

## WHY DO DEVELOPING COUNTRIES SIGN BITS?

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### Abstract:

Why do developing countries sign bilateral investment treaties (BITS)? While one would expect that there is an obvious answer – that countries sign these treaties to help increase the volume of foreign investment they attract – the academic literature on this topic has come to conflicting conclusions about the efficacy of BITS as a tool for investment promotion. To advance the debate this paper evaluates the data from the 1990s to address two questions. First, which developing countries signed BITS and was there any evidence that BIT signing was influenced by the desires of existing foreign investors? And second, did the signing of BITS enable developing countries to attract a higher level of foreign investment?

### I. INTRODUCTION

Developing countries often compete for foreign investment with the hope that foreign direct investment (FDI) will bring a wide range of economic benefits.<sup>1</sup> These benefits include increased levels of

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<sup>1</sup> See Gordon Hanson, *Should Countries Promote Foreign Direct Investment?*, U.N. Doc. UNCTAD/GDS/MDPB/G24/9 (G-24 Discussion Paper No. 9, 2001), available at <http://www.unctad.org/en/docs/pogdsmdpbg24d9.en.pdf>. Hanson discusses recent trends in investment promotion by developing countries. Hanson's comparison of

investment and economic activity, worker training, well-paid jobs and technology transfers that enhance the productivity of local firms.<sup>2</sup> In addition, foreign investment may be viewed as a particularly attractive means of increasing developing country investment stocks since foreign investment is much less likely than other financial flows to leave the host country if the host experiences a financial crisis.<sup>3</sup> While multinational firms may also have negative effects on host country markets, such as intensified competition with local firms, policy makers generally assume that FDI is beneficial on net.<sup>4</sup>

While countries may choose from a number of policy instruments as a means of increasing foreign investment inflows, the use of bilateral investment treaties (BITs) became especially common in the 1990's.<sup>5</sup> By the beginning of the year 2000, 173 countries had signed at least one BIT and the total number of treaties had risen to 1857 from a base of 385 treaties a decade earlier.<sup>6</sup> An increase in treaty signings by previous signers, as well as an increase in the number of participating

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country investment promotion efforts uncovers a wide range in the techniques countries employ. While some countries offer exemption from corporate or value-added tax obligations, others offer exemptions from import duties, export processing zones, or subsidy packages tailored for multinational investors.

<sup>2</sup> See Aitken et al., *Spillovers, Foreign Investment, and Export Behavior*, 43 J. OF INT'L ECON. 103 (1997) (evidence on spillovers to domestic firms); Aitken et al., *Wages and Foreign Ownership: A Comparative Study of Mexico, Venezuela and the United States*, 40 J. OF INT'L ECON. 345 (1996) (evidence on labor market effects). See also GIORGIO BARBA NAVARETTI & ANTHONY J. VENABLES, *MULTINATIONAL FIRMS IN THE WORLD ECONOMY* (2004) for an overview of the extensive work on these topics.

<sup>3</sup> See Robert E. Lipsey, *The Role of Foreign Direct Investment in International Capital Flows* (Nat'l Bureau of Econ. Res., Working Paper No. 7094, 2000) (providing evidence that FDI is much less likely to leave developing countries in time of financial crisis, when compared with portfolio capital investments).

<sup>4</sup> See U.N. Conference on Trade and Development, *World Investment Report 2003: FDI Policies for Development: National and International Perspectives*, U.N. Doc. UNCTAD/WIR/2003 (Sept. 4, 2003), available at [http://www.unctad.org/en/docs/wir2003\\_en.pdf](http://www.unctad.org/en/docs/wir2003_en.pdf) [hereinafter WIR-2003] for a review of recent trends in this area. See also Brian J. Aitken & Ann E. Harrison, *Do Domestic Firms Benefit From Direct Foreign Investment? Evidence From Venezuela*, 89 AM. ECON. REV. 605 (1999) and Beata Smarzynska Javorcik, *Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers Through Backward Linkages*, 94 AM. ECON. REV. 605 (2004) for analyses of domestic firms in Venezuela and Lithuania that show how the presence of multinational firms has multiple and conflicting effects on the performance of domestic firms.

<sup>5</sup> See U.N. Conference on Trade and Development, *Bilateral Investment Treaties 1959-1999*, U.N. Doc. UNCTAD/ITE/IIA/2 (Dec. 15, 2000), available at <http://www.unctad.org/en/docs/poiteiid2.en.pdf> [hereinafter BITs] (chronicling the acceleration in signing of BITs).

<sup>6</sup> Author's calculation based on treaty rosters included in BITs, *supra* note 5.

countries, drove this expansion.<sup>7</sup> Of the 173 countries that had signed treaties by 2000, seventy-one had not signed a single treaty before 1990.<sup>8</sup> While Germany was the most frequent participant, having signed 124 separate agreements by the beginning of 2000, the average country had twenty-one separate BITs by that time.<sup>9</sup> BITs generally contain provisions that touch on a common set of investment issues.<sup>10</sup> After defining investment, BITs typically discuss the application of national and most-favored nation treatment to foreign investments.<sup>11</sup> They may also include measures related to transparency of national laws, performance requirements, or the movement of foreign personnel.<sup>12</sup> However, while BITs usually address a common set of topics, the content of BITs often differs significantly.<sup>13</sup> Nonetheless, the element of BITs that may be of greatest interest to foreign investors is a country's agreement regarding its obligations if a dispute arises in the future.<sup>14</sup> While other domestic reforms may generally coincide with the interests of foreign investors, it may be difficult for host countries to persuade investors that their domestic reforms will be implemented as promised.<sup>15</sup> In particular, investors may be especially concerned about the permanence or strength of domestic reforms implemented in countries that have a higher level of perceived risk or endemic corruption.<sup>16</sup> The dispute-settlement procedures contained in

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<sup>7</sup> See WIR-2003, *supra* note 4, at 89 (claiming that the increase in the 1990s was fueled by treaty signing between developing countries).

<sup>8</sup> Author's calculation based on roster of treaty signings included in BITs, *supra* note 5.

<sup>9</sup> Author's calculation based on treaty rosters included in BITs, *supra* note 5.

<sup>10</sup> See WIR-2003, *supra* note 4, at 89-91, which outlines the general elements contained in BITs. The later parts of the same chapter discuss investment liberalization accomplished through regional or multilateral means.

<sup>11</sup> See WIR-2003, *supra* note 4, §§ A-B in ch. 4 (discussing the details on these questions).

