# Appendix 1. Review of Evidence Regarding Whether IIAs Encourage Investment Inflows to Signatory Countries

### Introduction and overview

The views of those who have written about the anticipated effects of international investment obligations on FDI flows vary widely. Some, such as Sornarajah, suggest that 'in reality attracting foreign investment depends more on the political and economic climate for its existence rather than on the creation of a legal structure for its protection'. Many others simply assume that international investment obligations will promote FDI inflows. Proponents of IIAs as strategies to promote inward investment, however, have had to confront the fact that some developing countries, of which Brazil is the best example, have been extremely successful in attracting FDI from countries with which they do not have IIAs. Other countries have signed IIAs and attracted little investment. Recently, researchers have tried to determine empirically whether international investment agreements actually result in increased foreign investment flows into signatory countries. Unfortunately, the empirical studies that have been done to date have not come to consistent conclusions regarding the effects of IIAs on investment flows.

Studies have looked at two main expected effects of signing IIAs on investment flows:

- Commitment effect: Signing an IIA creates an international commitment by a host country to comply with investor protection obligations in the treaty in relation to investors from the other party state. The anticipated effect is increased investment by investors from that other party state.
- Signalling effect: Signing an IIA sends a signal generally to foreign investors that a country is serious about protecting the rights and interests of foreign investors. The anticipated effect is increased investment from all countries.

To determine whether there is a commitment effect in practice, studies have looked at investment flows between pairs of countries that have signed a bilateral investment treaty. Some of these studies show a significant positive correlation between a developing country signing a BIT with a developed country and increased

<sup>1</sup> M Sornarajah (2010), *The International Law of Foreign Investment*, 3d ed., Cambridge University Press, Cambridge, at 82.

<sup>2</sup> A Guzman (1998), 'Why LDCs Sign Treaties that Hurt Them: Explaining the Popularity of Bilateral Investment Treaties', 38 Virginia Journal of International Law 639.

<sup>3</sup> M Hallward-Driemeier (2003), 'Do Bilateral Investment Treaties Attract FDI? Only a Bit ... and They Could Bite', World Bank Policy Research Paper WPS 3121, World Bank, Washington, DC; J W Salacuse and N P Sullivan (2005), 'Do BITs Really Work? An Evaluation of Bilateral Investment Treaties and Their Grand Bargain', 46 Harvard International Law Journal 67.

foreign investment from that developed country.<sup>4</sup> Other studies have found little or no evidence of such an effect. A similar inconsistency exists in studies seeking to determine if a signalling effect exists. Some studies have found a positive effect on total investment inflows into a country from all countries as a result of signing a BIT, while others have not. Most studies have found that other forms of IIA, such as preferential trade and investment agreements, have had a positive effect on investment inflows.

In some of the studies that found a positive relationship between signing an IIA and investment inflows, the results varied depending on particular circumstances. For example, several studies have found that the relationship between IIAs signed by a country and investment inflows to that country vary with the number of agreements entered into. At some point, signing an additional agreement was found to have little marginal effect.

Commentators have suggested that the inconsistency in results of studies looking at the relationship between signing an IIA and investment inflows is due to problems with data and econometric modelling techniques. For example, most studies do not attempt to control for the effect of investment-liberalising changes made by a host state to its domestic regime that often are contemporaneous with entering into a BIT. Where a study shows a positive relationship between signing a BIT and investment inflows, but does not try to eliminate the effects of pro-investment domestic reform, it may overstate the investment-inducing effect. Some of the new investment may be attributable to the changes to the domestic regime. While the impact of the changes to the domestic regime on the results is uncertain, the failure to control for such an impact in an empirical study of the effects of signing a BIT makes the results unreliable.

Attempts to use alternative empirical approaches to find evidence of the impact of the existence of investment agreements on investment flows, such as surveys of corporate decision-makers regarding the factors that they take into account in deciding whether to invest in a country, have been similarly inconclusive.

# Review of empirical studies<sup>5</sup>

#### **BITs**

#### Studies of the commitment effect on bilateral investment flows

The first major empirical study of the relationship between IIAs and investment flows was completed by UNCTAD in 1998. It looked at the impact of signing a BIT between pairs of countries on bilateral FDI flows between the parties over the period 1971–94.

<sup>4</sup> Ibid.

<sup>5</sup> General surveys of the empirical work to date are provided in UNCTAD (2009), The Role of International Investment Agreements in Attracting Foreign Direct Investment to Developing Countries, United Nations, New York and Geneva, discussing the methodological problems with the empirical studies (at 56–8), and K P Sauvant, and L E Sachs (eds) (2009), The Effect of Treaties on Foreign Direct Investment: Bilateral Investment Treaties, Double Taxation Treaties and Investment Flows, Oxford University Press, Oxford.

