Uncorrected Proofs

of

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"Bilateral Investment Treaties and Foreign Direct Investment: A Political Analysis."

Forthcoming in:

The Effect of Treaties on Foreign Direct Investment: Bilateral Investment Treaties, Double Taxation Treaties, and Investment Flows,

edited by Karl P. Sauvant and Lisa E. Sachs.

6. BILATERAL INVESTMENT TREATIES AND FOREIGN DIRECT INVESTMENT: A POLITICAL ANALYSIS*

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INTRODUCTION

Bilateral investment treaties (BITs), which promise foreign investors nondiscriminatory treatment and give them specific additional rights, have become popular. After a slow start, with the first BIT signed between Germany and Pakistan in November 1959 and 72 signed by the end of the 1960s, the number of BITs signed grew steadily but slowly in the 1970s and 1980s before it took off in the 1990s, with 1,857 BITs signed between the 187 members of the UN by December 31, 1999 (UNCTAD 2000, p. 1).1 Clearly, some governments have thought them worthwhile. Yet, empirical studies of the impact of BITs on foreign direct investment (FDI) have had mixed results. Some studies have found that BITs increase FDI, but empirical analyses of bilateral investment flows, in particular, have tended to find that BITs fail to boost inward FDI into the developing countries that sign them.2 We advance a theoretical and

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1. 17,391 bilateral treaties would have been hypothetically possible between the then-187 member states of the UN, so more than 10% of all possible BITs had been realized by 2000 (UNCTAD 2000, p. iii). By the end of 2006, 2,573 BITs had been signed between the now 192 member states of the UN (UNCTAD 2007), possibly part of a more general endorsement of neoliberal ideas by developing countries (Yackee 2005; though cf. Elkins, Guzman and Simmons 2006).

2. Many scholars have considered bilateral FDI the most appropriate measure of FDI to examine the effect of BITs on FDI, since each BIT is signed between two countries, only. We will return to this issue below. Most BITs have been signed between one developing country and one advanced capitalist country (usually a member state of the Organization for Economic Cooperation and Development (OECD)), though developing countries have increasingly signed BITs with each other; attempts to negotiate a multilateral investment agreement have repeatedly failed (see e.g., Guzman 1998; Elkins, Guzman and Simmons 2006).
epistemological argument to explain the mixed results of previous studies and to advance the understanding of BITs and their effect on FDI. Statistical as well as qualitative empirical analyses provide support for our argument.

We argue, first, that understanding the effect of BITs on FDI requires a political analysis of BITs. BITs are legal instruments that establish specific rights and obligations; they are part of the remarkable “legalization” of international politics in recent decades (Goldstein et al. 2001). Most strikingly, most recent BITs contain arbitration clauses that allow private parties from either signatory to initiate binding arbitration proceedings against the government of the other, without any need for either government’s approval. But while BITs are legal instruments, they exist to address a political problem. We focus on this political dimension of BITs to advance the understanding of the effect of BITs on FDI.

In the early years after post–World War II decolonization, outright expropriation was seen as the greatest threat to foreign direct investors. Starting in the 1970s, however, the changing nature of FDI led host country governments to largely refrain from expropriation. Rather, host governments started to use a wide variety of measures—including fees, regulatory requirements for financing or purchasing, and other interventions in the market—to increase ex post their share of the benefits from FDI. When negotiating with a potential foreign investor over the terms of the investment, governments of course have every incentive to promise that they will not take any such measures. Once the investment is made, however, governments have strong incentives to renege on such promises, especially in developing countries, where the rule of law often is only weakly established and domestic courts can often not be relied upon to enforce whatever contract the foreign investor might have with the host state. If the only remedy of foreign investors is to withhold future investments, then even the costs that investors collectively may in the long run impose upon the host country are unlikely to outweigh the benefits that political leaders with short time horizons can reap in the short run from reneging on their promises. BITs address the long-standing concern about expropriation by providing assurances against arbitrary expropriation and by committing the signatories to swift, substantial compensation if expropriation were to occur. We suggest, however, that BITs should be understood as attempts to reduce the likelihood of a much broader range of interventions by committing the FDI host country to economically liberal policies and by increasing the speed and costliness of punishments for breaking such commitments.

3. Giving private parties standing in a dispute with a foreign state is a fundamental deviation from long-standing traditions in public international law—though it may be consistent with a more general shift in international businesses’ preferences for private dispute resolution fora (see Mattli 2001).
The logic of this theoretical argument, developed in greater detail in Section B, also has epistemological implications. It suggests that BITs should not only boost FDI between the signatory states but more broadly increase inward FDI into the developing country signatory. We therefore argue, second, for monadic analyses of inward FDI rather than dyadic analyses of bilateral FDI, because dyadic analyses may be ill-suited to estimate the effect of BITs on FDI.

After we discuss in Section A the often narrow, legalistic conceptualization of BITs in previous studies, as well as previous dyadic and monadic empirical findings, we present our own theoretical argument in Section B. We then turn to a statistical analysis of inward FDI flows into 122 developing countries with a population of more than 1 million from 1970 to 2000—a much more comprehensive sample than in most previous analyses (Section C). Finding strong correlational support for our argument in the quantitative analyses, we turn in Section D to a qualitative analysis of the hypothesized causal mechanisms. Since the evidence here is mostly anecdotal, our findings in the qualitative section are more tentative, but they suggest cumulatively quite strongly that the positive correlation that we find between BITs and subsequent FDI is indeed driven by the hypothesized causal mechanisms. In the conclusion, we explore some broader implications and note avenues for future research.

A. PREVIOUS STUDIES OF THE EFFECT OF BITS ON FDI

1. Conceptual Differences in the Existing Literature
States started signing bilateral investment treaties in 1959—and more general bilateral treaties with investment and investor protection provisions have existed at least since the 1920s (e.g., Piper 1979, pp. 332–339; Vandevelde 1988, pp. 203–206). Yet, only in very recent years have scholars begun to study the effect of such treaties on FDI flows. The UN Centre on Transnational Corporation’s comprehensive 1992 review of empirical studies of the Determinants of Foreign Direct Investment, for instance, devoted a single sentence in its 76-page study to BITs, confirming the lack of empirical studies of their effect on FDI (UN 1992: p. 61). Most of the early scholarship on BITs (e.g., Alenfeld 1971; Bergman 1983; Mann 1982; Sornarajah 1986; UN 1988; Voss 1981) traced the history of such treaties in mostly descriptive fashion and, in the “old institutionalist” tradition that dominated scholarship in law and political science for much of the 20th century, focused on the specific provisions of such treaties, based on the implicit assumption that the rules operate as written and that the rules as such

4. Guzman (1998) warned, however, not to overestimate the importance of the (often vague) investment provisions in the pre–World War II treaties.
should therefore be the main object of study.5 Much of this scholarship also was concerned with normative questions, especially whether BITs were cumulatively creating a new body of customary international law—an important question for legal doctrine but not necessarily for explaining FDI flows. Yet, despite the dearth of positive analysis, some of those early studies provide valuable insights for understanding the effects of such treaties on FDI.

Particularly notable here is the discussion of BITs by Hans-Martin Burkhardt (1986, pp. 99f), based on his many years’ experience in the German Ministry of Economics. He suggested that it was no coincidence that the earliest BITs between an advanced industrialized country and a developing country were signed by West Germany and Switzerland (Germany–Pakistan, 1959; Switzerland–Tunisia, 1961), as these countries sought formal institutional links to compensate for the lack of colonial ties and networks to provide information and to safeguard investments. Major European colonial powers such as Britain and France started to sign BITs only later (see, e.g., Gallins 1984), though Japan and the United States were even later and began to take interest in investment-specific bilateral treaties only in the late 1970s and early 1980s, respectively. Burkhardt also noted that, by the mid-1980s, developing countries had already started to sign BITs amongst themselves (1986, p. 100; on this point, see also Sornarajah 1986; UNCTAD 2000, p. 5), and that many BITs were going well beyond guarantees for compensation in the event of expropriation by including, for instance, provisions for free capital flows as well as against regulatory interventions such as content or performance requirements (Burkhardt 1986, p. 101f). Importantly, he noted that the range of issues covered in the treaties and in the negotiations leading to such treaties were far broader than “the risks covered by investment insurance” (1986, pp. 103f). In short, while the details of BITs differ and have changed over time—and would surely warrant a more detailed analysis based on coding the specific provisions of each individual treaty—Burkhardt’s 1986 discussion of BITs suggests that these international institutions have for several decades covered a broad set of issues that affect the “investment climate” in FDI host countries.

This broad understanding of BITs was largely lost in two subsequent important and highly influential studies by UNCTAD and the World Bank. The authors of the UNCTAD study (Vandevelde, Aranda and Zimny 1998) focused on BITs as legal instruments that create rights and obligations for the signatories only. They consequently provided a richly informative discussion of BITs’ specific provisions (1998, pp. 29ff) but for the same reason focused their positive empirical work on analyses of the effect of BITs on bilateral FDI flows (1998, pp. 108ff). Similarly, Mary Hallward-Driemeier’s (2003) study for the World Bank emphasized

5. For a critique of this approach to political-legal issues in international business regulation, see, e.g., Mattli and Büthe (2005).
the host country obligations to pay “just compensation” for expropriation, the foreign investors’ right to “sue” the host government (2003, p. 4), and the bilateral nature of the treaties. She therefore conceptualized each BIT as a way to reassure potential foreign investors from the specific OECD signatory country, only—investors who might otherwise be deterred by weak domestic property rights in the developing-country signatory and potential FDI host (2003, pp. 2ff). This approach has become the conventional wisdom and has driven the predominance of dyadic empirical analyses (where bilateral FDI flows, usually from an OECD country to a developing country, are the dependent variable), discussed below.

The broad understanding of BITs has only been recovered in a few recent studies. Jeswald Salacuse, who in an earlier article speculated that BITs might “improve the host country’s investment climate” beyond the details of the treaty and its dispute settlement provisions (Salacuse 1990, p. 674), has in his recent work with Nicholas Sullivan suggested several ways in which BITs may affect FDI flows. Salacuse and Sullivan have argued that post-1960s bilateral investment treaties were intended to promote investment flows into the developing country signatories prospectively, in contrast to investment protection provisions in earlier international treaties, which were mostly concerned with the retrospective protection of existing investments (2005, pp. 75ff). BITs may therefore boost FDI not only through investment protection provisions—such as assurances that foreign investors will receive national or most-favored-nation treatment and be compensated in the event of expropriation, as well as commitments to a third-party dispute settlement mechanism such as ICSID arbitration—but also by “liberalizing the developing country’s economy as a whole.” Salacuse and Sullivan’s discussion of how BITs might contribute to such liberalization and in turn boost foreign investment remained, however, rather unspecific (2005, pp. 90ff), and although their study was not designed to differentiate between different causal mechanisms, they emphasized in the end the investment protection provisions and the associated bilateral logic of BITs affecting FDI.

Eric Neumayer and Laura Spess (2005) went further. They explicitly recognized that dispute settlement (especially binding arbitration) provisions not only enhance the credibility of guarantees against classic risks in foreign investment such as expropriation, but also that the provisions give foreign investors the right to challenge in favorable tribunals other government interventions in the market if such interventions distinctly affect the foreign investor. They consequently hypothesized that “the signing of BITs sends out a signal to potential investors

6. Most BITs allow the investor to initiate proceedings for binding arbitration, not a lawsuit in conventional courts.

7. Even scholars who conducted a range of empirical analyses, such as Tobin and Rose-Ackerman (2005) and Salacuse and Sullivan (2005), have tended to rely on the dyadic analyses above all to draw their conclusions.
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that the developing country is generally serious about the protection of foreign investment [regardless of the national origin of the investor]” (2005, p. 1571). A similar understanding of BITs also informed (less explicitly) the analysis of Robert Grosse and Len Trevino (2005), who hypothesized that foreign investors view BITs not just as property rights—protection for foreign investments but also more broadly as a “signal . . . that the host country has undertaken institutional reforms toward building a market economy” (2005, p. 129). Consequently, both Neumayer and Spess as well as Grosse and Trevino focused on total FDI inflows into developing countries rather than bilateral FDI flows as the dependent variable. As discussed in Section B, we take a similar view of BITs and adopt a similar empirical strategy, but we rely on a logic of credible commitment (for which we specify the causal mechanisms in greater detail than previous studies), rather than a signaling logic, since we do not believe BIT signing in and of itself can bring about a separating equilibrium, which would be required for a signaling model to work.9

2. Empirically Models of BITs and FDI

Scholars have adopted different approaches to modeling the effect of BITs on FDI empirically, grounded in the conceptual differences discussed above. Most analyses—and certainly the most prominent ones—have taken bilateral FDI as the primary *explanandum*, often in a panel setting, where multiple dyad-years are each observed over multiple years. These empirical models examine whether the existence of a BIT between the two countries in a dyad leads to higher FDI flows between them over time or in comparison with dyads that have no BIT.10 In monadic analyses, by contrast, individual host countries are the unit of observation in cross-sectional analyses (country-years in panel settings). These statistical models examine whether the total number of BITs (or BITs with certain characteristics) affect aggregate inflows of FDI into the host country.

a. Empirical findings from dyadic analyses

The highly influential studies by UNCTAD and the World Bank both relied primarily on dyadic analyses for their conclusions. Vandervelde et al. (1998, pp. 108ff) examined bilateral FDI flows between 1971 and 1994.11 They found a positive coefficient for the existence of a BIT in most of their statistical models, but the estimated effect was substantively

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8. Grosse and Trevino’s hypothesis is grounded in a general discussion of the new institutional economics and FDI, but the particular causal mechanism linking BITs to FDI is not specified.

9. We thank Jeff Frieden for discussion of this point.

10. Since existing analyses are mostly concerned with FDI into developing countries, they usually employ “directed” dyads, examining only FDI flows from the advanced industrialized country to the developing country in each dyad.