<sup>12</sup> See WIR-2003, *supra* note 4, at 89.

<sup>13</sup> See U.N. Conference on Trade and Development, *Bilateral Investment Treaties in the Mid-1990s*, U.N. Doc. UNCTAD/ITE/IIT/7 (Jan. 7, 1999) for a detailed description of the measures included in BITs and the variations across BITs (noting that the content of BITs tends to vary even for treaties signed by a particular country with different partners).

<sup>14</sup> See WIR-2003, *supra* note 4, at 114, which notes that most investors would receive protections through the host countries general laws of the land. However, investors often desire an internationalized approach. Here, the common form involves recourse to arbitration.

<sup>15</sup> Eric Neumayer & Laura Spess, *Do Bilateral Investment Treaties Increase Foreign Direct Investment to Developing Countries?* (Nov. 2004) (unpublished manuscript, on file with author) [hereinafter Neumayer & Spess].

<sup>16</sup> Mary Hallward-Driemeier, *Do Bilateral Investment Treaties Attract Foreign Direct Investment? Only a Bit, and They Could Bite* (World Bank Policy Research,

BITs may alleviate these concerns, since the dispute settlement provisions codify the forum and treatment of any future disputes.<sup>17</sup> As a result, BITs are capable of providing a commitment mechanism that helps to reduce the amount of uncertainty foreign investors believe they face in a particular host country.<sup>18</sup>

The recent surge in foreign investment may certainly help to explain the increased motivation for countries to use BITs as a means of providing international investors with an attractive investment environment.<sup>19</sup> As Figure 1A documents, the amount of foreign investment in developing countries grew dramatically during the 1990's. More importantly, as the data in Figure 1B demonstrate, foreign investment flows were increasingly large when compared with expenditures on gross capital formation in their developing country hosts. Compared with gross capital formation, FDI between 1970 and 1992 averaged a mere three percent.<sup>20</sup> In contrast, FDI between 1993 and 2003 averaged 10.8 percent of gross capital formation.<sup>21</sup> As a result, it is clear that FDI flows made a non-negligible contribution to the level of investment in developing countries.<sup>22</sup>

Surprisingly, many analyses exploring the economic effects of BIT signing have generally come to the rather discouraging conclusion that BITs are not associated with large increases in foreign investment. Hallward-Driemeier concludes for example, that BIT signing only appears to have elevated FDI if one examines the share of a source country's FDI attracted by a host.<sup>23</sup> Further, she finds that such effects

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Working Paper Series No. WPS 3121, 2003), available at [http://econ.worldbank.org/files/29143\\_wps3121.pdf](http://econ.worldbank.org/files/29143_wps3121.pdf) [hereinafter Hallward-Driemeier]

<sup>17</sup> See Neumayer & Spess, *supra* note 15.

<sup>18</sup> See Kenneth J. Vandeveld, *Investment Liberalization and Economic Development: The Role of Bilateral Investment Treaties*, 36 COLUM. J. TRANSNAT'L L. 501 (1998) (discussing the use of BITs as a commitment mechanism).

<sup>19</sup> See WIR-2003, *supra* note 4, at 89.

<sup>20</sup> Author's calculations based on data from Annex Table B.5. Inward and Outward FDI Flows as a Percentage of Gross Fixed Capital Formation, by Region and Economy, 1992-2003, in U.N. Conference on Trade and Development, *World Investment Report 2004: The Shift Towards Services*, U.N. Doc. No. UNCTAD/WIR/2004 (Sept. 22, 2004), available at [http://www.unctad.org/en/docs/wir2004\\_en.pdf](http://www.unctad.org/en/docs/wir2004_en.pdf) and U.N. Conference on Trade and Development, WIR Annex Tables Key Data, Inward FDI Flows as a Percentage of Gross Fixed Capital Formation, by Host Region and Economy, 1970-2004, <http://www.unctad.org/Templates/Page.asp?intItemID=3277&lang=1> (data file downloaded Feb. 2004) [hereinafter WIR-2004].

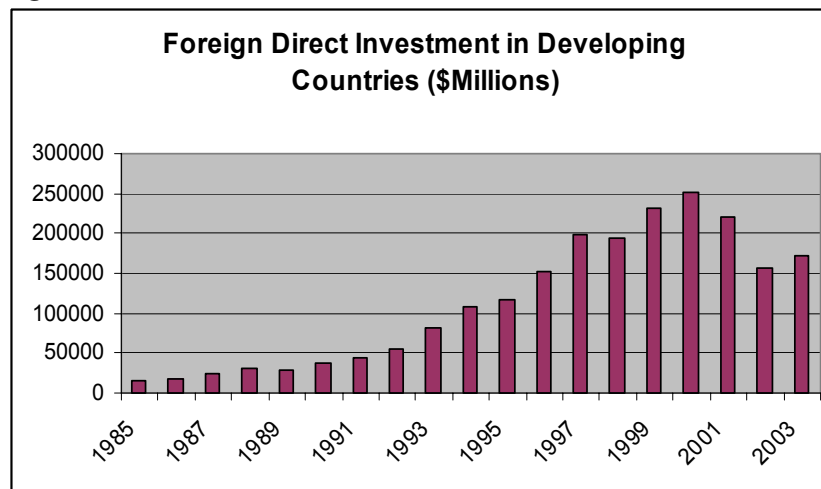
<sup>21</sup> Author's calculation based on data from WIR-2004, *supra* note 20.

<sup>22</sup> Even if FDI took the form of acquisitions, the payments made by foreign acquirers would have increased financial resources in the developing country host, thus freeing domestic resources that could be channeled towards increased domestic investments in the host economy.

