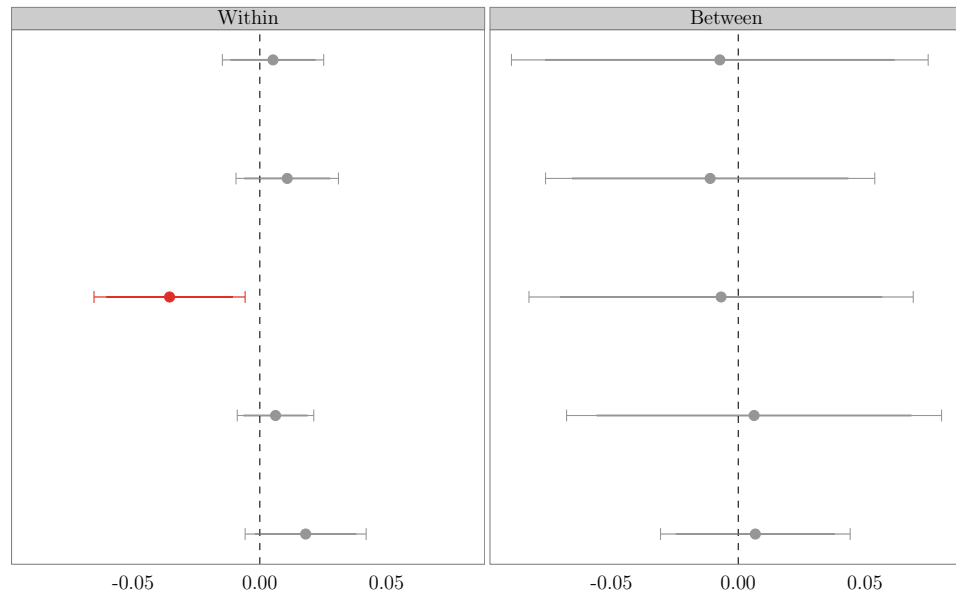


(a) Investment Profile

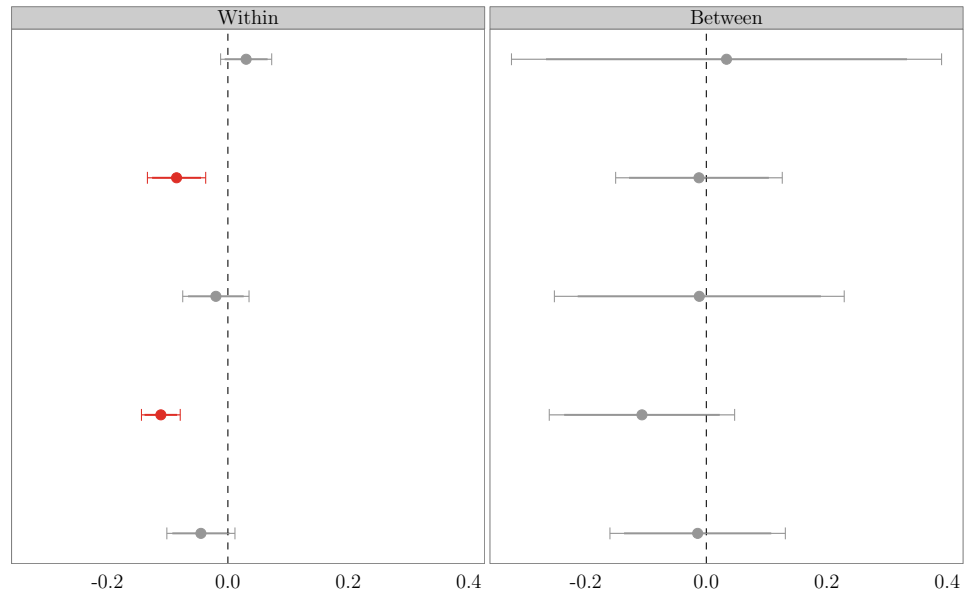


(b) Property Rights

FIGURE 3.9: Results here combine the coefficient estimates of BITs from two additional models where we lagged BITs by two, and three years instead of just one, all other covariates remained lagged at one year.



(a) Investment Profile



(b) Property Rights

FIGURE 3.10: Each row here shows the coefficient estimate of BITs from rerunning the model on five random subsamples within the dataset. All the covariates used in the initial models were included as well.

### 3.5 Conclusion

The extant literature has assumed that the potential costs of violating BIT agreements are so consequential that countries will abide by their terms. Given this assumption, they argue that ratification of these agreements is viewed by foreign investors as a credible commitment of a country's intention to engage in economic liberalization at home, especially, in regards to policies related to the riskiness of a country's investment climate and protection of property rights. Offering this credible commitment is supposed to enable developing countries to overcome the time inconsistency problem and attract greater levels of aggregate FDI inflows.

I have shown, however, that the ratification of BITs appears to do little to engender confidence in the eyes of foreign investors. The substantive impact of ratifying more and more BITs is almost nil in terms of increased FDI inflows. Second, when actually examining the theoretical mechanism through which these agreements lead to changes in FDI inflows, the analysis presented here shows that very little of the variation in perceptions of a country's investment profile and property rights regime can be explained by the number of BITs a country has ratified. Last, in my examination of the process through which these agreements have diffused in the international system, there appears to be little evidence that countries were participating in these agreements in order to overcome a credible commitment problem vis-à-vis their FDI competitors. Indeed, signing of these agreements seems to have been driven by a myopic attempt to maintain appearances without a concern for necessarily making substantive policy changes domestically.

This piece of research highlights the difficulty faced by international law in substantively altering government behavior. BITs, on paper, seem like an ideal example of an international treaty. The signing and ratification of these treaties as well as purported violations are, in many instances, easily accessible public knowledge, and

many BITs provide explicit dispute resolution mechanisms to punish violations of the treaty. Yet, when signing these agreements, few developing countries paid much regard to the commitment they were making. As countries have begun to realize the powers allotted to investors under BITs, they have moved to carefully reconsider the terms prescribed by future BITs and many are coming to the conclusion that one of the key aspects of BITs, ability to bring claims to third party tribunals, needs to be limited or even removed. Although modifying the ability of investors to pursue arbitration removes a key punishment mechanism of these agreement, there is variation in the extent to which countries are making these changes to their model BITs. Understanding how the terms of BITs are changing and what effects this has on the ability of developing countries to make credible commitments to investors may provide a fruitful research agenda in coming years.

## Changing Content of BITs and their Effect on FDI

**Abstract:** Bilateral investment treaties (BITs), on paper, were an ideal international treaty through which to solve the credible commitment problem that developing countries faced in their attempts to attract foreign direct investment (FDI). The signing and ratification of these treaties as well as purported violations are a part of public knowledge, and many BITs provide explicit dispute resolution mechanisms (DRMs) to punish violations of the treaty. Specifically, they allow multinational corporations (MNCs) to sue the country at independent international arbitration tribunals such as the International Centre for the Settlement of Disputes (ICSID). Yet, in recent years it has become clear that the actors involved in this system had a limited understanding of the legal edifice created through the system of BITs in the international system. As knowledge about this system grew, multinational corporations (MNCs) have turned to using the DRMs in these treaties with increasing frequency, but studies examining whether developing countries have benefitted from FDI through participating in BITs remain mixed. I show that as knowledge

about this system has grown the ability of countries to resolve credible commitment problems through BITs has emerged. To do this, I collect the original treaty texts of over 3,000 BITs and coded them by strength of the DRMs provisions therein. Using this database, I show that countries follow divergent paths after facing a dispute at tribunals like ICSID, some move to strip their treaties of strong DRM measures while others maintain their commitments. Through these divergent paths, countries can more credibly highlight their commitments to creating an investor friendly climate.

