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THE DIFFUSION OF BILATERAL INVESTMENT TREATIES: AN EMPIRICAL ANALYSIS

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Zachary Elkins
University of Illinois
zelkins@staff1.cso.uiuc.edu

Andrew Guzman
Boalt Hall School of Law
University of California at Berkeley
guzman@law.berkeley.edu

Beth Simmons
Harvard University
bsimmons@latte.harvard.edu

I. INTRODUCTION

The process of globalization has been made possible by a series of technological, institutional, and policy changes over the course of the last several decades. As the introduction to this project suggests, governments have often made conscious policy adjustments in the face of innovations perceived as advantageous by competitors, new ideas of policy success, and sometimes as the result of explicit or implicit political pressures from powerful governments or international institutions.

A very important part of this process involves government choices to alter the international legal structure in which economic transactions take place. The most salient accomplishments in the development of an international legal structure to further economic liberalization has clearly been in the trade of goods and services, where the World Trade Organization commands a focal presence. In the monetary and exchange rate area, a growing number of governments have committed themselves through Article VIII of the International Monetary Fund's Articles of Agreement to keep their current accounts free from restrictions,[1] assuring traders and lenders that hard currencies will be made available to pay for imports and service international debts.

Interestingly, there has been very little *multilateral* development of the legal rules surrounding international investment, and in particular foreign direct investment (FDI).[2] Nevertheless, such investment has grown substantially over the past several decades. According to the United Nations, total foreign direct investment inflows peaked at about

[1] Simmons 2000; Simmons 2000.

[2] For a review of the relevant legal literature see Dolzer 1981; Minor 1994; Sornarajah 1994; Vagts 1987.

1,450 billion in 2000, before falling back to $735.1 billion in 2001.[3] The growth in global FDI has far outstripped both world GDP and world trade growth. But direct investments are highly skewed geographically: developed countries account for over 93 per cent of outflows and 68 percent of inflows,[4] and these shares have not changed too drastically over the past decade.

The primary legal innovation in the area of foreign direct investment in the post-world war two period has been the proliferation of bilateral agreements that seek to make explicit the contractual arrangements under which a firm invests in a local jurisdiction. Bilateral investment Treaties (BITs) are defined as an agreement establishing the terms and conditions for private investment by nationals and companies of one country in the jurisdiction of another.[5] They are negotiated between governments precisely to create a legal environment to encourage foreign direct investment, typically in those jurisdictions that find it difficult to credibly commit to treat foreign capital in ways that are perceived by investors as transparent, fair, and predictable. These agreements are a way to tie the hands of the host country by agreeing to a wide range of pro-investor terms. By surrendering part of its legal sovereignty – notably the right to use its own courts to adjudicate any disagreements that may arise from a contract to invest – developing countries hope to convince foreign firms that their investments will be safe and sound.

As such, BITs should be understood as a part of the broader neo-liberal project to encourage the free flow of goods, services, capital, and ideas across national borders. They typically include provisions requiring investing nationals of the BIT partner to be

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[3] UNCTAD, http://www.unctad.org/Templates/WebFlyer.asp?intItemID=2111&lang=1
[4] UNCTAD, http://r0.unctad.org/en/subsites/dite/fdistats_files/Annextables/Annextab02.pdf
[5] Automated System for Customs Data (AYSCUDA) , http://www.asycuda.org/cuglossa

treated as well as national firms or as well as the most favored foreign firms (MFN treatment); establish limits on expropriations of investments and require compensation when it occurs; and guarantee investors' right to transfer funds into and out of the country using a market rate of exchange. Sometimes these agreements also explicitly prohibit "performance requirements" on the part of foreign investors, though such clauses are more typically found in US rather than European agreements.[6] Thus, we view these agreements as consistent with the market-oriented trend the editors of this volume have identified.

This article seeks to explain why BITs have proliferated over time. The popularity of BITs is puzzling when contrasted with the *collective* resistance developing countries have shown toward pro-investment principles under customary international law. Our central contention is that bilateral investment treaties intensify the inter-state competition for foreign investment. Because signing a BIT gives a state an advantage in this competition we expect the probability of acceptance of a BIT by a state to increase when rival states sign such a treaty. The model we have in mind is squarely consistent with the competitive models laid out in the introductory chapter to this project.

The article is organized as follows. The first section describes the BITs terrain in some detail: the history, rationale, and spread of these bilateral arrangements over time. The second section presents a model of competition for investment that could lead to the pattern of treaty diffusion we observe. In this model, one country exogenously "breaks ranks" and agrees to investors terms in order to enjoy the benefits of investment inflows. While competitors may not have preferred to do so, BITs effectively create a negative

[6] See for example United States Trade Representative, "U.S. Bilateral Investment Treaty Program." http://www.ustr.gov/agreements/bit/pdf

externality by presenting the prospect of diverting capital to hosts who agree to BITs. One obvious way to mitigate this outcome is to enter into a BIT as well. We entertain the possibility of more sociological explanations which may be plausible in explaining some investment treaties witnessed in more recent years.

The third section reviews the evidence of competitive diffusion. Competitive pressures for BIT proliferation are consistent with the data, but even some of the non-diffusion influences on the pattern of BITs suggest the broader reputational story we develop is apt. While socialization influences appears to be present in recent years, the most important explanations for the growing web of bilateral arrangements are those that postulate rational responses to the globalization of capital.

II. SECURING INVESTORS' LEGAL RIGHTS: FROM CUSTOM TO BILATERAL INVESTMENT TREATIES

The Opposition to Customary International Law

Prior to the development of BITs, international law did little to make state promises about the treatment of foreign investment credible.[7] The primary source of international law on the subject of foreign investment was a customary international law doctrine known as the "Hull Rule." The rule is so named because Cordell Hull, while Secretary of State for the United States, penned what has become the standard expression

[7] For a discussion of the historical protection of foreign investment see Lipson 1985.

of the rule: "no government is entitled to expropriate private property, for whatever purpose, without provision for prompt, adequate, and effective payment therefore."[8]

The strength of this customary rule became urgent as decolonization spread and as the perceived threat of nationalization intensified. The nationalization of British oil assets by Iran in 1951, the expropriation of Liamco's concessions in Libya in 1955, and the nationalization of the Suez by Egypt a year later served notice of a new militancy on the part of investment hosts. The nationalization of sugar interests by Cuba in the 1960s further undercut assumptions about the security of international investments.[9]

Meanwhile, collective resistance to the Hull Rule was on the rise. Developing countries' opposition to this rule was evident at least as early as 1962 when the UN General Assembly adopted the 1962 "Resolution on Permanent Sovereignty over Natural Resources" which provided for "appropriate compensation" in the event of expropriation. It was understood that "appropriate compensation" was a much lower requirement than "prompt, adequate, and effective." By the mid-1970s, following several more United Nations resolutions[10] and a string of expropriations around the world that did not receive prompt, adequate, and effective compensation,[11] no reasonable observer could conclude that the Hull Rule retained the status of customary law. But exactly what legal standard

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[8] Note to Mexican Minister of Foreign Affairs during 1938 dispute over land expropriations, reprinted in Green H. Hackworth, Digest of International Law v. 3, § 228 (1942). The Rule itself predates Cordell Hull's statement, and various statements of it can be found in decisions from the early part of the 20th century. See Concerning the Factory at Chorzow (Ger. v. Pol.), 1926-29 P.C.I.L. (ser. A), Nos. 7, 9, 17, 19; Norwegian Shipowners Claims Arbitration (U.S. v. Nor.) 1 Rep. Int'l Arb. Awards 307 (1922).

[9] Guzman T.Andrew, 1998. "Explaining the Popularity of BIT's: Why LDC's sign Treaties that Hurt Them". Virginia Journal of International Law. Ministry of Commerce, Industry and Energy (MOCIE) website, http://www.mocie.go.kr/english/investing/cooperation/default.asp; Comeaux.E,Paul; Kinsella N,Stephen. " Reducing Political Risk in Developing Countries: Bilateral Investment Treaties, Stabilization Clauses, and MIGA&OPIC Investment Insurance. 1994 by the New York Law School Journal of International and Comparative Law; http://www.kinsellalaw.com/publications/polrisk.pdf

[10]

[11]

should apply was hotly contested. Disagreement largely followed North-South divisions, and increasingly engaged the attention of international lending bodies, particularly the World Bank. The creation of the International Centre for Settlement of Investment Disputes (ICSID) in 1966[12] was in part intended to relieve the World Bank President and its staff of the burden of mediating disputes related to expropriation. However, ICSID's involvement required the consent of the expropriating country and, presumably because such consent was lacking, that body did not hear any cases until 1972.

The Rise of Bilateralism

Bilateral treaties made their debut in the late 1950s, just as consensus on the Hull Rule began to erode under the weight of undercompensated nationalizations, public declarations by developing countries, and U.N. resolutions asserting lower standards of investor protection. Much like the Hull Rule, these treaties provide protection for investors and increase the credibility of host country commitments, though in a fashion that was more favorable to investors.[13] A casual look at the early treaties suggests creditor governments tended to negotiate bilateral arrangements where political risk was high, and where their nationals had significant sunk investments. Africa – where

[12] The Convention on the Settlement of Investment Disputes between States and Nationals of Other States was opened to signature on March 18, 1965 on behalf of all the States members of the International Bank for Reconstruction and Development. On October 14, 1966, thirty days after the deposit with the Bank of the twentieth instrument of ratification, the Convention entered into force in accordance with its Article 68(2).