<sup>23</sup> Hallward-Driemeier, *supra* note 16.

were only apparent five years after a treaty was signed.<sup>24</sup> Hallward-Driemeier finds that other measures, such as FDI levels or FDI relative to GDP, were, if anything, negatively correlated with BITs.<sup>25</sup> Tobin and Rose-Ackerman also come to the same disappointing conclusion that BITs do not appear to increase foreign investment flows, or to improve the characteristics of the local investment environment in signatory countries.<sup>26</sup> In contrast, when Salacuse and Sullivan, and Neumayer and Spess use larger sets of countries to investigate these questions, they find a positive association between the number of BITs signed and the foreign investment received by a country.<sup>27</sup> Neumayer and Spess also discover that the apparent boost provided by a BIT is bigger in countries that were characterized by greater risk, and hence likely to benefit more from the decision to sign a BIT.<sup>28</sup>

**Figure 1A**<sup>29</sup>



<sup>24</sup> *Id.*

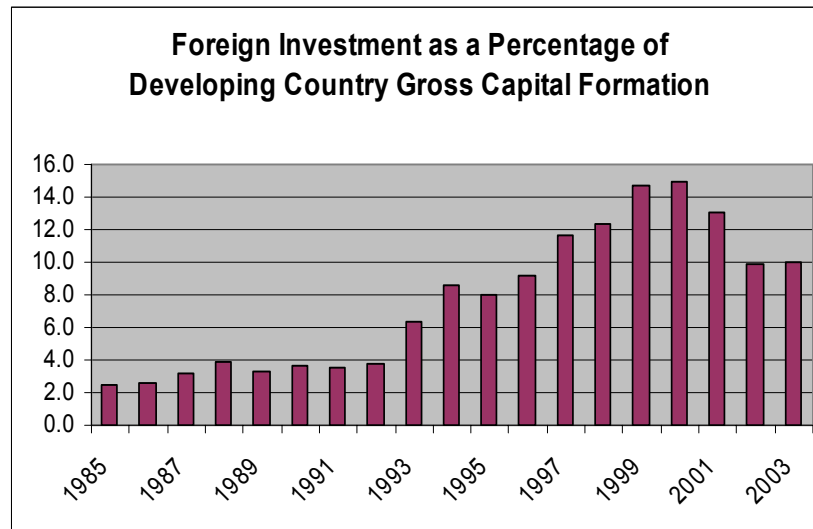
<sup>25</sup> *Id.*

<sup>26</sup> Jennifer Tobin & Susan Rose-Ackerman, *Foreign Direct Investment and the Business Environment in Developing Countries: the Impact of Bilateral Investment Treaties*, (Yale Law and Economics Research Paper No. 293, 2005), available at [http://www.law.yale.edu/outside/html/faculty/sroseack/FDI\\_BITs\\_may02.pdf](http://www.law.yale.edu/outside/html/faculty/sroseack/FDI_BITs_may02.pdf) [hereinafter Tobin & Rose-Ackerman].

<sup>27</sup> Jeswald Salacuse & Nicholas Sullivan, *Do BITs Really Work? An Evaluation of Bilateral Investment Treaties and Their Grand Bargain*, 46 HARV. INT'L L.J. 67, (2005) [hereinafter Salacuse & Sullivan].

<sup>28</sup> Neumayer & Spess, *supra* note 15.

<sup>29</sup> Data source is WIR-2004, *supra* note 20.

**Figure 1B**<sup>30</sup>

The fragility of the results in the previous literature on BITs leaves one to question whether BIT signing is in the best interest of a developing country. Since BITs effectively cause developing country to relinquish some of their property rights to foreign investors,<sup>31</sup> one may reasonably ask whether the countries receive an adequate level of benefits in return for their participation.

To be certain, the recent surge in the signing of BITs represents a form of investment liberalization since the expansion of investment protections is designed to facilitate increased globalization through international investment.<sup>32</sup> What is notable is the contrast between this method of furthering international economic integration with earlier approaches for trade liberalization, which were largely based on the efforts of multilateral negotiations.

While there have been calls for multilateral negotiations aimed at the concerns of international investors, multilateral efforts to liberalize the international investment environment have not borne fruit.<sup>33</sup> One

<sup>30</sup> *Id.*

<sup>31</sup> *See, e.g.,* Bhagirath Lal Das, A Critical Analysis of the Proposed Investment Treaty in WTO (July 2003), Global Policy Forum, <http://www.globalpolicy.org/socecon/bwi-wto/wto/2003/07critical.htm> (last visited Oct. 16, 2005) [hereinafter Das].

<sup>32</sup> *See* WIR-2003, *supra* note 4, at 89.

<sup>33</sup> *See, e.g.,* The Global Policy Forum, Multilateral Agreement on Investment, <http://www.globalpolicy.org/socecon/bwi-wto/indexmai.htm> (last visited Oct. 16, 2005). This web page is devoted to concerns about multilateral investment approaches and

view that has inhibited progress towards the creation of a true multilateral investment agreement has been the view that signatories to such an agreement would provide foreign firms a host of economic benefits, while extracting no new concessions and imposing no new responsibilities on the beneficiary firms.<sup>34</sup> As a result, while the European Union was successful in adding discussion about such an investment agreement to the Doha Round of WTO talks,<sup>35</sup> many countries view such agreements with suspicion. Consequently, there is no multilateral protection of investment that is similar in scope to the WTO protections provided to trade in goods and services and the prospects for a multilateral solution are believed to be slim.<sup>36</sup> In this policy void, BITs provide a piecemeal set of investment protections that augment investment provisions provided through some regional agreements.<sup>37</sup>

While economic models confidently predict that BITs should increase the level of foreign investment, the wide range of results discussed above suggests that the motives and the effects of BIT signing deserve further attention. To think about this question, and the paradoxical inability of academic studies to uncover consistent evidence that BITs are associated with investment increases, I study two questions. First, I examine the correlation between previous foreign investment and the signing of BITs to explore whether there is any evidence that the signing of BITs is investor-driven. Such a correlation would imply that BIT signing is affected not only by the national governments of the signatory nations, but also by the interests of the investing firms who wish to gain further protections for their

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notes that OECD discussions of a multilateral investment agreement, which commenced in 1995, have failed to move towards any new agreement.

<sup>34</sup> *E.g.*, Das, *supra* note 31.

<sup>35</sup> World Trade Organization, Ministerial Declaration of 14 November 2001, WT/MIN(01)/DEC/1, 41 I.L.M. 746 (2002), *available at* [http://www.wto.org/english/thewto\\_e/minist\\_e/min01\\_e/mindecl\\_e.htm](http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm) [hereinafter Doha Declaration]. The Doha Declaration includes statement 20, which reads: “Recognizing the case for a multilateral framework to secure transparent, stable and predictable conditions for long-term cross-border investment, particularly foreign direct investment, that will contribute to the expansion of trade, and the need for enhanced technical assistance and capacity-building in this area as referred to in paragraph 21, we agree that negotiations will take place after the Fifth Session of the Ministerial Conference on the basis of a decision to be taken, by explicit consensus, at that session on modalities of negotiations.”

<sup>36</sup> *See, e.g.*, WIR-2003, *supra* note 4, at 91 (commenting on the fact the efforts to negotiate multilateral investment agreements have always failed, even when the agreements were non-binding on countries).