Since World War II the international system has witnessed a proliferation of bilateral and multilateral treaties seeking to shape issues as diverse as human rights and the environment to trade and foreign investment. Broadly, the purpose of these treaties can be thought of as either providing a credible commitment on the behalf of states or simply a signal of a government's preferences and intentions at the moment. What makes a credible commitment unique is that it is meant to provide an arrangement that effectively ties a government's hands in a way that assures the terms within the treaty will not be violated even if the government's preferences change. The obvious question though is why would governments actually stand by their commitment when the costs of doing so become unfavorable. The most prominent argument within the political science literature is that states do so in order to stave off adverse reputational effects, which presumably arise from violations of their international commitments (Keohane, 1984; Simmons, 2000; Abbott and Snidal, 2000). Despite this it is certainly plausible that the material benefits of walking away from a commitment outweigh any resulting adverse reputational effects. A more compelling argument is that the treaties themselves may have built in provisions that punish violations of the arrangements prescribed therein. Yet, this argument for the ability of treaties to serve as credible commitments is built on the idea that the

treaties themselves cannot be terminated or renegotiated at will. This idea imparts an assumption of permanence to the role of treaties in international relations that is neither obvious nor based on empirical fact.

Specifically, it ignores the reality that buried in the back of most modern international treaties are provisions that provides avenues through which states can “exit” treaties (David, 1975; Helfer, 2005). These types of clauses are pervasive, we can find them in agreements regarding human rights issues, arms control, and environmental agreements. For example, Jamaica, Trinidad & Tobago, and Guyana unilaterally withdrew from human rights treaties in response to treaty interpretations that would have resulted in the abolishment of the death penalty (Concepcion, 2000; Tittlemore, 2004; Harrington, 2004). Another example involves the denunciation of the International Convention for the Regulation of Whaling by Norway, Iceland, Greenland and the Faroe Islands, each of which sought to relieve themselves of the obligations of that convention so they could revive their commercial whaling industries (Caron, 1995). The existence and usage of these types of procedures further brings into question the role that international treaties can play in serving as a credible commitment device. The argument that I present here is one that more conforms to the realist perspective, which begins with the recognition that treaties, in general, are malleable and are the representation of the understanding and needs of the environment in which they were formed (Downs et al., 1996; Von Stein, 2005). This is not at all to imply that international treaties cannot have a profound effect on the international system and the countries that participate in them. Quite the opposite, in fact, however, before their intended effect can be realized state commitment to the terms prescribed therein needs to be made and kept credible. Credibility, I argue, is only forged when states are seen to continually maintain their commitments after having faced costs from the provisions guaranteed within the treaties they have signed.

Nowhere, is this argument more relevant than in the development and evolution

of international investment law. The edifice upon which this system has been largely built are bilateral investment treaties (BITs). From just a few hundred in the early 1990s to thousands today, BITs now undeniably form the basis for a common lexicon of investment treaty law (McLachlan et al., 2007). The preamble of almost every BIT begins with the statement that the purpose of this agreement is to “to create favourable conditions for greater economic cooperation for the mutual benefit of both countries and to maintain fair and equitable conditions for investments by investors of one Contracting Party in the territory of the other Contracting Party”.<sup>1</sup> The most important way in which these agreements purport to accomplish this goal is through the inclusion of investor-state dispute settlement (ISDS) mechanisms that enforce the broad set of investor rights provided by these agreements. ISDS mechanisms are extremely unique and important because they provide multinational corporations (MNCs) the right to take investment-related disputes to an international arbitration tribunal that is completely independent of the host country’s legal system. There are no other international arrangements that have proliferated across the international system so rapidly and have had such an empowering effect for transnational actors, such as MNCs. For example, the International Centre for the Settlement of Investment Disputes (ICSID), which is the most widely used and well known international arbitration tribunal, awarded almost a billion dollars to a company that took the Slovak Republic to arbitration,<sup>2</sup> and Argentina recently settled a case that was brought against it for five billion dollars.<sup>3</sup>

BITs have certainly been effective in providing investors a viable avenue through which to attempt to recover perceived losses from sunk investments, but whether or

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<sup>1</sup>Agreement Between the Government of the Argentine Republic & the Government of New Zealand for the Promotion and Reciprocal Protection of Investments (1999).

<sup>2</sup>Ceskoslovenska Obchodni Banka, A.S. v. The Slovak Republic, ICSID Case No. ARB/97/4, Award (29 Dec 2004).

<sup>3</sup>Repsol, S.A. and Repsol Butano, S.A. v. Argentine Republic, ICSID Case No. ARB/12/38, ICSID Case No. ARB/10/7, Settlement Agreement (20 March 2014).

not they have provided any benefits in greater levels of FDI for developing countries has been a topic of wide debate within political science,<sup>4</sup> economic,<sup>5</sup> and legal circles.<sup>6</sup> I argue that the failure to find a consistent effect is a result of not accounting for the malleability of commitments to international obligations. Specifically, the extant literature has so far paid little attention to the fact that since facing the consequences of the obligations prescribed in BITs, namely, ICSID disputes, countries have reacted in variegated ways. Some have maintained strong commitments to the role of ISDS in BITs, while others have moved towards significantly revising the rights they provide to investors (Vis-Dunbar, 2008). Just one such example involves Columbia's revised BIT template that restricts the arbitral venues that can be used by foreign investors. The way countries respond to the disputes they face provides a way for the investment community to distinguish between countries that will stand by their BIT obligations and those that will not. I show that countries maintaining their commitments to strong BITs after facing ICSID disputes, not only see substantive changes in how they are perceived by foreign investors, but also receive substantively higher levels of FDI flows.

The rest of this paper is organized as follows. First, I discuss how understanding of the consequences of BITs among countries in the international system has changed over time and what their response has been to that shift. Second, I discuss how this evolving process has created a mechanism through which these agreements can actually begin to alter a country's reputation and level of FDI flows. Third, I introduce my empirical design and an original dataset that tracks how countries have changed the ISDS provisions within BITs over time. Next, I present empirical findings that highlight the substantive role BITs can play in shaping reputation and FDI flows

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<sup>4</sup>e.g., see Büthe and Milner (2009b); Kerner (2009); Poulsen and Aisbett (2013).

<sup>5</sup>e.g., see Egger and Pfaffermayr (2004); Neumayer and Spess (2005); Desbordes and Vicard (2009).

<sup>6</sup>e.g., see Guzman (1998); Montt (2009); Yackee (2010).

and conclude thereafter.

## 4.1 BITs: A Misunderstanding

BITs, on paper, represent an ideal example of an international treaty. The signing and ratification of these treaties as well as purported violations are a matter of public knowledge. The majority of BITs also provide explicit dispute resolution mechanisms to materially punish violations of the treaty (Reinisch, 2013). Making these treaties even more significant is that the terms relating to investor rights are extremely broad and open-ended and vest independent arbitration tribunals with the authority to review the legitimacy of any state actions affecting those rights (Montt, 2009). What is most surprising about the emergence of this regime, however, is that even though thousands of these treaties were negotiated in bilateral settings, their key substantive provisions are, up until recent years, almost identical (Ginsburg, 2005; Geiger, 2008; Allee and Elsig, 2015).