11. For each BIT, they examined the five dyad-years prior and subsequent to the BIT signing.
“marginal” (1998, p. 122) and statistically not quite significant at conventional levels. Hallward-Driemeier’s (2003) analyses of dyadic data on bilateral FDI flows from 20 OECD countries into 31 developing countries from 1980 until 2000 raised further doubts about the effectiveness of BITs: In a number of her models, the estimated coefficient for BITs was actually negative, but in most models it was completely insignificant, suggesting that developing countries could not use BITs to attract more FDI. As she pointed out, there also was no positive effect for the subset of developing countries with weak domestic political institutions or weak rule of law (Hallward-Driemeier 2003, pp. 20f). While based on a small subset of developing country hosts, the findings from these two studies quickly became something of a conventional wisdom, to the point where UNCTAD’s 2003 World Investment Report drew on them to conclude: “At best, BITs play a minor role in influencing global FDI flows and explaining differences in their size among countries” (2003b, p. 89)—though UNCTAD noted the possibility that “specific countries under specific circumstances” might experience a more positive effect.

The belief that BITs have no effect on FDI was further strengthened by Jennifer Tobin and Susan Rose-Ackerman’s analysis of U.S. FDI flows into 54 developing countries from 1984 to 2000. In country-fixed-effects models, which examined changes in each country over time, they found no significant effect for BITs—nor for political risk, though they found a seemingly perverse conditional effect when they included an interaction term between BITs and a measure of political risk: The estimated net effect of having a BIT was negative except for countries with very low levels of political risk, of which there were few among the developing countries in their sample. These estimates, moreover, were not statistically significant, possibly due to the use of three-year averages, which left them with at most six or seven observations per country as the basis for estimating the within-country effects of BITs. They consequently drew the overall conclusion that a BIT between the United States and a given developing country generally has no significant effect on U.S. FDI flows to that country.

Contrary to Tobin and Rose-Ackerman, Salacuse and Sullivan found that U.S. BITs boost U.S. FDI into the developing country signatory, based on an
examination of U.S. FDI flows to 31 developing countries from 1991 to 2000, 11 of which had signed a BIT with the United States by the end of the time period analyzed. They found that having a signed BIT with the United States makes a developing country highly significantly more likely to experience an increase in U.S. direct investment (Salacuse and Sullivan 2005, pp. 108ff)—though given that seven of the ten countries with U.S. BITs in Salacuse and Sullivan’s 1991–2000 analysis signed those BITs prior to 1992, and given that these findings are derived from a country-fixed effects model (with apparently no correction for trend in FDI), the highly significant coefficient for BITs was based on a preciously small amount of information. It may therefore not be surprising that Kevin Gallagher and Melissa Birch, contrary to Salacuse and Sullivan, found that U.S. BITs are not correlated with higher FDI flows from the United States to the developing country signatories, based on an analysis of FDI inflows into 24 Latin American and Caribbean countries from 1980 to 2002 (Gallagher and Birch 2006, pp. 969ff), though Yoram Haftel (2008) has provided qualified support for Salacuse and Sullivan’s argument by showing that ratified (rather than merely signed) U.S. BITs boost U.S. FDI into developing country signatories.

In sum, dyadic analyses have yielded mixed results, with most of them finding little if any statistically significant increase in FDI into developing countries (LDCs) as a result of BITs. These mixed findings may be due to data quality. The quality of bilateral FDI data is generally considered to be even poorer than the quality of monadic FDI data. Bilateral data also are available only for a limited (and a decidedly non-random) set of countries. More probably, though, the mixed findings are a consequence of the narrow conceptualization that underpins these analyses. If a BIT does not just boost FDI from the capital-rich treaty-signatory state (SCT) into the developing treaty-signatory state (SLDCT), but also—for reasons discussed in Section B—boosts FDI from other capital-rich states that are not party (i.e., external) to the treaty (SCXT), then dyadic analyses will pool observations of FDI flows that have been affected by the BIT (S_CXTPostBIT) with observations of FDI flows unaffected by the BIT (S_CXTpreBIT and S_CTPreBIT). Such pooling of “treated” and “untreated” observations biases the findings toward insignificance. Monadic analysis should address this problem.

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16. Of the ten U.S. BITs included in the study, the BIT with Bulgaria was signed in September 1992, with Panama in October 1992, and with Ukraine in March 1994.

17. They also conducted analyses of total FDI, where they found that the total number of BITs signed was positively correlated with total inward FDI, though this effect was robust only for South America, not for Mesoamerica.

18. In addition to these studies of FDI flows, Philippa Dee and Jyothi Gali’s (2003) study of dyadic FDI stock found no effect for BITs.
b. Empirical findings from monadic analyses

The UNCTAD study also included cross-sectional analyses of aggregate inward FDI flows from a single year (1995) into 133 host countries. The findings changed substantially with model specification, and BITs were so rarely significant that the authors concluded that “BITs play a minor and secondary role in cross-country comparisons of FDI determinants” (Vandevelde, Aranda and Zimny 1998, p. 120). However, as the authors noted, their setup might not have allowed them to draw any definitive conclusions even if the estimated coefficients had been more consistent, given that any number of country-specific factors, for which they did not control, might explain the variation across countries. This problem also affected the monadic analyses by Salacuse and Sullivan, who estimated cross-sectional models of aggregate FDI inflows into 99, 97, and 94 developing countries in 1998, 1999, and 2000, respectively (separate annual cross-sections). Using three measures of BITs—a dichotomous variable for U.S. BITs and count measures of other-OECD and non-OECD BITs—they found that signing a BIT with the United States has significantly boosted a developing country’s overall FDI inflows, whereas BITs with other countries have had no significant effect (Salacuse and Sullivan 2005, pp. 105, 120ff). They speculated that this finding may be due to the more demanding provisions for investment protection in U.S. BITs compared to other countries’ BITs, though high multicollinearity between their three BITs measures (2005, p. 106) made it nearly impossible to draw firm conclusions regarding the relative effectiveness of different BITs in boosting FDI.

More recently, scholars have turned to panel data of aggregate FDI inflows (monadic FDI) to alleviate the substantial risk of omitted variable bias in cross-sectional analyses. In most such analyses, however, the time series have remained short and the number of countries analyzed small. Grosse and Trevino (2005, p. 136), for instance, analyzed aggregate FDI inflows into 13 Central and Eastern European (CEE) countries from 1990 to 1999 (54 observations after listwise exclusion). They found the number of BITs signed by a country to be positively and statistically significantly correlated with FDI inflows into that country in random effects GLS estimates.\(^{19}\) By contrast, Tobin and Rose-Ackerman’s monadic analysis of five-year averages of aggregate FDI inflows into 63 developing countries from 1985 to 2000 (up to four observations per country in a country-fixed effects model) again found no significant effect for BITs, except in the conditional setting, where BITs had a negative and even statistically significant effect on FDI inflows for developing countries, except for LDCs with very low political risk (Tobin and Rose-Ackerman 2005, pp. 19–23). Neumayer and

19. The analysis built on the work of Trevino, Daniels and Arbeláez (2002), who found a positive and statistically significant correlation between the number of BITs signed by the FDI host country and FDI inflows in complementary empirical tests to their main pooled OLS analyses of 47 observations of inward FDI into seven Latin American countries between 1988 and 1999 (see Grosse and Trevino 2005, p. 129).
Spess (2005), whose empirical strategy is most similar to ours, analyzed a comprehensive sample of developing countries (up to 120) from 1970 to 2000, which enabled them to conduct much more conclusive fixed-effects estimations. They found consistently a positive and statistically significant effect for BITs, both in random and in fixed effects models.\textsuperscript{20}

In sum, most of the (few) monadic analyses have suffered from small sample sizes with a substantial risk of selection bias and, where panel data are employed, short time series within countries. Neumayer and Spess addressed both of these problems, though Tobin and Rose-Ackerman criticized them for the inclusion of “very small island countries” (2005, p. 23), which would violate the unit homogeneity assumption if the “true” model of FDI allocation to these countries were structurally different from the model for larger countries (as is often assumed in the literature). We address this concern by excluding from our analysis countries with a population of less than 1 million, while still analyzing FDI inflows into 122 developing (non-OECD) countries in our most comprehensive analyses.\textsuperscript{21} Neumayer and Spess also considered only a weighted subset of BITs, where the weights are themselves a function of investment flows, whereas we consider all BITs.

**B. A POLITICAL THEORY OF BITS AND FDI**

In this section we will discuss our assumptions about the political problem that BITs are intended to address. We will then specify why a BIT should be seen as a broad commitment to economically liberal policies and why such a commitment should be more costly to break and therefore more credible than corresponding domestic policy choices. Finally, we will explain why a BIT should boost inward FDI into the BIT-signing developing country in general, not just bilateral FDI

\textsuperscript{20} Neumayer and Spess used total amounts of FDI inflows in constant US$ as their main dependent variable, whereas Tobin and Rose-Ackerman calculated for each FDI-recipient country(-year) what percentage those FDI inflows constitute of all developing countries’ FDI inflows; this transformed percentage measure was their dependent variable (see Tobin and Rose-Ackerman 2005, p. 16). Neumayer and Spess also used a similarly transformed measure as an alternative dependent variable (Neumayer and Spess 2005, p. 1573, 1579); their findings are robust to that change.

\textsuperscript{21} Most countries are unambiguously above or below this conventional 1 million threshold. Among the countries included by Neumayer and Spess, Antigua and Barbuda, Seychelles, St. Kitts & Nevis, and St. Vincent and the Grenadines are below 100,000; Barbados, Belize, São Tomé and Principe, and St. Lucia are well below 300,000 each. Only Swaziland and Trinidad & Tobago crossed the threshold during the time period analyzed here. Swaziland was below 1 million until 1999 and was therefore mostly excluded from our analyses whenever the threshold was mechanically applied; the population of Trinidad and Tobago, by contrast, crossed the 1 million threshold from 1973 into 1974 and is therefore mostly included in our analyses. Fully including or excluding these countries did not change any of the substantive findings.
from the other BIT signatory, which suggests that monadic analyses are the most appropriate empirical strategy, where each developing country (year) is the unit of analysis and aggregate inward FDI flows are the dependent variable.

1. BITs as the Answer to a Political Problem

Foreign direct investment is distinctive in that it entails the acquisition or creation of assets that are more “specific” than other transnational financial investments, i.e. they cannot be as easily sold, moved, or put to other uses in the short run without considerable loss (Coase 1937; Williamson 1985; Yarbrough and Yarbrough 1990). This asset specificity gives governments, which control how property rights can be exercised, additional leverage vis-à-vis the investor as soon as an investment is actually made (Vernon 1971). This shift in power, which is inherent in FDI, should give rise to a fundamental concern for any potential foreign direct investor, well summarized by Andrew Guzman (1998, p. 659): “Regardless of the assurances given by the host before the investment and regardless of the intentions of the host at the time, the host can later change the rules if it feels that the existing rules are less favorable to its interests than they could be.”

This concern is real because the asset specificity creates a time inconsistency problem (Kydland and Prescott 1977), where host governments’ preferences after the investment differ predictably from their prior preferences. Distant prospects of punishment—in the form of reduced future investment or reduced benefits from the existing investments—may not solve the problem: The short-term gain of increasing their share of the benefits from existing foreign investments may lead governments to change the terms of those investments even if the costs of doing so outweigh the gains in the long run, provided that the political leader has a short time horizon.

The time inconsistency problem is further exacerbated by the fact that governments can intervene in the market in many different ways to change the terms of a foreign direct investment (e.g., Tarzi 1991). Governments may directly change the conditions or costs of entry or exit of foreign capital through restrictions on the capital account, including new restrictions on repatriating profits. Alternatively, they may put up tariffs or nontariff barriers so as to increase the cost of importing supplies or increase the government’s take from the export of outputs. They may raise taxes, impose new fees, or change regulations in ways that diminish the value of the investment or increase the share of the profits that goes to the FDI host government. Or they may selectively enforce the law or in various other ways affect the value or profitability of the investment. We therefore

22. In principle, the same concern applies to domestic investors, but foreign investors generally have less access to the domestic political process through which such ex post changes will be decided.

23. The problem may therefore affect potential foreign investments into developing countries in particular, because politicians’ time horizons may be particularly short in cash-strapped developing countries.
assume that the primary political concern for potential foreign direct investors is not so much outright expropriation (which has become a very rare event since the 1970s, see Minor 1994; Li 2005) but more broadly host governments’ commitment to economically liberal policies, as a safeguard against the broad range of interventions in the market that may diminish the value of the investment (we examine this assumption empirically in Section D.1.). And we submit that BITs should be understood as a political instrument to address this broad set of concerns by providing information and increasing the costliness of breaking commitments (thus making them more credible)—long recognized as important factors in international cooperation (e.g., Martin 2000; Milner 1992; 1997; Morrow 1994; Simmons 2000), but little explored in transnational relations between governments and foreign non-state/private actors.24

Since the unmitigated time inconsistency problem leads to suboptimal levels of investment, developing country governments, too, should have an incentive to address the problem. The unilateral (i.e., entirely domestic) adoption of liberal economic policies will surely increase a country’s attractiveness to FDI, but may not be considered a credible commitment by foreign investors unless the country has a very strong rule-of-law tradition, since short-term incentives may lead LDC governments to change or selectively apply such policies.25 By contrast, when an international agreement, formal treaty, or international organization enshrines its members’ commitment to a certain set of policies, a change in those policies has not only domestic ramifications, but also constitutes a breach of international commitments (see, e.g., Simmons 2000, pp. 821f), which makes reneging on such commitments more costly, as discussed in greater detail below.

2. BITs as a Broad Commitment to Liberal Economic Policies
BITs institutionalize foreign investors’ participation in the host economy. Their specific provisions differ across OECD signatories but also among the BITs signed by a given OECD country with different LDC countries. Yet, most BITs have many common elements (see, e.g., Dolzer and Stevens 1995; Franck 2005a, pp. 1529ff; Guzman 1998, pp. 654ff; Peterson 2001; UNCTAD 2003b, pp. 87f). Almost all BITs establish entry conditions for multinational corporations/foreign direct investors. These provisions usually do not change domestic laws, so that if a government has, for instance, a postal monopoly, foreign investors will ordinarily not be able to establish private postal services any more than

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24. Mattli and Büthe (2003) argue that delegation of regulatory authority to international nongovernmental standards-developing organizations in the Agreement Establishing the World Trade Organization enhanced the credibility of WTO member states commitments not to use technical standards as non-tariff barriers to trade. Tomz (2007) explores the persistence and half-life of information and reputations in sovereign bond markets.