[13] Other mechanisms have been used to try to protect foreign investment, of course. For example, the United States adopted the "First Hickenlooper Amendment" in the Foreign Assistance Act of 1963, codified as amended at 22 U.S.C. § 2370(e)(1)(1994) which requires that the President terminate aid to any country that has seized American property, repudiated or nullified contracts with Americans or in some other way discriminatorily harmed the interests of American investors. Before BITs were used, states signed treaties known in the United States as treaties of Friendship, Commerce, and Navigation (FCNs). These were mostly signed between developed states and typically included some investment protection.

investments in raw materials were vulnerable upon independence – was a key target for early BITs. Often these accords appear to have reinforced legal ties with the mother country after independence. But there are a number of early cases that do not seem to follow predictable patterns, for example Germany and Madgascar (1962) Switzerland and Costa Rica (1965), and Sweden and Cote Ivoire (1965).

[TABLE 1 ABOUT HERE]

Notwithstanding the aggressive campaign waged by developing countries against the Hull Rule, BITs seemed to be greeted with enthusiasm by these same countries, at least if one judges by the pace at which they were signed. Figure 1 documents the geometric growth in such investment bilaterals overtime in relation to mean inflows of foreign direct investment as a percentage of GDP.

[FIGURE 1 ABOUT HERE]

The United States was considerably slower than its northern European counterparts at embracing the BIT. Between 1962 and 1972, during which time West Germany entered into 46 BITs and Switzerland entered into 27, the U.S. signed no such treaties and only a single Friendship Commerce and Navigation Treaty -- with Togo and Thailand.[14] One possible reason for the delayed US participation in bilateral

[14] Vandevelde J., Kenneth. (1988)."The Bilateral Investment Treaty Program of the United States". Cornell International Law Journal.21. [EXPLAIN THE DIFFERENCES BETWEEN A BIT AND A FCN TREATY].

arrangements may have been the hope of retaining a multilateral approach. The United States was one of the most aggressive proponents of the Hull Rule and may have feared that BITs represented a threat to its claim that investment was already protected under the rule of customary international law. Another reason may relate to the relatively onerous provisions the U.S. government tried to secure from host states. One of the prime differences between the terms typically offered by the Europeans and U.S. at this time was the formers' emphasis on investment *protection* and the latter's additional insistence on *liberalization.*[15]

It was not until 1981 that the United States changed its view on BITs. There is evidence that some officials in the Reagan administration viewed BITs as an alternative way to achieve the principals contained in the embattled Hull rules. The argument was advanced that BITs were designed "to protect investment not only by treaty but also by *reinforcing traditional international legal principles* and practice regarding foreign direct private investment" [emphasis added].[16] And the American model BIT had changed – it now pursued investor protection in the same fashion as did European BITs. George Schultz noted in his communication with the President upon completion of six BITs in 1986[17] that, "Our approach followed similar programs that had been undertaken with considerable success by a number of European countries, including the Federal Republic

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[15] "Multilateral or Bilateral Investment Negotiations: Where Can Developing Countries Make Themselves Heard?" Briefing Paper CUTS Centre for International Trade &Environment. No.9http://cuts.org/9-2002.pdf. Some observers note that the insistence on liberalization explains the inability of the US to secure agreements with East and Southeast Asian countries until quite recent years. See Reading R., Michael.1992. "The Bilateral Investment Treaty in ASEAN: A Comparative Analysis. Duke Law Journal. 42. 679-705.

[16] George P. Schultz, transmission letter to the president recommending transmission of the US-Turkey Bilateral Investment Treaty, 1985. http://ankara.uembassy.gov/IRC/treaty/1985BIT.HTM

[17] Turkey, Morocco, Haiti, Panama, Senegal, and Zaire.

of Germany and the United Kingdom since the early 1960s."[18] US BITs were explicitly recognized as an amalgamation of some aspects of earlier FCN treaties, and language actually drawn from the BITs of "European counterparts." By the mid-1980s, it is safe to say that creditors governments had nearly converged on a single treaty model. Developing countries could, increasingly, opt to take it or to leave it. As Figure 1 attests, many did the former.

[FIGURE 1 ABOUT HERE]

As BITs began to spread in the mid 1980s, their character as a bridge between countries of starkly varying traditions and resources continued to be obvious. Their very purpose, after all, is to bolster the credibility of the capital-poor and to encourage flows from the capital rich. Figure 3 demonstrates, however, that the economic differences within these dyads have declined fairly substantially over time, even while the wealth disparities between non-BIT dyads have worsened.

[FIGURE 2 ABOUT HERE]

BITs have also served to bring together politically diverse partners, reflecting their role as a bridge between governments with distinct conceptions of property rights. One indicator of this role is the dramatic difference in the level of democracy between BIT partners compared to other country pairs. Figure 3 plots the mean difference in level of

[18] George P. Schultz, transmission letter to the president recommending transmission of the US-Turkey Bilateral Investment Treaty, 1985. http://ankara.uembassy.gov/IRC/treaty/1985BIT.HTM

democracy of BIT partners in the year of their signing. As is the case with wealth, the "political gap" between new BIT signers has shrunk significantly over the last thirty years. In both cases, there is a dramatic trend towards institutional and income *convergence*, even as the trend for the rest of the sample of unsigned partners is one of *divergence.*[19] As we discuss below, this observation is consistent with a more sociological explanation for the diffusion of BITs in the last few years.

[FIGURE 3 ABOUT HERE]

The Failure of Multilateralism: From MAI to Coordinated Bilateralism

While bilateral deals were flourishing, multilateral treaty efforts foundered. In 1976, members of the Organization for Economic Cooperation and Development negotiated a voluntary set of rules, aimed at regulating investments among themselves. The (mostly abortive) UN Code on Transnational Corporations was the focus of multilateral effort between 1976 and 1992, but again is voluntary in nature (and is much contested), as are the World Bank Foreign Investment Guidelines (1992). The 1990s saw a successful effort to include investment provisions in a series of regional trade arrangements, including the North American Free trade Agreement (NAFTA, 1994), Mercosur (Colonia Protocol) and the 1994 Energy Charter Treaty. Interestingly, much of the text in the investment chapters of these arrangements can be traced back to recent BIT practice.

[19] Sociological theories of the stages of diffusion suggest that later adopters to have weaker functional reasons for signing than do earlier adopters (Tolbert and Zucker 1983).

The most ambitious effort of the decade to develop a multilateral regime for FDI was also the decade's most spectacular failure. Although the Multilateral Agreement on Investment (MAI) contained provisions comparable to many BITs, it became a lightning rod for political opposition. The MAI was the target of opugnant attack by governments and newly emboldened nongovernmental organizations alike. The presumptive paternalism of negotiating an investment agreement in the cozy confines of the OECD certainly did not go down well with the most vocal of the potential host countries. Furthermore, no creditor country would spend much political capital defending the MAI. Europe was preoccupied with investment agreements that would facilitate its eastward plans for expansion. The United States was only a lukewarm supporter, and was more concerned with NAFTA's Chapter 11 than the MAI. Conflict broke out with France over liberalizing investment in cultural sectors. Under the circumstances, there were no champions of a global approach to investment rules, and ultimately no takers.

Bilateralism, in contrast, accelerated over the course of the 1990s. By late in the decade there were a few twists to the basic theme of wealthy countries picking off potentially lucrative but risky venues one at a time. From about 1999, developing countries began a rather more proactive effort to create bilateral investment treaties *among themselves*. These activities have been coordinated through UNCTAD, and sometimes with the assistance of a major capital exporting country, such as Germany or France. During a meeting jointly sponsored by UNCTAD, the Swiss government, and a group of 15 developing countries (G-15), seven developing countries signed eight bilateral treaties among themselves.[20] Individual developing countries soon began to

[20] Egypt, India, Indonesia, Jamaica, Malaysia, Sri Lanka and Zimbabwe.

seize the initiative. At the request of Thailand, a mini-lateral conference yielded seven more developing country BITs,[21] and furthered discussions on several more. Bolivia (2000), India (2001) and Croatia (2001) initiated minilateral discussions on a similar model. France financed a round of discussions primarily among the Franco-phone countries in 2001 that attracted 20 participants and yielded 42 BITs, many of which involved non-contiguous, poor, highly indebted African countries for which it is difficult to imagine high expected payoffs. (What are the chances that capital from Burkina Faso would flow to Chad, or investors from Benin would soon demand entrée to Mali?) More understandable, from an economic point of view, was the German funded and supported meeting in October 2001 that drew together seven capital-poor countries (five of which were officially "highly indebted poor countries") and four wealthy European countries,[22] yielding both understandable (Belgium-Cambodia) and bizarre (Sudan-Zambia) bilateral treaty combinations.

III. THEORIES OF BIT DIFFUSION: RATIONAL COMPETITION AND INDEPENDENT DECISION-MAKING

We are faced with a three-fold puzzle: first, why has there been a *collective* rejection by developing countries of the content of modern investment treaties, yet a willingness to sign *bilateral* agreements that carry essentially the same obligations? Second, what explains – in the face of so much resistance to multilateralism – the spread

[21] Thailand-Zimbabwe, Thailand-Croatia, Thailand-Iran, Zimbabwe-Croatia, Zimbabwe-Sri Lanka, Croatia-Iran, Thailand Kazakhstan, Zimbabwe-Kazakhstan, Croatia-Kazakhstan. Sweden also participated and concluded a BIT with Thailand.

[22] Participants included Cambodia, Eritrea, Malawi, Mozambique, Sudan, Uganda, and Zambia. Upon the request of these countries, Belgium, France, the Netherlands and Sweden were both invited to participate and responded affirmatively.

of bilateral agreements over the course of the past decade? Why would developing states resist the notion of a rule of customary international law or multilateral treaties that protects investment only to embrace bilateral treaties that offer an even stronger set of investor protections backed by a more credible enforcement scheme? Third, why the turn in recent years toward bilateral investment treaties among the relatively capital poor?