This patchwork of relatively consistent treaties has empowered MNCs to take a wide assortment of developing and developed countries to international arbitration tribunals. To highlight the diversity of countries that have become involved in disputes resulting from BITs, I show the geographic distribution of disputes by 2015 in Figure 4.1. The initiation of disputes as a result of BIT violations was relatively rare and isolated to Latin American countries in the 1990s, but by the mid-2000s developing countries such as South Africa became aware of the risks of these agreements, and in 2011 even Australia was introduced to the potential BITs had in empowering MNCs to challenge a government's domestic policy agenda.<sup>7</sup>

Though BITs have diffused across almost all countries in the international system, in general, countries systematically underestimated the risks they posed to the policy

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<sup>7</sup>See *Philip Morris Asia Limited v. The Commonwealth of Australia*, UNCITRAL, Written Notification of Claim pursuant to Agreement Between the Government of Hong Kong and the Government of Australia for the Promotion and Protection of Investments (22 June 2011).

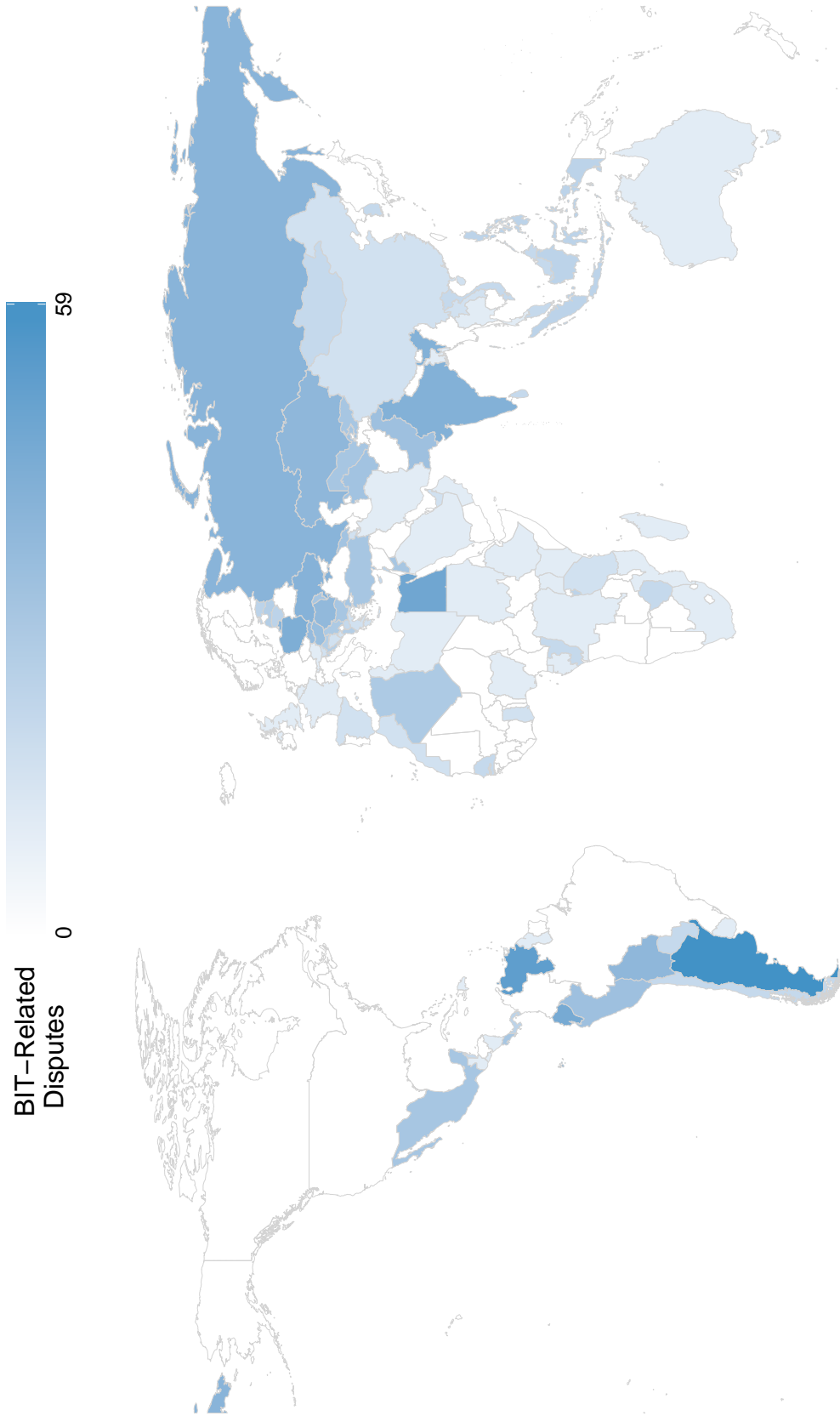


FIGURE 4.1: Geographic distribution of disputes filed at international arbitration tribunals as a result of the purported violation of a BIT by 2015.

agendas and even sovereignty of participants (Peterson, 2009a). This is a point in echoed in scores of interviews with BIT negotiators (Poulsen, 2011). The implication being that the development of this regime was not intentional, but rather driven by a failure to appreciate the terms of the agreements being signed. This ignorance was partly the result of a “bounded rationality” on the part of countries (Poulsen, 2013), but it is also a function of the fact that even few legal scholars appreciated the way in which international investment regime regime itself was evolving (Suchman and Edelman, 1996). Clarity over the costs and benefits of participating in the regime manifested by BITs is only being revealed over time as more and cases are brought in front of international arbitration tribunals (Goldstein and Steinberg, 2008; Schill, 2009).

As countries have realized the powers allotted to investors under BITs, many have moved to reconsider the terms prescribed within them or to leave the regime entirely. Indonesian Vice President Bouediono, for example, recently confirmed that Indonesia will not be renewing its BIT with the Netherlands (Beckett et al., 2014). Many have speculated that Indonesia’s decision comes in the face of recent investment dispute cases, in particular, an ICSID case brought by Churchill Mining Plc (Ruff, 2014; Beckett et al., 2014; Tevendale and Naish, 2014). Indonesian President Yudhoyono’s has spoken publicly with regards to this ICSID case, saying that he does not want MNCs to “pressure developing countries like Indonesia” (Philipps and Milburn, 2014; Bland and Donnan, 2014).

South Africa has indicated that it will no longer be including ISDS provisions in future BITs and has even terminated several of its agreements with European Union countries. Like Indonesia, South Africa’s decision was precipitated by a growing concern over BIT-related disputes. In 2007, Italian and Luxembourg investors called for investor-state arbitral proceedings at the ICSID against South Africa following the enactment of South Africa’s Mining and Petroleum Resources Development Act

(MPRDA). The goal of the MPRDA was to initiate reforms that brought about equitable access to South Africa’s natural resources. This was to be accomplished through divesting current landowners of a percentage of their share to Historically-Disadvantaged South Africans. The Italian and Luxembourg investors argued that this piece of legislation contained provisions that expropriated their mineral rights.<sup>8</sup> In explaining the decision to exclude dispute resolution mechanisms from future BITs, Rob Davies, South Africa’s Minister of Trade and Industry, announced that these agreements “pose risks and limitations on the ability of the government to pursue its constitutional-based transformation agenda”.<sup>9</sup>

## 4.2 Reforming BITs

Indonesia and South Africa are hardly alone in terminating or reformulating their BITs. The increasing risk of facing disputes at arbitration tribunals, and perceptions that those tribunals adopt expansive interpretation of BIT provisions has prompted not only calls for reform, but has also led many developing countries to attempt to extricate themselves from this system. For some Latin American countries these attempts have manifested themselves in the forms of repudiations of the ICSID convention and other arbitration tribunals. Other such as Indonesia and South Africa have moved to denounce swaths of BITs to which they previously committed.<sup>10</sup> The objective of withdrawing from the ICSID convention and unilaterally denouncing a BIT is to find some way to escape from the potential for further arbitration in the future.