25. This may be why Glen Biglaiser and Karl DeRouen (2006) found that market-friendly economic reform in Latin American countries do not always lead to increased FDI.
domestic investors. However, they usually commit each signatory to allowing nationals and economic entities from the other signatory to bring capital for direct investments into the country without being subjected to taxes or fees for entry; they also commonly commit the signatories to allow the unimpeded repatriation of profits from foreign direct investments. Reflecting lingering concerns about (rare but always very prominently publicized) instances of expropriation, BITs contain provisions that may constrain nationalization and always guarantee compensation for expropriation if it were to occur (many BITs also promise compensation for any destruction of property in the event of civil conflicts or war). And among the “procedural rights that permit the enforcement of the substantive rights,” BITs in recent years have tended to contain the kinds of binding arbitration provisions discussed above, which allow foreign investors to initiate a dispute over violations of BIT provisions directly against the FDI host government. In sum, most BITs commit the signatories not to impose capital account controls that impede foreign investment or the repatriation of profits; they commit the signatories to pay compensation in the even of expropriation, and they commit host governments to submit to arbitration in the event of a dispute over these commitments.

Yet, most BITs go far beyond these common provisions. They generally guarantee, for instance, national treatment for foreign investors with respect to establishing and operating a business in the FDI host country. At the same time, they grant rights to the foreign investor that no domestic investor has, such as the right for a review of any alleged violation of the government’s obligations under the treaty by arbitration panels whose composition is controlled in part by the foreign direct investor. Most BITs also guarantee most-favored-nation treatment, that is, they guarantee that each signatory state will treat investors from the other signatory state no less favorably than investors from anywhere else.

Most importantly, many BITs contain general—vague but potentially sweeping—provisions by which the signatories commit not to take any regulatory, legislative, or administrative steps that would diminish the value of the investment, including policies that would impede the import of inputs or export of outputs. Thus, the Denmark-Lithuania BIT of March 1992, for instance, specifies in Article 3(1) that “neither Contracting Party shall in any way impair by unreasonable or discriminatory measures the management, maintenance, use, enjoyment or disposal of investments in its territory . . . .”26 In other words, the BIT commits the government not to interfere in the market in ways that would diminish the value of the investment to the investor. Moreover, the arbitration provisions usually apply to all of the commitments undertaken in the treaty, effectively leaving it to the arbitration tribunal to interpret the breadth or depth of the governments’

26. The text of this and most other BITs is available from the UNCTAD website’s Investment Instruments Online; http://www.unctad.org/sections/dite/iia/docs/bits/denmark_lithuania.pdf (3/1/2008), emphasis added.
obligations under the treaty (such as what would be a “reasonable” exception under the Denmark-Lithuania BIT).

In sum, BITs give foreign investors rights that go well beyond unimpeded capital flows and guaranteed compensation for expropriation. Rather, BITs constitute a commitment to economically liberal policies across a broad range of issues, as underlined by arbitration decisions (though the interpretation of BITs by arbitration panels has been far from perfectly consistent; see Franck 2005a; 2005b).

3. Credibility of Internationally Institutionalized Commitments

Why should we expect that foreign investors will consider the commitments undertaken via BITs to be more credible than promises that host governments might make directly to them? Why should these internationally institutionalized commitments be less susceptible to the time inconsistency problem? We argue that BITs provide information about the nature of the commitment and about any actual occurrence of a violation—and they provide mechanisms for the enforcement of those commitments. All of this increases the costs of reneging and/or the speed with which governments that renege on their commitments will likely incur those costs, which in turn should raise the credibility of those commitments in the eyes of foreign investors.

a. Ex ante information & BITs

Charles Lipson (1991, p. 501) suggests that states enter into formal agreements such as treaties in part to make commitments more “visible.” Such ex ante information about international agreements, especially when it makes the nature and specific provisions of the commitment known, facilitates detecting violations of the commitment and in turn should allow for swifter punishment.

There are good reasons to think that this logic applies to BITs. The conclusion of negotiations for a BIT, the signing of the BIT, and (where separately needed) the ratification of a BIT are usually publicized in government press releases and often undertaken in public ceremonies reported in the media. Such initial publicity should provide at least some information about the nature of the commitments undertaken. In addition, governments (particularly governments of regular FDI “home” countries) may provide information about the country’s BITs on an ongoing basis. In the United States, for instance, designated offices in the Department of State (Office of Investment Affairs) and in the Office of the U.S. Trade Representative (Office of Services, Investment, and Intellectual Property) exist to answer American investors’ questions about their rights under U.S. BITs.

Moreover, information provision is not restricted to the two signatory countries. BITs are covered by the UN requirement to notify all treaties to the UN, and UNCTAD has for a number of years by now made the full text of most BITs available on its website. We may therefore expect that a multinational corporation (MNC) or individual investors considering a foreign direct investment in a given developing country may already know or can easily learn whether this LDC has a BIT with his/her own country, toward how many other countries the
country has undertaken similar commitments, and what the terms of those agreements are.

b. *Ex post* information and BITs After the initial publicity subsides, BITs continue to generate information that facilitates identifying and punishing those who renge on their commitments. Such information is most likely to be generated by the aggrieved investor him/herself through the dispute settlement process (discussed in greater detail under “Enforcement” below). Investment treaties tend to include provisions for binding arbitration of any disputes under the treaty and increasingly specify the World Bank’s International Centre for Settlement of Investment Disputes (ICSID) as the arbitrator before which private investors may bring a dispute directly against the FDI host government. Arbitration before an ICSID panel makes the host government’s alleged violation of its commitment a matter of public record: Pending cases as well as decisions are published on the World Bank website and in the ICSID newsletter.27

In addition, governments and private actors are more likely to provide information about noncompliance with commitments under a BIT than about noncompliance with commitments that have not been institutionalized internationally. A government’s compliance with its treaty obligations is often monitored by the other governments that are parties to the international agreements—more closely and continually than policy commitments that a government may undertake domestically or via individual investors. The U.S. Department of State’s Office of Investment Affairs, for example, publishes annual *Investment Climate Statements* for some 120 countries. Prepared by government officials based in part on reports from U.S. diplomatic missions abroad as well as private investors, each statement notes any investment agreement that the country has with the United States and reports outstanding disputes or issues that have arisen in the implementation of those agreements, including property rights and trademark protection issues as well as dispute settlement problems.28 On the non-governmental side, international agreements create incentives for domestic groups that benefit from the commitments to make government violations of those commitments public, and they legitimate such domestic, private information provision about a government’s failure to live up to its commitments (Cortell and Davis 1996; Dai 2005). This information effect should increase with the number of BITs an FDI host country has signed, since each BIT increases the number of parties monitoring a government’s policies.

27. A number of BITs, especially older ones, also arrange for ad hoc arbitration outside the ICSID framework, but we have less systematic knowledge about them, since such arbitration proceedings may be confidential. As William Rogers (2000) points out, governments’ desire to avoid the reputational damage of even being publicly accused of treaty violations may create perverse incentives for “unhappy investors . . . to [falsely] complain that a financial or business failure was due to improper regulation, misguided macroeconomic policy or discriminatory treatment by the host government . . . “

28. See http://www.state.gov/e/eeb/ifd/c9787.htm (3/1/2008)
By generating information about each instance of reneging on (or *ex post* rejection of) an international agreement, BITs also raise the reputational costs of such behavior. Violating an institutionalized commitment—or not making amends to correct a violation that has occurred—damages a country’s reputation for keeping commitments, making future cooperation on the same and other issues more difficult and maybe impossible to achieve (Abbott and Snidal 2000; Simmons 2000).²⁹ And violating any specific BIT also generates costs in interactions with countries that are not a party to that treaty, because it constitutes a violation of the broader social norms affirmed through the agreement (Snidal and Thompson 2003, p. 200). The greater the number of countries with which the host has signed BITs, the greater is the number of countries that may infer from the breach of any one BIT that the commitments undertaken vis-à-vis them are now also in jeopardy. The costs of violating BIT commitments should thus increase with the number of BITs signed by a given FDI host country.

As a consequence, a potential foreign investor should have ample opportunity to assess any host government’s record of compliance with its BIT obligations, not just under a BIT with the foreign investor’s own country (if such a BIT exists) but under all BITs signed by the potential host country. If investors extrapolate from past to future behavior, adding a risk premium for uncertainty, then signing additional BITs should boost the attractiveness of a developing country to foreign investors (assuming constant levels of compliance), because each BIT provides the investor with additional information. Signing additional BITs should therefore increase a country’s attractiveness for foreign direct investors, leading to increased inward FDI in the aggregate.

**c. Ex post enforcement & BITs** Like many other formal international agreements, BITs lead to the creation of mechanisms that make it easier for private actors to solicit assistance from their home government to bring diplomatic pressure to bear on “a government that is considering or engaging in rule violation” (Simmons 2000, p. 821). The U.S. government offices that are designated to provide information about BITs (discussed above) also exist to pursue intergovernmentally any complaints by those who believe that their rights under a treaty have been violated by a foreign government. European governments similarly have designated officials in ministries for foreign affairs or economics/commerce (and in their embassies) as the first contacts and representatives of their nationals vis-à-vis foreign governments if the former feel that a current or forthcoming policy threatens their interests in violation of a BIT. As a European government official told us: “Of course, we always try to be supportive of our citizens if they have been harmed by the actions of a foreign government, but it

²⁹. These reputational costs should be even higher when the international institution provides for an arbitral or judicial mechanism, as BITs generally do, which provides an independent confirmation that a country has indeed violated its treaty obligations (Abbott and Snidal 2000, p. 427).
makes a difference whether there is a treaty, because we can be more forceful if there are quasi-legal rights and obligations."30 Others, like the government of Australia, have similar institutional access points. In short, the existence of a BIT makes it easier for foreign investors to recruit the assistance of their home governments to bring costly pressure to bear on FDI host country governments that renege on their commitments to economically liberal policies.

BITs, however, go beyond this common feature of international agreements. Investment treaties now almost always include an \textit{ex ante} commitment to binding arbitration and—in a radical departure from the dominant tradition in international law (Salacuse and Sullivan 2005, p. 88)—create the right for private parties in one state to take the government of the other state “to court” (i.e., to an arbitrator).31 To be sure, these provisions provide no absolute guarantee that governments will not change policies to the detriment of foreign investors. Yet, while they provide no guarantee, they indeed raise the costs of reneging on the commitments made in the BITs, as evidenced by the outcomes of such disputes. The World Bank’s International Centre for Settlement of Investment Disputes (ICSID), which has increasingly become the standard designated arbitrator in BITs, registered its first case arising under a BIT arbitration provision in 1987 (ICSID 2000, p. 7). Having proven considerable independence from governments by rendering 10 of its first 18 decisions against governments (foreign investors prevailed, at often substantial economic and/or political costs to the host country government, see IBRD 2005, p. 181), ICSID has continued to attract investment disputes, with 87 cases brought under BITs by February 2003 and 144 by the end of June 2005 (ICSID 2003ff).32

In sum, enforcement procedures established by (or as a consequence of) BITs enable foreign governments and private actors to impose higher economic and political costs on governments that renege on their policy commitments—and to do so more quickly—than in the absence of BITs. By increasing the likelihood

31. Arbitration provisions in BITs varied considerably in the early years (Sornarajah 1986, p. 96 esp) but have become much more consistent in the last two decades (Dolzer and Stevens 1995; interviews of the authors with government officials in the United States and Europe); under most recent treaties, private parties have standing before the designated arbitrator regardless of their home government’s approval (Salacuse and Sullivan 2005).
32. This pattern raises the question why governments generally accept the outcomes of the judicial or arbitration processes even when the decisions go against them. While proper research of this question is beyond the current chapter, nonacceptance of arbitration decisions would most immediately undermine the very objective that led most countries to institutionalize their commitments in the first place, namely to gain the economic benefits of increased FDI; it also would much more broadly damage their reputation for honoring commitments and thus might deprive them of a range of benefits of international cooperation (see discussion of reputational costs above).
and the time-discounted magnitude of the punishment for reneging, international institutions should reduce the time-inconsistency problem posed by FDI for developing country governments. As Salacuse (1990, p. 674) noted, a “BIT’s mandatory dispute settlement provisions and the ultimate prospect of compulsory arbitration will cause host country officials to pause before taking actions toward foreign investment.”

4. Who benefits? The effect of BITs on FDI

BITs’s treaty provisions create specific legal rights for nationals of the other signatory. They consequently should boost the FDI flows from the capital-rich treaty-signatory state, $S_{CT}$, to the developing country treaty-signatory, $S_{LDCT}$. We submit, however, that they should be expected to affect FDI well beyond bilateral FDI flows, boosting inflows from other capital-rich states that are external to the treaty ($S_{CT}$) into $S_{LDCT}$. This should occur for several reasons. First, each BIT signed by a given $S_{LDCT}$ may boost what we have called the *ex ante* informational effect of other BITs signed by that $S_{LDCT}$ and should increase the reputational cost of reneging on the commitments undertaken via those BITs, as discussed above. Second, economic nationality is not well defined and may be stretched in the event of a dispute. Any specific BIT thus directly creates rights for a broad set of potential or actual investors. In one of the most prominent investment disputes of recent years, for example, a mostly American-owned, Bermuda-headquartered, Nasdaq-traded multinational, Central European Media Enterprises (CEME), was able to bring a case against the Czech government under a BIT between the Czech Republic and the Netherlands, because a Dutch subsidiary of CEME had been involved in some of the transactions (CEME also brought a case over the same issue under a BIT between the Czech Republic and the United States in London).