Our theory begins as a story of economic competition and ends, as many accounts of diffusion have done, with a coda of institutional isomorphism. We highlight a theory in which *phases of diffusion* are possible: different logics may drive the diffusion process at different points in time. We view economic competition as the main engine that powered the growth of BITs in the post war world. This competition can explain both why multilateral approaches have faltered and why bilateral agreements have proliferated, but it is less useful for explaining the growth in poor country dyads after the late 1990s.

Competitive Dynamics and the Diffusion of BITS

We propose a model in which states are interested in the behavior of other states because they are competing with those other states to attract investment.[23] The ability to make a credible commitment regarding the way in which foreign investment will be treated is valuable to states because such commitments make them more attractive to potential investors. A BIT is one of the few ways in which a state can increase the credibility of its promise to treat foreign investment well. This is, of course, true not only of BITs, but also of the Hull Rule. To the extent it affects state behavior, the Hull Rule

[23] Guzman 1998; Simmons and Elkins 2004.

offers comfort to potential investors because it makes expropriation more costly to the host state.

The crucial difference, however, is this: because BITs are bilateral they promise a higher return (i.e., a larger increase in investment) to a developing state than does the Hull Rule. This is so even if we assume that the legal protections offered by the alternative legal rules are identical.[24] Rules of customary international law, including the Hull Rule (to the extent it was such a rule at any given time), apply to all states.[25] Developing countries, then, could expect to experience more investment under the Hull Rule than under an otherwise identical world without that rule, to the extent the legal protections provided led to a worldwide increase in FDI. Any particular developing country would then capture some share of that total.

When offered the opportunity to sign a BIT, however, the potential benefits to a developing country are much larger. Signing such a treaty increases the ability of the state to make credible commitments to investors, and this can attract investment from two different sources. First, much like the Hull Rule, a BIT may increase the total amount of foreign investment that takes place. To the extent a BIT does so, the developing country signatory benefits from this investment. Second, a BIT offers a developing country the opportunity to make itself more attractive to investors *relative to other potential host*

[24] In fact, the BIT offers even greater protections for investors than the Hull Rule. This is so because treaties represent a generally more powerful form of international law, because BITs have relatively strong enforcement provisions whereas customary law has no enforcement provisions, and because the substantive terms in BITs are more investor-friendly than the Hull Rule.

[25] Conventional international law doctrine provides that a rule of CIL does not apply to a state that is a "persistent objector." In practice, it appears that it is difficult to maintain the status of persistent objector and, in any event, developing countries would have an incentive to avoid the status of persistent objectors to an effective Hull Rule for the same strategic reasons they had to sign BITs, as discussed below.

countries. By signing the treaty, then, a developing country may also divert some foreign direct investment that would have otherwise been made in a different developing country.

The appeal of a BIT, then, is in part the fact that it improves the ability of the developing signatory state to succeed in the competition to attract investment. The Hull Rule, because it is rule of customary international law, affects all host countries in a similar way and so does not alter the basic competition among these countries. A BIT, on the other hand, makes its signatory a more attractive host in both absolute and relative terms. Although BITs may increase the worldwide supply of FDI by increasing the expected return on investment, they also alter the distribution of existing FDI to the benefit of those who are party to such treaties.

An early BIT signatory, then, gains an advantage over its rivals in the competition to attract investment. When other countries have BITs in place, states without such agreements face a similar incentive to agree to such treaties in order to "catch-up" in the competition. If a country's competitors have signed a BIT, not only does a country fail to enjoy an increase in investment, it also loses the investment that is diverted to the signatory states.

The ability of a developing state to divert investment from other developing states depends on the extent to which signing a BIT is likely to alter the decisions of potential investors. One would expect states that compete for the same pool of investment to be more sensitive to policies adopted by one another than by other states. The prediction of the theory, then, is that states are more likely to sign a BIT when their rivals in the competition for investment have signed. In fact, they are not only more likely to sign a BIT, they are more likely to do so with the same home country counter-party. Thus, for

example, if Argentina signs a BIT with the United States, we expect that countries which compete with Argentina are more likely to sign a BIT with the US.

One can also imagine that states will face increasing pressure to enter into a BIT as the total number of BITs increases. As the web of BITs get larger, a state that does not enter into such treaties may find itself shut out of the market for foreign investment. This could happen for at least two reasons. First, the total volume of "lost" investment grows as more and more potential alternative hosts entered into BITs with more and more potential source countries. Second, as BITs become commonplace, investors may view a refusal to sign a BIT as a negative signal. If so, the lack of a BIT will not only reduce the expected return to investors because certain protections are absent, but also because investors will view the state as prone to expropriation. This more global notion of competition suggests the probability of a state entering into a BIT increases as the total number of BITs increases.

The competitive model of BITs has implications for the impact BITs are likely to have on the welfare of developing country partners. The traditional story of BIT formation in which states signed a BIT in order to attract more investment from developed countries suggested that BITs were welfare increasing for developing countries. First, the fact that the treaties were signed voluntarily was some evidence that they offered net benefits. Second, and perhaps more persuasively, there is little doubt that foreign investment is valuable to states, and the ability to enter into credible commitments promised to increase the supply of such investment. Furthermore, since many of the commitments states make to foreign investors are essentially contractual in nature, a state could offer more generous terms to investors who would not otherwise

invest, and less generous terms to investors who would invest even in the absence of a BIT.

The competitive story above, however, points out that BITs also serve to create competition among developing countries. This is true both because the decision to enter into such a treaty is influenced by competitive considerations as described above, but also because once a BIT is in place competitive bidding for potential investors is much more likely. Among the provisions of a typical BIT is a definition of investment that includes "any right conferred by law or contract,"[26] which means that expropriation of investment includes a breach of contractual provisions agreed to between the host and the investor. The BIT, then, allows potential host countries to offer ever more favorable terms to investors in an attempt to attract them. As the terms offered to investors improve, of course, the net benefits of the investment to the host decline. As a result, the net effect of a large network of BITs may be to reduce the net gains to developing countries relative to what they would enjoy if no BITs were in place.

Coda: Institutional Isomorphism?

If competitive dynamics are the main engine in the move toward bilateral investment arrangements, then many of the agreements concluded within the past two years are quite puzzling indeed. Not only do we see the general convergence over time in wealth per capita (despite the opposite trend among non-BIT dyads); there have been a series of bilateral treaties between non-contiguous countries with official HIPC status. It

[26] See. e.g., United States Model BIT, art. I(1)(a).

is hard to see how a BIT between such partners could have been worth a couple of negotiators' fares to Paris.

There are three possibilities worth considering. The first is that some of these BITs are a better fit with rational competition than they appear at first blush. Many of the BITs from the late 1990s involve mini-lateral sessions with round robin bilateral bargaining sessions held in a European city and sponsored by a major European capital exporter (France, Germany, Switzerland for example). Sometimes several capital exporters attend. The true goal of the LDC negotiators is likely to be to secure an agreement with the lone (or few) capital exporters. BITs with other attendees may be little more than a cooperative display to persuade negotiators from capital exporting countries to be willing to conclude a much more important (traditional) north-south agreement. One can ask whether Croatia, Kazakhstan, Iran, Sri Lanka and Zimbabwe would have even responded to Thailand's invitation had Swedish negotiators not promised to be present. The ten agreements signed among the developing countries, in this interpretation, merely facilitated Thailand's, Iran's, and Kazakhstan's agreements with Sweden. BITs among obviously capital importing countries would then be merely tactical. Their strategy could be analyzed in the competitive terms above.

Another possibility is that the participating capital exporter in these mini-laterals has its own political agenda to promote. It is not difficult to see a political/cultural motive in the French sponsorship of the Franco-phone mini-lateral in Paris (January 2001). While not a single agreement involving France itself came out of these discussions, Franco-phone solidarity alone could possibly justify the effort and expense from a French point of view. It is also possible that these mini-laterals are hands-on

tutoring sessions. As the French report writes, *"Cette ronde a permis aux negociateurs d'enrichir leur experience et leurs connaissances dans le domaine de la negociation internationale."*[27] As such, these apparently irrational treaties may be a rational exercise in strengthening the international capacities and competencies of one's cultural and political allies.

A final answer might lie in theories of institutional isomorphism. This approach suggests that where we observe hard-to-rationally-justify agreements we might attribute it to the influence of the dominant western culture. The value of liberal economics and legalistic forms of agreement, this approach suggests, have been externally validated by a dominant culture. Thus these treaties have not spread as a result of their functional virtues as much as their external legitimation. Leaders in developing countries have absorbed the BIT-making tradition, reflecting the "myth" and "ceremony" of modernization.

Independent Decision Making and the Demand for and Supply of Capital

Many alternatives exist to the dominantly competitive framework we have outlined here. It is useful to divide the alternatives explanations for BITs into three analytic categories: (1) factors associated with an investing country's probability of

[27] "This round allowed negotiators to deepen their experience and knowledge with respect to international negotiations." *Rapport Final, Ronde de negociations de conventions bilaterales de promotion et de protection des investissements pour les pays les moins avances Francophones*, Paris, January 2001

signing an agreement; (2) those associated with that of the host country; and (3) those associated with the *relationship* between host and investing countries.[28]

Home country considerations. The most obvious alternative to the competitive and sociological explanations we have advanced here is that BITs can be understood as an outcome of independent decisions affecting both the demand for and the supply of global capital. On the supply side, the proliferation of BITs could be adequately explained by two host-country considerations: the desire to protect existing overseas capital, and the desire profitably to invest more. These considerations are likely to be of paramount importance, regardless of how other countries tend to their treaty arrangements. In the analysis that follows we control for the total FDI "exposure" of the home country; that is, the degree to which a country's capital is actually invested abroad. For this we use a measure of net foreign direct investment as a proportion of GDP (scored negatively when outflows outweigh inflows and positively when inflows outweigh outflows). On average, we expect high outflows to produce a greater demand for BITs on the supply side.

