

**The Effect of U.S. BITs on FDI Inflows to Developing Countries:
Signaling or Credible Commitment?**

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Abstract

Foreign direct investment (FDI) from the US to the developing world has gradually increased in recent decades. During the same period, the US has launched a bilateral investment treaties (BITs) program, which resulted in the conclusion of more than fifty treaties. Many, but not all, these BITs have entered into force. This study examines the effect of BITs signed and in force on American FDI inflows into developing countries. Theoretically, it argues that a signed BIT operates as a costly signal of pro-investment climate and that a BIT in force operates as a credible commitment to an irreversible favorable treatment of foreign investors. To the extent that these mechanisms function properly, they should increase FDI inflows. I test these putative relationships with a data set that includes 132 developing countries from 1977 to 2004. Employing alternative model specifications and controlling for several economic and political variables, I find that BITs in force increase FDI inflows to the host economy, but that signed BIT do not. These findings indicate that investors are more concerned with time-inconsistency problems than uncertainty regarding the host government's general economic orientation at the time of the initial investment.

In a June 1992 historic summit, George H. W. Bush and Boris Yeltsin signed several important treaties, among them a bilateral investment treaty (BIT). In a speech before the U.S. Congress, Yeltsin pointed out that Russia's economic fortune depends on the influx of foreign private capital and that this treaty will be very instrumental in this respect (New York Times, June 18 1992). In order to take effect, both the American Congress and the Russian Parliament had to ratify the treaty. While Congress quickly ratified the treaty, it languished in the Russian legislative. This legal uncertainty had resulted in a markedly slowing flow of American investment into Russia (Journal of Commerce, March 28 1995). As of 2007, the Russian Parliament is yet to ratify the U.S.-Russia BIT.

This anecdote highlights an important, but frequently overlooked, dimension of international treaties: to take effect governments have to sign as well as to mutually ratify them. Insofar as ratification conditions the purported effect of international treaties and to the extent that ratification varies across such treaties, this distinction has significant implications for our understanding of the role of international investment treaties – and international institutions more broadly – in world politics. This is particularly so if one accepts the recent claim by prominent students of international law and organizations that such institutions allow governments to credibly commit themselves to a set of domestic policies (Abbott and Snidal 2000; Guzman 2005; Mansfield, Milner, and Rosendorff 2002; Martin 2005; Simmons 2000). In order to generate *credible commitments*, I argue below, treaties have to be in force. Only then they carry strong legal obligations and capable of penalizing non-compliance (Guzman 2005; Lipson 1991). Signed treaties that are not jointly ratified, on the other hand, involve fewer legal obligations that undermine

the credibility of the commitments made in the treaty. These treaties may still prove useful. They may, in particular, serve as a *costly signal* of governments' preferences and intentions. This is a second important function ascribed to international institutions (Abbott and Snidal 2000; Kydd 2001; Martin 2005, Morrow 1994; Thompson 2006).

Despite the prominence of these two causal mechanisms in extant research on international institutions, the difference between them and their distinct empirical implications are not well understood. Many studies lump these mechanisms together, make little effort to distinguish between the two, and sometimes conflate them (Maxfield 1997; Pevehouse 2005; Simmons 2000). Most studies that examine the specific issue of BITs neglect the potential implications of the treaty's legal status for their argument. For example, Elkins, Guzman, and Simmons (2006) as well as Neumayer and Spess (2005) emphasize credible commitments but examine only signed treaties.

In this paper, I introduce a way to think about the distinct observable implications of signaling and credible commitments in the context of BITs. Specifically, I argue that signed treaties reflect a costly signal and mutually-ratified treaties reflect a credible commitment. In a nutshell, signing a BIT involves mostly sunk costs related to the negotiation phase and the anticipated ratification process (Martin 2005). A BIT in force, on the other hand, operates primarily as a hand-tying mechanism, most notably through a binding international dispute settlement mechanism. While this bifurcation is by no means clear-cut, it offers valuable insights into the implications of these different causal mechanisms for the inflow of foreign direct investment (FDI). The theoretical discussion indicates that tying one's hands through ratifying a treaty is more effective than the sunk costs involved in treaty signing in attracting foreign capital.

I empirically evaluate these putative links in the context of the U.S. BITs program. Many of these treaties are in force, but some of them still require the ratification of one or both parties to become legally binding. I test the separate effects of signed BITs and BITs in force on American FDI inflow into 132 developing countries from 1977 to 2004. The examination of investment flows from the U.S. to developing countries is valuable as the U.S. is largest source of FDI inflows to developing countries. Focusing on the U.S. also allows me to minimize the variation in the structure of the treaties and to include bilateral data on a large number of host countries, not available for other home countries.¹

This article contributes to a growing number of studies that attempt to shed light on the relationship between investment treaties and FDI. It is noteworthy that these studies arrive at different conclusions: some argue that BITs foster FDI inflows (Elkins, Guzman, and Simmons 2006; Neumayer and Spess 2005; Salacuse and Sullivan 2005) while others argue that such effects are either very limited or highly conditional (Aisbett 2007; Gallagher and Birch 2006; Hallward-Driemeier 2003; Tobin and Rose-Ackerman 2006; UNCTAD 1998). One reason for these inconsistencies may emanate from the inattention to the difference between signed BITs and mutually-ratified BITs. Another may be a result of the particular research design and data employed in these studies. I expand on this extant research by analyzing the separate effects of signed BITs and BITs in force and by employing a dyadic set up that includes a large number of developing countries over a long period of time. My findings support the theoretical expectations: BITs in force substantially increase FDI inflows, but signed yet un-ratified BITs do not.

¹ Economies from which capital outflows are labeled home countries; economies to which capital inflows are labeled host countries

A consideration of the potential endogenous nature of treaties does not change this conclusion.

This article proceeds as follows. The next section examines the relationship between BITs and FDI from a theoretical perspective and elaborates on the causal mechanisms that may link these two phenomena. The third section provides an overview of the U.S. BITs program. The fourth section presents the research design and elaborates on data, variables, and statistical techniques. The fifth section reports the results of the statistical analysis and examines the issue of endogeneity. The final section concludes.

Linking BITs and FDI

BITs are international agreements that provide legal protection and rights to foreign investors. The provisions of most BITs are remarkably similar and include – among other things – most favored nation or national treatment of foreign investors (whichever is better), adequate compensation in the event of expropriation, and protection against restrictions on employment and currency transfer. Most BITs also specify mechanisms for dispute resolution and provide private investors with the right to binding international arbitration. The standards of BITs signed by the U.S. are particularly strict and uniform. As a former legal advisor to the American BITs negotiating team points out, “one feature of these negotiations was the unwillingness of the United States to compromise on the standards of compensation or the right of investors to binding third-party arbitration of investment disputes (Vandavelde 1993: 628).

Why, then, have developing countries been willing to sign agreements that undermine their sovereign rights and decrease their bargaining power vis-à-vis

multinational corporations? The obvious answer is that they expect BITs to increase much needed FDI inflows to their economies. As Salacuse and Sullivan (2005: 77) explain, “a BIT between a developed and a developing country is founded on a grand bargain: a *promise* of protection in return for the *prospect* of more capital in the future.”² The mechanisms by which BITs may attract FDI are not straightforward, however. Recent studies highlight two potential paths by which BITs may attract more foreign capital. First, BITs may function as a *signaling* device. Second, BITs may serve as an instrument of *credible commitment*. Signaling and credible commitments reflect different manners by which actors attempt to promote their interests. Signaling involves sunk, or *ex-ante*, costs that allow others to identify the type of the signaling player under conditions of incomplete information. Credible commitments, on the other hand, involve *ex-post* costs that solve time-inconsistency problems (Fearon 1997; Morrow 1999). I argue that these two causal mechanisms point to different observable implications that can be empirically tested (albeit imperfectly). As I explain in more detail below, BIT signing is mostly about signaling and only slightly about credible commitments. A mutually-ratified BIT, on the other hand, provides a credible commitment that obviates the need for signaling.