The CEME dispute turned on regulatory actions and omissions by the Czech Broadcast Regulation Council in 1999, which had allowed CEME’s local business partner, on whose Czech citizenship CEME was relying for its broadcasting license, to squeeze out CEME and render its investment in a successful Czech TV station largely worthless. CEME’s founder Ronald Lauder, a U.S. national, lost his dispute under the Czech Republic-U.S. BIT, but the arbitrator for the Czech-Dutch BIT (in this case a panel of the Arbitration Institute of the Stockholm Chamber of Commerce), found in September 2001 that, given the actions and omissions of the Czech regulator, the Czech state had failed its obligation under the BIT to protect and fairly treat the foreign investor; it awarded CEME US$ 355 million—more than twice the market capitalization of CEME before the award and equal to the entire annual budget of the Czech Ministry of Health (Desai and

33. The tribunal under the Czech Republic-U.S. BIT found that the Czech Regulator had discriminated against Lauder as a non-Czech citizen, but that Lauder had failed to show that his subsequent loss of the investment was due to this violation of the BIT. It therefore awarded no damages.
Moel 2006; Franck 2005a, pp. 1559ff; Green 2003). This was not an isolated case: Japanese MNC Nomura Group Companies has brought a case against the Czech government over the insolvency of a Czech bank partly owned by Nomura under the Czech Republic-Netherlands BIT (Goldhaber 2003); U.S. MNC Bechtel has brought a case against Bolivia over the privatization of a water utility based on a Bolivia-Netherlands BIT (Mahnkopf 2005, p. 134); and Italian MNC Carmuzzi has brought a case against Argentina over public utilities pricing in the aftermath of its 2001 currency crisis on the basis of BITs that Argentina had signed with Belgium and Luxembourg (Goldhaber 2003)—to name just a few.

Third, many BITs contain clauses that guarantee treatment of foreign investors on par with the treatment afforded to investors from the “most favored” country. As a consequence, investors from a country that has signed a BIT with a given FDI host may be able to take advantage of more far-reaching provisions in a BIT that the host has signed with another country. Developing country governments that are tempted to treat foreign investors differently, depending on whether or not the investors have certain rights under specific BITs, will therefore have to tread carefully. Uncertainty over the applicability of BITs provision (beyond the core group of investors unambiguously associated with the treaty partner) creates incentives for adopting liberal policies toward investors in general, rather than selectively.34

In sum, there are several reasons to expect BITs to affect not just bilateral FDI flows but inward FDI flows into BITs-signing developing countries much more broadly. This has important implications for empirical analyses of the effect of BITs on FDI flows into developing countries. It suggests that such analyses should not focus on bilateral flows, where inappropriate pooling may bias the results, but on aggregate FDI inflows into any given developing country.

This argument for a monadic empirical strategy is further strengthened by an artifact of FDI statistics: Bilateral FDI statistics generally record only the immediate source or destination of the funds, which may obscure the flow of funds and the reasons for investment. If the April 1992 BIT between Spain and Uruguay,

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34. Moreover, irrespective of how broad the group of investors who arguably gain direct rights under a given BIT, the commitment to economically liberal policies toward these foreign economic actors also creates incentives to adopt and maintain economically liberal policies in general. This is not to say that liberal foreign economic policies and liberal domestic economic policies automatically go together; domestic policies remain subject to political contestation, even after a country makes a commitment to a liberal foreign economic policy via a BIT, and developing countries may, like OECD countries, exhibit partisan differences in the kind of foreign direct investments they like to see (Pinto and Pinto 2008). Yet, there are strong economic incentives to maintain (more) market-economic policies when economies are (more) open, so as to be able to reap the full benefits from international (in this case financial) liberalization (see, e.g., Chang, Kaltani, and Loayza 2005; Frieden and Rogowski 1996). BITs thus may work to institutionalize a country’s commitment to liberal foreign and domestic economic policies not just selectively vis-à-vis treaty partners, but also in general.
for instance, spurred a Spanish multinational corporation to make an investment in Uruguay, but the Spanish MNC decided to make that investment via its Latin American head office at its subsidiary in Argentina, the investment would be recorded (by Uruguay and Argentina) as Argentinian FDI in Uruguay. Dyadic analyses of bilateral FDI flows between Spain and Uruguay would find no effect and might, in fact, find a negative effect if they compared the flows from Spain to Uruguay (for a dyad with BIT) with the flows from Argentina to Uruguay (for a dyad without BIT). This is not just a hypothetical scenario. A recent detailed study of U.S. FDI inflows into Vietnam, for instance, gathered data on individual investment transactions and found that a large share of the growing investments by U.S. multinationals corporations into Vietnam have been administratively handled by the U.S. MNCs’ existing East-Asian subsidiaries in, for instance, South Korea and Japan, and that these investments consequently were not recorded as U.S. FDI into Vietnam, but as FDI from South Korea into Vietnam and from Japan into Vietnam (FIA 2005, p. 4). Bilateral FDI data thus might obscure the effect of BITs or even cause the researcher to get it entirely wrong.

We therefore focus on monadic analyses of FDI inflows, where the effect on FDI should be proportional to the number of BITs the FDI host (developing) country has signed. Our central hypothesis for the empirical analysis is therefore: The greater the number of BITs to which a developing country is a party, the more attractive will foreign investors consider it to be as an investment location, and the more inward FDI will it receive, ceteris paribus.

C. STATISTICAL ANALYSIS

1. Setup of the core statistical analysis
a. Sample To test our hypothesis statistically, we conduct statistical analyses of annual flows of inward foreign direct investment into developing (non-OECD) countries with a population of more than 1 million. Our dependent variable, annual inward FDI, is the sum of the year’s flows of direct investments into a given “host” country by capital owners that are foreign to that country (net of direct investments withdrawn by foreign capital owners), calculated as a percentage of GDP. We restrict the analysis to developing FDI host countries

35. We thank Eddy Malesky for bringing this study to our attention.
36. The effect need not be linear, but we lack theoretical reasons for expecting any other particular functional form ex ante and therefore estimate a linear relationship.
37. This measure of FDI, which is employed in many recent analyses of FDI, eliminates the need to deflate the dependent variable and makes it easily comparable across countries and over time. Our data is from the online version of UNCTAD’s Handbook of Statistics (see UNCTAD 2003a for details).
bilateral investment treaties and foreign direct investment

by excluding all OECD country-years for three reasons: (1) our theoretical logic suggests that the political determinants of FDI into developing countries may differ from those for FDI into advanced industrialized countries; (2) our empirical findings from interviews with business managers (see Section D) suggest that their key concerns about the political environment differ systematically depending on whether they are considering a foreign direct investment in a developing or an advanced industrialized country; and (3) a recent study by Bruce Blonigen and Miao Wang (2005) shows that pooling “wealthy and poor” countries in statistical analyses of the determinants of FDI may lead to biased results or erroneous inferences. We also restrict our analysis to country-years during which the FDI host was an independent country (i.e., was in a position to set its own policies toward FDI) and had a population of more than 1 million, since previous studies have suggested that the logic of FDI into very small countries may be different, as a few big investments may play a very large role for a small economy.\textsuperscript{38} There have been 129 independent non-OECD countries with a population of more than 1 million in existence at some point in time between 1970 and 2000. Our analyses cover up to 122 of these countries and up to 31 years for each of them\textsuperscript{39}—a much broader sample than in most previous studies, whose findings may be biased if data are missing in non-random fashion.

\begin{enumerate}
\item \textbf{Estimation methods} We conduct “fixed effects” or “within [country]” analyses of inward FDI because the theoretical logic of our argument suggests first and foremost that a given developing country should experience higher inward FDI after signing one or more BITs. Such a boost in FDI should come in addition to whatever level of inward FDI the country might experience for other reasons, including reasons that may be specific to each country. Our argument thus suggests an effect within countries over time. The logic of the argument also suggests that countries with more BITs should receive more FDI than countries

\\textsuperscript{38} The 1 million cutoff is ultimately arbitrary but common in the literature. It also assures the exclusion of very small advanced industrialized countries that may not be OECD members. Restricting our analysis to countries with populations greater than 1 million has two further advantages: First, very small countries often display extreme values and wide swings on variables of interest, which make them outliers or even influential points when they are included along with larger countries. Second, data coverage is much poorer for countries with a population of less than 1 million, and casual inspection of the data suggests that data are missing nonrandomly, so that including the remaining observations for small countries would introduce bias. See footnote 21 for further discussion of the threshold.

\textsuperscript{39} As virtually all economic analyses, we have no data for Afghanistan, Cuba, Iraq, Libya, Myanmar/Burma, the Democratic People’s Republic of [North] Korea, and Somalia. Listwise exclusion for missing data and the independence criterion also restrict the average length of the time series to just under 21 years, though there is considerable variation, not least because for instance the successor states of the Soviet Union do not enter the sample until the 1990s.
with fewer BITs (ceteris paribus, i.e. after all other nonrandom factors have been controlled for), but there is no reason to think that the magnitude of this “cross-sectional” effect across countries should be the same as the magnitude of the within-country effect over time, and the within-country effects over time are of primary interest for assessing the theoretical argument.\footnote{In preliminary analyses, we in fact found that FDI data from recent decades fails standard tests for using simple OLS on the pooled data (treating all country-years in our panel as independent and unit-homogenous); the data also fails standard tests for using “random effect” feasible generalized least squares (GLS) estimation (Neumayer and Spess (2005) obtain similar findings). Note that failing random effects tests can be due to deficiencies of the model specification and therefore is not necessarily indicative of real differences between the cross-sectional and “within” effects.} Moreover, modeling the allocation of FDI across countries (beyond a few widely agreed factors, most importantly market size and level of economic development) has proven extremely difficult in prior research due to multicollinearity and unobserved differences between countries. Analyses with “country-fixed effects” safeguard against the resulting problems of multicollinearity and omitted variable bias by including a dichotomous “dummy” variable for each country. The coefficients on the dummy variables then “predict” the average FDI inflows for each country and thus soak up all of the cross-national variance in the dependent variable, including cross-sectional variance that may be explained by the cross-sectional component of the explanatory variables in the regression model. As a consequence, for each explanatory or control variable, only the variation over time within each country is brought to bear when estimating a country-fixed effect model, and coefficients that result from such a “within estimation” only predict the variation over time in the dependent variable, that is, the change over time that remains after subtracting the country-mean level of FDI from each observation.\footnote{By predicting perfectly the average value of the dependent variable (inward FDI flows) for each country, the country dummy variables effectively capture the cross-sectional component(s) of a potentially infinite number of “unobserved” factors. See Hsiao (2003) and Wooldridge (2002) for more detailed, technical discussion.}

Since within analyses are akin to time series in a panel setting, all the usual problems of time series analysis may interfere with drawing valid inferences. Most importantly, when there is a trend in the dependent variable and any of the explanatory variables, we might find a statistically significant but entirely spurious correlation due to these co-trending series (e.g., Davidson and MacKinnon 1993, pp. 670ff). To test for the presence of a trend, we regress each variable on a trend term (with country-fixed effects to allow for a country-specific intercept of the trend) before using the variable in our analyses. If we find a statistically significant trend, we use the de-trended residuals from this test as the explanatory variables in our main analysis, a solution to co-trending series that generalizes from time series.
Finally, even with de-trending and country-fixed effects, the errors may exhibit heteroskedasticity or autocorrelation. We therefore use the standard errors for within estimators proposed by M. Arellano (1987), which are robust to both heteroskedasticity and autocorrelation and generally yield conservative inferences. Using these clustered robust standard errors rather than the regular standard errors of ordinary least square (OLS) regression makes it less likely to find a statistically significant coefficient when the true effect of a variable is zero.

c. Baseline model As discussed in Section A, much of the existing work about the effect of BITs on inward FDI flows into developing countries has used small and differing sample sizes and short time series, which might explain the divergent findings. Since small and divergent panels often result from the inclusion of variables that are only available for a limited number of developing countries or only quite recent years (with data probably missing in a non-random fashion), we start from a baseline model that only includes variables that have persistently been found to be strong predictors of FDI flows, leaving the inclusion of additional controls for robustness checks. Specifically, our baseline model includes two political variables, one policy/outcome variable (trade), and three economic control variables:

Market size. Research on the determinants of FDI in economics has focused on various characteristics of the host market (see Blonigen 2005 for a recent comprehensive review). These studies have very persistently found the size of the host market to be a substantively and statistically significant factor, with larger markets attracting more FDI, in many studies even on a per capita basis. Large markets are particularly attractive for horizontal foreign direct investments, where multinationals replicate their entire production process in multiple countries to serve (primarily) the domestic market in the host country, but the finding appears to apply to FDI in general. The finding, however, is primarily based on cross-sectional analyses, as even in panel settings almost all of the variation in available measures of market size is cross-sectional. We effectively control for market size by using FDI-as-a-percentage-of-GDP as our dependent variable. To be able to distinguish any possible remaining effect of market size cleanly from the level of economic development, we use (the natural log of) a country’s population as our measure of market size, with population data drawn from the World Bank’s World Development Indicators (WDI) database. However, 97.8% of the variation in the log of population is cross-sectional, and country-fixed effects will capture all cross-sectional variation in our models.42 Population also shows a clear upward trend over time, so that we de-trend this control variable, using the de-trended values in the regressions. Trend and country-fixed effect together account for 99.8% of the variation in the log of

42. All specific information about variance in the individual variables reported here is based on the sample used in Models 1 and 2, but changing the sample size did not lead to materially different findings on variance.
population, leaving us with a variable that shows hardly any variation over time within each country and is bivariately negatively correlated with inwards FDI. We nonetheless include this variable since controlling for market size is customary, but one should not make too much of any findings, given the limited residual variance.43

**Economic development.** Research in economics has also very consistently shown that richer, more developed countries attract more FDI, though there is some question over whether this finding equally holds for developing countries, where vertical FDI often involves locating labor-intensive stages of the production process in countries with low wages, which might result in some FDI into developing countries seeking low rather than high levels of economic development (Blonigen and Wang 2005; Hanson, Mataloni and Slaughter 2005).44 As our measure of economic development, we use the natural log of per capita GDP in constant 1995 dollars (again from WDI). For economic development, too, the general finding is primarily based on cross-sectional variation in levels of economic development, and 97.2% of the variation in economic development is cross-sectional. Country-fixed effects and the trend term combined soak up 97.5% of the variance in this control variable. Estimated coefficients for economic development should therefore not be over-interpreted, either.