Whether these paths represents a viable approach through which countries can

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<sup>8</sup>Piero Foresti, Laura de Carli and others v. Republic of South Africa, ICSID Case No. ARB(AF)/07/1, Award (August 04, 2010)

<sup>9</sup>Speaking Notes for Minister at the Discussion of UNCTAD’s Investment Policy Framework for Sustainable Development (September 2012)

<sup>10</sup>South Africa and Indonesia have both terminated nine BITs (UNCTAD, 2016).

extricate themselves from the legal entanglements of the BITs regime is somewhat unclear (Lavopa et al., 2013; UNCTAD, 2016), especially since many BITs come with decade long survival clauses. However, there is some agreement between arbitrators and academics that if a BIT is unilaterally terminated, then only investments existing at or before the time of termination will be covered (Fouret, 2008; Schill, 2011; Voon et al., 2014). Investments taking place post the unilateral termination of a BIT or withdrawal from ICSID, or other arbitration tribunals, no longer can rely on the broad set of rights that BITs typically provide (UNCTAD, 2010). Further even though the process for countries of disentangling themselves from the BITs regime is complicated, investors who win cases against states that do not want to pay have no easy road for claiming their award either (Cane, 2004). Countries such as Congo, Senegal, Russia, and Thailand have each lost a case at ICSID but refused to honor the award levied by the arbitration tribunal (Bjorklund, 2012). As Cardosi (2014) notes, “a state decides whether it will honor an arbitral award, and if it says, ‘go fish,’ the investor is on his or her own”.<sup>11</sup>

Unilateral termination of a BIT or simply ignoring arbitration rulings is certainly one option that has been pursued by a number of countries, but it is not the most common. As was shown in Figure 4.1, disputes have affected a large number of developing countries, by 2015 over 100 countries have faced at least one BIT related dispute. Haftel and Thompson (2013) find that as a result of facing a dispute countries are significantly more likely to renegotiate their BITs. Figure 4.2 visualizes the number of treaties that countries have changed either by renegotiating a new treaty, terminating with consent from their signatory partner, or unilaterally denounced. By 2015, over 90 countries have made some changes to their portfolio of BITs. Some of the most active include Canada, Colombia, and Tunisia, each of which

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<sup>11</sup>For MNCs partnered with sophisticated legal firms, there is the possibility of seizing assets from recalcitrant states such as these but that process is by no means a frugal or obvious enterprise.

have replaced up to 25% of their treaties (Gordon and Pohl, 2015). The types of changes countries are making to their existing set of BITs are unique, some treaties, for example, now limit the scope of activities over which disputes can be initiated in independent arbitration tribunals. For example, in the revised Cameroon-Turkey BIT, investors in real estate activities can no longer initiate arbitration proceedings at ICSID (Bermann, 2015), and the Canada-Jordan BIT includes similar restrictions for investors in financial services (Bouchenaki and Tan, 2014). More generally other countries such as Colombia and Egypt have restricted the rights of investors to pursue arbitration in cases that would infringe on domestic environmental, public health, and labor standards (UNCTAD, 2016).

The variegated types of changes that are currently taking place within the BITs network represents an end to the era of the boilerplate BITs that proliferated across the international system during the 1990s. Across the majority of countries that participate in this system there is now an increasing level of awareness with regards to the substantive provisions of BITs. Given this level of awareness, we can observe that some countries continue to participate in agreements with high levels of investor protection while others discard those features that made BITs so unique. India, for instance, is one such country that is moving towards discarding a number of BIT provisions that are important to investors (Malik, 2010a). To date, India has had more than 80 BITs come into force, but it did not face its first ICSID dispute until 2003. The year after that first dispute, India faced eight additional new cases at the ICSID. With this torrent of disputes, India began a process towards rethinking its BITs programme, specifically, with regards to the regulatory powers that it is willing to cede to arbitration tribunals (Ranjan, 2014). The revised model BIT now contains an “exhaustion of local remedies” clause, which states:

“In respect of a claim that the Defending Party has breached an obligation



... a disputing investor *must first submit its claim before the relevant domestic courts* or administrative bodies of the Defending Party for the purpose of pursuing domestic remedies in respect of the same measure or similar factual matters for which a breach of this Treaty is claimed.”  
(Indian 2015 Model BIT, Article 14.3)

The inclusion of this clause specifying that investors must first go through domestic channels significantly increases the time and costs to investors of filing any dispute motions at all. Further even after exhausting all domestic options within Indian courts, investors will then need to attempt to “resolve the dispute amicably” with the Indian government for at least another year before they can even begin the process of turning to an arbitration tribunal – this latter process also comes with a number of steps (see Article 14.4 of the Indian 2015 Model BIT).

While countries such as India have moved to weaken investor protection provisions within BITs, others such as Peru have actually maintained many of the ISDS related provisions that made these agreements so unique (UNCTAD, 2011). Peru after its first investment dispute in 2003 began an assessment not of their BIT portfolio, but in how they could create a better system for efficiently and effectively resolving potential investment disputes (Llerena, 2013). To do this, the government in 2006 set up the “Coordination and Response System for International Investment Disputes”. The changes made here by Peru differ from those of India in that the government did not move to restrict access to arbitration tribunals, but instead has decided to reform its own government agencies so that it can more efficiently handle disputes that do arise.

### 4.3 How BITs Can Matter

The diverging paths countries take following disputes provides a way in which investors can differentiate between countries that are truly committed to strong ISDS provisions within BITs and those that are not. The BITs literature has so far argued that it is simply the existence of ISDS provisions within BITs that provides a credible commitment<sup>12</sup> or signaling<sup>13</sup> effect strong enough to lead to increased FDI flows. However, for a credible commitment to exist within this framework, the BIT must tie the hands of the participating countries in such a way that the treaty cannot be violated in the future irrespective of the government's preferences. Yet, the very fact that this system is undergoing such dramatic change now belies the argument that any participating country was truly seeking to cede their sovereignty in the manner prescribed by BITs. Even if we discard the qualitative evidence indicating that countries had little appreciation for the consequences of these agreements (Yackee, 2010; Poulsen, 2011; Fecák, 2011), what we cannot ignore is that once confronted with disputes a number of countries have either refused to honor awards from ICSID, left the ICSID convention entirely, or proceeded to unilaterally denounce their BITs. The very idea of a credible commitment implies some sort of permanence, but BITs are treaties that are actually evolving.

The argument that BITs can serve as a signal, however, does have merit but extant explanations of this signaling mechanism are lacking. The existing literature argues that by participating in a BIT a country is signaling its willingness to offer a friendly environment for foreign investors. It is argued that this signal is deemed strong enough because only countries that are willing to abide by the terms of a BIT

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<sup>12</sup>e.g., see Haftel (2007); Bütte and Milner (2009a); Lupu and Poast (2013).

<sup>13</sup>e.g., see Hallward-Driemeier (2003); Neumayer and Spess (2005); Salacuse and Sullivan (2005).

would participate, as the ex post<sup>14</sup> and ex ante<sup>15</sup> costs of violating them are high enough that countries not seeking to make these commitments will be dissuaded from participating in this legal regime. Thus the key here, as in all signaling games, is whether participants in this system have endogenized the costs such that only those intending to be genuinely compliant to the signal will commit to sending it (Morrow, 1999; Abbott and Snidal, 2000; Martin, 2005; Thompson, 2006).