BITs as a Costly Signal

One significant impediment to FDI inflows to the developing world involves the high level of risk associated with such investment and poor property rights laws. Historically, many developing countries had expropriated foreign assets without adequately compensating the owners of the assets. Domestic laws in these countries (or

² Italics in original. See also Guzman (1998).

lack thereof) were also often unfavorable to foreign investors and constrained them. As a consequence, foreign investors steered clear of many developing economies (Bubb and Rose-Ackerman 2007; Guzman 1998). Therefore, developing countries that desire to attract more capital need to convince foreign investors that they have “mended their ways.” Using the lingo of signaling games, these now “pro-FDI” states have to separate themselves from “anti-FDI” states.³ The former can do so by taking actions that the latter will find too costly, thus the costly signal.

Signing BITs is one way to send such a signal. Signing a BIT may involve substantial negotiation efforts. The negotiation phase may involve several negotiation rounds, side payments, and diplomatic skills (UNCTAD 1998: 23-28).⁴ In addition, signing a BIT may demonstrate the seriousness of the host government to improve their treatment of foreign investors (Ginsburg 2005: 117; Neumayer and Spess 2005: 1571). This is especially true if the government faces domestic opposition to the treaty. Labor unions and other anti-globalization groups in developing countries sometimes actively resist their governments on this issue (Kerner 2007). By agreeing to sign a treaty – which requires domestic support for its ratification – rather than an executive agreement, for example, governments indicate that they intend to live up to the terms of the agreement (Martin 2005, 445). Finally, signing a BIT may be an indication of more comprehensive economic liberalization efforts on the part of the host country. As such, it can serve as a signal of a more welcoming and profitable economic climate to foreign investors (Salacuse and Sullivan 2005, 76).

³ This other type can be either another state or the same state in the past.

⁴ That said, there may be a great deal variation in the negotiations process and the costs involved. Exploring the sources of this variation is a promising avenue of future research.

While the implementation and enforcement of a BIT involves *ex-ante* costs as well – revision of domestic laws, for example – it seems that most of these costs are higher in the signing and ratification stage. As an UNCTAD study argues (1998: 106), “Once a BIT signed, or expected to be signed, the market has absorbed [the signal] or begins to absorb it.” A signed BIT that is not in force generates only limited obligations to the host government, however. Under the Vienna Convention on the Law of Treaties, states are obliged not to defeat the object and purpose of the treaty even if it is not in force. Nonetheless, states are not bound by the treaty provisions until it takes effect. For example, in 2004 the U.S. signed a BIT with Uruguay’s conservative government. Shortly thereafter this government was replaced by a left-of-center party that insisted on the renegotiation of the treaty. The treaty was indeed revised in favor of Uruguay, resigned, and only then ratified (Salacuse 2007). In addition, to the extent that the BIT is not mutually ratified, investors cannot invoke the dispute settlement procedure agreed upon in the treaty (UNCTAD 2005: 8). Thus, signing a BIT may send a costly signal of pro-investment legal and political environment but is unlikely to credibly commit the government to honor in the future deals they made with foreign investors in the present. In sum, to the extent that *signing* a BIT sends a costly signal of a pro-investment climate, signing a BIT will result in an increase of FDI inflows into developing countries.

This proposition, while logically consistent, is grounded in the premise that the costs involved in signing a BIT are indeed high. There are good reasons to doubt this premise, however. First, BITs are rather uniform and commonly have a standard format (Guzman 1998). As such, both sides have a clear starting point to build on. Even though negotiations may sometimes be difficult and disagreeable, the process itself is not

necessarily costly. Second, the ability of domestic opposition in developing countries – most of which are not mature democracies – to inflict meaningful political costs on their governments is questionable. From this perspective, the ratification process may not be viewed as costly as in mature Western European or North American democracies. Third, in instances in which BITs are part of comprehensive economic reforms, the value added of the BIT is probably low (Aisbett 2007). Finally, to the extent that a BIT is signed but not ratified, it may even be counterproductive. As a recent UNCTAD study concludes (2006a: 4), “The longer foreign investors have to wait until an agreement becomes effective, the more they might lose interest in investing in a particular country, and look for alternative destinations.” For all these reasons I am skeptical of the signaling argument in this particular context and of the ability of a signed BIT, in and of itself, to increase FDI inflows to developing countries.

BITs as a Credible Commitment

Insofar as the host government can satisfy foreign investors that economic and political conditions in its country will yield the desired return on their investment, they need to convince them that they will not renege on the initial terms of the contract. Governments may find it difficult to do so due to the so-called time-inconsistency problem. That is, developing countries have an incentive to promise foreign investors favorable treatment initially in order to lure them to their economy. Because foreign investment may require substantial sunk costs, they face gradual declining bargaining power vis-à-vis the host government (Moran 1974). As a consequence, governments can shift the terms of the deal after the initial investment in their favor. Because foreign investors understand this problem, they may be reluctant to invest in developing countries

to begin with (Guzman 1998). In addition, they will look for assurances from the current regime, as well as future governments, will not alter the terms of the original agreement. That is, they would like the host country to credibly commit to the agreed-upon legal obligations. Thus, a credible commitment requires that the host government incurs costs if it reneges on its promises (Maxfield 1997; Rodrik 1989; Rogoff 1985).

BITs in force provide a useful commitment mechanism in several respects. First, states that renege on a BIT (or any other international obligation for that matter) violate the general principle of international law that agreements should be respected (*pacta sunt servanda*). Thus, states that violate a BIT offend not only private investors but also their government. Such violation is likely to have negative reputational repercussions that go above and beyond the specific investment decision (Abbott and Snidal 2000: 426; Elkins, Guzman, and Simmons 2006: 823; Guzman 2005; Lipson 1991; Simmons 2000; Vandevelde 2000: 488).⁵ Moreover, most BITs provide for a binding dispute settlement procedure. Such provisions allow both foreign investors and their home governments to file a complaint against the host government in international arbitration bodies like the International Center for the Settlement of Investment Disputes (Hallward-Driemeier 2003: 6-7; UNCTAD 1998; Vandevelde 1992). To the extent that the host country violates the agreement, it may be forced to compensate the investor. These awards can be substantial. Several recent examples illustrate the potential price tags involved in investment arbitration. In three complaints against Argentina, ICSID awarded the American companies, LG&E, Enron, and Sempra, 60 , 100 , and 130 million dollars, respectively. In another case, UNCITRAL determined that Ecuador should pay

⁵ Büthe and Milner (2006) make the same argument in the context of regional integration.