**Economic growth.** The third and final economic variable that existing studies have consistently shown to be a very strong predictor of inward FDI is economic growth, measured as the annual growth rate in a country’s real GDP (GDP growth, again from WDI). High or above-average economic growth is often seen as indicative of investment opportunities, and previous studies have found a significant positive coefficient for GDP growth. Average growth rates also vary across countries, but only 19.7% of the variance in GDP growth is cross-sectional. Moreover, while there is a slight, statistically significant upward trend in GDP growth rates, country-fixed effects and de-trending combined soak up only 20.3% of the variance in this variable. FDI of course might and in fact should lead to subsequent increases in GDP growth, but since we lag GDP growth by one year, we hope to capture the effect of growth on FDI, rather than the other way around.

**Trade openness.** Another variable that many previous studies have found to be an important predictor of FDI is trade. While some horizontal FDI is motivated by high costs of exporting to the host country and might therefore be a substitute for trade (which would imply a negative coefficient), the importance for developing

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43. This problem is common to all available measures of market size in (strongly warranted) fixed effects estimations. We alternatively employed other measures of market size in models not shown here; their use did not change any of our findings. Dropping market size altogether did not change our results for BITs, either.

44. Categorizing any particular investment as horizontal or vertical is in practice extremely difficult, and no good aggregate data exist distinguishing between these conceptually very distinctive types of FDI (see Markusen and Maskus 2004).
countries of vertical FDI, where FDI and trade are complements, leads us to expect a positive coefficient for this variable, as in most previous studies of inward FDI into developing countries. We use the sum of exports and imports as a percentage of GDP (from WDI) as our measure of trade. This measure might be interpreted as simply a trade flows measure, but international trade does not just “happen” but is at least in part a function of policy decisions to permit or impede cross-border product market transactions to a greater or lesser extent. We therefore think of this variable (especially after country-fixed effects, which soak up 87.6% of the variance) not just as an economic but as an economic policy variable—an empirical manifestation of trade openness.\textsuperscript{45}

\textit{Domestic political constraints}. Investors—foreign and domestic—like predictability. They should consequently welcome constraints on policymakers’ ability to change policy. Sometimes this is seen as one of the benefits of (liberal) democracy, where media scrutiny of the government’s policies and greater openness of the political process should provide earlier and better information, which should at a minimum be a safeguard against sudden, unexpected changes in policy (Jensen 2003). But empirical findings regarding the effect of democracy on foreign direct investment have been mixed, probably because common measures of democracy force onto a single dimension a number of characteristics of political regimes that might be perceived quite differently by foreign investors (Feng 2001; Harms and Ursprung 2002; Jensen 2006; Kahler 1981; Li and Resnick 2003; Oneal 1994). A more specific measure of institutionalized domestic political constraints on national political leaders has been developed by Witold Henisz. His preference-weighted index of domestic institutional veto points, which we use as our measure of “domestic political constraints” (see Henisz 2000; 2002) is strongly positively correlated with measures of democracy, but it captures substantial variation on this particular dimension among democracies as well as among non-democracies, which may be why studies that have used this variable have consistently found it to be a good predictor of inward FDI (e.g., Henisz and Zelner 2001; Henisz and Macher 2004).\textsuperscript{46} We therefore include domestic political constraints rather than a measure of regime type in our baseline model.

\textit{Political instability}. Political instability and political violence should make a country less attractive for foreign investors, since they render the economic and political context less predictable (Schneider and Frey 1985). Empirical research using varied methods has found consistent support for this argument (e.g., Brunetti, Kisunko and Weder 1997; Jun and Singh 1996). We use the composite measure from Arthur Banks’ (1999) dataset of political events that indicate political violence and instability (coup, assassinations, general strikes, guerrilla

\textsuperscript{45} De-trending only adds marginally to this: Country fixed effects and de-trending combined soak up 88.5% of the variance.

\textsuperscript{46} 51.3% of the variance is cross-sectional; country fixed effects and de-trending combined soak up 58.9% of the variance in Domestic Political Constraints.
warfare, government crises, purges, riots, revolutions, antigovernment demonstrations) as our measure of political instability. Average levels of political instability differ across countries, but only 33.7% of the variance is cross-sectional, which leaves us with substantial variation on this variable to possibly explain changes in inward FDI within countries over time.47

2. Statistical findings

a. Basic model with BITs

This baseline model of FDI (Model 1 in Table 1) explains 5.2% of the variance in inward FDI flows, after country-fixed effects and de-trending have already accounted for 39.2% of the variance. The estimates from OLS regression with Arellano (1987)-type clustered standard errors suggest that economic growth, trade openness, domestic political constraints, and political instability all have a statistically significant effect on FDI in the expected direction.

We then add our key variable of interest, cumulative BITs, i.e., the number of bilateral investment treaties to which a country is a signatory (from UNCTAD 2000).48 46.4% of the variance in BITs (among the developing countries in our broadest sample) is cross-sectional, and there is a significant trend, so that country-fixed effects and de-trending soak up 62% of the variance in this key explanatory variable. When we add the residual of this variable (after de-trending and country-fixed effects) in Model 2, OLS with clustered standard errors estimates a highly statistically significant positive coefficient for this variable. This finding suggests that BITs are indeed boosting FDI inflows into developing countries. More precisely, since country-fixed effects by design account for average levels of FDI in each country, we find that, the higher the number of BITs to which any given country is a signatory, the greater will be the amount of foreign direct investment into that country, ceteris paribus and after de-trending. The estimated effect for domestic political constraints is modestly reduced and political instability misses conventional levels of statistical significance, after including (and thus controlling for) BITs.49 At the same time, the explanatory leverage of the model increases notably.50

47. Political Instability is also the only variable in our baseline model that does not exhibit a significant trend.

48. We correct for the double-counting and some errors in UNCTAD’s comprehensive, official listing of all BITs.

49. The highest bivariate correlation among any of the de-trended variables in this model is 0.3584, suggesting no major concerns about multicollinearity; the correlation between domestic political constraints and our measure of BITs is 0.2292.

50. Here, as before, the 6.41% of variance explained (R^2) is on top of the 39.2% explained by the country fixed effects and de-trending. Relative to the 5.2% additional variance explained by model 1, 6.4% constitutes more than a 1/5 increase in explanatory leverage.
**BILATERAL INVESTMENT TREATIES AND FOREIGN DIRECT INVESTMENT**

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 3'</th>
<th>Model 4</th>
</tr>
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<td>Cumulative BITs</td>
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<td>0.0421***</td>
<td>0.0423**</td>
<td>0.0372**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.0132)</td>
<td>(.0137)</td>
<td>(.0176)</td>
<td>(.0174)</td>
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</tr>
<tr>
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<td>0.129**</td>
<td>0.0901*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>index</td>
<td>(.0502)</td>
<td>(.0519)</td>
<td>(.0470)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good policy index</td>
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<td></td>
<td></td>
<td>0.278***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(.0653)</td>
<td></td>
</tr>
<tr>
<td>Domestic political constraints</td>
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<td>1.80***</td>
<td>1.75**</td>
<td>1.18*</td>
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</tr>
<tr>
<td></td>
<td>(.686)</td>
<td>(.684)</td>
<td>(.714)</td>
<td>(.633)</td>
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<td>-0.0139</td>
<td></td>
</tr>
<tr>
<td></td>
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<td>(.00836)</td>
<td>(.00812)</td>
<td>(.00872)</td>
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<td>Trade openness</td>
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<td>0.0199***</td>
<td>0.0145***</td>
<td>-0.0195***</td>
<td></td>
</tr>
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<td>(.00680)</td>
<td>(.00541)</td>
<td>(.00584)</td>
<td></td>
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<td>-1.17</td>
<td>-2.13</td>
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</tr>
<tr>
<td></td>
<td>(1.42)</td>
<td>(1.38)</td>
<td>(1.38)</td>
<td>(1.92)</td>
<td></td>
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<td>Economic development</td>
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<td>-0.840</td>
<td>-0.592</td>
<td>-1.21**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.526)</td>
<td>(0.527)</td>
<td>(0.493)</td>
<td>(0.583)</td>
<td></td>
</tr>
<tr>
<td>GDP growth</td>
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<td>0.0347***</td>
<td>0.0338***</td>
<td>0.0337***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.0107)</td>
<td>(.0105)</td>
<td>(.0109)</td>
<td>(.00966)</td>
<td></td>
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<tr>
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<td>-4.24e-10</td>
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</tr>
<tr>
<td></td>
<td>(1.16e-9)</td>
<td>(1.16e-9)</td>
<td>(1.54e-9)</td>
<td>(1.28e-9)</td>
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<td>n</td>
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<td>122</td>
<td>121</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>2524</td>
<td>2524</td>
<td>2499</td>
<td>1785</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>+0.0520</td>
<td>+0.0641</td>
<td>+0.0672</td>
<td>+0.0990</td>
<td></td>
</tr>
</tbody>
</table>

*Note: OLS within-estimates with Arellano (1987) robust (clustered) standard errors in parentheses; all estimates rounded to three significant figures. * p < 0.1; ** p < 0.05; *** p < 0.01; two-tailed tests. Analyses cover 1970-2000, subject to data availability; all explanatory variables enter with a 1-year lag. All variables de-trended, except “political instability,” which exhibited no significant trend. Country-fixed effects implemented in advance via “areg” command, with “absorb(country)” in Stata 9.2. R² information indicates additional variance explained by the variables shown, after country-fixed effects and trend have explained 39.2% of the variance in the raw FDI data (40.7% for Model 3; 48.7% for Model 4); R² not fully comparable across models when sample size changes.*
To provide a sense of the substantive significance of these findings, Table 2 shows the magnitude of the estimated effect for each variable. The first column notes the magnitude of one standard deviation for each independent variable. The second column notes the change in our dependent variable (de-trended, post-fixed effects FDI as a percentage of GDP), which results from a one standard deviation increase in each explanatory or control variable, *ceteris paribus*. Thus, a one standard deviation increase in the number of BITs signed by a given country is estimated to result in an increase of FDI equal to just under 0.3% of that country’s GDP. The information in the third column helps to assess whether such a change is substantively significant (the dependent variable has a standard deviation of 2.32). A change of 0.291 thus amounts to 12.5% of a standard deviation in the dependent variable.

<table>
<thead>
<tr>
<th>TABLE 2. ESTIMATED SUBSTANTIVE EFFECTS, MODEL 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 standard deviation increase in . . . which is equal to . . . results in this change in FDI as a % of GDP: which is equal to this percentage of a std deviation in the dependent variable</td>
</tr>
<tr>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Cumulative BITs</td>
</tr>
<tr>
<td>Dom. political constraints</td>
</tr>
<tr>
<td>Political instability</td>
</tr>
<tr>
<td>Trade openness</td>
</tr>
<tr>
<td>Market size</td>
</tr>
<tr>
<td>Economic development</td>
</tr>
<tr>
<td>GDP growth</td>
</tr>
</tbody>
</table>

*Note: All estimates based on de-trended values as discussed in the text. Due to the implementation of country-fixed effects in advance, all the variables have a mean of zero by design. For estimated change: * p < 0.1; ** p < 0.05; *** p < 0.01; two-tailed tests. Standard deviation and estimated effects rounded to three significant figures; percentage rounded to first decimal.*

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51. By construction—that is, as a consequence of having implemented the country fixed effects at the stage of de-trending in order to allow the intercept for the trend to vary across countries—de-trended, post-fixed-effects FDI as a percentage of GDP has, like the explanatory variables, a mean of zero.
These estimates suggest that BITs have as much of an effect on FDI as trade openness, where a standard deviation increase in trade as a percentage of GDP increases FDI by 12.6% of a standard deviation, and a substantively larger effect than any of the other variables. To put this into perspective: A country would have to achieve almost a one and a half standard deviations increase in economic (GDP) growth to attract increased FDI equivalent to the increased FDI that results from a one standard deviation increase in BITs.

b. International institutionalized commitment or domestic policy choice? Our analysis so far has shown that BITs are positively and statistically significantly correlated with subsequent inward FDI into developing countries. We have argued that BITs constitute a commitment to economically liberal policies, and that BITs boost FDI because they make such commitments more costly to break and hence more credible. It is conceivable, however, that international investors merely respond to the domestic policy preferences/choices of the developing country government, not to the international institutionalization as such. If international agreements merely commit governments to doing what they already want to do anyway (Downs, Rocke and Barsoom 1996; von Stein 2005) and are signed at about the same time as the domestic policy changes, then our finding of a positive correlation might be spurious, rather than indicative of foreign investors attributing greater credibility to commitments undertaken via BITs.

To test this alternative explanation for our statistical finding in Model 2, we introduce, separately and jointly, two direct measures of domestic policy preferences. First, we add Nancy Brune’s financial openness index, which measures the degree to which a country restricts capital account transactions, including FDI inflows themselves or the repatriation of profits. Higher values indicate greater openness and thus more liberal policies. This variable directly captures some of the specific policy commitments that LDC governments undertake in BITs and should therefore have a strongly positive effect on FDI (and reduce the estimated effect of BITs). And indeed, we estimate a statistically highly significant positive coefficient for this measure of domestic policy choice in Model 3. The estimated coefficient for the financial openness index suggests that a standard deviation increase in this variable results in an increase in inward FDI equivalent to 0.218% of host country GDP, which amounts to 9.5% of a standard deviation in our dependent variable. The estimated effect of BITs is slightly reduced, but remains substantively and statistically highly significant. This finding suggests that institutionalizing policy commitments via BITs indeed substantially increases the credibility of those commitments and hence boosts FDI beyond the boost that results from domestic policy choice alone.

A broader measure of domestic policy choice is Craig Burnside and David Dollar’s “good policy index,” which is a composite measure of domestic economic policies and foreign economic policy, where higher values indicate more liberal policies (Burnside and Dollar 2000). Unfortunately, even the updated index (by Easterly, Levine and Roodman, 2003) is only available for 82 non-OECD
countries with a population of more than one million, so that we lose about 30% of our sample when including this variable. Since there are strong reasons to suspect that reliable data on domestic policy choices is missing in a nonrandom fashion, we are less confident about the findings for models that include this index than for our other models, but the breadth of this index should make it informative. Due to the loss in sample size, we first re-estimate Model 3 for this sample (Model 3 in Table 1), then add the good policy index in the last column of Table 1 (Model 4).