<sup>37</sup> A more limited set of WTO measures included in the Trade Related Investment Measures (TRIMS) and the General Agreement on Trade in Services (GATS), help protect some forms of investments.

assets. This link may provide insight into the findings that BITs are only sometimes related to increases in foreign investment, since BITs signed to meet the interests of existing investors may not lead to the receipt of future investments.

Next, I study how BITs affected the flow of investments between countries after including a wide range of controls for the economic environment, such as home and host GDP, wage rates, and risk measures. Unfortunately, while these variables are certainly primary determinants of investment, it is impossible to control for all country characteristics that cause firms to invest in one country versus another. Rather than adding further control variables, I add previous foreign investment as a control in my regression analysis. Such a control helps to provide a direct indicator of country attractiveness that is otherwise unobservable through direct measures.<sup>38</sup>

## II. WHICH COUNTRIES SIGN BITS

Although progress towards a multilateral investment agreement remains stalled, an increasing portion of foreign investment benefits from investment protections that are provided by BITs. According to Hallward-Driemeier, by 2000 one-half of foreign investment developing countries received from investors in Organization for Economic Cooperation and Development (OECE) countries was covered by the promises and protections conferred by BITs.<sup>39</sup> Since the benefits of BIT signing are as yet difficult to identify, one may ask whether BIT signers receive an adequate exchange for their promises to foreign investors. To address this question, it is important to begin by analyzing which countries chose to sign BIT agreements.

Elkins, Guzman and Simmons, and Neumayer have contributed to this area by using Cox analyses of the data that examine the timing of treaty signing.<sup>40</sup> In both papers, the authors ask what determines the amount of time that elapses between the signing of BITs. While Neumayer focuses on the economic characteristics of the investor and

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<sup>38</sup> While a researcher can directly control for education, for example, the researcher can not directly control for the effectiveness of the educational system. However, a country that has an effective education system that produces skilled workers is likely to attract investment now and in the future.

<sup>39</sup> Hallward-Driemeier, *supra* note 16.

<sup>40</sup> Zachary Elkins et al., *Competing for Capital: The Diffusion of Bilateral Investment Treaties, 1960-2000* (UC Berkeley Public Law Research Paper No. 578961, 2005) [hereinafter Elkins]; Eric Neumayer, *Own Interest and Foreign Need: Are Bilateral Investment Treaty Programs Similar to Aid Allocation?* (Jan. 2005) (unpublished manuscript, on file with the author) [hereinafter Neumayer].



recipient countries,<sup>41</sup> Elkins, Guzman and Simmons examine whether competition with other countries influenced the motives of countries.<sup>42</sup> To further this debate, I will address an alternative possibility: countries signed BITs due to the interest of foreign investors rather than pressures exerted by local constituencies or the altruism of the investing nations. I will also change the frame of the debate by examining the overall frequency of treaty signing, rather than the amount of time that elapsed between treaties signings. The motive for this switch is to examine the factors that cause some countries to pursue a larger number of treaties than others.

### III. WHO SIGNS BITs? EMPIRICAL RESULTS

Since countries differ so dramatically in their propensities to sign BITs, this section first asks whether country characteristics can predict the signing of BITs. Next, the analysis is augmented to examine whether the interests of existing foreign investors had any influence on the signing of BITs.

To answer these questions, I examine whether the number of BITs signed by developing countries was related to economic conditions of the countries, or to the investment positions taken by foreign investors. The dependent variable is the number of new BITs signed. By 2000, countries that had signed BITs had an average number of 21.2 treaty signings each.<sup>43</sup> However, there was a great deal of heterogeneity across countries in their treaty signing proclivities. In particular, since the median number of treaties signed was 14.5, we can infer that some countries signed a great number of treaties, while others were much less active.<sup>44</sup> Because the number of treaties signed is always non-negative, I use a negative binomial estimation framework.<sup>45</sup> In addition, since treaty signing isn't a frequent event, the dependent variable is measured at two different periods of time, 1990-1994 and 1995-1999.

To gain insight into the importance of country characteristics, Table 1 displays results from a simple analysis that relates the number of treaties signed to country per-capita income, country risk, and the region where a country is located. Country risk is included, since one

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<sup>41</sup> Neumayer, *supra* note 40.

<sup>42</sup> Elkins, *supra* note 40.

<sup>43</sup> Author's calculation based on roster of treaty signings included in BITs, *supra* note 5.

<sup>44</sup> Author's calculation based on roster of treaty signings included in BITs, *supra* note 5.

<sup>45</sup> Standard regression models assume that the dependent variable can take on both positive and negative values, which are not seen in this context.

would expect that countries might sign BITs to provide assurances to foreign investors when the external assessment deemed the country as having a level of risk that might otherwise deter foreign investors from entering the country.<sup>46</sup> Said differently, a country that is characterized by a high level of risk or corruption might not be able to implement domestic reforms that succeed in attracting international investors, since investors might worry that the reform would not be permanent, or if permanent, that the reform might not be enforced. Per capita income is included, since treaty signing is found to be positively related to country incomes.<sup>47</sup> Consequently, I expect to find a positive relationship between both per-capita income and country risk and the signing of BITs.

Finally, regional dummy variables are included in the analysis to capture regional differences in institutions or resources, which might predispose local governments towards or away from the signing of BITs. The regression coefficients on these regional variables will take on either positive or negative signs, indicating whether the region was more or less active in BIT signing than were countries in other regions of the world. For example, some countries might have been less likely to sign BITs since the region had already provided credible investor protections through a regional trade agreement, or an alternative mechanism such as Friendship, Commerce and Navigation treaties that included investment provisions.

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<sup>46</sup> See Hallward-Driemeier, *supra* note 16.

<sup>47</sup> See Neumayer, *supra* note 40.

**Table 1: Economic Determinants of BIT Signing<sup>48</sup>**

<i>Dependent Variable</i>	Number of BITs Signed	
	1990-1994	1995-1999
Per Capita Income	.729*** (.246)	.419*** (.151)
Risk	.013 (.022)	.022* (.014)
<i>Region Effects</i>		
South America	.423 (.386)	-.227 (.257)
Africa	-.169 (.449)	-.415 (.272)
CEE	1.11 (.390)	.345 (.263)
Asia	.937 (.447)	.450 (.286)
Constant	-.890 (1.39)	.615 (.826)
Log Likelihood	-258	-301
Number of Countries	90	90

Regional dummy variables may also capture the essence of competitive BIT signing that the results of Elkins, Guzman, and Simmons suggest.<sup>49</sup> Namely, countries may have decided to sign a BIT when they were concerned about retaining foreign investments that might otherwise relocate to neighbors that just signed their own BITs with key investing countries. Since neighboring countries within a region are likely to resemble each other to a greater degree than geographically distant countries, regional variables help to capture this aspect of competition.<sup>50</sup>

The results in Table 1 confirm the basic predictions. During the 1990's, high-income countries, and those countries that were viewed as

<sup>48</sup> Negative Binomial Regressions. Standard errors and contained in ( ). \*\*\*, \*\*, and \* represent significance at the 10, 5 and one percent, respectively.