The issue with the extant signaling argument in the BITs literature is that it fails to take into account that governments simply had not endogenized the costs of BITs when they first rushed to participate in this regime. Understanding of the consequences of BITs is something that has evolved over time, and it is in the observation of this system's evolution that MNCs can begin to distinguish between countries that are committed to investor friendly policies and those that are not. Specifically, I argue that those countries that maintain their commitments to strong ISDS provisions following disputes will be more likely to see positive effects stem from their participation in this regime. This does not imply that simply having strong ISDS provisions will lead to positive effects, the intermediate step of having had a dispute and then maintaining a commitment to the regime is crucial if the signal of a BIT is to be made credible. The credibility comes from the fact that after having faced a dispute a country is able to genuinely endogenize the costs of violating these agreements, and if that country maintains a commitment to strong ISDS provisions going forward investors will have greater confidence in the signal that BITs are believed to send.

To test this argument it is necessary to first build a dataset that actually differentiates between strong and weak BITs in terms of their commitments to ISDS mechanisms. To do this, I have assembled a collection of over 2,500 treaties written

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<sup>14</sup>See Elkins et al. (2006).

<sup>15</sup>See Kerner (2009).

in English and 1,525 written in other languages from 1962 to 2015 – this sample includes earlier and most recent versions of a BIT that may have been renegotiated.<sup>16</sup> I restrict my analysis to only those treaties that are or have been in force, thus excluding BITs that were only signed but never ratified by both parties. The distinction between BITs in force and those simply signed is important as the latter have no binding legal force, and are essentially just pieces of paper (Hathaway, 2008; Haftel, 2010). Additionally, given the potential nuances that come with legal documents, I focus only on treaties for which I could retrieve English copies.<sup>17</sup>

To code this set of treaties, I employ the scheme developed by Yackee (2007a) for rating the strength of the ISDS provisions within BITs. Specifically, I create a binary variable, simply labeled “strong BITs”, that is one if the treaty meets the “comprehensive, effective pre-consent” standard that he describes and zero otherwise.<sup>18</sup> Yackee (2007a, p. 22) describes treaties that fall into this category in the following way: “each state agrees *in advance of any particular dispute* to allow future investors to *unilaterally initiate arbitration* in the event of an ‘investment dispute,’ broadly defined, before particular arbitral tribunals.” The inclusion of comprehensive consent is crucial as it “unambiguously pre-commit[s] the host government to investor-state arbitration for a wide variety of treaty violation[s]” (Yackee, 2016, p. 57). The importance of this type of consent has also been noted within the political science literature, most prominently by Allee and Peinhardt (2014) who applied Yac-

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<sup>16</sup>The majority of the treaty texts were scraped from UNCTAD’s Investment Policy Hub online repository of treaties, for cases in which the treaty was not supplied in English here I turned to the Kluwer Arbitration collection of treaties, last, if neither of these sources had the relevant treaty then I turned to country-specific sources. The program I developed to scrape treaties from UNCTAD and Kluwer is available in a github repository: [s7minhas/BITsData](#).

<sup>17</sup>As a robustness check I coded the 483 treaties written in Spanish and 890 in French as well, after having translated the documents into English using Google translate, and the results I present in the following sections remain robust even if I include those treaties in my analysis.

<sup>18</sup>Yackee’s (2007) actual coding scheme provides a four point index for assessing the strength of ISDS provisions. However, a number of subtle legal nuances develop once one attempts to parse out the differences between some of the intermediate categories. Given that I am not a legal scholar, I choose to only focus on coding whether or not a treaty meets the high standard set by Yackee’s “comprehensive, effective pre-consent” category.

kee's coding scheme to a sample of 1,500 BITs from 1959 to 2006. For BITs without these broad pre-consent mechanisms, MNCs have to obtain the written consent of the state before they are able to initiate arbitration. I also create a second binary variable labeled "weak BITs", that is one if the BIT is in force and does not meet the criteria for providing "comprehensive, effective pre-consent".

After applying this coding scheme across the set of treaties that I assembled, I make a number of modification to account for the ways in which states have responded to investment disputes. First, if a treaty has been unilaterally denounced I give it a zero for the strong BITs variable and a one for the weak BITs variable. The reasoning for this is that even though unilateral denunciation does not clearly disentangle a country from its commitments to preexisting investments, the legal literature does seem to provide some consensus that investments made post that denunciation are not guaranteed access to ISDS (UNCTAD, 2010; Lavopa et al., 2013). Additionally, a unilateral denunciation does send a clear signal to the investment community that the country is no longer willing to stand by any commitments in that treaty. Second, if a pair of countries have agreed to mutually terminate a BIT, then I do not classify that treaty as either weak or strong. Third, if a treaty has been renegotiated then the treaty type after that renegotiated treaty has entered into force is used to define the relationship between the pair of countries. Once these modifications are made I create two monadic level variables that capture the the number of strong and weak BITs a country has in force by time  $t$ .

The key argument that I put forward is that countries will be able to more credibly commit to the investor rights prescribed in BITs when they maintain their commitments to strong BITs following the occurrence of disputes resulting from BITs. To code this disputes variable, I calculate the total number of investment settlement disputes that have been filed against a country using a BIT that the country had in force. This merges together disputes that might have been filed at the ICSID,

Stockholm Chamber of Commerce (SCC), and other regional fora that have been established to handle ISDS cases.<sup>19</sup> The sample that I use to analyze the validity of this argument is comprised of over 100 developing countries from 1986 to 2014 and includes approximately 2,600 country-year observations.<sup>20</sup> To examine whether the commitment of providing an investor friendly locale is manifested by a country continuing to maintain strong ISDS provisions following a dispute, I test my argument using two dependent variables. First, I consider whether perceptions of a country's investor-friendliness improve once a country has shown that it is committed to strong ISDS provisions. I draw this perceptual measure from the International Country Risk Guide (ICRG) dataset, specifically, the investment profile variable, which represents expert perceptions of a government's general attitude towards investment (Political Risk Services Group, 2013). The investment profile measure ranges from zero to twelve, where a higher rating for a country indicates that it is perceived as a friendlier environment for foreign investment. Second, I test whether providing this commitment actually leads to a change in the level of net FDI flows – data for FDI flows is gathered from the World Bank. Before utilizing this variable in the analysis I transform it by taking the log. Results using logged or unlogged specification of the net FDI variable are similar for the key covariates.

The general econometric specification that I utilize to test these hypotheses is summarized as follows:

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<sup>19</sup>Data for this measure is taken from UNCTAD's investment settlement dispute website.

<sup>20</sup>When incorporating the various control measures a certain amount of missingness is obviously introduced. To check against the possibility of biases and inefficiencies resulting from listwise deletion, I employed the multiple imputation approach discussed by Honaker and King (2010). The results are similar after rerunning the analysis using five imputed datasets, the results I present in the following section utilize the raw data.

$$\begin{aligned}
y_{i,t} = & \beta_d \text{Disputes}_{i,t} + \\
& \beta_s \text{Strong BITs}_{i,t} + \beta_{s \times d} (\text{Strong BITs} \times \text{Disputes}_{i,t}) + \\
& \beta_w \text{Weak BITs}_{i,t} + \beta_{w \times d} (\text{Weak BITs} \times \text{Disputes}_{i,t}) + \\
& \sum_{c=1}^C \beta_c \mathbf{X}_{c,i,t} + \alpha_i + \epsilon_{i,t}
\end{aligned}$$

Where  $y_{i,t}$  is a placeholder for the investment profile measure from the ICRG and net FDI flows from the World Bank,  $\sum_{c=1}^C \beta_c \mathbf{X}_{c,i,t}$  represents a set of  $C$  control variables utilized in the analysis,<sup>21</sup> and  $\alpha_i$  represents a set of country fixed effects. The statistical parameters central to my argument are  $\beta_d$ ,  $\beta_s$ , and  $\beta_{s \times d}$ . My expectation is that the substantive effect of both  $\beta_d$  and  $\beta_s$  will be relatively marginal, but that  $\beta_{s \times d}$  will be positive and have a substantive effect. The implication of this is that when a country has a notable number of disputes and still maintains a large number of BITs with strong ISDS provisions, that country will be more successful in sending a credible signal to investors, and will, as a result be perceived to have a more favorable investment climate along with greater levels of FDI flows. Additionally, I include a set of parameters to capture the effect of weak BITs. In the next two sections, I discuss the control variables and results for the reputation and FDI analyses.