Occidental Oil 75 million dollars⁶ Even though such international courts lack enforcement power, compliance rates with tribunal rulings are very high. Moreover, the small number of challenges to damages awarded by these international courts was unsuccessful (Baldwin, Kantor, and Nolan 2006, 1).⁷

Even if the host country wins the dispute, it is still likely to incur costs associated with the arbitration process. Most ICSID and UNCITRAL rulings that reject the complaint filed by a private investor still require the defendant government to bear its own legal costs and fees. On the other hand, if the tribunal finds in favor of the investor, it tends to shift the costs of the proceedings to the respondent government (Schill 2006). An UNCTAD report (2005, 15) estimates that, on average, governments incur 1-2 million dollars in legal costs per case. In one recent case, PSEG Global, an energy services American company, filed a complaint in ICSID against Turkey, based on the term of the U.S.-Turkey BIT.⁸ The tribunal found in favor of the company and determined that Turkey pay PSEG Global about nine million dollars and two-thirds of the arbitration costs, which amounted to thirteen million dollars. Thus, the legal expenses were higher than the awarded compensation. These expenses can be quite substantial for developing countries, especially if faced with multiple claims (Hallward-Driemeier 2003: 22; Salacuse and Sullivan 2005: 87-90). An UNCTAD report (2006b: 8) concludes that developing countries are highly vulnerable to binding international dispute settlement procedures because of “their limited technical capacity to handle investment disputes, the

⁶ Investment Treaty News, various issues. See, <http://www.iisd.org/investment/itn/>.

⁷ The experience in this area is limited, however. With the increasing number of BITs, arbitrations, and awards, attempts to challenge such rulings are expected to increase (Baldwin, Kantor, and Nola 2006). Nonetheless, until such challenges succeed, investors can reasonably expect that governments will comply with the courts' rulings.

⁸ See ICSID's website, Case No. ARB/02/5, Award decision on January 17, 2007.

potentially high costs involved in conducting such procedures, and the potential impact of awards on the budget and a country's reputation as an investment location.”

As pointed out above, BIT ratification and implementation may incur sunk costs as well as tie the hands of the government. In particular, in order for the BIT to take effect, host countries have to modify domestic laws in a manner that will reflect the more favorable treatment of foreign investors. This may entail loss of revenues to the government, crowding out of domestic investors, and, more broadly, decreased capacity to dictate the terms of the investment. Two points are in order here. First, although these costs may be substantial, they may offer no additional useful information to foreign investors. This is because a credible commitment obviates the need for signaling. If the host country is credibly committed, foreign investors are no longer concerned with its type and preferences because its hands are tied. In other words, commitment subsumes signaling and renders the latter redundant.

Second, domestic laws in developing countries are frequently less than fully transparent and subject to reversal – hence the rationale for signing a BIT in the first place (Ginsburg 2005: 113). I therefore argue that the primary mechanism by which BITs in force foster FDI has to do with credible commitments rather than signaling. Thus, to the extent that a BIT is *in force*, it increases the *ex-post* costs associated with unfavorable treatment of foreign investment.⁹ In turn, MNCs are more likely to invest in (or not withdraw their assets from) countries that have a BIT in force with their home government. This should result in a higher level of FDI inflows from the home country.

⁹ This logic applies during the time in which the treaty is in force. U.S. BITs commonly last ten years and then are either terminated or renewed for an indefinite duration. I am unaware of a treaty that was terminated upon the initial phase. Moreover, even if the BIT is terminated, investments made prior to the date of termination continue to be protected for ten more years.

An Overview of the U.S. BITs Program

The flow of foreign direct investment (FDI) from the developed to the developing world has surged in recent decades. American MNCs spearheaded this trend and remain the largest source of FDI inflows to developing countries. In 2004 alone, American firms invested close to \$30 billion in the developing world. In the late 1970s the United States joined a growing number of developed countries that negotiated investment treaties with developing countries and initiated its own BIT program. It began to develop this program in 1977 and signed its first BITs in the early 1980s, more than two decades after the first BIT was signed between Germany and Pakistan. Like other developed economies, the U.S. signed most of its treaties with developing countries.¹⁰ After signing a small number of BITs in the 1980s, the U.S. signed numerous additional BITs in the early and middle 1990s. This second wave of BITs was motivated largely by the end of the Cold War (Vandevelde 1993). The number of new BITs signed has declined in recent years although it did not cease. The latest BIT signed by the U.S. was with Uruguay and there are several additional treaties currently under negotiations. In addition, since the early 2000s, the U.S. signed an increasing number of free trade agreements that include an investment chapter which is essentially a BIT. The U.S. signed such agreements with Singapore, South Korea, and several Latin American countries. On the whole, the U.S. concluded fifty-three BITs. Table 1 provides a complete list of American BIT partners and the years in which the treaty was signed and entered into force.

¹⁰ The only exception is Canada, which, together with Mexico, signed an investment treaty as part of the NAFTA agreement (Chapter 11). The free trade agreement with Australia includes an investment chapter. In contrast to agreements with developing countries, however, this agreement explicitly excludes a dispute settlement mechanism due to the “longstanding economic ties between the [two countries], their shared legal traditions, and the confidence of their investors in operating in each others’ markets.”

[Table 1 here]

A survey of these BITs indicates that signing did not always follow smooth ratification and implementation. As figures 1 and 2 show, the ratification of signed BITs sometimes lingers for several years. As of spring 2007, 48 of 56 BITs (86%) have entered into force. It is difficult to account for all the agreements that did not enter into force with technicalities. For example, the agreement between the U.S. and Costa Rica that was signed in 2004 (as part of the CAFTA-DR agreement) was ratified by the latter only recently, after a highly contentious political debate and a national referendum.¹¹ Other BITs were signed more than ten years ago and yet to take effect. The BIT with Haiti was signed in 1983 and still awaits ratification. While the specific causes for delays or suspensions vary, it seems that they are often politically motivated (Vandeveldel 1993: 630). Some of the BITs that are still not in force are with important partners, most notably the BIT with Russia.

Not all the BITs that have eventually entered into force benefited from a speedy ratification. It is not uncommon that six or seven years elapse between signature and joint ratification. In the case of Panama, nine years passed until the BIT entered into force. The reason was, again, political. The U.S. Senate refused to consider this BIT after the Panamanian president was removed from office and replaced by a Noriega ally (Vandeveldel 1993: 630). These instances illustrate the potential difference between a signed BIT and a BIT in force, and that the latter do not always follow the former. It is therefore important to examine the separate effects of these two stages empirically rather than assuming that they are equivalent (Elkins, Guzman, and Simmons 2006).

¹¹ The treaty was approved by just over fifty percent of the popular vote.

[Figures 1 and 2 here]

Research Design

To evaluate the effect of BITs on the flow of American FDI into the developing world, I constructed a data set that includes 132 developing countries from 1977 to 2004.¹² 1977 was the year in which the U.S. launched its BIT program. 2004 is the most recent year for which data on many variables is available. The time span of twenty-eight years is longer and the number of developing countries examined is larger than other dyadic analyses of the determinants of FDI. Hallward-Driemeier's sample (2003) includes thirty-one host countries from 1980 to 2000; Salacuse and Sullivan's (2005) covers thirty developing countries from 1990 to 2000; Gallagher and Birch (2006) examine twenty-four Latin American countries; and Aisbett (2007) analyzes data on twenty-eight host countries from 1980 to 1999. Because there are systematic differences between those states that report data and those who do not, my data set offers a more representative sample of the broader set of developing countries. I analyze the data with a fixed-effects regression model. This model accounts for cross-sectional heterogeneity not captured by the independent variables. It is widely used by studies on the effect of BITs on FDI (Aisbett 2007; Büthe and Milner 2006; Neumayer and Spess 2005; Tobin and Rose-Ackerman 2006). A modified Wald test indicates that the dependent variable is heteroscedastic. I address this problem with cluster-corrected (robust) standard errors.¹³

¹² Developing countries include all non-OECD countries and include several countries that have the joined the OECD in recent years. The latter include the Czech Republic, Hungary, Mexico, Poland, Slovakia, South Korea, and Turkey.