<sup>49</sup> Elkins, *supra* note 40.

<sup>50</sup> See Deborah L. Swenson, *The Effect of U.S. State Tax and Investment Promotion Policy on the Distribution of Inward Direct Investment*, in GEOGRAPHY AND OWNERSHIP AS BASES FOR ECONOMIC ACCOUNTING 285 (J. David Richardson, Robert Lipsey & Robert E. Baldwin eds., 1998) (showing that one identifies bigger effects of taxes on foreign investment in the U.S., if one controls taxes of competing neighbor states).

more risky exhibited a propensity for entering into a larger number of BITs. The results also show that there were marked regional differences in country propensities for signing BITs. Throughout the 1990's the highest probability was observed in the developing countries of Asia. While this may indicate that BIT signing was driven by cross country competition in Asia, there may have been characteristics that were present in Asian economies that caused the Asian countries to sign more treaties than other countries did.

If multinational firms can convince countries that they are footloose and prepared to relocate their operations to countries that provide a superior investment climate pressure from multinational investors may influence whether countries sign BITs.<sup>51</sup> Assuming that the stock of current investors propels the impetus towards investor-driven BIT signing, we can test whether the number of BITs signed is positively related to the stock of investments countries had already received. In particular, if country decisions were based on the fear of relocation by multinational firms, countries that had amassed greater foreign investment stocks would be more inclined to sign a BIT than countries that were economically similar, but had yet to attract significant levels of foreign investment.

To test whether BIT signing was related to previous foreign investment, the regressions displayed in Table 2 add a country's foreign investment stock at the beginning of the period as an explanatory variable. As a result, the foreign investment stock accumulated by 1990 was added to the regression describing country treaty decisions for 1990 to 1994, while the foreign investment stock amassed by 1995 was added to the regression analysis for 1995 to 1999. The results in Table 2 show that countries that attracted more foreign investment in previous years were much more likely to sign BITs. This result suggests that concern that foreign firms might relocate if the current host government failed to sign its own BIT motivated BIT signing, at least in part. Such an outcome is plausible, since foreign investors may become more effective at lobbying host governments after they make their investments both due to their economic threat to leave, as well as due to insights about the political processes in the host country that are gained as the firm operates in the host country. Notably, the economic significance of the other variables, per-capita income and country risk, are unchanged when the regression is augmented with foreign investment stocks.<sup>52</sup>

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<sup>51</sup> See Elkins, *supra* note 40.

<sup>52</sup> The regressions reported in Tables 2 and 3 have fewer observations than the regressions in Table 1. This is because foreign investment is included as a determinant of BIT signing in Tables 2 and 3. As a result, developing countries that failed to receive

Since BIT signing appears to be correlated with the presence of foreign investment, one may also ask whether countries signed BITs as a means of gaining contemporaneous FDI flows. While BITs may have had no observable effect on future foreign investment flows, it may be the case that countries signed BITs to secure immediate foreign investments that were realized at the time of BIT signing. To consider this issue, a final variable supplements the analysis: FDI flows that occurred during the period of BIT signing. Table 3 shows the new results. Once again, the general economic variables introduced earlier continue to perform as before. BIT signing, country per-capita incomes, and country risk are still positively related. However, the new results show that the inclusion of contemporaneous FDI flows provides additional explanatory value to the regressions. Countries that were in the midst of FDI surges were more likely to sign BIT agreements.

In summary, the data for the 1990s show that the signing of BITs was positively correlated with previous investment levels. Such a correlation suggests that countries may have agreed to sign these treaties since foreign investors located in their borders were lobbying for the investor protections they could gain from BITs. In addition, BITs depend on country characteristics, as the number of treaty signings was positively correlated with per-capita income and country risk.

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foreign investment in earlier years were not included in the regression.

**Table 2: Economic Determinants of BIT Signing, Including FDI Stocks<sup>53</sup>**

<i>Dependent Variable</i>	Number of BITs Signed	
	1990-1994	1995-1999
FDI Stock in beginning	.387*** (.110)	.165*** (.056)
Per Capita Income	.400 (.294)	.380** (.150)
Risk	.010 (.025)	.029** (.012)
<i>Region Effects</i>		
South America	.660 (.539)	-.787*** (.261)
Africa	.026 (.574)	-.853*** (.270)
CEE	1.97*** (.756)	.021 (.263)
Asia	.482 (.597)	-.364 (.310)
Constant	-2.98** (1.59)	-.232 (.800)
Log Likelihood	-178	-266
Number of Countries	69	82

<sup>53</sup> Negative Binomial Regressions. Standard errors and contained in ( ). \*\*\*, \*\*, and \* represent significance at the 10, 5 and one percent, respectively. FDI stock for 1990-94 regression is stock in 1990. The FDI stock in 1995 is used for the regression describing 1995-99 BITs signed.

**Table 3: Economic Determinants of BIT Signing, Including FDI Stocks and Flows<sup>54</sup>**

<i>Dependent Variable</i>	Number of BITs Signed	
	1990-1994	1995-1999
FDI Stock in beginning	.429*** (.098)	.248*** (.069)
FDI Flow in period	.702*** (.213)	.353** (.148)
Per Capita Income	.506* (.272)	.302** (.157)
Risk	.022 (.022)	.026** (.012)
<i>Region Effects</i>		
South America	.528 (.488)	-.844*** (.255)
Africa	.057 (.519)	-.764*** (.266)
CEE	.355 (.778)	-.105 (.265)
Asia	.172 (.539)	-.492 (.305)
Constant	-4.34 (1.50)	-.902 (.827)
Log Likelihood	-173	-260
Number of Countries	69	81

#### IV. DO BITs INCREASE FOREIGN INVESTMENT? CONCEPTUAL ISSUES

Basic economics suggests that, all else being equal, countries that sign BITs will be rewarded with increased levels of foreign investment. This belief is based on the economic premise that firms seek to maximize their economic returns, and that BITs will help firms to protect their profits and to reduce their uncertainty about the application of laws to their investments.<sup>55</sup> The fact that the review of

<sup>54</sup> Negative Binomial Regressions. Standard errors and contained in ( ). \*\*\*, \*\*, and \* represent significance at the 10, 5 and one percent, respectively. FDI stock for 1990-94 regression is stock in 1990. The FDI stock in 1995 is used for the regression describing 1995-99 BITs signed. FDI flow is the contemporaneous change in FDI.