#### 4.4 BITs and Reputation

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<sup>21</sup>Control variables will be different depending on the dependent variable utilized.

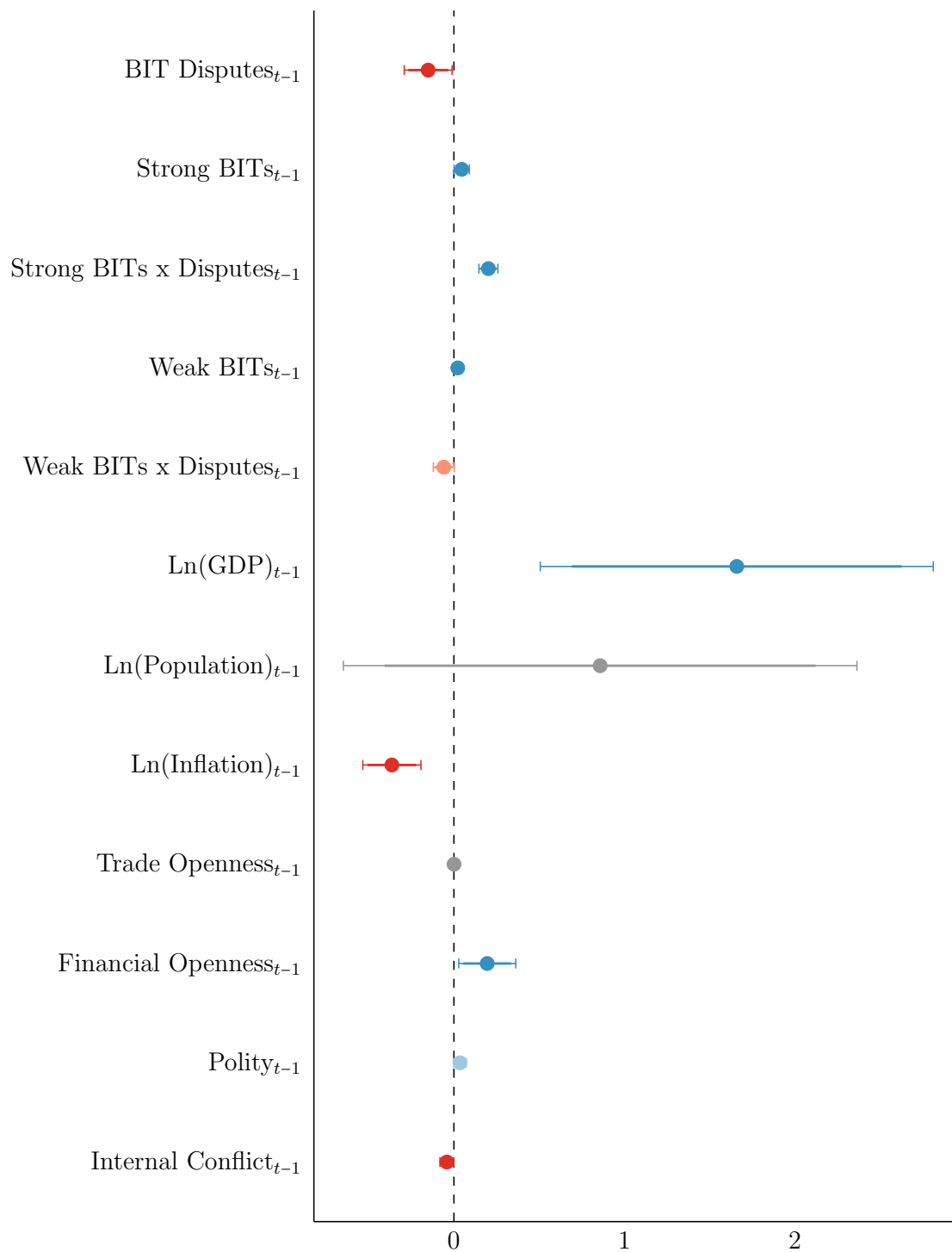


FIGURE 4.3: Darker colors indicates that the coefficient estimate is significantly different from zero at a 95% CI, while lighter the same for a 90% CI. Grey indicates that the estimate is not significantly different from zero at either of those intervals.

For controls in the reputation analysis, first I include a set of macroeconomic variables, specifically, logged GDP, logged population, a logged rate of inflation, and measures for trade and capital account openness.<sup>22</sup> There is also an extensive literature asserting the importance of democratic institutions in relation to property rights. De Haan and Sturm (2003) have found empirical evidence that democratic institutions are a precursor to the the development of economic freedom, along dimensions like investment protection and property rights liberalization, thus I include polity as a control variable here as well. Given the uncertainty that a serious internal war can wreak on a country's institutional structure, I include a measure that captures the level of internal stability within a country from the ICRG dataset.

The results of this model are shown in Figure 4.3. In discussing the results, I focus on our key parameters of interest. First, we find that disputes have a significant negative effect on reputation, strong BITs have a positive effect, and, most importantly, the interaction between the two is significant and positive. Additionally, we find that weak BITs also have a significant and positive effect, but the interaction between weak BITs and the BITs-related dispute measure is negative.

Given that the model I estimate includes interaction effects drawing conclusions from just the regression results is not the most straightforward way to proceed. Additionally, the raw regression results by themselves provide us with little guidance in determining whether or not BITs or disputes have any substantive implications for reputation. To address both of these issues, I turn to a simulation based approach that allows us to compare the effects across varying scenarios and provides appropriate measures of uncertainty. What I hope to show from this simulation based analysis is that the effect of having a larger number of strong BITs increases as the number of BIT-related disputes a country has faced increases. To do this, I first

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<sup>22</sup>GDP, population, inflation, and trade openness data all collected from the World Bank. To construct a measure of trade openness, I use the sum of exports and imports as a share of GDP. Capital account openness is taken from Chinn and Ito (2008b).

set up four scenarios, one in which the disputes variable is equal to zero and then three others where the number of disputes rises incrementally by one. Within each of these dispute scenarios, I include estimates for investment profile when the number of strong BITs is at its 0<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, and 99<sup>th</sup> percentile. I then repeat this process of constructing scenarios for weak BITs. For each of the generated scenarios all control variables are kept at their mean. In order to introduce appropriate levels of uncertainty for predictions of investment profile ratings in each of these scenarios, I next take 1,000 random draws from a multivariate normal distribution using the point estimates and variance-covariance matrix from the regression results. This provides us with a distribution of values that each of the regression parameters can take. To obtain predictions of investment profile, I simply matrix multiply the constructed scenarios with the draws from the multivariate normal, and I visualize the results of this process in Figure 4.4.

Within Figure 4.4 a solid circle is used to designate the mean estimate for each scenario and the length of the line designates where 95 percent of the values for a given scenario fall. The top panel shows the results when varying strong BITs and the bottom when varying weak BITs, the columns represent variations in the number of BIT-related disputes. The first column generates predictions for the case of zero disputes, here within both of the panels we can see that there is no notable predicted difference in investment profile ratings by variations in the number of weak BITs that a country has signed or even in the number of strong BITs. Also notable is that the average predicted investment profile rating for both weak and strong BITs is practically the same.