¹³ I use the command `xttest3` in Stata. For discussion of this issue, see Winchell (2007). She recommends this modeling choice.

All independent variables are lagged one year to reduce the risk of endogeneity. Table A1 in the appendix reports descriptive statistics of all variables.

Dependent Variable

The dependent variable, labeled *FDI*, is the net annual FDI inflows as a percentage of the host country's gross domestic product (GDP). Net FDI refers to the FDI inflows to minus the outflows from the host economy. To the extent that states experience capital flight, they may have negative FDI inflows. Measuring the dependent variable as FDI as a percentage of GDP rather than absolute inflows allows a meaningful comparison across time and space. This specification is used by a variety of other studies (Ahlquist 2006; Büthe and Milner 2006; Jensen 2003). Because the ratio of FDI to GDP is commonly very low, I multiply it by one-hundred to facilitate the presentation and interpretation of the empirical results. For net FDI inflows, I use the U.S. Bureau of Economic Analysis (BEA) data reported on its website.¹⁴ This is the most comprehensive data on American foreign investment and was employed by other studies on its determinants (Blonigen and Davies 2004). I use data from the Penn World Tables 6.2 for GDP (Heston, Summers, and Aten 2006).

Independent Variables

The primary variables involve BITs between the U.S. and developing countries. *BIT_Sign* is a dichotomous variable that indicates if the host country has a signed BIT with the U.S. that is not in force. This variable switches back to zero after the treaty is in

¹⁴ <http://bea.gov/international/di1usdbal.htm>. FDI inflows or outflows lower the five-hundred thousand dollars – labeled with an asterisk – coded as zero. Data suppressed to avoid disclosure of data of individual companies – labeled D – is coded as missing value. This coding procedure is consistent with Blonigen and Davies (2004).

effect. *BIT_Force* considers the effect of BITs in force. States score 1 if the BIT is in effect, and zero otherwise. The list of BITs as well as the dates of signature and entrance into force at based on data available at U.S. Trade Compliance Center website (see Table 1 above).¹⁵

The model also includes a number of conventional variables. The first three variables pertain to the economic conditions in the host country and are included in most studies on FDI (e.g., Jensen 2003; Li and Resnick 2003). *GDP* is the natural log of the host economy's real gross domestic product in thousand of U.S. dollars. The received wisdom is that larger markets attract more absolute inflows of FDI but not necessarily more inflows relative to market size. The effect of *GDP* on the dependent variable is thus ambiguous. *GDPPC* is the natural log of gross domestic product per capita in constant U.S. dollars. This variable captures the host country's level of economic development. Higher levels of economic development are believed to be conducive for FDI inflows. I thus expect a positive estimate of *GDPPC*. Other studies argue that it is not necessarily the absolute level of economic development that is important, but rather the change in the level of development. Higher levels of economic growth may offer higher return on investment and may be more attractive for foreign investors. *Growth* is the annual GDP growth of the host economy in percentages. I use data from the Penn World Tables 6.2 for all three economic variables (Heston, Summers, and Aten 2006).

Developing countries that conclude BITs with the U.S. may also implement domestic economic reforms. The signaling logic discussed above assumes that BITs actually complement such domestic liberalization efforts. From this perspective, the host

¹⁵ http://tcc.export.gov/Trade_Agreements/Bilateral_Investment_Treaties/index.asp

country's economic orientation may be correlated with both BITs and FDI inflows. A good measure of a country's economic preferences is difficult to find. As a first cut, I rely on the openness of the host economy to international trade. Countries that trade more are likely to have lower trade barriers and a more liberal economy.¹⁶ In addition, extant research indicates that states that trade more are also likely to attract more FDI (Büthe and Milner 2006). I account for this possibility with *Openness*, measured as the volume of trade as a percentage of GDP. The Penn World Tables 6.2 provides data for this variable (Heston, Summers, and Aten 2006).

A second factor that may be correlated with both signing a BIT and the level of FDI inflows pertains to domestic institutions. Developing countries that have a more transparent legal system and greater respect to private property rights, for example, are more likely to comply and thus sign international investment treaties (Rocke, Downs, and Barsoom 1996). Countries that have such domestic institutions are also likely to attract more FDI. Direct measures of property rights guaranties or the transparency and strength of the domestic legal system are few and far between. Moreover, these measures cover only a limited subset of developing countries over a short time span. As a first step, I account for this factor with the level of democracy, which is likely to be associated with the strength of domestic institutions (Olson 1993; Li and Resnick 2003; Rosendorff and Vreeland 2006). In addition, recent studies indicate that regime type is an important determinant of FDI and that, in particular, democracies attract more investment relative to non-democracies (Jensen 2003). I account for this argument with the variable *Polity*. This

¹⁶ Admittedly, this variable captures domestic preferences indirectly and imperfectly.

variable ranges from -10, for a complete autocracy, to 10, for a mature democracy. I use the Polity IV data set for this variable (Marshall and Jaggers 2002).

Results

Table 2 reports the results of three basic models. The first two models examine the effects of signed BITs and BITs in force separately and the third model examines their effect in the same model. The results are straightforward: BITs in force have a positive and significant effect on the flow of FDI into developing countries. Thus, BITs in effect increase FDI inflow from the U.S. to the countries that concluded them. Moreover, the estimates on this variable suggest that the effect of BITs in force is not only statistically significant but also substantively important. They indicate that BITs in force increase FDI inflow by about 0.2 percent of the host economy's GDP. A consideration of the average value on the dependent variable helps putting this number in perspective. The mean ratio of FDI inflows to GDP is also 0.2 percent. Thus, on average, a developing country that has an effective BIT with the U.S. increases FDI flows into its economy twofold. In contrast, and consistent with my expectations, signed BITs that are not in force fail to increase FDI inflows. Remarkably, *BIT_Sign*, which accounts for years in which BITs are signed but not in effect, is statistically insignificant and has a negative sign. This result suggests that signed BITs, in and of themselves, fail to increase FDI inflows. If anything, signing a BIT but delaying its ratification and implementation may actually be counterproductive.

Considering the distinction made in the conceptual section, it appears that concerns related to commitment carry a much greater weight than uncertainty about the preferences of the host government in determining investment location. As I argued

above, signing a BIT may not be so costly as to separate pro-investment from anti-investment countries. In this interpretation, signing a BIT does not add believable information to foreign investors. It is also possible that foreign investors have good information on host governments' economic and political orientation, which may render signaling through BIT signing redundant. On the other hand, BITs that have entered into force allow host governments to credibly commit to the protection and favorable treatment of foreign investors. It seems that American investors are more willing to invest in (or not to withdraw existing investment from) states that have a BIT in force with the United States. Presumably, foreign investors believe that the potential costs associated with renegeing on the initial deal and the risk of litigation in international courts and costly settlements will deter developing countries from breaking their promises. To the extent that host governments violate their contracts, investors have confidence that they will be able to recover their losses through international arbitration.