<sup>55</sup> See Neumayer & Spess, *supra* note 15.

foreign investment data comes to contradictory findings may say something about the assumptions that underpin this simple view. To address this problem, this section reviews timing issues that may affect the measurement of BIT effects. The empirical section will then use the discussion of timing issues to guide the implementation of the data analysis.

The evidence from Table 3 shows that foreign investment rose contemporaneously with BIT signing. However, since signing a BIT implies that a country has agreed to a set of ongoing obligations, it is reasonable to ask whether such countries were rewarded with subsequent increases in foreign investment in later years. As was discussed in the introduction, work on this question has come to mixed conclusions. While Salacuse and Sullivan, and Neumayer and Spess find evidence that BITs appeared to facilitate subsequent foreign investment flows,<sup>56</sup> work based on a smaller set of host countries conducted by Hallward-Driemeier and Tobin and Rose-Ackerman comes to the opposite conclusion.<sup>57</sup> To revisit this question I use a large set of developing countries and propose two ways of reframing the question in hopes of better identifying the effects of BITs on foreign investment flows.

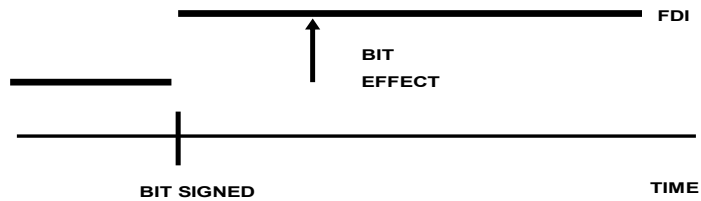
Figure 2 represents the simple view of BIT effects. Here, a country signs a BIT, and the path of FDI flows rises immediately upon the country's signing. The investment response shown in Figure 2 is based on the idea that investor uncertainty about a country's treatment of foreign investments is resolved on the date of the signing. And the rise in investment that is observed at the time of signing is measured as the effect of the BIT provisions on foreign investment. Figure 2 conveys the basic idea that lies behind the econometric analysis: the effect of BITs is to be measured by examining how foreign investment flows change when a country signs a BIT. However, the simple framework fails to capture at least two phenomena that are likely to influence the economic value that is attributed to BIT signing.

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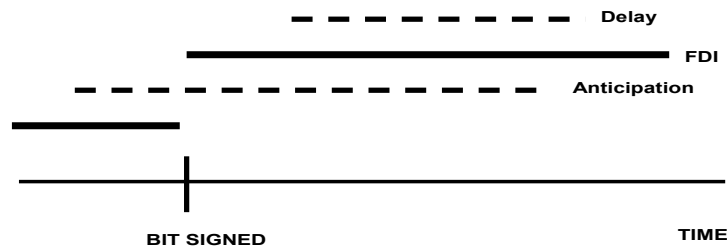
<sup>56</sup> Salacuse & Sullivan, *supra* note 29; Neumayer & Spess, *supra* note 15.

<sup>57</sup> Hallward-Driemeier, *supra* note 16; Tobin & Rose-Ackerman, *supra* note 28. While working with a larger set of countries implies that the data set is more comprehensive, the smaller set of countries included in the work by Hallward-Driemeier or Tobin and Rose-Ackerman attracted the bulk of all foreign investments. As a result, the difference in the two sets of results may mean that the effects of BITs were greatest for the countries that received the least amount of investment. While this means that BITs may have helped these countries to achieve a noticeable percentage increase in the foreign investment they received, the economic value of these investments may have been miniscule, since they represented a large percentage increase applied to a tiny base.



**Figure 2: Identifying Economic Effects of BITs.**

The first caveat relates to issues of timing. While Figure 2 assumes that all investors change their expectations about a host country's treatment of foreign investment on the date when a treaty is signed, it is easy to imagine that the time pattern of investment responses will unfold much less neatly than portrayed in Figure 2. In some cases, if BIT signing is expected, it is likely that investors may invest in the host country before the BIT signing takes place, since the investors confidently anticipate that their current investments will soon receive further protections when the signing occurs. In this scenario, the level of foreign investment jumps to a higher level before the BIT is signed, as is shown by the dotted line, Anticipation, in Figure 3.

**Figure 3: Leads and Lags in Investment Reactions**

In contrast, investors may doubt the resolve of other host countries to sign a BIT. Alternatively, the investor may be concerned

that the ultimate treaty will fail to include all the provisions that are of great importance for their particular investment. In this scenario, such investors will wait to verify that a treaty with all vital provisions has been signed before they make their investment decision. However, once the treaty has been signed, investment may be delayed further yet, as the investor takes time to plan the details of the investment and to begin its implementation. In this second scenario, the BIT does cause investors to elevate their investment. However, the actual response is delayed relative to signing, as shown by the higher dotted line, Delay, in Figure 3.

Since timing issues are likely to affect all investors, it is unlikely that foreign investment will jump on the date of treaty signing, as is illustrated in Figure 2. Further, it is important to remember that timing issues may not be the same for all firms, even if the firms are evaluating the same host country. To deal with the timing and account for the possibility that investments may be characterized by anticipation or delay relative to the date on which a BIT is signed, I use data that are grouped into two time periods, 1990-1994 and 1995-1999, rather than examining changes that occurred at yearly intervals.

Another data issue that influences the measured importance of BITs relates to the identity of BIT partners. Consider, for example, a developing country that first signs a BIT with the U.S., and later signs a BIT with Belgium. While the U.S. and Belgium are both rich countries whose firms often engage in foreign investment, U.S. foreign investment is much larger in magnitude than that of Belgium. As a result, a host country is likely to see its overall receipt of foreign investment rise considerably after it signs a treaty with the U.S. The same country will experience further foreign investment gains when it signs a treaty with Belgium. However, the magnitude of those gains is likely to be much smaller, since Belgium is a much smaller player in the market for foreign investment.<sup>58</sup> To convey these differences, Figure 4 illustrates the differential effects that come from signing a BIT with the U.S. versus signing a similar treaty with Belgium. Both treaties elevate the level of foreign investment, though the increase following the U.S. treaty signing is larger.