The supply of BITs might also be conditioned by the type of investment opportunities the home country ultimately wants to protect. One of the (and arguably the single) key reasons to negotiate these agreements is the existence of time inconsistent preferences on the part of the host government. Whatever promises are made to entice foreign capital, once investments are sunk, the original bargain may become sub-optimal from the host's perspective. The greater the fixed assets involved, the greater are the

[28] In order to construct such measures in the first two categories, it is helpful to identify which of the countries in each pair is the "host" and which is the "investing" country. We employ a simple rule: we define the less-developed country, by GDP per capita, of each pair as the "host" country.

host's temptation to renege on an investment agreement. We capture this idea by controlling for the proportion of the host's national income that is accounted for by extractive industries. As extractive industries make it difficult credibly to commit not to act opportunistically, we expect extractive industries to be correlated with home country demands to negotiate a BIT.

Home countries may not only want to protect overseas assets of its nationally based firms, but to expand investment opportunities as well. They may be motivated to sign BITs with countries that provide clear economic opportunities but high political risks. Economic opportunities are hard to measure, but one possibility is to follow the money: host countries with larger capital inflows, might, in fact, be better places to invest. We thus include a measure of net foreign direct investment (% of GDP of the host country), this time with the expectation that increases in inflows will lead to an increased probability of a BIT. Realizing that actual capital flows are themselves endogenous to more basic determinants of those flows, we capture the economic desirability of the potential host by controlling for the quality of its infrastructure (transportation and communications systems) and the quality of its work force (the rate of illiteracy). The hypothesis is that BITs are more likely to be supplied when capital inflows, a reliable infrastructure, and an educated work force serve as investment enticements.

Two other factors are likely to influence the inherent attractiveness of a host country to foreign direct investors. The size of the market is likely to be central: while many investors might want to exploit local resources as a platform for exporting to the rest of the world, in at least some cases FDI will be motivated by the possibility of selling goods and services to the local market. The larger the local market, the greater are these

possibilities. And finally, foreign direct investors will want good evidence that they will be able to import inputs, move goods, and reap profits in hard currency. While provisions relating to these are likely to be part of the BIT itself, the home government might seek good evidence prior to signing that a country has an interest in these basic elements of economic openness. We therefore control for whether or not the government broadly restricts the availability of hard currency, and the proportion of trade relative to GDP. The expectation is that *ceteris paribus* creditors seek BITs with countries with fewer restrictions on external economic transactions.

Host Country Demand. Our story of the diffusion of BITs centers on the search for host government credibility to respect the rights of investors in an effort to attract external foreign direct investment. We have suggested how it is that competitive reputation building, through BITs, can set off the diffusion process among countries that plausibly compete with one another. There are a number of domestic conditions that affect credibility but which less directly set off the competitive processes we have outlined above. In general, we would expect governments with strong indigenous credibility to be unwilling to pay the sovereignty and other political costs associated with concluding BITs. It is governments that lack credible domestic commitment mechanisms who should be expected to seek outside validation of their intent to be fair and impartial to foreign interests.

We capture this idea by asking what institutional arrangements provide governments with indigenous means to credibly commit to protect investors' rights. The first is a legal system that provides clear and consistent substantive property rights, and the second is a reputation for using it when disputes arise. A growing literature suggests

that common law systems are systematically more attuned to property rights, in comparison most especially to systems modeled on the French civil law system. Early research in this genre tends to demonstrate the superiority of common law relative to civil law systems in the provision of investor protections. Common law countries tend to have broader and deeper capital markets as a result.[29] Civil law systems are more likely, these authors argue to implement regulatory solutions to perceived social conflict[30] – precisely the kind of approach likely to make external capital flinch. Judicial independence tends to be higher in common law countries, one indicator of which is the longer average tenure in office of Supreme Court justices in common law jurisdictions.[31] The upshot of this empirical research is that civil law systems seem much less oriented toward credible rules of capital protection. It is precisely these civil law countries we expect to see reach for an external commitment mechanism, such as a BIT.

A second cut at this problem of domestic credibility is to turn from the institutional environment to direct evidence about investors' perceptions of government credibility. We can get at these attitudes by using indices based on investor surveys of the strength of the rule of law in various potential host countries. We use an indicator for the rule of law that is especially appropriate to test the market's assessment of the reputation for rule of law: a six point scale published by a political risk analysis firm expressly to assess the security of investments (see Knack and Keefer, 1995:225). The scale represents the willingness of citizens peacefully to implement law and adjudicate disputes using established institutions. Higher scores on this 6-point measure indicate the presence of such institutional characteristics as

[29] La Porta, Lopez-De-Silanes, Shleifer and Vishny 1997. La Porta, Lopez-de-Silanes, Shleifer and Vishny 1998.
[30] Botero, Djankov, La Porta, Lopez-de-Silanes and Schleifer 2002.
[31] La Porta, Lopez-de-Silanes, Pop-Eleches and Schleifer 2002.

a strong court system, sound political institutions, and provisions for orderly succession. Low scores reflect an increased use of extra-legal activities in response to conflict and to settle disputes. Our hypothesis is that countries with a reputation among investors for a strong rule of law tradition are less likely to reach for the external credibility we have argued BITs potentially provide.

Characteristics of Country Pairs. In this category we identify *relational variables* that might be associated with the likelihood of an agreement between the two nations, but which we argue do not qualify as diffusion understood as interdependent decision-making. One logical factor is the amount of investment activity between host and home. While we do not have data on bilateral investment flows across all nations, we can approximate this with measures of other business transactions (specifically, trade) between the countries. The measure we employ for this is the volume of trade (imports and exports) between countries as a percentage of the less developed country's GDP. It is also logical to think that countries sign BITs with those with whom they share cultural characteristics. We test this by measuring country pairs with similar predominant religions, languages, and colonial heritages. Finally we think it plausible that BITs are more likely to develop between "mother" country and former colonies than between a random pair of countries. We therefore include data indicating a traditional colonial relationship.

Table 2 summarizes the variables included in the analysis to this point, as well as variables we plan to control for in future versions of the model.

[TABLE 2 ABOUT HERE]

IV. METHODS AND DATA

Method and Unit of Analysis

Since the goal of this analysis is to predict bilateral agreements between any relevant governments in a given year, the appropriate unit of analysis is the country dyad-year.[32] For tractability we have eliminated states with fewer than one million inhabitants. Our analysis begins in 1959, the year of the first recorded BIT. Our analysis ends in 1997, the last year for which we have accurate BIT data. We use event history techniques to estimate the probability that a BIT will be signed between any given country-pair in a particular year, given that they have not signed one to date. Event history methods offer a convenient way to incorporate time dependence in models of policy adoption. Our formulation is slightly more complicated than most since the unit of analysis is the country dyad and the model includes variables measured for one or the other member of the dyad as well as for the dyad itself. We estimate the following equation:

$$Y_{ab} = aX + ßZ + ?Wy_b + dV_{ab}$$

Where Y_{ab} is a BIT between country A and B, X is a vector of conditions that affect country A's calculations, Z is a vector of conditions that affect country B's calculations, Wy_b is a count of BITs among a group of host countries specified by the spatial weight W, and V is a matrix of characteristics of the relationship between country A and B.

We estimate this equation with a Cox Proportional Hazard model, a useful estimator when one does not have strong assumptions about the effect of time on the baseline hazard.

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[32] While we have the luxury of knowing the date of adoption of these treaties to the *day*, our analysis to this point does not make use of this information, except to discriminate between "ties".

Data and measures

In order to assess the source and strength of the various influences of policy diffusion we construct a series of *spatial lags,* modeled largely after those in Simmons and Elkins (forthcoming). Spatial lag models treat spatial dependence in the same way time-series models treat serial correlation. Instead of lagging the value of the dependent variable one unit in time, one "lags" it one unit in space. The spatial lag is the weighted average of the dependent variable in the actor's "neighborhood." The neighborhood is mapped by an N by N spatial weights matrix conventionally labeled *W*. Thus the spatial lag for country i (which we take to be the relatively capital poor country for purposes of our diffusion variables) can be written as

$$Wy_i = \sum_{j=1,\ldots N} W_{ij} y_j$$

where *W* is the spatial weights matrix and y_j is the dependent variable for country j. In matrix form we write the relationship as *Wy*, where *y* is an N by 1 vector of observations on the dependent variable. These measures vary by year as well.[33]

As with time series models, the spatial dependence can be modeled as an autoregressive or as a moving average function depending on our assumptions about the effect's rate of decay. Because we expect spatial effects to reverberate throughout the network and not just from the closest actor, we adopt an autoregressive function. We can express such a model as

$$Y = \rho Wy + X\beta + \varepsilon$$

[33] W, then, is an N x N x T matrix and y is an N x T matrix.

where ? is a spatial autoregressive coefficient, *W* is the n by n spatial weights matrix, *X* is a vector of non-diffusion regressors with coefficients *?*, and *?* is a vector of error terms.[34]

In geographic models, the spatial weights matrix, *W*, is often a matrix of *geographic* distances among units. In our case, we are interested in measuring influence along channels of carved out by competition among potential hosts for international capital. Identifying competitors is not straightforward and, as such, we have adopted a multi-measure approach. We propose three indicators of "competitive distance." The first measures the degree to which host governments compete in the same foreign markets; that is, whether they have the same trade relationships.[35] The second records the degree to which nations export the same basket of goods. The third measures the degree to which countries share the same educational and infrastructure resources.