[Table 2 here]

The results on the control variables are mixed. *GDP* is insignificant and has a negative sign. This may result from the contradicting effects of economic size on investment inflows as a percentage of GDP. In addition, this result is probably related to the fixed-effects specification. Neumayer and Spess (2005), who obtain similar results with such model, argue that growing economies experience higher levels of FDI inflows as a percentage of their market size, but larger economies do not necessarily attract more FDI than smaller economies as a percentage of their market size.¹⁷ The estimates of *GDPPC* are negative but never significant. This indicates that the level of economic

¹⁷ They measure market size with population rather than GDP.

development is not an important determinant of FDI inflows into developing countries. Economic growth has a positive effect on FDI inflows. Its coefficients barely meet conventional levels of statistical significance, however. Thus, further research is needed to ascertain the positive effect of economic growth on FDI.

Trade openness has a positive and statistically significant effect on FDI inflows. This result is consistent with the notion that developing countries that are more open to trade attract more FDI. From this perspective, trade and investment are complements rather than substitutes, at least for developing countries (Büthe and Milner 2006). In addition, to the extent that trade openness is an indicator of a liberal economic orientation, this finding suggests that American foreign investors find such economic climate more attractive. Regime type does not affect FDI flows into developing countries. *Polity* is positive but not statistically significant. This result is consistent with the mixed evidence on this relationship and may emanate from the crudeness of this particular measure (Jensen 2003; Li and Resnick 2003).

Robustness Checks

Are the results presented above an artifact of the specific model and variables employed? This section addresses this issue in two ways. It first considers additional variables, namely domestic political constraints, the nature of the international system, an alternative measure of signed BITs, and a lagged endogenous variable.¹⁸ It also employs alternative model specifications that account for potential autoregressive and random-

¹⁸ I controlled for several additional variables. These include the involvement of the host country in war, a militarized interstate dispute between the US and the host country, the political affinity between the US and the host country, the American business cycle measured as the total US FDI outflows, and the host country's exchange rate. These variables were insignificant and did not change the main findings of this paper. For the sake of brevity, they are not reported here.

effects dynamics. As we shall see, these additional tests offer further support to the initial findings.

Several studies capture the quality of domestic institutions with the number of veto players rather than regime type (Büthe and Milner 2006; Neumayer and Spess 2005). More veto players make it harder to reverse existing policies and thus increases stability. To the extent that foreign investors care about policy stability and predictability, more veto players should result in more FDI inflows. I test this hypothesis with the political constraints index (POLCON), constructed by Henisz (2002). *Polcon* ranges from 0, which indicates complete executive discretion to reverse policies, to 1, which indicates complete infeasibility of policy change. Model 4 in Table 3 presents the results. The estimate of *Polcon* is negative and, like *Polity*, not statistically significant.¹⁹ This finding echoes previous analyses (Büthe and Milner 2006; Neumayer and Spess 2005). Notably, replacing *Polity* with *Polcon* does not change the initial results. BITs in force continue to have a positive effect on FDI inflows while signed BITs do not.

The end of the Cold War and the consequent era of globalization resulted in the integration of many developing countries into the world economy. Former communist countries, in particular, went through a rapid process of modernization and economic reforms. From this perspective, the dramatic transformation of the international system and the growing global interdependence may lead to an increase in FDI flows into developing and previously social economies. Because many of these countries concluded a BIT with the U.S. shortly after the end of the Cold War, it is possible that this systemic change accounts both to the conclusion of a BIT and to increase in FDI inflows

¹⁹ These two concepts are related but capture somewhat different dimensions of domestic institutions. The correlation between *POLITY* and *POLCON* is .75.

(Hallward-Driemeier 2003: 13; Vandevelde 1993). To ensure that the relationship between BITs and FDI are not spurious, I add a dichotomous variable, labeled *Coldwar*, that scores one for 1990-2004 and zero otherwise. Model 5 in Table 3 reports the results. As expected, the estimate on this variable is positive and significant. It indicates that during the post-Cold War era, developing countries attracted a much greater amount of American direct investment, compared to the earlier period. It is also apparent that the inclusion of *Coldwar* in the model decreases the statistical significance and substantive effect of BITs in force. Nonetheless, this variable still meets a conventional level of statistical significance and continues to be substantively meaningful. Even when we account for the systemic change and the remarkable domestic reforms that accompanied this change, a BIT in force adds, on average, more than fifty percents to FDI inflows as a percentage of GDP.²⁰ Signed BITs on the other hand remain negative and insignificant.

It may be argued that the operationalization of *BIT_Sign* stacks the deck against signed BITs. Switching this variable back to zero after the treaty enters into force implicitly assumes the signing of the treaty ceases to affect FDI after the treaty becomes effective. This may be a problem especially if the treaty enters into force shortly after it is signed. To remedy this potential problem, I construct a new variable, labeled *BIT_Sign2*. This is a dichotomous variable that indicates if the host country has a signed BIT with the U.S. States score 1 if they do and zero otherwise, whether or not the treaty is in force. The downside of this specification is that it can not differentiate between the effects of signed treaties and treaties in force. Keeping this trade-off in mind, Model 6 in Table 3 reports the results. A signed BIT now has a positive effect on FDI inflows, but

²⁰ *BIT_FORCE* performs much better when *BIT_SIGN* is dropped from this model. Then, the estimate, t-value, and p-value increase to .154, 1.77, and 96.5%, respectively.

this effect is statistically insignificant. It appears, then, that signed BITs fail to increase FDI inflows even if we assume that the effect of signing such treaty lasts after the treaty becomes effective.

[Table 3 here]

Extant research indicates that decisions regarding investment locations are long-lasting. Some states persistently attract a great deal of FDI while others fail to do so. I address these enduring differences and the potential effect of past on present investment decisions in two ways. I begin by adding a one-year lag of the dependent variable, labeled *Lagfdi*, presented in Table 3, Model 7. Surprisingly, the estimate of this variable is negative and insignificant. Nevertheless, adding this variable does not affect the initial results. BITs in force have a positive and significant effect of FDI inflows, while signed BITs remain ineffective. Temporal dynamics may also lead to autocorrelation, which occurs in time-series when the errors associated with a given time period carry over into future time periods. Autocorrelation violates some of the assumptions of the OLS regression technique, and if present, needs to be corrected. I test for the presence of first order autocorrelation (AR(1)), which is the most common autoregressive dynamic, in two ways. I first use Woolridge's statistic, which tests the null hypothesis of no first order autocorrelation. This test fails to reject the null hypothesis and suggests that absence of AR(1) dynamics.²¹ I then use a modified Durbin-Watson test recommended by Bhargava, Franzini, and Narendranathan (1982). This statistic indicates no first order autocorrelation

²¹ I employ the *xtserial* routine. $F(1, 140) = .025$; $Pr > F = .875$.

as well.²² To be on the safe side, I nonetheless estimate the basic model with AR(1) disturbances, reported in Model 8 in Table 4.²³ This model offers additional support to my initial results. BITs in force remain substantively and statistically significant.²⁴ The estimate of signed BITs, on the other hand is negative and insignificant.

Finally, several studies consider the random-effects model as an alternative specification to the fixed-effects model (e.g., Neumayer and Spess 2005; Winchell 2007). One advantage of the random-effects model is that it can include theoretically interesting variables that vary across countries but not across time. In the context of this study, the distance between the U.S. and the host country is likely to determine FDI inflows. The random-effects model assumes that individual effects captured in the error terms are randomly distributed and thus uncorrelated with the explanatory variable. A Hausman test indicates that this assumption is warranted and that the random-effects model is consistent.²⁵ Model 9 in Table 4 reports the results of the random-effects model that include all the variables reported in the basic model as well as *Distance*.²⁶ With the exception of GDP, which is now positive and significant, the results are very similar to the fixed-effects model. As expected, *Distance* is negative and highly significant. More distant countries receive less American FDI. Notably, *BIT_Force* is still positive and statistically significant and *BIT_Sign* is still negative and insignificant.