Tobin and Rose-Ackerman also consider the importance of country identity, as they seek to see whether the effects of BIT signing with low-income countries were quantitatively different from BIT signings with high-income countries.<sup>59</sup> They find that countries that

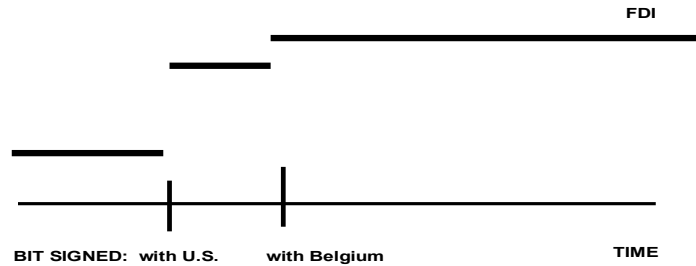
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<sup>58</sup> Data on outward investment in services in WIR-2004, *supra* note 20, at 306-307, show that Belgium's investments for 1995-1999 were less than three percent as large as foreign investments by U.S. investors during the same interval.

<sup>59</sup> Tobin & Rose-Ackerman, *supra* note 28.

signed more BITs attracted a greater share of world FDI.<sup>60</sup> However, while they find that a higher number of BITs with high-income countries sometimes correlated with receipt of higher foreign investor shares, the result is somewhat sensitive to the choice of regression specification.<sup>61</sup>

**Figure 4: The Effect of Country Identity on BIT Effects**



#### V. ECONOMIC EVIDENCE FROM THE 1990'S ON THE VALUE OF SIGNING BITS

Tables 4 and 5 explore how BIT signing affected the investment received by developing countries. Each of the regressions includes regional variables to capture emerging trends in foreign investment. For example, to the extent that foreign investment in the 1990's helped to facilitate outsourcing of electronics industries in Asia, one might expect Asia to receive a higher than average amount of foreign investment. Alternatively, to the extent that South American economies were emerging from the problems of their 1980's debt crises, one might predict that they would have benefited from increased foreign investment inflows. In any case, the inclusion of regional variables helps to control for trends in investment that were driven by otherwise unobservable factors that were common at the regional level. These include, among other factors, commonality in resources or distance from customer markets. The coefficients on regional variables may also indicate that there were similarities in the policy environment, which arose due to commonality of culture and tradition.

<sup>60</sup> *Id.*

<sup>61</sup> *Id.*

**Table 4: The Effect of BIT Signing on FDI Flows: All BITs.<sup>62</sup>**

<i>Dependent Variable</i>	Foreign Direct Investment Flow	
	1990-1994	1995-1999
New BITs	.002 (.091)	.143** (.069)
FDI Flow, prev period	-.040 (.149)	.186** (.076)
Risk	.011 (.011)	.010 .173
<i>Regions</i>		
South America	-.076 (.257)	.192 (.177)
Asia	.155 (.298)	.029 (.195)
CEE	2.37*** (.831)	.147 (.278)
Africa	-.243 (.259)	.061 (.188)
Constant	.445 (.403)	-.111 (.298)
Adjusted R <sup>2</sup>	.063	.129
Observations	80	84

62 Negative Binomial Regressions. Standard errors and contained in (.). \*\*\*, \*\*, \*

**Table 5: The Effect of BIT Signing on FDI Flows: BIT Identity.<sup>63</sup>**

<i>Dependent Variable</i>	Foreign Direct Investment Flow	
	1990-1994	1995-1999
New U.S. BIT	-.057 (.440)	.943*** (.309)
New non-U.S. BITs	.009 (.093)	.125* (.066)
FDI Flow, prev period	-.043 (.151)	.194*** (.073)
Risk	.011 (.011)	.008 (.007)
<i>Regions</i>		
South America	-.072 (.263)	.124 (.170)
Asia	.152 (.299)	.084 (.187)
CEE	2.365*** (.836)	.187 (.264)
Africa	-.239 (.262)	.089 (.179)
Constant	.433 (.407)	-.067 (.284)
Adjusted R <sup>2</sup>	.050	.211
Observations	80	84

Of course, there is much remaining heterogeneity among countries within a region. Unfortunately, identifying country differences that influenced the level of foreign investment is difficult, since it is virtually impossible to collect a comprehensive data set that includes information on every country characteristic that is of interest to foreign investors. However, as Lipsey shows, there is a high level of persistence in foreign investment decisions.<sup>64</sup> In particular, some countries attract high levels of foreign investment from one year to the next, while other countries repeatedly fail in their pursuit of foreign

and \* represent significance at the 10, 5 and one percent, respectively.

<sup>63</sup> Negative Binomial Regressions. Standard errors and contained in ( ). \*\*\*, \*\*, and \* represent significance at the 10, 5 and one percent, respectively.

<sup>64</sup> Robert E. Lipsey, *The Location and Characteristics of U.S. Affiliates in Asia* (Nat'l Bureau of Econ. Res., Working Paper No. 6876, 1999).

investment.<sup>65</sup> To control for ongoing differences in country attractiveness, I include previous years' foreign investment as an explanatory variable in the regressions, as an indirect means of capturing the unobservable factors that affected foreign investment flows. This means that the regression is designed to show whether a country's decision to sign more BITs caused the country to receive a greater level of foreign investment in the current period, as compared with predictions based on their previous receipt of foreign investment.

The answers provided by the results presented in Table 4 are mixed. In particular, the results suggest that new BIT signing in the early 1990's was not correlated with increased levels of investment, while BIT signing in the late 1990's was. It is possible that differences in the business cycle were responsible for the differences in the effects observed in the two periods. In particular, foreign investment was depressed in the early 1990's,<sup>66</sup> and as a result, countries may have experienced declining investment in the early 1990's even if they agreed to sign new BITs. In contrast, world FDI flows rose considerably in the late 1990's,<sup>67</sup> so multinational firms, who were increasing their foreign investment presence at this time, may have been more responsive to cross-country differences in the BIT environment provided by host country governments.