Given the centrality of competition to the analysis, it is instructive to look more carefully at the construction of these variables. Our general procedure for the construction of these measures is to identify the closest competitors (actually, the 10% closest) for each host nation within the last five years and then to sum the number of BITs among this group for that time period. The three measures differ according to how the competitive distance between countries is measured. For the first measure, which is explained in more depth in Simmons and Elkins (2004), we use the IMF Direction of Trade data to produce an *n* by *n* by *t* matrix of correlations (between countries) across the countries' proportion of exports to each of the 182 partner countries. Two countries that

[34] In the models reported below, we measure the policies of the tenth of the sample closest to each country, by each measure. We also tested models which allowed for a more gradual rate of decay in the lag by weighting the dependent variable by the distance to *all* other countries in the sample. The results were, on the whole, fairly similar for these different lag structures.

[35] For a similar approach see Finger and Kreinen (1979). Network analysts often use this sort of measure to identify competitors (see Wasserman and Faust 1994).

export goods in the same proportions to 182 countries will have a score of 1; while those with entirely opposite relationships will have score of –1. Second we measure the distance between export products, using information from the World Bank's World Development Indicators (WDI) that describe a country's export mix. These indicators tap the value of exports (in 1995 US dollars) in sectors such as food, fuel, agricultural raw materials, ores and metals, and arms. We calculate the correlation between countries for each year across these 13 indicators. The result is a measure, ranging from –1 to 1, of the similarity between countries according to the products they export. Our third measure of competitive distance is designed to pick up competition among jurisdictions that, from a foreign direct investor's point of view are rough substitutes. Assuming that potential foreign direct investors are concerned with a country's human assets as well as its technological and communications infrastructure, we reason that countries with similar educational and infrastructural profiles will compete for the same pool of capital. We compare such investment profiles by calculating correlations, by year, between countries across roughly 15 educational and infrastructural variables selected from the WDI. These distances also range from –1 to 1. To repeat, we use these three distances to identify the tenth of the sample "most similar" to each country in investment profile. We then calculate the number of BITs among that group in the last five years.

What can we say about the validity of these competition measures? To begin with, the three measures distinguish different aspects of competition (they correlate at .09, .12, and .19). This is not surprising since they are designed to tap competition both in terms of exports and capital appeal. While we intend to subject the measures to further analysis, they seem to have some degree of face validity. For example, Figure 4 plots the

values for the distance in export products between Brazil and select countries across time. If these values are to be believed, Brazil's products correlated quite highly with those of most Latin American countries in the 1960's and 1970's. This correlation decreased in the 1990's, at which time Brazil's export profile began to resemble that of the United States and Canada, more than that of its Latin American neighbors. This finding is consistent with the common interpretation of the increasingly diversified Brazilian economy, one whose exports in everything from technology to agriculture now compete directly with the United States.

[FIGURE 8 ABOUT HERE]

One of the alternatives we wish to consider is whether the diffusion of BITs can be explained as a social phenomenon as well as a competitive phenomenon. Perhaps rather than being influenced by their competitors, governments are influenced by salient examples, especially of those hosts about which they have good information or that they perceive to be similar to themselves. One hypothesis is that they might take policy cues from countries with whom they have common memberships. Thus we control for the number of BITs signed in the last five years by both host and home countries' partners in preferential trading agreements. If social relationships are important, we might expect both BIT partners to be influenced by the BITs signed by countries of the same language and religion. We compute "cultural distances" on these dimensions as suggested in the above discussion of spatial lags. Finally we want to test the proposition that sociological isomorphism may explain some BITs. If global culture is at work, we would expect the

probability of signing a BIT to be influenced by the density of such BITs globally. Thus we control for cumulative BITs world wide as a proportion of country-dyads.

Control variable – independent decision-making:

The balance of the variables we examine influence decision-making within the given dyad without reference to the BIT activity going on around it. Non-diffusion influences on the home country are captured in its FDI exposure (net FDI/GDP), the proportion of the host's economy accounted for by extractive industries, FDI flows into the host country relative to GDP, the quality of the host's work force (the illiteracy rate), the economic size of the host (GDP), and the host's links to the international trading system (exports+imports/GDP). In order to capture the argument about the ability of domestic institutions to provide credibility with respect to property rights, we use an indicator of a English Common law tradition used by La Porta et. al. Our strongest expectations are those in support of the struggle to establish a reputation for credibility: signs of competitive commitments as well as evidence that indigenous credibility (or lack thereof) plays an important role in the decision to commit to a BIT.

V. PRELIMINARY FINDINGS[36]

We now turn to the results of an initial set of event history models (Table 3). While the analysis is still preliminary, several clear empirical patterns begin to emerge. The first result is that there is fairly consistent and convincing evidence of the importance of competition for capital among developing countries in explaining the proliferation of

[36] Note: these results are quite preliminary and do not reflect anything like a final analysis. We are not able at this point to test all of the propositions outlined above, but only able to report on progress to date.

BITs over the past four decades. In all the models in which measures of competition were included, higher rates of BIT acceptance among competitors significantly increased the rate at which a given country would itself enter into a BIT. We find evidence of this relationship among host countries that export similar products and host countries whose exports compete in similar third markets. But the most convincing relationship in terms both of its statistical strength and substantive impact appears to be competition among countries that can be considered comparably "attractive" to investors in terms of their infrastructure and work force. These findings suggest that BITs may be one strategy to do as well as comparably attractive investment sites by offering investors legal guarantees thereby tipping investment decisions, on the margins, in their favor.

Other diffusion variables did not perform as well as the competition model. There was little evidence that BITs diffuse along more sociological lines, for example. There was no support in these analyses of emulation based on a shared language or a common colonial heritage. Indeed, these results suggest fairly strongly that home countries are less likely to sign BITs with their colonies than they are with others. A colonial link reduces by about two-thirds the likelihood that a country pair will enter into a BIT. This fits with earlier findings that BITs are created largely to establish a common legal framework for investment that is otherwise lacking.

Much of the explanation for dyadic BIT outcomes flows from influences that we consider to be the "null hypothesis," as described in the introduction to this volume. Most of the factors that encourage a developing country to seek and a developed country to supply a BIT are firmly in the realm of independent decision-making. For example, we found support for the idea that developed countries tend to want to negotiate a BIT

with countries for which FDI is already on the rise. This might be evidence of an investment opportunity to be further exploited; a BIT is one way to reduce the political risks of further investment. There is also strong evidence that dyadic trade makes a BIT more likely. Clearly countries that do not trade with one another are unlikely to invest in one another, and so are unlikely to have need for an investment treaty. And the evidence suggests that BITs are likely to be negotiated by countries at very different developmental levels; bigger differences in GDP per capita positively raise the probability of a treaty. This suggests that most of these treaties are (roughly) "functional"; they tend on average to join capital rich and capital poor countries in what is apparently a mutually advantageous contract.

Unsurprisingly, countries appear to choose developing BIT partners that offer the most significant opportunities for profitable investment. Large internal markets are one attraction: the larger and more vibrant a developing country's GDP (absolute size and growth), the more attractive the opportunity for an investor wishing to sell to the domestic market. BITs are also more likely to be concluded with developing countries whose current accounts tend toward surplus, indicating that an export orientation is a plus. On the other hand, the host's GPD per capita has a negative effect on BITs, likely reflecting the competitive advantage of a potential host's labor costs. Still, capital demands that the labor provided be of high quality: illiteracy, for example, significantly reduces the probability that a country will be offered a BIT.

BITs may also be more likely with developing countries who are believed to be on the road to economic reform generally, as evidence by the convincing positive association between making use of IMF credits (which of course are conditional on

economic reforms) and the eventual negotiation of a BIT. Whether a government actually has liberal policies, however, does not seem to matter much. For example, despite the fact that BITs usually specify the obligation to provide access to convertible currency at market rates, whether or not a government's overall policy with respect to current account restrictions did not systematically affect the BIT decision.

Perhaps the most interesting finding among the variables that speak primarily to the null hypotheses is the way the search for external credibility interacts with domestic institutions. We have characterized a BIT as a developing government's way to compete for international capital by attempting to establish a reputation as country with low political risk. Our expectation was that, ceteris paribus, governments would prefer to use (and investors may give more credence to) domestic institutional arrangements rather than treaties to shore up such a reputation. Investment treaties, we have argued, are a way to enhance a reputation as a safe venue for capital investment when domestic institutions themselves can't deliver. But they involve sovereignty costs, which governments are loathe to pay unless they have no reasonable domestic alternative.

The evidence provides some tantalizing support for this argument. Two of the clearest results are that developing common law countries are significantly less likely to enter into BITs than are the governments of civil law countries.[37] It appears that many common law countries simply do not need an external source of credibility to be attractive to investors. Their credibility is built into the legal system itself.

On the other hand, participatory democracy had no such effect. Indeed, more democratic developing countries were *more* likely than others to seek external credibility

[37] Most of which are of the French civil law tradition, but including socialist legal traditions and German and Scandinavian civil law countries.

by negotiating a BIT.[38] We submit that there is no reason to expect that democracy alone provides the stability that economic agents desire as does a stable and dependable legal system devoted to the protection of property; on the contrary, popular participation along with weak guarantees for fair enforcement of property rights can endanger these rights. When looked at from this perspective, our finding that developing democracies (many of which are relatively new and can easily be viewed as unstable) are more likely to enter into BITs is quite understandable. While their governments may want to become players in the international economy, most do not have the domestic institutions which alone can convince global capital that it will be protected in their jurisdiction.

VI. CONCLUSION

Bilateral investment treaties have grown significantly since the early 1960s, and largely reflect governments' efforts to cope with the globalization of foreign direct investment generally. These treaties are meant to improve conditions under which global capital relocates, prospers, and repatriates. They are also meant to raise the stakes for governments of capital-poor economies by committing them to respect property rights of foreign investors and to agree to arbitration – effectively clipping their sovereignty – in the event of any disagreement over subsequent investment contracts. There are clearly possibilities here for mutual gain, though we are agnostic about the global welfare effects of these treaties. We also admit that some of the more recent treaties between very poor countries do not square with a straightforward economic interpretation.