²² $d_p = 2.046$. This value is higher than the critical values (d_{pu}) provided by Bhargava, Franzini, and Narendranathan (1982: 537). Like in the original Durbin-Watson test, a value that is higher than the critical value indicates that the null hypothesis of serial independence cannot be rejected.

²³ I use the `xtregar` command.

²⁴ The effect of *BIT_Force* is stronger when *BIT_Sign* is dropped from this model. Then, the estimate, t-value, and p-value increase to .214, 2.02, and 97.8%, respectively.

²⁵ $\text{Chi}^2(7) = 2.26$; $Pr > \text{Chi}^2 = .94$.

²⁶ *Distance* is the natural logarithm of the distance between the Washington DC and the capital of the host country. EUGene generated the data for this variable (Bennett and Stam 2000).

In summary, it appears that the initial results are robust to alternative model specifications and additional control variables. BITs in force do have a sizable substantive and statistically significant positive effect on FDI inflows. In contrast, signed BITs that are not in force do not increase American FDI inflows and may actually decrease these flows.

[Table 4 here]

Are BITs Endogenous?

My findings indicate that mutually-ratified BITs increase FDI inflows. It is possible, however, that international treaties are endogenous to prior cooperation. That is, the U.S. may negotiate investment treaties with important economic partners and snub countries that attract little or no investment. The executive may prefer to deal with countries that host more investment either for political reasons or due to political pressure from private investors who own assets in these economies. Moreover, higher levels of FDI may reflect economic and political conditions that are conducive to FDI. These favorable conditions are likely to reduce costs associated with the BIT and its enforcement (e.g., Downs, Rocke, and Barsoom 1998). Thus, my findings may capture the effect of investment inflows on the likelihood of concluding a BIT rather than the other way around. Such endogeneity would exaggerate the effect of the treaties on FDI and may render the findings presented above spurious.

I began to address this issue by lagging the independent variable. Here, I take a closer look at the level of U.S. FDI stock in the host countries included in my sample.²⁷

²⁷ A third approach is to employ an instrumental variable. Several existing studies use the number of BITs signed by the host government with other countries. I intend to utilize this method in the near future.

FDI stock refers to the total value of foreign investors' assets in a given country in a given year. To the extent that BITs are indeed endogenous to FDI, the U.S. should negotiate with those countries that have the highest level of accumulated American FDI. To evaluate this possibility I ranked all developing countries according to their stock of U.S. FDI.²⁸ I then considered the rank of the BIT partner in the years in which the treaty was signed and ratified. If endogeneity is present, most partners ought to be highly ranked. It is also possible that as time passes and the U.S. BIT program expands, it may be forced to go down the ladder and conclude treaties with less important partners. To account for this possibility, I also count the number of countries ranked above the BIT partner that do not have a BIT with the U.S. Table 5 presents the results of this analysis for signed BITs and Table 6 reports the results for BITs in force.

[Tables 5 and 6 here]

The data presented in the tables offers little support to the notion that the U.S. government negotiates BITs primarily with major investment destinations. Most of the BIT partners are not among the top ten or even top thirty destinations of U.S. FDI. The average rankings reflect this reality. The mean rank of BIT partners in the year in which the treaty went into force is forty-seven out of 112 countries in the sample. Even more telling, on average, almost forty countries that do not have a BIT with the U.S. are ranked above the treaty partners in the year in which it entered into force. If the U.S. government were to seek the protection of the largest proportion of American assets, it could have selected any of the countries higher on the list. The average rankings on signed BITs are similar to BITs in force and actually somewhat lower. The U.S. government signs

²⁸ This approach is borrowed from Blonigen and Davies (2004) who apply to tax treaties and FDI. They conclude that tax treaties are not endogenous to FDI.

investment treaties with a variety of developing countries and there is no indication that it favors significant over marginal destinations.

This ranking is conservative for two reasons. First, it excludes all OECD countries, many of which are important destinations of American FDI outflows.²⁹ Second, for some BIT partners FDI data in the year in which the treaty was signed or entered into force is not available. They are not included in the tables and in the calculations of the average rankings. For the most part, these are small countries in Eastern Europe, Central Asia, and Sub-Saharan Africa. Based on data available in other years and the characteristic of these countries, it is safe to assume that they attract little U.S. investment and that their ranking is below the mean ranking of BIT partners. In all likelihood, including these countries would further decrease the averages reported in tables 5 and 6.³⁰

This analysis offers additional support to the argument that investment treaties affect foreign direct investment and that they are not endogenous to existing FDI flows. The U.S BIT program includes some important partners, like Mexico, Singapore, and Argentina. It also includes many developing countries that attract little, if any, investment, e.g., Congo, Mongolia, and Jordan. On the other hand, it excludes several other key investment destinations, like Brazil, China, and India. Overall, I find no clear pattern in the manner by which the U.S. selects its BIT partners.

²⁹ In the past three decades all or most of the top ten destination include OECD countries and Bermuda, which is excluded from the sample.

³⁰ The only exception is the oil-rich Kazakhstan, which is commonly ranked in the top twenty destinations.

Conclusion

The proliferation of BITs concluded between developed and developing countries in recent decades is one of the most remarkable trends of the contemporary global economy. These BITs commonly offer foreign investors favorable or at least fair treatment by host governments and legal remedies if these governments fail to honor their contractual obligations to investors. Notably, they commit host governments to binding international dispute resolution mechanisms. Despite having to relinquish policy autonomy and despite risking costly litigation and compensation, developing countries rush to sign BITs with economically developed countries. It appears that governments in the developing world do so in order to attract much-needed capital to their economies.

Although a positive effect of BITs on FDI inflows may seem straightforward, extant research indicates that it is by no means a forgone conclusion. From a theoretical perspective, the mechanisms by which BITs may facilitate FDI are not clearly specified and empirically established. From an empirical viewpoint, the results are mixed and rather tentative. This study advances our understanding of the relationship between BITs and FDI in two ways. It, first, makes a distinction between signaling and credible commitments as functions of BITs and links the former to signed BITs and the latter to BITs in force. As such, this study begins to examine the conditions under which BITs may or may not attract FDI. Second, it uses the most comprehensive data set to date on American investment in developing countries to empirically evaluate the effect of BITs on FDI inflows.

My findings indicate that BITs have the expected positive effect on FDI inflows, but only if they are mutually-ratified. States that sign BITs but fail to ratify and

implement them are unlikely to gain from these agreements. This result suggests that BITs are more instrumental as solutions to time-inconsistency problems but not as useful as a signal of pro-investment climate. This observation also suggests that foreign investors pay greater attention to the specific benefits and protections BITs provide than to the more general policy orientation it reflects. From a policy perspective, my findings indicate that governments of developing countries that go through the trouble of negotiating and signing a BIT should secure the ratification of the treaty by both parties. Only then they will obtain the expected benefits.