The strongly statistically significant positive coefficient for the good policy index suggests that foreign investors indeed respond very favorably to liberal economic policies, independent of international institutions such as BITs: A one standard deviation increase in this index is estimated to result in an increase in FDI equivalent to 11.0% of a standard deviation in FDI. As a consequence of including this variable, the estimated effect for financial openness is reduced and now is only weakly statistically significant anymore, probably because the good policy index captures some aspects of financial openness (the correlation between the two indices is 0.350). The estimated effect of BITs is also reduced, as expected, but remains statistically clearly significant and substantively still suggests an increase of 11.9% of a standard deviation in FDI for a one standard deviation increase in BITs. In sum, here again, BITs boost FDI well beyond investor-friendly domestic policy choices. We conclude from these additional analyses that our findings for BITs are not spurious.

c. Alternative estimation techniques

For the analyses shown in Table 1, we have used OLS with clustered standard errors, which under most conditions of fixed-effects or “within” estimations yields the most conservative estimates (Kézdi 2004; Wawro and Kristensen 2007). Since the use of clustered standard errors in the analysis of panel data is not yet very common and some readers may hence be hesitant to have confidence in the results, we re-estimate Model 3 (the most inclusive model from Table 1 in terms of variables and sample size) using alternative estimation techniques. The results are shown in Table 3.

In preliminary analyses of OLS with regular standard errors, the Breusch-Godfrey test for autocorrelation in the errors (which generalizes from time series to panel data) indicated first order (but no higher order) serial correlation in the error terms, suggesting that the use of OLS with regular standard errors is not appropriate for these data. We nonetheless report the estimates for OLS with regular standard errors in the first column of Table 3 to allow readers to see the

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52. When the Good Policy Index is entered without the Financial Openness Index, then its coefficient is larger (0.371) and similarly strongly statistically significant, whereas the estimated coefficient for BITs is marginally larger, but the R² is reduced to 0.0817.

53. De-trending and country fixed effects must be implemented anew every time that there is a change in the sample, resulting in a small change in the standard deviation of each variable.
results. To take account of the first order autoregressive (AR(1)) process generating the error term, we then re-estimate the model using feasible generalized least squares (GLS), once allowing for an AR(1) process that is common across the units (countries) and once allowing for a country-specific AR(1) process. Finally, we re-estimate the model with “panel-corrected standard errors” (PCSE), as proposed by Nathaniel Beck and Jonathan Katz (1995), with results shown in the last column of Table 3.54

**TABLE 3. ALTERNATIVE ESTIMATIONS OF MODEL 3**

<table>
<thead>
<tr>
<th></th>
<th>OLS (regular std. errors)</th>
<th>GLS (common AR(1))</th>
<th>GLS (country-spec. AR(1))</th>
<th>PCSE (common AR(1))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative BITs</td>
<td>0.0421***</td>
<td>0.0362***</td>
<td>0.0436***</td>
<td>0.0452***</td>
</tr>
<tr>
<td>(0.00815)</td>
<td>(.00417)</td>
<td>(.00406)</td>
<td>(.00980)</td>
<td></td>
</tr>
<tr>
<td>Financial openness index</td>
<td>0.148***</td>
<td>0.114***</td>
<td>0.0942***</td>
<td>0.133***</td>
</tr>
<tr>
<td>(.0314)</td>
<td>(.0166)</td>
<td>(.0168)</td>
<td>(.0339)</td>
<td></td>
</tr>
<tr>
<td>Domestic political constraints</td>
<td>1.75***</td>
<td>0.392**</td>
<td>0.553***</td>
<td>1.23***</td>
</tr>
<tr>
<td>(.419)</td>
<td>(.182)</td>
<td>(.146)</td>
<td>(.409)</td>
<td></td>
</tr>
<tr>
<td>Political instability</td>
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<td>−0.00316</td>
<td>−0.00181</td>
<td>−0.00808</td>
</tr>
<tr>
<td>(.0114)</td>
<td>(.00283)</td>
<td>(.00184)</td>
<td>(.00634)</td>
<td></td>
</tr>
<tr>
<td>Trade openness</td>
<td>0.0145***</td>
<td>0.00434**</td>
<td>0.00575***</td>
<td>0.00413</td>
</tr>
<tr>
<td>(.00321)</td>
<td>(.00179)</td>
<td>(.00170)</td>
<td>(.00656)</td>
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<tr>
<td>Market size</td>
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<td>−1.24***</td>
<td>−1.75*</td>
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<tr>
<td>(.815)</td>
<td>(.436)</td>
<td>(.457)</td>
<td>(1.05)</td>
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<td>−0.0975</td>
<td>−0.639*</td>
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<tr>
<td>(.263)</td>
<td>(.135)</td>
<td>(.150)</td>
<td>(.352)</td>
<td></td>
</tr>
<tr>
<td>GDP growth</td>
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<td>0.00534**</td>
<td>0.00482**</td>
<td>0.0149*</td>
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<tr>
<td>(.00790)</td>
<td>(.00250)</td>
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<td>(.0226)</td>
<td>(.0964)</td>
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<td>N</td>
<td>2499</td>
<td>2495</td>
<td>2495</td>
<td>2499</td>
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Note: Standard errors in parentheses; all estimates rounded to three significant figures. * p < 0.1; ** p < 0.05; *** p < 0.01; two-tailed tests. Analyses cover 1970–2000, subject to data availability; all explanatory variables enter with a 1-year lag. All variables de-trended, except “political instability,” which exhibited no significant trend. Country-fixed effects implemented in advance via “areg” command, with “absorb (country)” in Stata 9.2.

54. Since none of these methods deal with the problem of possible spurious correlation arising from trending series, we use the de-trended values for all of these re-estimations.
The magnitude of the estimated effect changes, naturally, with the use of these alternative estimation techniques, but the estimated coefficient for our main variable of interest (cumulative BITs) remains positive and substantively significant, regardless of the estimation technique used. Moreover, the estimated coefficient for BITs is statistically even more highly significant with any of the alternative estimation techniques.

d. Additional robustness checks To probe the soundness of our findings further, we conduct a series of additional robustness checks (results not shown but available on request). We consider various alternative measures for market size and level of economic development. We also drop from the model—separately or in combination—any variables that are often statistically insignificant: market size, level of economic development and political instability. None of these changes alter our main result that BITs have a positive, substantively and statistically significant effect on inward FDI into developing countries.

We also consider a series of additional economic and political control variables. Most importantly, we consider three regime-type measures of domestic political institutions: Alvarez, Cheibub, Limongi and Przeworski’s dichotomous measure of democracy, the 21-point summary measure of regime type from the Polity IV dataset, and Freedom House’s three-point “Freedom” index. These measures are correlated with Henisz’s measure of veto points but measure primarily electoral democracy, rather than constraints. Whether these variables are entered separately or in combination with domestic political constraints, the coefficients estimated for the democracy measures are correctly signed but not even close to conventional levels of statistical significance, while BITs remain substantively and statistically significant.

Another important issue is whether our findings might be driven by one or a few particular countries that are outliers. Here, a key concern is whether East Asian or Eastern European economies are driving our results. These countries arguably have experienced exceptionally high levels of FDI in the 1990s (and beyond) and also have signed a large number of BITs. We therefore re-estimate our main models after omitting countries from these regions individually and in groups. These sample restrictions change the estimated coefficients on the margins, but do not affect the overall finding that BITs boost inward FDI to a substantively and statistically significant extent. In Table 4, we report the results for the full sample in the first column, for the sample without the countries categorized by the OECD as Eastern European in the second column, and for the sample without the countries categorized as East Asian or South Asian.55

55. We use the OECD’s regional classification system, rather than the World Bank’s because the OECD uses a more fine-grained regional classification, which for instance allows us to differentiate between Eastern Europe and Central Asia, though results after also excluding the eight Central Asian countries included in the World Bank region “Europe & Central Asia” are very similar. The OECD’s definition of East Asia is very narrow (the Democratic People’s Republic of Korea, Mongolia, the People’s Republic of China, the
### Table 4. Sample Restrictions

<table>
<thead>
<tr>
<th>Model 3 full sample</th>
<th>Model 3 without Eastern Europe</th>
<th>Model 3 without East/Southeast Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative BITs</td>
<td>0.0421***</td>
<td>0.0402***</td>
</tr>
<tr>
<td></td>
<td>(0.0137)</td>
<td>(0.0155)</td>
</tr>
<tr>
<td>Financial openness index</td>
<td>0.148***</td>
<td>0.148***</td>
</tr>
<tr>
<td></td>
<td>(0.0502)</td>
<td>(0.0509)</td>
</tr>
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<td>Domestic political constraints</td>
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<td>1.60**</td>
</tr>
<tr>
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<td>(.714)</td>
<td>(.792)</td>
</tr>
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<td>Political instability</td>
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<td>-0.0127</td>
</tr>
<tr>
<td></td>
<td>(.00812)</td>
<td>(.00808)</td>
</tr>
<tr>
<td>Trade openness</td>
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<td>0.0160***</td>
</tr>
<tr>
<td></td>
<td>(.00541)</td>
<td>(.00572)</td>
</tr>
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<td>Market size</td>
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<td>-0.967</td>
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<tr>
<td></td>
<td>(1.38)</td>
<td>(1.41)</td>
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<td>Economic development</td>
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<td></td>
<td>(.493)</td>
<td>(.534)</td>
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<td>GDP growth</td>
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<td>0.0376***</td>
</tr>
<tr>
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<td>(.0121)</td>
</tr>
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<tr>
<td></td>
<td>(1.54e-7)</td>
<td>(1.30e-5)</td>
</tr>
<tr>
<td>n</td>
<td>122</td>
<td>103</td>
</tr>
<tr>
<td>N</td>
<td>2499</td>
<td>2373</td>
</tr>
<tr>
<td>R²</td>
<td>+0.0672</td>
<td>+0.0602</td>
</tr>
</tbody>
</table>

*estimated effect of 1 std dev increase in BITs (≈ % of std dev in FDI:)

|                      | 0.291                           | 0.238                             | 0.252                             |
|                      | 12.5%                           | 10.2%                             | 10.7%                             |

Note: For details on sample restrictions, see text. OLS within-estimates with Arellano (1987) robust (clustered) standard errors in parentheses; all estimates rounded to three significant figures. * p < 0.1; ** p < 0.05; *** p < 0.01; two-tailed tests. Analyses cover 1970–2000, subject to data availability; all explanatory variables enter with a 1-year lag. All variables de-trended, except “political instability,” which exhibited no significant trend. All estimates in Stata 9.2. R² not fully comparable across models due to changes in sample size.

Republic of Korea, and Taiwan only), so we are showing the results for excluding the countries categorized as either as “East Asia” or “South Asia,” which captures (inter alia), Indonesia, Malaysia, the People’s Republic of China, Philippines, Singapore, Thailand and Vietnam, i.e., all of the East Asian countries that have arguably received disproportionately high FDI. Here, results based on excluding the countries categorized as being in “East Asia/Pacific (Oceania)” by the World Bank again lead to very similar results. Note the relatively small loss of observations from the exclusion of Eastern Europe because many of the countries in
Similar results pertain when excluding China by itself or jointly with other, smaller groups of East or Southeast Asian countries. The estimated substantive effects for these restricted samples are even less changed than the estimated coefficients might suggest, since re-implementing de-trending and country-fixed effects after the sample restriction changes the standard deviations of several variables. Specifically, the estimated effect of a 1 standard deviation increase in BITs for the sample without Eastern Europe is an increase in FDI-as-a-percentage-of-GDP of 0.238, which is equal to 10.2% of a standard deviation. For the sample without the East and Southeast Asian countries, the estimated effect is 0.249 (10.7% of a standard deviation in FDI). In sum, we find that BITs boost FDI not only for a small number of countries or a few high-FDI regions.

3. Power and institutions

As noted in Section A, Salacuse and Sullivan (2005) argue that a BIT between the United States and a developing country attracts more FDI into the developing country than a BIT between that developing country and any other OECD country (or at least that U.S. BITs boost FDI more consistently and therefore have a statistically more significant effect). As an empirical matter, U.S. BITs might indeed attract more FDI than other OECD countries’ BITs on average, though multicollinearity in Salacuse and Sullivan’s statistical analysis makes it impossible to draw such a conclusion with confidence. Theoretically, their hypothesis is based on the assumption that the specific provisions in U.S. BITs impose more far-reaching obligations on the FDI host government than BITs of other OECD countries. Yet, we do not actually know to what extent U.S. BITs are distinctive; some scholars emphasize the striking and increasing similarities in the terms of BITs, while others point out differences. A proper analysis of the logic of an argument about the effect of treaty provisions would therefore require a detailed coding of the provisions in a large random or representative sample of existing BITs. Some scholars have recently begun such a coding (see, e.g., Peinhardt and Allee 2007, Katzenstein 2008), building on Barbara Koremenos’s pioneering work in coding international agreements (e.g., Koremenos 2005). Their research holds great promise for advancing this literature (we will return to this issue in the conclusion), but has not yet yielded any firm findings. Nor do we know whether potential foreign investors actually consider the detailed provisions of the BITs, though we know that some investors are taking into account how many BITs have been signed by a country that they are considering as an investment location (see qualitative analysis, below).

There is, however, another—more overtly political—reason to think that BITs may differ in their effectiveness, even if their specific provisions may not meaningfully differ. We have argued that BITs make reneging on one’s commitments more costly not just because they allow aggrieved investors to take FDI host governments

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this region became independent only after 1989, and almost all of them lacked FDI and/or GDP data for the years prior to the transition from Communism to capitalism.
to an arbitration panel, but also because they make it easier for investors to solicit the diplomatic assistance of their home governments, which might alleviate the need to initiate arbitration proceedings. And states differ in the power resources that they are able to bring to bear in intergovernmental settings, even when the formal rules of diplomacy or international institutions nominally consider all states to be equal (e.g., Krasner 1991). This logic leads to a more general hypothesis (complementary and supplemental to our main hypothesis), namely that the effectiveness of a BIT may be partly a function of the relative power of the other signatory vis-à-vis the developing country FDI host that is our unit of analysis.