Interesting differences between the number and type of BITs only begin to emerge after disputes occur. As we go right across the columns within the two panels, we can see that having a larger number of BITs starts to lead to slightly varied predictions for investment profile ratings. A number of interesting differences in predicted

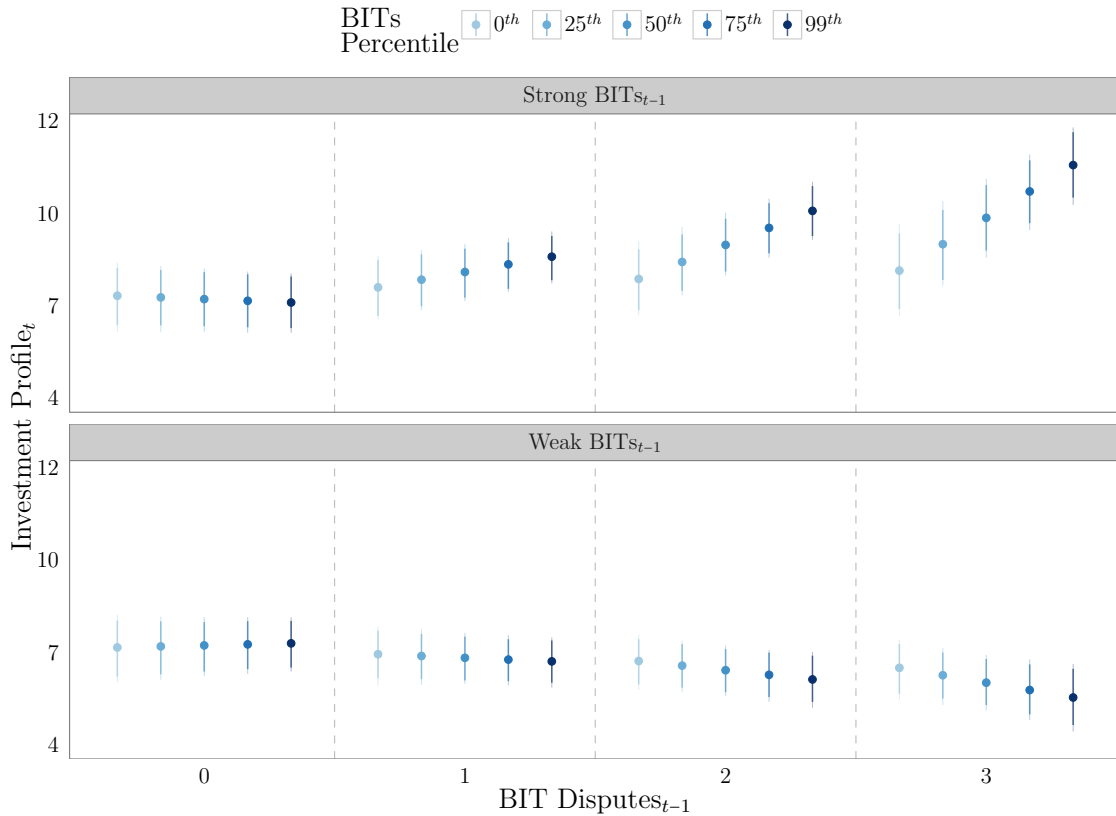


FIGURE 4.4: Here I show a typical country’s predicted rating on investment profile under scenarios in which we vary the number of disputes, strong BITs, and weak BITs. The colors here designate varying numbers of BITs and the columns in each of the panels varying number of disputes. All other variables were kept at their mean values. Results were obtained by using simulations that accounted for inferential uncertainty. The point estimates here represent the mean predicted ratings and the line represents the 95% level of uncertainty associated with these estimates.

investment profile ratings actually begin to become notable after at least two disputes have been filed. First, having a larger number of strong BITs is associated with higher investment profile ratings. Second, if we compare predicted investment profile ratings across the columns of the top panel, we can clearly see that having a larger number of strong BITs is more consequential after a country has faced a dispute. Last, the type of BITs, strong or weak, begins to become meaningful after a country has faced disputes. The analysis here suggests that a large number of weak BITs clearly does not lead to any positive changes in reputation.

## 4.5 BITs and FDI

Next I run a similar analysis to ascertain whether the hypothesis that I have discussed has any implications for the relationship between BITs and FDI. In choosing a set of control variables for the FDI model, I heavily lean on previous empirical work that has tried to ascertain the effects of BITs on FDI. Specifically, I closely mirror the specification provided by Allee and Peinhardt (2011). To account for macroeconomic factors that might affect FDI flows I add in GDP growth, logged GDP per capita, logged population, and logged inflation.<sup>23</sup> Additionally, I add a set of measures from the International Country Risk Guide (ICRG) to account for the level of political violence in the country and the risk to the ruling government from foreign action.<sup>24</sup> Next, I add in a set of institutional measures that have been identified as related to FDI flows: financial openness,<sup>25</sup> political democracy,<sup>26</sup> and level of property rights protection.<sup>27</sup> Last to account for global trends in FDI flows, I add in a yearly level variable that sums up the net FDI flows in a given year across all countries in the world.

The results here are shown in Figure 4.5 and are generally consistent with the reputation analysis. With the exception of the BIT-related disputes variable and the interaction between weak BITs and disputes having less precisely measured parameters. Nonetheless, the key results align with the expectations I laid out earlier.

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<sup>23</sup>We gather each of these measures from the World Bank.

<sup>24</sup>Political Risk Services Group (2013)

<sup>25</sup>Chinn and Ito (2008a)

<sup>26</sup>Specifically, I use the Polity 2 score from the Polity IV project developed by Marshall et al. (2013).

<sup>27</sup>Political Risk Services Group (2013)