Two caveats to this conclusion are warranted. First, my empirical analysis examines relationship between the U.S. and developing countries. Generalization of the results beyond the U.S. should be made carefully. American BITs tend to be more uniform, inflexible, and pro-investment, relative to BITs signed by other industrialized countries. It is therefore possible that BITs concluded with the U.S. reflect a stronger and more credible commitment of the host country, compared to BITs signed with other countries. Hence, the effect of U.S. BITs on the inflow of foreign capital is likely to be stronger than the effect other BITs. An empirical bilateral analysis of other developed countries and developing countries is needed to determine the generalizability of my findings. Second, my analysis examines aggregate FDI flows across sectors and industries. Potentially, the effect of BITs on FDI varies across economic sectors. For example, investment treaties may play an important role in extractive or public utility sectors, where the sunk costs are high and the expropriation is more frequent. Despite the very limited availability of industry-level FDI data, a more fine-grained analysis along these lines is a promising avenue of future research.

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Figure1: Number of BITS Signed and Enter into Force, 1977-2006

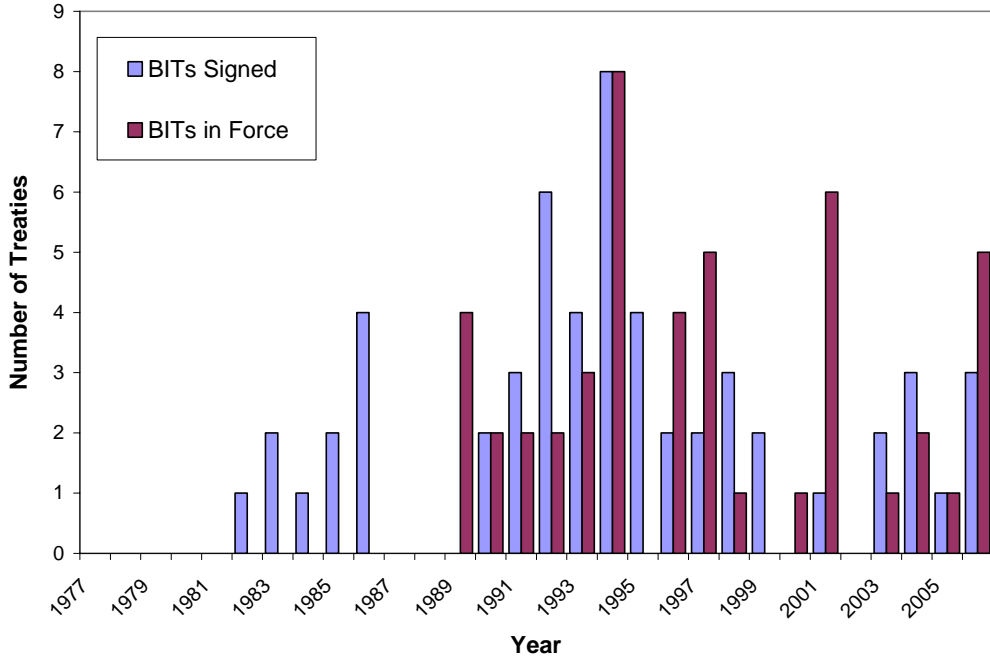


Figure 2: Cumulative Number of BITS Signed and Entered into Force, 1977-2006

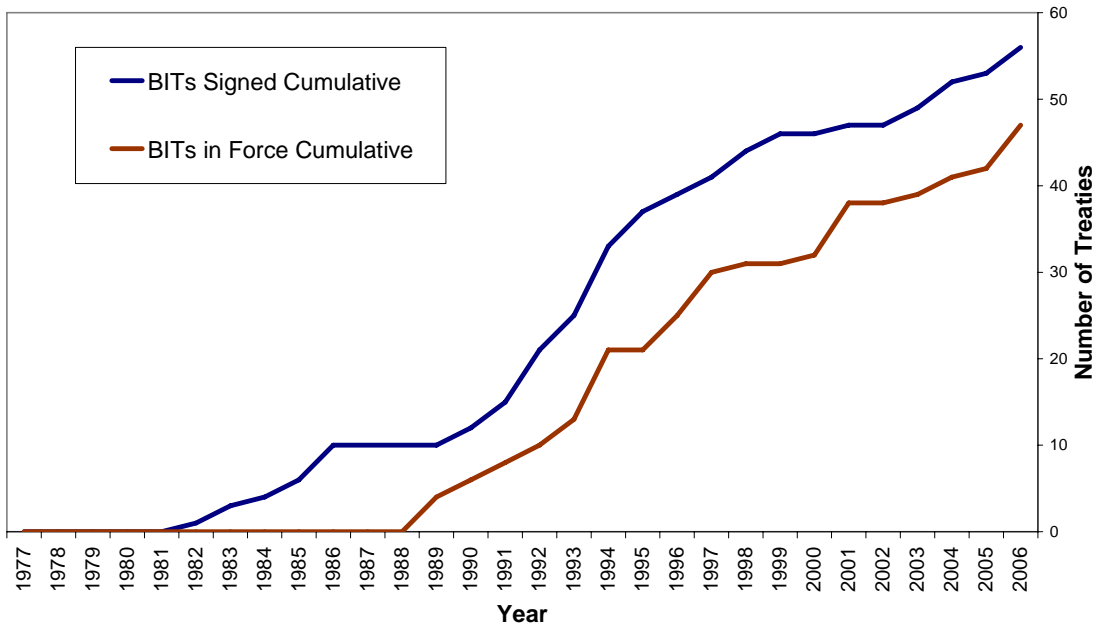


Table 1: U.S. BITS with Developing Countries

State	Signed	In Force	State	Signed	In Force
Albania	1995	1998	Jordan	1997	2003
Argentina	1991	1994	Kazakhstan	1992	1994
Armenia	1992	1996	Kyrgyzstan	1993	1994
Azerbaijan	1997	2001	Latvia	1995	1996
Bahrain	1999	2001	Lithuania	1998	2001
Bangladesh	1986	1989	Mexico ³	1992	1994
Belarus ²	1994	NIF	Moldova	1993	1994
Bolivia	1998	2001	Mongolia	1994	1997
Bulgaria	1992	1994	Morocco	1985	1991
Cameroon	1986	1989	Mozambique	1998	2005
Chile ³	2003	2004	Nicaragua ⁴	1995	2006
Colombia ³	2006	NIF	Oman ³	2006	NIF
Congo, DR	1984	1989	Panama	1982	1991
Congo (Brazzaville)	1990	1994	Peru ³	2006	NIF
Costa Rica ³	2004	NIF	Poland	1990	1994
Croatia	1996	2001	Romania	1992	1994
Czech Republic	1991	1992	Russia ⁶	1992	NIF
Dominican Rep. ³	2004	2007	Senegal	1983	1990
Ecuador	1993	1997	Singapore ³	2003	2004
Egypt	1986	1992	Slovakia	1991	1992
El Salvador ⁴	1999	2006	Sri Lanka	1991	1993
Estonia	1994	1997	Trinidad & Tobago	1994	1996
Georgia	1994	1997	Tunisia	1990	1993
Grenada	1986	1989	Turkey	1985	1990
Haiti ⁵	1983	NIF	Ukraine	1994	1996
Honduras	1995	2001	Uruguay	2005	2006
Jamaica	1994	1997	Uzbekistan ⁷	1994	NIF

Notes:

1. NIF = Not in Force
2. Entry into force pending exchange of instruments of ratification
3. Investment chapter in a free trade agreement. Agreements not in force: Colombia and Peru – needs US ratification; Costa Rica – needs Costa Rica ratification; Oman – pending exchange of instruments of ratification.
4. BIT was not entered into force. An investment chapter in a free trade agreement signed in 2004 entered into force.
5. Entry into force pending ratification by both parties and exchange of instruments of ratification.
6. Entry into force pending other party's ratification and exchange of instruments of ratification.
7. Entry into force pending U.S. ratification and exchange of instruments of ratification.