We test this hypothesis by creating a weighted measure of BITs, which uses each country’s GDP as the proxy for its power in the international political economy. Specifically, we use a variant of the “cumulative BITs” measure where each BIT has been weighted by the relative power (GDP) of the signatories. Specifically, we calculate our measure “weighted BITs” as the sum of the weighted BITs a country has signed:

$$X_{it} = \frac{\sum_{j=1}^{n} [BIT_{ij} \times \frac{GDP_{j}}{GDP_{it}}]}{100}$$

... where $X$ is our measure of weighted [cumulative] bits, $BIT$ is a dichotomous indicator variable coded 1 if a BIT existed between countries $i$ and $j$ in year $t$ (zero otherwise), subscript $i$ signifies the FDI host country for which the weighted BITs measure is recorded, and subscript $j$ signifies the (potential) signatory of a BIT with country $i$, where $n$ is the universe of all independent countries in year $t$. Since the GDP weights result in a measure of a different order of magnitude, we divide it by 100 before using it the analysis. This measure, weighted BITs, is only correlated at 0.157 with our regular cumulative BITs, and the correlation is further reduced to 0.0503 after de-trending and country-fixed effects. We can therefore use the two variables in the same regression. Table 5 reports the results.

In the left column, we re-estimate Model 3 for this slightly reduced sample (we lose some observations due to the GDP weights); Model 5 then includes the weighted BITs measure. For the weighted measure, we estimate a positive and statistically significant effect, which suggest an additional substantive boost in FDI equal to about 74% of the magnitude of the effect estimated for BITs alone. Importantly, however, cumulative BITs remains highly significant and in fact its coefficient is very little reduced from the model without weighted BITs. This finding suggests that (1) BITs have a substantial effect on FDI that is independent of the relative power of the signatories and (2) BITs signed with powerful FDI home states have a substantial additional effect. In other words, BITs alone are a credible

56. For purposes of calculating this weighted measure (as well as our Cumulative BITs measure), we thus consider all BITs, including BITs with OECD countries and BITs with countries whose populations is less than 1 million, although we do not analyze those countries as FDI hosts. In the regression tables, by contrast, $n$ refers to the number of countries included in the analysis as FDI hosts (only).
commitment mechanism and signing more of them improves the credibility of this commitment since it means more countries can punish and monitor behavior. In addition (i.e., controlling for the pure number of BITs), BITs with (economically) bigger countries bring in even more FDI because they increase the likely cost of punishment if the FDI host were to violate its commitments.

D. QUALITATIVE ANALYSIS

In this final section, we want to complement the strong correlational findings of our statistical analyses with a brief qualitative analysis of key elements of the
causal mechanism that we have hypothesized. This analysis allows us to test the plausibility of the micro-logic of our argument. Our findings here strengthen the confidence we can have in our explanation.

1. Core substantive assumption: Investor concern

We started from the assumption that a key concern of potential foreign investors, when they ponder investment opportunities in a developing country, are the political risks that arise from a broad range of political interventions in the market, which may diminish the value or profitability of an investment. We have assumed that this concern is not just (and in recent decades not even predominantly) a concern about outright expropriation but about the potential for detrimental policy change in a range of fields, including foreign economic policies (such as capital account controls) as well as domestic policies (regulation, law enforcement, etc.). We have deduced from this core substantive assumption the expectation that foreign investors generally prefer economically liberal policies, and that BITs boost FDI because they constitute a credible commitment to such liberal policies.

While assumptions are never “true” and mostly heuristic, Ronald Coase (1982) forcefully argued that patently false assumptions may lead to models that are neither theoretically insightful nor useful for policy, and that the plausibility of central assumptions should therefore be examined. We find ample evidence to suggest that our assumption is plausible. In a survey of its members in the late 1990s, the U.S. Chamber of Commerce, for instance, found political risks to U.S. companies’ real or intangible property from government policies that amounted to “creeping expropriation” among the ten most important concerns of U.S. firms considering investments abroad (U.S. Chamber 2000). This concern about government intervention in the market does not appear to be just an American preoccupation: In a series of interviews with German senior managers on the factors that make for a good investment climate in a given country, interviewees tended to distinguish first between countries where physical and intellectual property was essentially secure (as they generally assumed to be the case in OECD countries) and countries where it was not. For the latter category, restrictive foreign economic policies, domestic regulation in general, and more broadly government intervention in the markets—not mentioned as a general concern regarding investments in OECD countries—were seen as generally undesirable, with a broad preference for economically liberal policies implied or even directly expressed.57

Whose political risks matter, though? It may be argued that investors care only about safeguarding their own investments against government intervention, rather than economically liberal policies in general. In fact, one might speculate

57. Interviews of some sixty senior managers of German firms were conducted by Tim Büthe in 2000–2002.
that if a government is pressed for resources, investors prefer a blatant violation of someone else’s property rights (such as the expropriation of their assets) over an across-the-board increase in taxes or fees. A content analysis of the Wall Street Journal’s and Financial Times’ coverage of the 2004 expropriation of Yukos assets by the Russian government is insightful on this point: While the expropriation was at first presented primarily as a problem for those holding Yukos stock (Betts 2004, Jack 2004; FT 2004), it soon came to be seen as a more general threat to all current or planned investments in Russia (McDonald and Sender 2004; Karmin 2005). By the end of 2004, in explicit response to the expropriation of Yukos assets, some existing inward FDI was reversed as a consequence of “the perception [that] the risk of doing business [in Russia] has increased” (Arvedlund and Mouawad 2004). Further, as “aftershocks” kept “foreign investors on edge” (Buckley 2005), potential new FDI stayed out. Responses to the Yukos episode thus suggest that foreign investors care about the general approach of the government to private economic actors and their investments, rather than just acting on the promises made to them about the treatment of their individual assets. This finding is also supported by results of surveys among OECD country business executives (see, e.g., IMD 2001). Such surveys tend to find consistently a preference for economically liberal policies among those who make most foreign direct investment decisions. In sum, we find substantial and even quite direct support for our core assumption.

2. Causal mechanism

Based on the above assumption, we developed in Section B a theoretical argument that led us to predict that BITs should be positively correlated with subsequent inward FDI into developing countries in fixed effect (within-country) analyses. We have found strong evidence of such a correlation in the empirical analyses in Section C. How plausible is the hypothesized causal mechanism?

An examination of the causal mechanism turns on whether BITs indeed generate the hypothesized informational and enforcement effects and consequently make reneging more costly, whether they are indeed perceived in that way by governments, and whether investors take notice of them and perceive them as constraining governments.\textsuperscript{58} We offer here at least a tentative assessment, based on existing accounts, some documents, and interviews that we have conducted with business managers and government officials.

\textbf{a. Informational effects of BITs} Do BITs generate \textit{ex ante} information? As noted above, both governments usually announce the treaty signing. OECD countries often have designated offices to provide detailed information about their BITs to investors or at a minimum disseminate the terms of agreements

\textsuperscript{58} Investor perception would be sufficient for the effect to obtain, but if such perceptions were divorced from actual constraints, we would need to explain how such erroneous perceptions arise and persist.
such as the UK Investment Promotion and Protection Agreements (i.e., UK BITs), which are publicized by the Foreign and Commonwealth Office. Government officials in these offices report receiving inquiries about the details of a given BIT from individual firms “quite often” and sometimes even from outside consultants and legal experts who advise firms considering foreign direct investments. Developing countries differ in the extent to which they actively publicize information targeted at foreign investors. Botswana’s Export Development and Investment Authority, for instance, advertises BITs that the country has signed on its Web pages for foreign investors, as one of the reasons for why MNCs should choose Botswana for their investments (along with other investment protection measures, assurances of political stability, etc.). Other developing country governments do not quite advertise their BITs on the World Wide Web, but according to Western government officials who frequently interact with developing country officials and with investors from their own (FDI home) country, developing country officials regularly point out BITs to potential foreign investors and to foreign officials. In a 1997 UNCTAD meeting, for instance, Chinese representatives noted: “We are often consulted by foreign investors and our own overseas investors on BITs, especially when a large amount of investment and investment in some sensitive sectors such as natural resources, public utilities, are to be made” (Vandevelde, Aranda and Zimny 1998, p. 120 note 10). Host countries for (potential) FDI thus invoke BITs implicitly or even explicitly as an assurance that they will not go back on their commitments to provide a favorable investment climate for foreign investors. Just as importantly, business and industry associations and organizations such as the U.S. Chamber of Commerce often report about new BIT signings or existing BITs. Finally, media reporting of a given BIT rarely covers the specific provisions of an investment treaty, though publications focused on international commerce often provide more detailed information, and insofar as BITs are very similar to each other, detailed information may not be needed.

Do BITs generate ex post information about (non)compliance? As noted in Section 3.b., governments regularly gather information about their treaty partners’ compliance with existing BITs, based importantly on investors’ reports. Some make that information widely public (such as in the U.S. Investment Climate Statements); others provide it more privately. An Australian government official, for instance, told us that they routinely evaluate the compliance of Australia’s treaty partners under trade and investment agreements and share that assessment as part of advising Australian investors on international investments, in particular since it is a major factor in the risk assessment for investment guarantees

60. See http://www.bedia.co.bw/ (3/1/2008).
or insurance. And when a private investor initiates as well as when he or she wins or loses a major dispute at ICSID, it not only is noted on the World Bank website and in the ICSID newsletter, but also gets reported in major international newspapers, such as the *Financial Times*, *New York Times*, *Wall Street Journal*, *Frankfurter Allgemeine Zeitung*, *Figaro*, or *Neue Zurcher Zeitung*, as well as more specialized business publications. The media also often report about disputes in front of other arbitration panels, which, seeking to maintain discretion, may not themselves advertise the dispute.

By all indications, this information is reaching investors. How many BITs a given country has signed and with whom may not be quite common knowledge or the subject of cocktail party conversations among business managers. Yet, senior executives of multinational companies who have been involved in FDI decisions and foreign investment advisors to major U.S. and European MNCs have told us that they look for information about BITs and a country’s record of disputes under their BITs as one of the pieces of information that is easy and quick to obtain but also (in their assessment) genuinely informative. And a German official at the 1997 UNCTAD conference noted his government’s observation that “many investors . . . postpone their investments until their establishment is protected by a BIT,” which he interpreted as an indication that “the business community seems to be aware of additional benefits of these agreements” (Vandevelde, Aranda and Zimny 1998, p. 120 note 10).

b. Cost of breaking BIT commitments

BITs threaten punishments for breaking the commitments thus undertaken. If such threats were perfectly successful in deterring noncompliant behavior, such threats would never have to be carried out, which makes such “negative sanctions” very inexpensive in an environment where compliance is high (Baldwin 1985; 1989 [1971]). But just as domestic laws, international treaties rarely lead to perfect compliance. In fact, our theoretical argument in no way predicts perfect compliance, but only that BITs increase the costs of breaking promises or commitments toward foreign investors and therefore make it less likely that a host government will break these commitments. We therefore might see some instances of violations of BIT commitments, but we would expect governments that break their BIT commitments to incur real costs for doing so—which might in fact strengthen the BIT regime by making the costliness of noncompliance visible.

Reneging on the commitments made in BITs has indeed proven costly: The arbitration provisions of BITs have been successfully used to seek compensation (of tens, even hundreds of millions of dollars in some cases) for allegedly

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62. Not-for-attribution interview, June 2006. OECD (FDI home) country governments here tend to take a fairly liberal view of economic nationality, so that the “investors” whom they support through advice and assistance may include multinational corporations that have headquarters or subsidiaries in the FDI home country.

63. Not-for-attribution interviews.
bilateral investment treaties and foreign direct investment

damaging policies far broader than classic expropriation. Policies or actions that have been the subject of arbitration proceedings under BITs have included corruption, administrative/regulatory measures, and allegedly biased law enforcement (e.g., Franck 2005b), consistent with our interpretation of BITs as a broad commitment to liberal economic policies. In addition, governments of FDI home countries have on numerous occasions intervened diplomatically with the FDI host before a dispute has reached the arbitration stage (at which point governments ordinarily take a strict hands-off approach).\textsuperscript{64}

c. BITs as credible commitments and the perceptions of investors

There is strong evidence that FDI home governments view BITs not just as a way to reduce restrictions on FDI and the repatriation of profits or a way to gain an assurance against outright expropriation, but that they see them as means for bringing about (commitments to) economically liberal policies quite broadly. Jeffrey Lang (1998), for instance, reports that OECD country governments have long sought BITs as a device for strengthening developing countries’ general commitment to liberal economic policies. According to a U.S. official, serious negotiations for a BIT (which sometimes are requested by the developing country, at other times initiated at the request of U.S. private parties, usually via members of Congress) are preceded by an assessment whether the potential treaty partner is “politically willing and administratively ready or capable” to sign up to the major obligations that a BIT entails, including a “real commitment to the rule of law, intellectual property rights, etc.”\textsuperscript{65} Such screening, however, only establishes the potential for a pro-active agenda going forward. Summarizing his interviews with government officials in advanced industrialized countries and especially the United States, Salacuse (1990, p. 76) note that “although the BITs themselves do not specifically enunciate the goal of investment and market liberalization, that goal has clearly been in the minds of developed country negotiators and is sometimes reflected in background documents.” Similarly, European governments whose officials we interviewed conveyed their view of BIT negotiations as “an opportunity to have a series of conversations about the political, administrative, and economic conditions that are needed for foreign investments”—conversations that would not occur or be awkward or even inappropriate outside the context of BIT negotiations.\textsuperscript{66} These conversations, government officials told us, sometimes take place in the context of a liberalization of economic policies; at other times, they lead to such a liberalization, as “considerable learning takes place” on the part of the LDC government in the course of the negotiations, which consequently tend to take at least one to two years


\textsuperscript{65}. Not-for-attribution interview, Nov. 2005.

\textsuperscript{66}. Not-for-attribution interview, Nov. 2005.
for each BIT.\textsuperscript{67} The sometimes vague but potentially sweeping provisions in BITs reflect the commitment to economically liberal policies in this broader sense.