The analysis presented in Table 5 explores whether there were notable differences in the value of signing a BIT with the U.S. To do so, the BIT variable was split into two unique variables. The first component takes on a value of zero or one, depending on whether the host country signed a BIT with the U.S. The second component is the number of BITs signed with other countries. As in Table 4, BITs were not found to foster investment in the early 1990's, while all BIT expansion was correlated with increased investment in the late 1990's. However, BIT signing with the U.S. was correlated with a much larger stimulus to investment flows. In fact, the relative magnitude of the estimated coefficients suggests that countries who signed a BIT with the U.S. received a boost to foreign investment that was seven and a half times as large as the boost experienced when the average BIT was signed with other countries. Nonetheless, the positive coefficient on the number of non-US BITs is likely to mean that countries that actively sought to provide a more stable environment using BITs were also actively promoting investment through other channels.

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<sup>65</sup> *Id.*

<sup>66</sup> See WIR-2003, *supra* note 4 (annex tables on investment document the general decline in investment in the early 1990s).

<sup>67</sup> See WIR-2003, *supra* note 4 (annex tables show the rapid increase in foreign investment in the late 1990s).

## VI. INTERPRETATION AND FURTHER ISSUES

There are other factors that may influence the results in this study and others that deserve attention in future studies. One of the first is the effect of alternative investment promotion measures. In this study, as others, the only investment tool that is included in the regressions is the number of BITs. However, countries certainly have other avenues for protecting the interests of foreign investors.<sup>68</sup> As a result, a more comprehensive treatment of the data might be achieved if the regressions were augmented with variables that indicated whether investors could receive protection from elements of regional trade agreements or from the provisions of Maritime and Friendship treaties.<sup>69</sup> While work by Yeyati, Stein and Daude suggests that regional agreements have influenced foreign investment, there is no work that looks at the full set of investment measures at the same time.<sup>70</sup>

Another reason why BITs may appear less effective in stimulating investment than they actually were is that large cross country analyses necessarily involve generalizations that are unable to capture the full degree of heterogeneity in choices and outcomes. To begin, while some BITs provide more comprehensive investor benefits than others, the regression analysis is limited to noting whether a BIT was in place or not. Unfortunately, the creation of a more tailored variable that ranked BITs by value, such as a one to ten scale, would be difficult. First, one would have to assemble a large data set that indicated which details were present or absent from each of the BITs signed. More difficult yet, one would have to decide how to weight the different elements of BITs. Given the diversity in procedures and enforcement, it is difficult to imagine that one could easily assign weights to varying sets of dispute settlement measures, thus enabling easy comparisons of the treatment of foreign nationals in other countries. Ultimately, an index measure would require arbitrary judgment calls about the weights. What is worth remembering, when interpreting this study or other work that examines how investment responds to BITs, is that the

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<sup>68</sup> See WIR-2003, *supra* note 4, at 89-93 (describing how foreign investment could be protected under provisions of regional trade agreements, or how multilateral agreements could accomplish the task).

<sup>69</sup> See Subramanian & Wei, *The WTO Promotes Trade, Strongly But Unevenly* (Nat'l Bureau of Econ. Res., Working Paper No. 10024, 2003) (showing that the uncovering the trade promoting effects of the WTO requires one to carefully attend to other trade promoting agreements, including regional trade agreements, or application of the generalized system of preferences).

<sup>70</sup> Eduardo L. Yeyati et al., *Regional Integration and the Location of FDI* (Inter-Am. Dev. Bank, Working Paper No. 492, 2002), available at <http://www.iadb.org/res/publications/pubfiles/pubwp-492.pdf>.

use of BIT counts relies on an imprecise measure of the investment environment. As such, the analysis is less likely to observe results, even if BITs are effectively fostering new investment.

A third element of the data that may affect the results is that all foreign investment is grouped together. However, it is possible that some investments will be more responsive to BITs than others. For example, investors deciding where to build a manufacturing facility may be able to choose from a large number of countries, and the availability of BIT protections may influence their ultimate decision. In contrast, natural resource investments are constrained to locate in countries that offer the appropriate resource. While investors might hope for BIT protection, they will choose to invest in the resource rich countries, whether an investment treaty has been signed. As a result, grouping all investments together provides one with an idea of the average response to BITs. However, it misses the subtle differences across different investment sectors.<sup>71</sup> It would be interesting for future researchers to explore the differential effects of BITs on manufacturing, service and resource investments. It would also be interesting to learn whether the effects of BITs differ by investment type, having more or less effect on acquisition FDI than they have on greenfield investments.

## VII. CONCLUSIONS

A remarkable expansion in the number of signings of BITs marked the 1990s.<sup>72</sup> On the face of it, this expansion in the number of treaty obligations presents a puzzle, since a number of studies have come to question whether the receipt of new foreign investment flows rewarded signatory countries.<sup>73</sup> I find two factors that are likely to influence the observed benefits of country decisions to enter into BITs. First, while treaties are viewed as forward-looking tools that are signed

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<sup>71</sup> Compare Deborah L. Swenson, *Investment Distinctions: The Effect of Taxes on Foreign Direct Investment in the U.S.*, in THE WELFARE STATE, PUBLIC INVESTMENT, AND GROWTH (Hirofumi Shibata and Toshihiro Ichori eds., 1998), and Deborah L. Swenson, *Transaction Type and the Effect of Taxes on the Distribution of Foreign Direct Investment in the U.S.*, in INTERNATIONAL TAXATION AND MULTINATIONAL ACTIVITY (James R. Hines, Jr. ed., 2001) (showing how different classes of investment are differentially affected by host location taxes), with Keith Head et al., *Attracting Foreign Manufacturing Investment Promotion and Agglomeration*, 29 REGIONAL SCI. & URB. ECON. 197 (1999) (showing how careful treatment of the full set of tax provisions provides cleaner estimates of taxes on investment decisions).

<sup>72</sup> See WIR-2003 *supra* note 4 (noting the remarkable growth of BITs after 1989).

<sup>73</sup> See, e.g., Hallward-Driemeier, *supra* note 16; Tobin & Rose-Ackerman, *supra* note 28 (neither find consistent evidence suggesting that BITs foster foreign investment in developing country hosts).



to gain future investments, I show that treaty signing also had a backward looking element. In particular, countries that had already received larger stocks of foreign investment were more likely to sign BITs than were countries that had been less successful in attracting foreign investment. This result suggests that the interest of exiting foreign investors drove the signing of BITs, at least in part. Nonetheless, the signing of BITs may have been in the interest of individual countries if the signing of BITs allowed countries to retain investments that might have relocated to another country. However, rather than fostering new investments, BITs may have enabled these countries to hold onto previous investments. The second conclusion of this paper is that controls for timing, intrinsic country attractiveness and investor identity are all important. When these issues are addressed, data from the late 1990s suggests that BIT signing did help developing countries attract a larger volume of foreign investment.