[38] This is consistent with the findings of Simmons (2000).

On the whole, however, we have argued that where diffusion processes are at work, they are most likely to follow a model of rational competition for access to global capital. Our model suggests that a BIT could potentially change the expected return to capital for a competitor. We develop three measures of competition – competition for export markets, competition within particular export sectors, and competition among close substitutes as measured by comparable labor force and infrastructure. In all cases, where a country's closest competitors had negotiated a BIT, there was a higher tendency for the government to do so as well. These results give us no reason to doubt that competition plays *some* role in the process. We stress, however, that these results are preliminary.

We found little support in the statistical models for alternative diffusion mechanisms. While many of these were too thinly specified to be definitive, social networks – linkages through language and colonial ties, for example – did not positively predict BITs. On the other hand, there was plenty of support for a range of null hypotheses. The most important drivers of the spread of BITs are very likely factors that drive investment decisions more generally. The pattern of BITs shows that home governments want to secure investments in developing markets that are large, vibrant, somewhat open, with competitively priced, high quality labor. On the other hand, BITs are only necessary where political risk is endemic. China would be the quintessential BIT partner, according to our model.

Among the non-diffusion findings of this research is the apparent importance of domestic institutions, and in particular legal institutions. The evidence is strong and consistent on this point: common law countries are less likely to sign BITs while

developing democracies reach for them most readily. These findings are consistent with the broader story of the importance of reputation. To that extent, both our diffusion findings and our findings in support of independent decision-making indicate that governments are motivated to show they are trustworthy players in the global economy.

Figure 1 Number of Bilateral Investment Signed, relative to Global Foreign Direct Investment as a proportion of Global GDP, by year
Universe: States with over 1 Million Inhabitants between 1959 and 1997

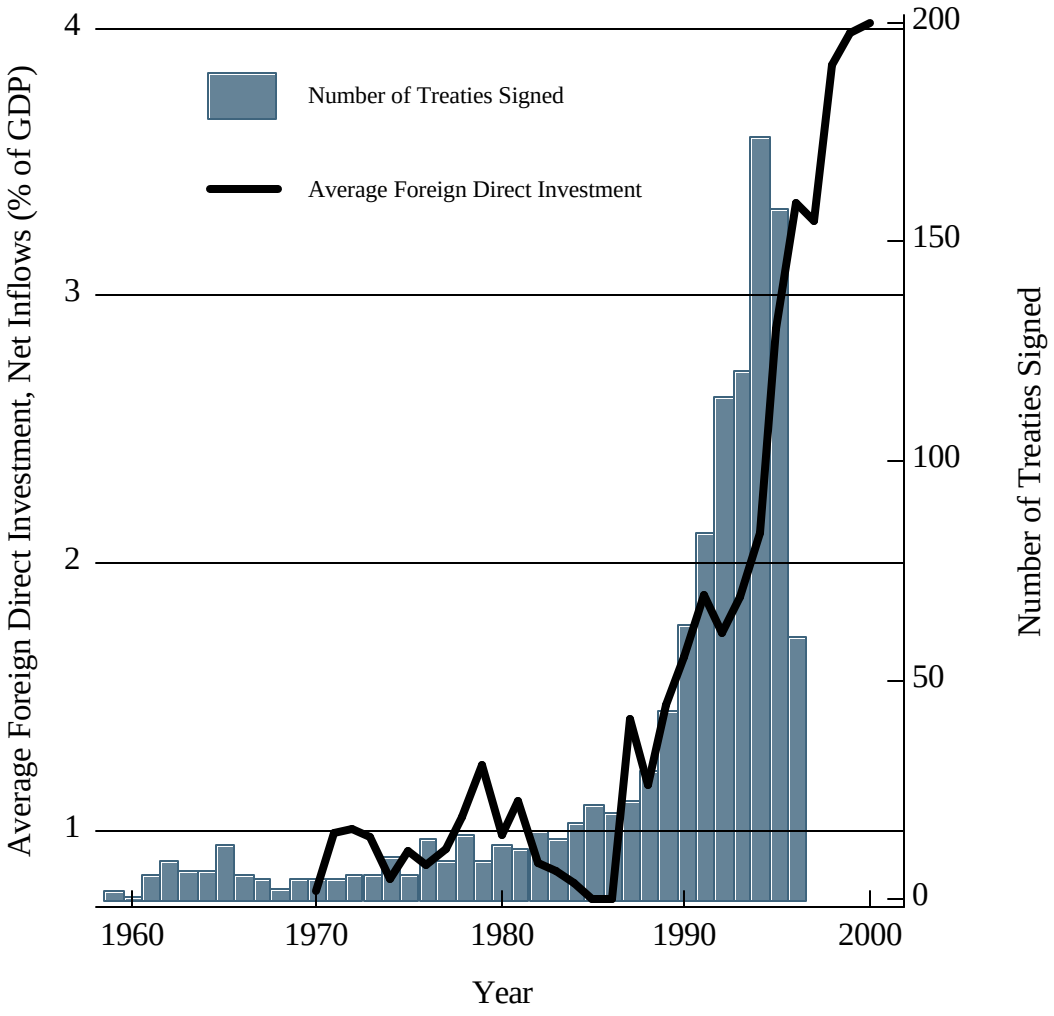


Table 1 The First 40 Bilateral Investment Treaties Signed
Universe: States with over 1 Million Inhabitants between 1945 and 1997

Host Country	Investing Country	Year BIT Signed
Germany	Dominican Republic	1959
Germany	Pakistan	1959
Germany	Malaysia	1960
Germany	Greece	1961
Switzerland	Tunisia	1961
Germany	Togo	1961
Germany	Thailand	1961
Germany	Liberia	1961
Germany	Morocco	1961
Switzerland	Niger	1962
Switzerland	Cote d'Ivoire	1962
Switzerland	Guinea	1962
Germany	Cameroon	1962
Switzerland	Congo	1962
Switzerland	Senegal	1962
Germany	Guinea	1962
Germany	Turkey	1962
Germany	Madagascar	1962
Switzerland	Rwanda	1963
Netherlands	Tunisia	1963
Switzerland	Liberia	1963
Switzerland	Cameroon	1963
Germany	Sri Lanka	1963
Germany	Tunisia	1963
Germany	Sudan	1963
Italy	Guinea	1964
Switzerland	Togo	1964
Germany	Senegal	1964
Germany	Niger	1964
Switzerland	Madagascar	1964
Belgium-Luxembourg	Tunisia	1964
Germany	Korea	1964
Switzerland	Tanzania	1965
Switzerland	Malta	1965
Germany	Sierra Leone	1965
Switzerland	Costa Rica	1965
Germany	Ecuador	1965
Netherlands	Cameroon	1965
Netherlands	Cote d'Ivoire	1965
Sweden	Cote d'Ivoire	1965

Figure 2 Mean Difference in GDP per Capita between Dyad Members
Universe: States with over 1 Million Inhabitants between 1960 and 1997

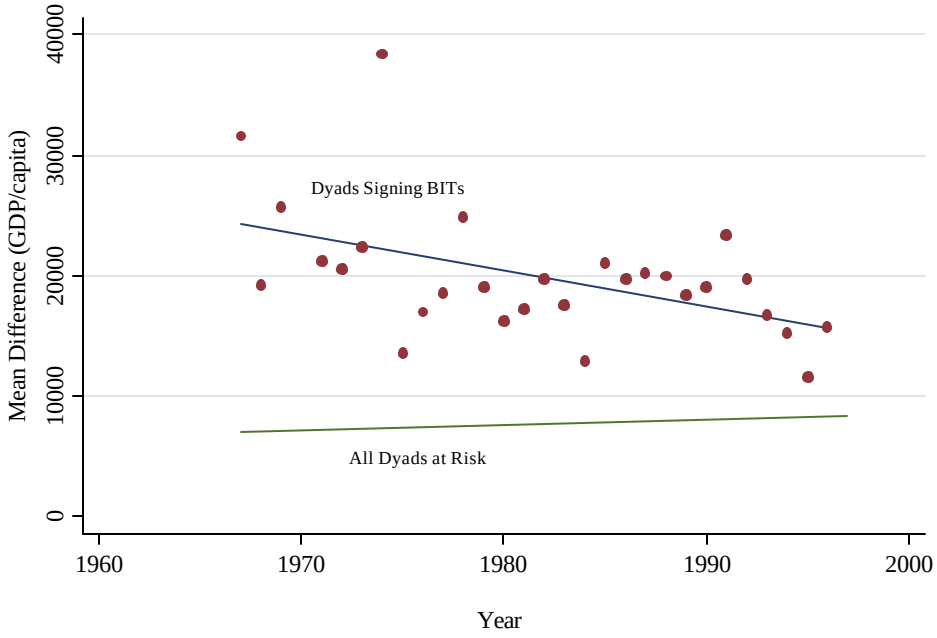


Figure 3 Mean Difference in Democracy between Dyad Members
Universe: States with over 1 Million Inhabitants between 1960 and 1997