Anecdotal evidence suggests that developing country governments, too, have understood BITs as broad commitments to economically liberal policies. Salacuse (1990, p. 674) notes that developing countries have often sought them as “confidence-building measures . . . to improve the host country’s investment climate” and that in specific developing countries, “investor protection” has, in fact, often improved in the aftermath of a country signing BITs (Salacuse and Sullivan 2005, p. 674; see also Mahnkopf 2005, p. 130). Discussing why the Thai government had signed seven in one year, a recent article notes that “[BITs] signal to the business community worldwide and to [a country’s] own investors [the government’s] commitment to provide a predictable and stable legal framework for investors . . . and thereby boost FDI flows” (Business Day (Thailand), Feb. 22, 2000).

Finally, investors seem to view BITs as a credible commitment to a broad range of economically liberal policies, and “codifying such commitments in a treaty” gives them greater “visibility” and “extra weight.”\textsuperscript{68} To be sure, individual investment decisions are highly idiosyncratic, driven in the first place, of course, by the existence of an investment opportunity. BITs can make a country only more attractive as an FDI host country if such opportunities exist, and the specific concerns of investors differ with the particular investment opportunities that they are considering. Nonetheless, our interviews lead us to believe that foreign investors are generally well aware of the BITs that have been signed by the government of the country that is the potential host for their investments. Any particular BIT (not just with the investor’s home country) may then be welcomed for a number of reasons, consistent with our broad interpretation of these agreements. As an investment consultant to many U.S. multinational corporations told us, BITs between the investor’s home country and the FDI host country reduce transaction costs because they contain as general policy commitments (i.e., as a matter of course) what potential foreign investors must otherwise negotiate as part of their individual contracts with the host governments, such as the right to repatriate profits or binding arbitration in the case of disputes. Moreover, these policy commitments are more credible because they are enshrined in an international treaty. As a German government official put it, based on many years of interactions with German foreign investors: “[O]f course, it’s a treaty, so changing it is more difficult than just changing a law.”\textsuperscript{69} He also

\textsuperscript{67} Note that such changes in policy during and because of the negotiations imply that even just prior or simultaneous changes in policies (as measured by the financial openness index and the good policy index in our statistical analyses) may in fact sometimes causally be connected to BITs.

\textsuperscript{68} Not-for-attribution interview, Nov. 2005.

\textsuperscript{69} Not-for-attribution interview, Nov. 2005.
noted that he had found corporate executives considering FDI to be generally well informed about the breadth of commitments that a developing country has undertaken in a given BIT. And in interviews, investors suggested that one of the reasons why they care about BITs signed between the host country and countries other than their own is that treaties are indicative of a country’s international engagement. Having signed more BITs means that the country has a greater stake in what the rest of the world thinks about it. This reasoning suggests that investors recognize the reputational logic discussed in Section B.3.b.

The direct support for the hypothesized causal mechanism is mostly anecdotal and in that sense tentative: We have drawn on interviews with a number of government officials and senior managers in MNCs who have been involved in investment decisions, as well as investment advisors, but the information drawn from those interviews is not systematically linked to FDI outcomes. Nonetheless, the observed support for every major element of the hypothesized causal mechanism cumulatively gives us considerable confidence that the theoretical argument put forth in Section B indeed drives the correlational findings reported in Section C.

E. BITs, BITES, AND FDI: SOME CONCLUSIONS

We have examined the effect of bilateral investment treaties (BITs) on inward foreign direct investment flows (FDI) into developing countries (LDCs). We have argued that BITs generate information about LDC governments’ policy commitments, as well as information about governmental actions that violate those commitments, and that they facilitate imposing political and/or economic costs on such governments through intergovernmental or private enforcement mechanisms. As a consequence, foreign investors see BITs as credible commitments to economically liberal policies across a broad range of issues, which alleviates the key substantive concern of such investors about the political risks to FDI in developing countries. And because the informational benefits accrue to foreign investors in general, because the specific rights accrue to a broad range of foreign investors with often multiple economic nationalities, and because bilateral FDI data often do not record the real source of the invested capital or investment decision, we have argued that BITs should be expected to boost inward FDI in general, not just bilateral FDI. In fact, dyadic analyses may inappropriately pool observations that should be expected to exhibit a BIT effect with observations that should exhibit no such effect, thus biasing the findings toward insignificance.

Statistical analyses have provided strong support for our argument. We find the predicted positive, statistically and substantively significant correlation between BITs and subsequent inward FDI into developing countries in a maximally comprehensive analysis of FDI flows into developing countries from 1970
through 2000.\footnote{In addition, we have found that BITs signed with large countries boost FDI further, without much diminishing the effect of the raw number of BITs.} This finding is robust to the inclusion of numerous control variables including measures of domestic policy choice, the use of several alternative estimation methods, and the exclusion of countries and even entire regions that have attracted a large amount of FDI in recent years. Qualitative analyses suggest that it is indeed the hypothesized causal mechanism that is driving these results, as we find support from interviews, internal documents, and secondary literature for our key substantive assumption and for all of the major elements of the causal mechanism.

A recent study of BITs warned that BITs “may bite” (Hallward-Driemeier 2003) in that they impose real constraints on the ability of developing country governments to adapt their policies flexibly to their political and economic needs. Our theoretical argument suggests that this constraint—on the governments of the FDI host countries that sign them—is not an accidental by-product but intended by both sides. BITs are in that sense simply particular instances of the institutionalization of policy choices, which is often intended to “bind the hands” of policymakers or their successors (Moe 1990; 2005). In fact, we have argued and found that BITs work (i.e., attract FDI) precisely because they “bite.”

Our finding that BITs indeed attract FDI does not constitute a normative endorsement. The flipside of our argument that BITs boost FDI inflows into developing countries because they “bite” is that such treaties indeed constrain policy choices or impose significant ex post costs if policies are chosen that violate the commitments institutionalized through these treaties. Such constraints may run counter to principles of democratic governance, though developing countries with democratic regimes appear no less likely to enter into BITs than nondemocratic ones.\footnote{In fact, there is a small positive correlation between measures of democracy (ACLP, Polity, or the inverted Freedom House index) and signing new BITs, though that correlation is very low (ranging from 0.12 to 0.20). If BITs increase FDI they might also contribute to changing the politics within the host countries, as Malesky (2008) showed that inward FDI changes the balance of power between the political center and periphery in FDI host countries, but such effects are beyond the scope of this chapter.} Especially due to the dispute settlement procedures, BITs constitute a kind of international delegation of governance, for which developing countries often pay a higher price than advanced industrialized countries in terms of policy autonomy lost (e.g., Hawkins et al. 2006; Bradley and Kelley 2008; Büthe 2008). It is a cost that each developing country has to weigh against the benefits of increased FDI (and possibly other benefits). BITs certainly are not required for attracting FDI (Walter 2000, pp. 60ff), though the competitive dynamic (Elkins, Guzman and Simmons 2006; Jandhyala, Henisz and Mansfield 2006) may mean that retaining the status quo of no or few BITs might become increasingly costly over time.
Finally, our analysis suggests several avenues for future research. First, the logic of our argument about BITs suggests that international institutions more generally might allow FDI host governments to make credible commitments to foreign investors. Trade agreements in particular might also boost FDI flows into developing countries. While most trade agreements lack provisions for a private enforcement mechanism that is a prominent feature of BITs, they specifically commit the signatories to liberal foreign economic policies that are particularly important for vertical FDI, and they contain provisions that should increase the amount of information about compliance and facilitate enforcement, so that policy commitments should be more credible when made via trade agreements than when they are just made unilaterally. An analysis of both BITs and trade agreements would contribute further to our understanding of the role of international institutions in the international political economy (see Martin and Simmons 1998).

A proper discussion and analysis of the effect of trade agreements on FDI is beyond the scope of this chapter but promises to be a fruitful avenue for future research (see Büthe and Milner 2008). Since the logic of the argument suggests that BITs and trade agreements are partial substitutes for purposes of FDI, adding trade agreements to our models should reduce the estimated effect, but given the distinctive issues covered by these international institutions, they should also have independent effects. To give the reader a preliminary sense of the effect of including trade agreements in our models, we re-estimate Models 3 and 4 as Models 6 and 7, respectively, where we add three measures of trade agreements: the cumulative number of preferential trade agreements (PTAs) to which the FDI host country is a party (cumulative PTAs) and dichotomous measures for GATT membership and WTO membership.72 Table 6 shows the estimated coefficients for our measures of international institutions and domestic policy choice (the other control variables are omitted from the table, but were included in all estimations). We find indeed that these measures of trade agreements have a positive, substantively and statistically significant effect on inward FDI flows, except for GATT, which exhibits at most weak statistical significance—consistent with the relative weakness of GATT as an international institution. At the same time, BITs retain a significant, positive effect on FDI inflows even when we include trade agreements, though the estimated effect of BITs is reduced in these models (see Büthe and Milner 2008 for details).73

72. We here encode GATT and WTO separately because WTO involves stronger information-provision and enforcement mechanisms; using a single GATT/WTO indicator yields substantively the same results for BITs.

73. BITs are only weakly significant in the reduced-sample models that include the Good Policy Index.
Second, our empirical analyses have treated BITs as if they were all the same and therefore have estimated an average effect. Similarly, the analyses in Table 6 show the average effect of PTAs. Yet, while these international treaties have important common features, they also differ, and insofar as different elements of the treaties suggest more information provision or better/easier enforcement, stronger treaties might have a stronger effect on FDI. This suggests as one avenue for future research coding the specific provisions of BITs and PTAs, which would also contribute to the new research agenda on the design of international agreements and institutions (Koremenos, Lipson and Snidal 2001; Koremenos 2005, 2007; Axelrod 2008; Putnam and Shapiro 2007; Whytock 2005).

Third, we have found no statistically significant effect of regime type (democracy) on FDI flows into developing countries, contrary to other recent studies (Feng 2001; Globerman and Shapiro 2003; Jensen 2003; 2006; Tures 2003).

### Table 6. Trade agreements as alternative commitment mechanisms

<table>
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<th>Model 4‡</th>
<th>Model 7‡</th>
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<td>Cumulative BITs</td>
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<td>0.321**</td>
<td>0.0372**</td>
<td>0.0284*</td>
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<td>(0.0137)</td>
<td>(0.143)</td>
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<td>Cumulative PTAs</td>
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<td>0.0372**</td>
<td>0.0284*</td>
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<td>GATT membership</td>
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<td></td>
</tr>
<tr>
<td>WTO membership</td>
<td>0.520**</td>
<td>0.373*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.235)</td>
<td>(0.219)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial openness index</td>
<td>0.148***</td>
<td>0.0968*</td>
<td>0.0901*</td>
<td>0.0558</td>
</tr>
<tr>
<td></td>
<td>(0.0502)</td>
<td>(0.0515)</td>
<td>(0.0470)</td>
<td>(0.0506)</td>
</tr>
<tr>
<td>Good policy index</td>
<td></td>
<td>0.278***</td>
<td>0.216***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.0653)</td>
<td>(0.0778)</td>
<td></td>
</tr>
<tr>
<td>Trade openness</td>
<td>0.0145***</td>
<td>0.0142**</td>
<td>0.0195***</td>
<td>0.0194***</td>
</tr>
<tr>
<td></td>
<td>(0.00541)</td>
<td>(0.00552)</td>
<td>(0.00566)</td>
<td>(0.00570)</td>
</tr>
<tr>
<td>n</td>
<td>121</td>
<td>121</td>
<td>82</td>
<td>82</td>
</tr>
<tr>
<td>N</td>
<td>2499</td>
<td>2499</td>
<td>1785</td>
<td>1785</td>
</tr>
<tr>
<td>R^2</td>
<td>+0.0672</td>
<td>+0.0820</td>
<td>+0.1092</td>
<td>+0.1226</td>
</tr>
</tbody>
</table>

‡ Note: All regression models also included domestic political constraints, political instability, trade (openness), market size, economic development, GDP growth, and a constant. All variables de-trended, except “political instability,” which exhibited no significant trend. OLS within-estimates with Arellano (1987) robust (clustered) clustered standard errors in parentheses. * p < 0.1; ** p < 0.05; *** p < 0.01; two-tailed tests. Analyses cover inward FDI flows 1970–2000; all explanatory variables enter with a 1-year lag. All estimates in Stata 9.2. R^2 not fully comparable across models when sample size changes.
though cf. Li and Resnick 2003; Biglaiser and DeRouen 2006; Blanton and Blanton 2006). Our finding is particularly surprising given that new, careful research on specific policies with which governments seek to encourage, discourage, or regulate foreign direct investment—from restrictions on capital flows and investment incentives to tax policy and performance requirements—finds that political competition leads more democratic countries to adopt policies that are more favorable to foreign investors (Dorobantu-Popa 2008). It may be, however, that the greater responsiveness of political leaders in democracies to domestic interests makes favorable policies in democracies particularly susceptible to the credible commitment problems that we took as the starting point of our analysis. If democracies indeed face greater commitment problems in the eyes of foreign investors, then democracy as such might not lead to greater inward FDI, but democracy might boost FDI conditional on international institutions like BITs and PTAs. Alternatively, international institutions may constitute a more effective constraint upon governments when domestic groups that benefit from them can push for government compliance with the country’s international obligations, suggesting that the effect of BITs or other international institutions may be conditional on democracy. In short, future research should consider the interaction between domestic and international institutions, which has received little attention in the field of International Political Economy (with a few exceptions, such as Büthe and Mattli 2009; Mattli and Büthe 2003; Snidal and Thompson 2003). The findings from our analysis, which has treated differences in domestic political institutions only as a factor to be controlled for, should therefore not be taken as evidence of the irrelevance of domestic political institutions for the international political economy but rather as suggestive of a new avenue for research on the interaction between domestic and international institutions. Such research is beyond this chapter, but might advance the growing literature showing that differences in domestic institutions explain a significant part of the variation in international outcomes, both in the governmental and non-governmental realm (see e.g., Milner and Rosendorff 1997; Milner 2006; Milner with Kubota 2005).

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