Table 2: *Fixed-effects estimates of the sources of U.S. FDI, 1977-2004*

<i>Independent Variables</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>
BIT_Sign	-.128 (-1.12)		-.048 (-.42)
BIT_Force		.207** (2.25)	.189** (2.13)
GDP	-.007 (-.05)	-.065 (-.40)	-.055 (-.33)
GDPPC	-.167 (-.52)	-.125 (-.39)	-.135 (-.42)
Growth	.006* (1.30)	.005* (1.28)	.005* (1.28)
Openness	.006** (2.02)	.006** (1.99)	.006** (1.99)
Polity	.003 (.54)	.001 (.29)	.001 (.31)
Constant	1.122 (.59)	1.351 (.71)	1.338 (.70)
n	132	132	132
N	2334	2334	2334

Note: *p<.1; **p<.05; ***p<.01 (one-tailed). Figures in parentheses are *t* statistics. N is the total number of observations; n is the number of states.

Table 3: *Additional Fixed-effects estimates of the sources of U.S. FDI, 1977-2004*

<i>Independent Variables</i>	<i>Model 4</i>	<i>Model 5</i>	<i>Model 6</i>	<i>Model 7</i>
BIT_Sign	-.048 (-.44)	-.082 (-.71)		-.064 (-.51)
BIT_Force	.195** (2.27)	.122* (1.48)		.216** (2.28)
BIT_Sign2			.084 (1.08)	
GDP	-.060 (-.31)	-.533** (.030)	-.051 (-.32)	-.067 (-.38)
GDPPC	-.186 (-.57)	.284 (.97)	-.122 (-.38)	-.106 (-.32)
Growth	.005** (1.65)	.005* (1.29)	.005 (1.26)	.005 (1.06)
Openness	.006** (1.94)	.005** (1.87)	.006** (2.01)	.003* (1.62)
Polity		-.004 (-1.01)	.002 (.40)	.002 (.48)
Polcon	-.146 (-.67)			
Coldwar		.290*** (3.11)		
Lagfdi				-3.05 (-.27)
Constant	.625 (.35)	2.737 (1.22)	1.191 (.63)	1.420 (.72)
n	143	132	132	129
N	2510	2334	2334	2202

Note: *p<.1; **p<.05; ***p<.01 (one-tailed). Figures in parentheses are *t* statistics. N is the total number of observations; n is the number of states.

Table 4: Alternative estimates of the sources of U.S. FDI, 1977-2004

<i>Independent Variables</i>	<i>Model 8 AR(1)</i>	<i>Model 9 Random Effects</i>
BIT_Sign	-.065 (-1.53)	-.009 (-1.10)
BIT_Force	.188* (1.62)	.129** (1.93)
GDP	-.092 (-1.64)	.051*** (2.80)
GDPPC	-.067 (-1.36)	-.026 (-1.56)
Growth	.006** (1.78)	.006 (1.25)
Openness	.007*** (5.34)	.004*** (3.50)
Polity	.0006 (.11)	-.003 (-.89)
Distance		-.304*** (-4.14)
Constant	1.09 (1.24)	2.022*** (2.44)
n	129	132
N	2202	2334

Note: *p<.1; **p<.05; ***p<.01 (one-tailed). Figures in parentheses are *t* statistics. N is the total number of observations; n is the number of states.

Table 5: Relative Rank of U.S. BIT Partners in U.S. Outward FDI Position in the Year the Treaty was Signed³¹

Year	BIT Partner	Rank in Terms of U.S. Outward FDI Stock	Number of Countries Ahead in Ranking with no Signed BIT
1982	Panama	3	2
1983	Haiti	65	62
	Senegal	60	58
1984	Congo, DR	40	38
1985	Morocco	56	52
	Turkey	27	25
1986	Bangladesh	63	56
	Egypt	11	9
	Grenada	86	77
1990	Congo (Brazzaville)	55	47
	Poland	71	60
	Tunisia	49	44
1991	Argentina	8	7
	Sri Lanka	64	51
1992	Bulgaria	96	78
	Mexico	2	1
	Romania	63	52
	Russia	48	41
1993	Ecuador	28	22
1994	Belarus	98	75
	Georgia	100	76
	Jamaica	18	14
	Trinidad & Tobago	31	21
1995	Albania	95	69
	Honduras	63	46
	Nicaragua	58	43
1996	Croatia	106	78
1997	Azerbaijan	36	25
1998	Bolivia	44	30
	Lithuania	75	51
	Mozambique	94	67
1999	Bahrain	134	88
	El Salvador	40	26
2003	Chile	8	4
	Singapore	2	0
2004	Costa Rica	37	21
	Dominican Republic	39	22
	El Salvador	41	23
	Guatemala	48	27
	Honduras	50	28
	Nicaragua	60	33
	Average	53 (of 112)	40 (of 86)

³¹ Ranking is among developing countries for which data is available. FDI data is not available for the year of signature for the following partners: Cameroon, Czechoslovakia, Armenia, Kazakhstan, Kyrgyzstan, Moldova, Estonia, Mongolia, Ukraine, Uzbekistan, Latvia, and Jordan.

Table 6: Relative Rank of U.S. BIT Partners in U.S. Outward FDI Position in the Year the Treaty entered into Force³²

Year	BIT Partner	Rank in Terms of U.S. Outward FDI Stock	Number of Countries Ahead in Ranking with no Treaty in Force
1989	Bangladesh	60	58
	Congo, DR	41	40
	Grenada	85	82
1990	Senegal	56	53
	Turkey	22	21
1991	Morocco	48	45
	Panama	3	2
1992	Czechoslovakia	42	37
	Egypt	17	15
1993	Sri Lanka	69	59
	Tunisia	60	52
1994	Argentina	6	3
	Bulgaria	75	59
	Mexico	2	1
	Poland	27	21
	Romania	60	49
1996	Trinidad & Tobago	34	28
	Ukraine	82	65
1997	Ecuador	33	25
	Georgia	107	82
	Jamaica	19	16
1998	Albania	114	87
2001	Azerbaijan	37	26
	Bahrain	80	51
	Bolivia	47	29
	Croatia	78	50
	Honduras	57	36
2004	Chile	8	4
	Singapore	2	0
Average		47 (of 112)	38 (of 95)

³² Ranking is among developing countries for which data is available. FDI data is not available for the year of entry into force for the following partners: Cameroon, Congo, Kazakhstan, Kyrgyzstan, Moldova, Armenia, Latvia, Estonia, Armenia, Lithuania, and Jordan.

Table A1: Descriptive Statistics

Variable	N	Mean	STD	Min	Max
FDI	2,709	.204	2.267	-24.827	41.665
BIT_Sign	3,847	.053	.224	0	1
BIT_Sign2	3,847	.144	.351	0	1
BIT_Force	3,847	.090	.287	0	1
GDP	3,611	9.688	1.987	4.831	15.671
GDPPC	3,611	8.059	1.025	5.139	11.011
Growth	3,589	1.296	8.200	-63.318	125.960
Openness	3,606	78.469	48.099	.847	425.339
Polity	3,364	-.972	6.933	-10	10
Polcon	3,765	.182	.208	0	.690
Coldwar	4,007	.575	.494	0	1
Lagfdi	2,665	.002	.022	-.248	.416
Distance	4,007	8.503	.490	6.863	9.154