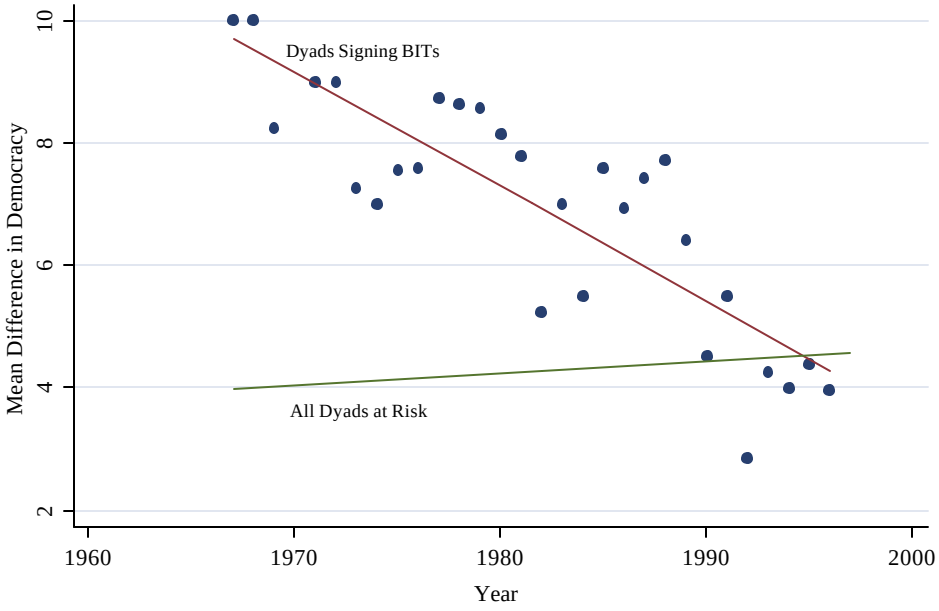


Figure 2 Foreign Direct Investment in Brazil, Net Inflows (% of GDP)

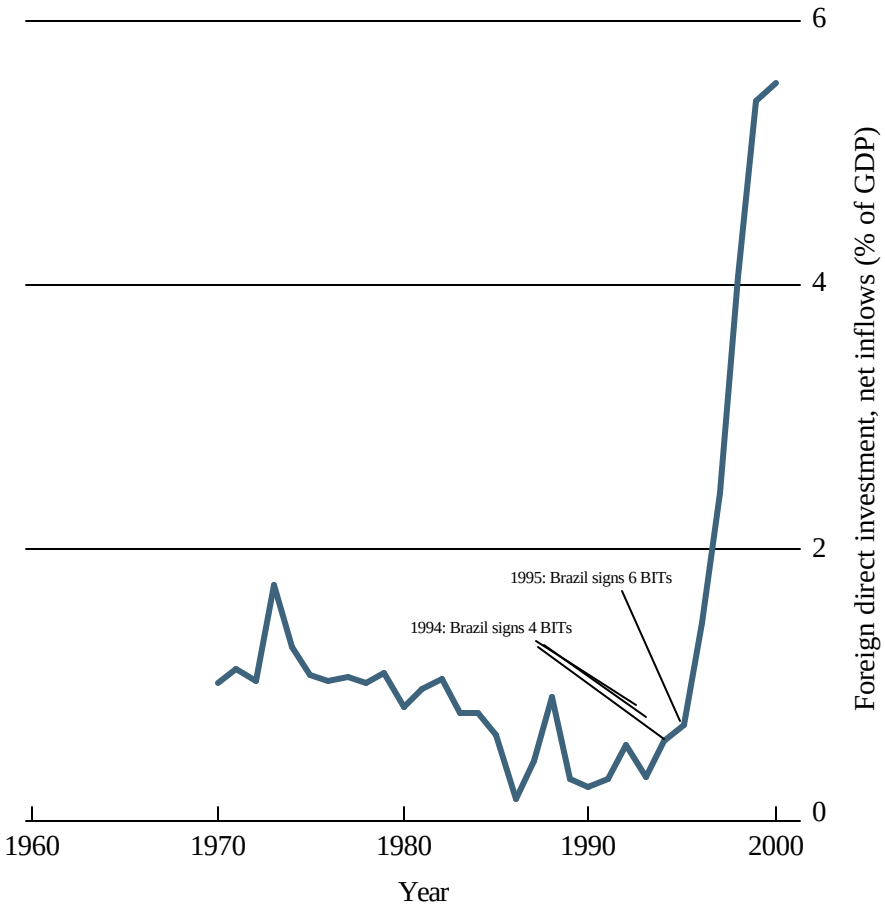


Figure 3 Foreign Direct Investment in Pakistan, Net Inflows (% of GDP)

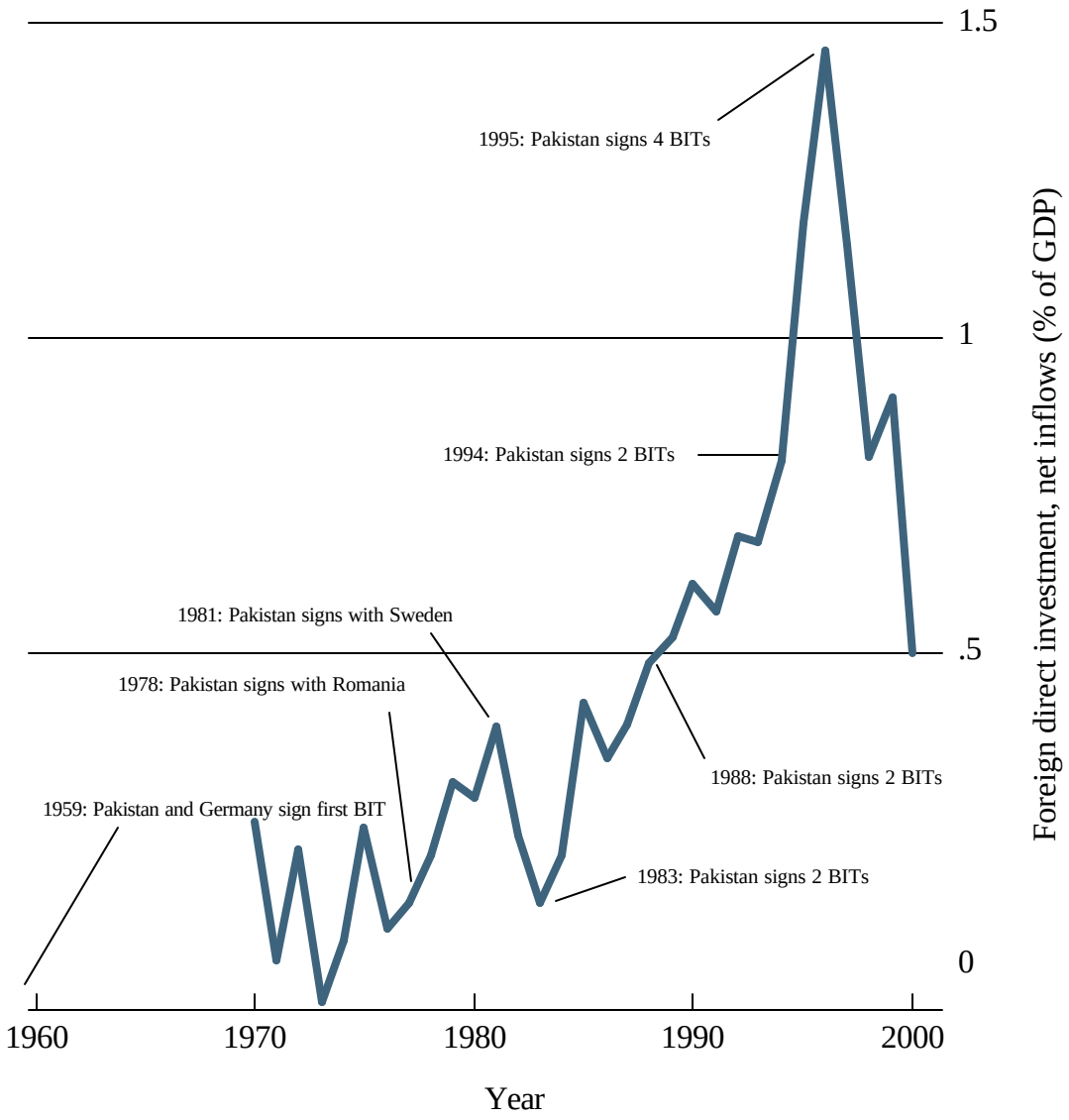
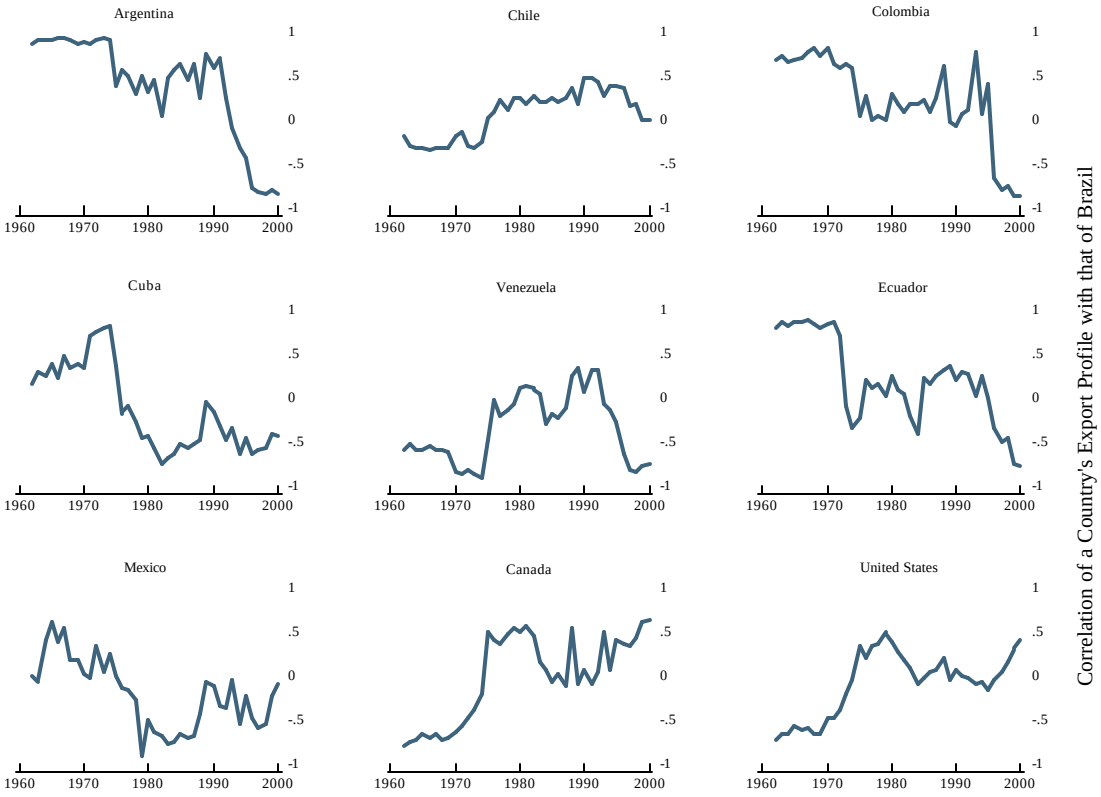