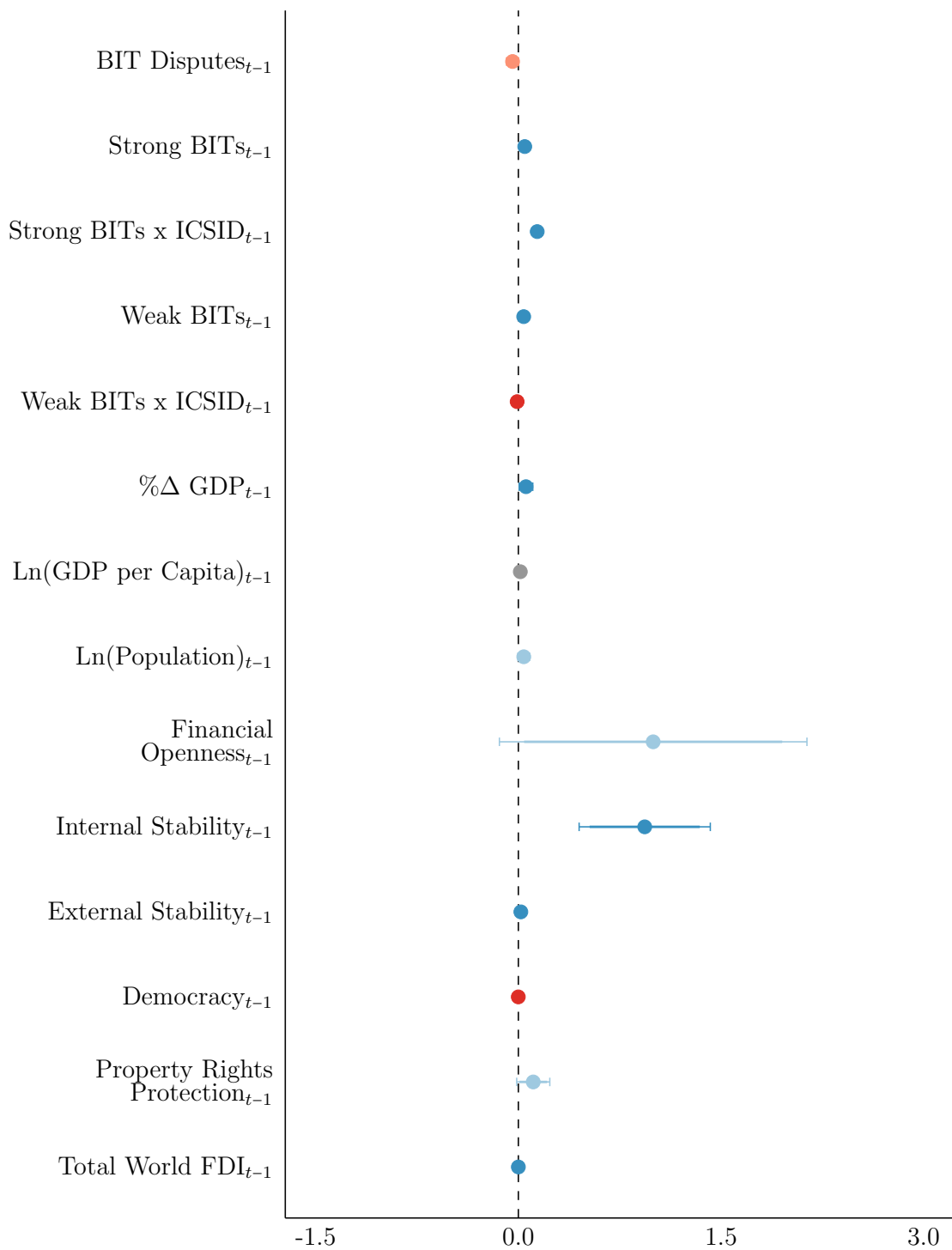


FIGURE 4.5: Darker colors indicates that the coefficient estimate is significantly different from zero at a 95% CI, while lighter the same for a 90% CI. Grey indicates that the estimate is not significantly different from zero at either of those intervals.

Additionally, as before to make substantive interpretations about the relationship between BITs, disputes, and FDI flows I turn to the same simulation based approach I discussed earlier. The results of the simulation based analysis for predicting logged, FDI flows are shown in Figure 4.6. The results here are similar to what is presented in the reputation analysis. We find that differences in the predicted level of net FDI flows from variations in the number of strong BITs only become apparent as the number of disputes increases.

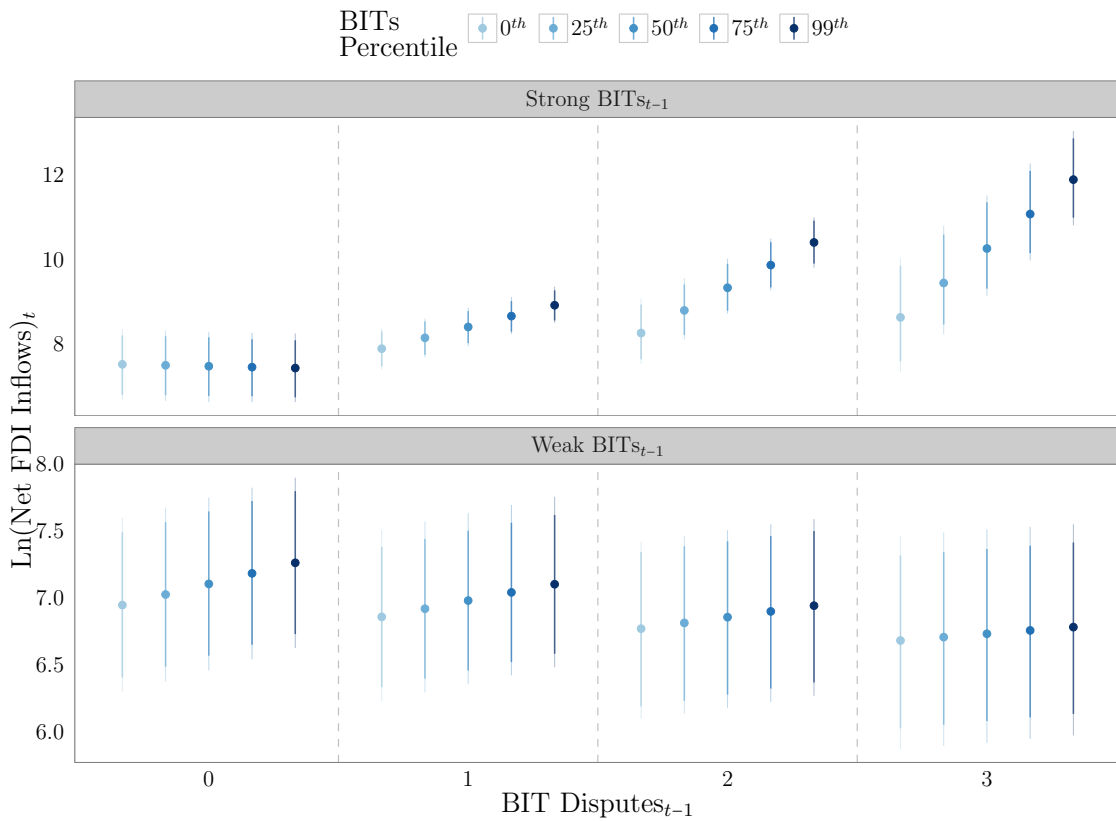


FIGURE 4.6: Here I show a typical country’s predicted level of logged, net FDI flows under scenarios in which we vary the number of disputes, strong BITs, and weak BITs. The colors here designate varying numbers of BITs and the columns in each of the panels varying number of disputes. All other variables were kept at their mean values. Results were obtained by using simulations that accounted for inferential uncertainty. The point estimates here represent the mean predicted ratings and the line represents the 95% level of uncertainty associated with these estimates.

We also find little evidence that variations in the number of weak BITs that a

country has in force lead to any meaningful differences in the level of FDI a country can expect to receive. The last important point to note is that differences in predicted levels of FDI flows between weak and strong BITs are contingent on the number of BIT-related disputes a country has experienced. The implication being that until a country has faced a dispute, this model predicts that the effect of having a weak BIT or a strong BIT is indistinguishable.

## 4.6 Conclusion

The principal finding from the empirical analyses shown here is that government commitment to treaties needs to be made credible before it can have any effect. Simply ratifying a treaty no matter what it promises seems to have little effect. To show this I have extended the coding developed by Yackee (2007a) over a broader set of countries and time periods. Further in extending this coding across a broader set of treaties, I am also able to track how the ISDS provisions change after BIT renegotiations. Most importantly, this research provides an illustration of how BITs can matter when it comes to not only shaping the reputation of states participating in this regime but also the level of FDI flows they can expect to attract. This is in contrast to much of the extant empirical work on this issue that has typically focused on just the relationship between BITs and FDI.<sup>28</sup>

The broader implication of this is that at most international institutions provide a signal of what a signatory government is willing to accept, and that signal remains only as powerful as the governments commitment to it. If a government desires to break a commitment, even as one as strong as a BIT, they are only limited in their attempts to do so by their ingenuity. In the case of BITs, countries have taken steps as diverse as renegotiating treaties to strip away ISDS provisions to simply ignoring the rulings of arbitration tribunals. In assessing the effect of BITs and whether or not

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<sup>28</sup>e.g., see (Kerner, 2009; Allee and Peinhardt, 2011).

they fall into a credible commitment or signaling paradigm, the literature has so far paid less attention to the fact that the treaties themselves should not be considered static. These treaties have evolved in interesting ways as countries have realized their costs, and through assessing their evolution we are able to better understand their effect.

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