Figure 4 Building a Measure of Competition, the Brazilian case



Appendix 1 Number of BITs in force by Country (1997)
Universe: States with over 1 Million Inhabitants between 1960 and 1997

United Kingdom	62	Vietnam	13	Burundi	4
China	52	Albania	12	Croatia	4
Poland	52	Australia	12	Ghana	4
Germany	51	Latvia	12	Jordan	4
Taiwan	50	Mongolia	12	Tajikistan	4
Romania	48	Russia	12	UAE	4
Switzerland	45	Morocco	11	Yugoslavia	4
France	44	Bangladesh	10	Algeria	3
Netherlands	43	Thailand	10	Azerbaijan	3
Hungary	35	Belarus	9	Chad	3
Korea, South	35	Bolivia	9	Cuba	3
Czech Republic	30	Canada	9	El Salvador	3
Spain	28	Kazakhstan	9	Gabon	3
Argentina	27	Pakistan	9	Haiti	3
Sweden	27	Paraguay	9	India	3
Italy	25	Uzbekistan	9	Kyrgyzstan	3
Slovakia	25	Chile	8	Mauritania	3
Denmark	23	Ecuador	8	Mauritius	3
Bulgaria	21	Kuwait	8	Moldova	3
Luxembourg	21	Portugal	8	Nepal	3
Turkey	21	Uruguay	7	Oman	3
Belgium	20	Venezuela	7	Rwanda	3
Finland	20	Congo, Kinshasa	6	Sudan	3
Malaysia	20	Israel	6	Syria	3
United States	20	Jamaica	6	Turkmenistan	3
Indonesia	19	Philippines	6	Benin	2
Sri Lanka	19	Senegal	6	Congo, Brazzaville	2
Peru	17	Cameroon	5	Guyana	2
Egypt	16	Cyprus	5	Honduras	2
Austria	15	Georgia	5	Lesotho	2
Estonia	15	Japan	5	Mali	2
Lithuania	15	Laos	5	New Zealand	2
Norway	15	Panama	5	Nicaragua	2
Greece	13	Papua New Guinea	5	Niger	2
Singapore	13	Slovenia	5	Swaziland	2
Tunisia	13	Armenia	4	Trinidad	2
Ukraine	13				

Bahrain	1	Cambodia	0	Korea, North	0
Burkina Faso	1	Cen African Rep	0	Lebanon	0
Dominican Rep	1	Colombia	0	Libya	0
Equatorial Guinea	1	Comoros	0	Macedonia	0
Kenya	1	Costa Rica	0	Madagascar	0
Liberia	1	Djibouti	0	Malawi	0
Namibia	1	Eritrea	0	Mexico	0
Nigeria	1	Ethiopia	0	Mozambique	0
Somalia	1	Fiji	0	Myanmar (Burma)	0
Tanzania	1	Gambia	0	Qatar	0
Uganda	1	Guatemala	0	Saudi Arabia	0
Zambia	1	Guinea	0	Sierra Leone	0
Afghanistan	0	Guinea-Bissau	0	South Africa	0
Angola	0	Iceland	0	Togo	0
Bhutan	0	Iran	0	Yemen	0
Bosnia	0	Iraq	0	Zimbabwe	0
Botswana	0	Ireland	0		
Brazil	0	Ivory Coast	0		

Table 2 Mechanisms and Measures Used in the Analysis

Mechanisms and Measures	**Hypothesized Effect**	**Included in the Analysis to date**
Independent Domestic Conditions		
Characteristics of the Investing Country		
FDI outflows	+	No
Characteristics of Dyad		
Dyadic Trade (% of host country's)	+	Yes
Difference in democracy score	+	Yes
Difference in GDP/capita	+	Yes
Common Colonial Heritage	+	Yes
Common language	+	Yes
Bilateral FDI (% of Investing country's)	+	No
Difference in legal tradition	+	No
Characteristics of the Host Country		
GDP of host country	+	Yes
Host's illiteracy	-	Yes
FDI inflows (% of GDP)	+	Yes
Host country's economic growth (t-1)	-	Yes
Host's Capital Account/GDP		Yes
GDP/Capita of host country	-	Yes
Host's use of IMF funds	+	Yes
Host's restrictions on Current Account	+	Yes
Host's common law tradition	-	Yes
Host's democracy score	+	Yes
Rule of Law Score	-	No
Sovereign Bond Rating	-	No
Political Vulnerability of Government	+	No
Learning from Success		
Growth in FDI of Countries signing BITS (t-1, t-5)	+	No
GDP Growth of Countries signing BITs (t-1, t-5)	+	No
Social Emulation among host countries		
% with BITS among those in host country's		
PTA network	+	No
religion network	+	No
language network	+	No
colonial network	+	No
legal tradition network	+	No
neighbors	+	No
Competition among host countries		
Number of Total BITS among countries with similar:		
Export products		Yes
export partners	+	Yes

	educational resources	+	Yes
	infrastructural resources	+	No
	Sovereign bond rating	+	No
Global Norms			
	% with BITs worldwide	+	No
Other Possibilities?			

Table 3 A Model of BIT signings
Cox Proportional Hazard Model

	(1)	(2)	(3)	(4)
Diffusion variables:				
BIT among countries with similar products	1.040*			
BITs among countries with similar export partners		1.083**		
BITs among countries with similar infrastructure and education			1.203***	
Common Colonial Heritage	0.344***	0.335***	0.337***	0.288***
Common Language	0.916	0.987		
Non-Diffusion Economic/Policy variables:				
Host's FDI (% of GDP)	1.072***	1.073***	1.075***	1.074***
Dyadic Trade (% of hosts GDP)	19.321***	17.198***	15.509***	8.506**
Difference in GDP/capita	1.000***	1.000***	1.000***	1.000***
Host's GDP	1.000***	1.000***	1.000***	1.000***
Host's Capital Account/GDP	1.039***	1.039***	1.040***	1.040***
Host's Growth in GDP	1.023***	1.022***	1.021***	1.018**
Host's GDP/capita	1.000***	1.000***	1.000***	1.000***
Illiteracy	0.984***	0.984***	0.983***	0.983***
Host's Use of IMF Funds	1.400***	1.404***	1.414***	1.335**
Host's Restricted Current Account	1.106	1.107	1.137	1.129
Non-Diffusion Domestic Institutional Variables:				
Difference in Democracy b/t dyad	0.993	0.994	0.993	0.994
Host's Common Law tradition	0.560***	0.559***	0.593***	
Host's Democracy				1.071***
Observations	60545	60545	63951	65649
Number of Subjects	4120	4120	4203	4300
Number of BITs	452	452	462	484
Log Likelihood	-3406.454	-3406.618	-3510.020	-3706.753

p values in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%

References

Botero, Juan, Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Schleifer. 2002. The Regulation of Labor. Unpublished manuscript,

Dolzer, Rudolph. 1981. New Foundations of the Law of Expropriation of Alien Property. *American Journal of International Law* 75 553-.

Guzman, Andrew. 1998. Explaining the Popularity of Bilateral Investment Treaties: Why Ldcs Sign Treaties That Hurt Them. *Virginia Journal of International Law* 38 639.

La Porta, Rafael, Florencio Lopez-de-Silanes, Cristian Pop-Eleches and Andrei Schleifer. 2002. The Guarantees of Freedom. Unpublished manuscript, Harvard Institute of Economic Research Discussion Paper Series, Cambridge MA.

La Porta, Rafael, Florencio Lopez-De-Silanes, Andrei Shleifer and Robert W. Vishny. 1997. Legal Determinants of External Finance. *Journal of Finance* 52 (3):1131-50.

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W. Vishny. 1998. Law and Finance. *Journal of Political Economy* 106 (6):1113-55.

Lipson, Charles. 1985. *Standing Guard: Protecting Foreign Capital in the Nineteenth and Twentieth Centuries.* Berkeley: University of California Press.

Minor, Michael S. 1994. The Demise of Expropriation as an Instrument of Ldc Policy. *Journal of International Business Studies* 25 177-.

Simmons, Beth A. 2000. International Law and State Behavior: Commitment and Compliance in International Monetary Affairs. *American Political Science Review* 94 (4):819-35.

Simmons, Beth A. 2000. The Legalization of International Monetary Affairs. *International Organization* 54 (3):573-602.

Simmons, Beth A. and Zachary Elkins. 2004. The Globalization of Liberalization: Policy Diffusion in the International Political Economy. *American Political Science Review* 98 (1):

Sornarajah, M. 1994. *The International Law of Foreign Investment*. New York: Cambridge University Press.

Vagts, Detlev F. 1987. Foreign Investment Risk Reconsidered: The View from the 1980s. *Foreign Investment Law Journal* 2 1-.