The study showed that there was evidence of a positive relationship, but that the role of signing a BIT in attracting FDI was likely to be minor and of secondary importance. The prime explanatory variables for investment flows into the host state were the host state's GDP and population, and the level of domestic investment in the host state compared with the host country's GDP. The authors suggest that one possible explanation for this result was that the main political reason for a developed country to push for the conclusion of a BIT with a particular developing country was pressure from investors lobbying their governments to enter into treaties with countries in which they had already invested as a way of protecting their assets. Another suggested explanation was that some positive investment effects may lag behind the signing of a treaty by many years.

In 2003, Hallward-Driemeier completed a study for the World Bank that looked at annual flows between pairs of countries consisting of 31 host developing countries and 20 OECD countries over the period 1980–2000. It found that the relationship between FDI flows and BITs was not statistically significant, with a few exceptions. Hallward-Driemeier also found that, in general, a country with a stronger institutional capacity (in terms of rule of law, the protection of property rights, lack of corruption, government effectiveness and regulatory quality) that had entered into a BIT was more likely to attract investment than a country that had entered into a BIT but was lacking such capacity. A BIT was seen as an effective complement to strong domestic institutions, but not a substitute. As discussed below, a study by Tobin and Rose-Ackerman reached a similar conclusion, based on aggregate investment flows into host countries that had signed BITs. This is a significant finding for developing countries that might seek to rely on BIT commitments, rather than undertaking the more difficult challenge of reforming its domestic regimes, though, as noted below, other studies have concluded that BIT commitments can be a substitute for domestic reform.

Several studies of the effects of BITs have come to more positive conclusions about the relationship between signing a BIT and attracting foreign investment, though the results are far from uniform. Salacuse and Sullivan attempted to examine the possibility that BITs with different levels of investor protection might have different effects on FDI.<sup>8</sup> Their study looked at annual investment flows from the USA to 31 developing countries in the period 1991–2000. In general, US BITs provide higher levels of investor protection than the forms of agreement employed by some other countries. For example, US BITs provide prospective investors with a right to establish in a host state, impose restrictions on host state use of performance requirements, and include

<sup>6</sup> Hallward-Driemeier, op. cit., at 2. Significantly, one of the exceptions was the North American Free Trade Agreement (signed 17 December 1992, in force 1 January 1994, reprinted in (1993) 32 *International Legal Materials* 605). The author acknowledged, however, that it was difficult to distinguish the impact of the NAFTA investment chapter from the effect of the other elements of the agreement.

<sup>7</sup> J Tobin and S Rose-Ackerman (2003), 'Foreign Direct Investment and the Business Environment in Developing Countries: The Impact of Bilateral Investment Treaties', William Davidson Institute Working Paper No. 587, Michigan: The University of Michigan Business School, Ann Arbour.

<sup>8</sup> Salacuse and Sullivan, op. cit.

a robust investor-state dispute settlement mechanism. Some of these provisions are lacking in other models. Salacuse and Sullivan found that there was a strong positive relationship between a developing country entering into a BIT with the USA and increased US FDI into the developing country, as well as with greater FDI from other OECD countries. They estimated that an annual increase of between 77 and 85 per cent in investment inflows from the USA resulted from signing a BIT with the USA. BITs with other OECD members also had a positive impact. The positive effect of a US BIT in this regard, however, was much more significant than the investment effects associated with weaker BITs negotiated by other OECD member countries. The authors concluded that the higher levels of investor protection in the US model BIT contributed to a stronger FDI stimulus from the signing of a BIT. They also found that the impact for a developing country entering into a US BIT was larger if the country's overall number of BITs was below the mean number of BITs entered into by developing countries with other OECD countries (7.3). Above the mean, the correlation between US BITs and increased FDI was very weak and statistically insignificant. The authors suggest that this could be because the US investment could get crowded out in situations where a developing country has strong investment relationships with a significant number of other OECD countries.

Subsequent studies have come to inconsistent conclusions regarding the impact of US BITs. In their study of 24 Latin American countries, Gallagher and Birch found no positive correlation between a US BIT with a country and US FDI into that country. Some other studies have come to similar conclusions regarding the effect of US BITs, 10 while others have agreed with Salacuse and Sullivan. 11

Surprisingly, Salacuse and Sullivan found that BITs entered into between developing countries had a negative impact on FDI flows between them. Some other studies have found that agreements between developing countries have no effect, even though BITs between developed and developing countries were found to have a positive effect.<sup>12</sup>

## Studies of the signalling effect on total investment flows

Neumayer and Spess<sup>13</sup> reached some conclusions that are similar to those of Salacuse and Sullivan, but looking at the relationship between total investment flows into a

<sup>9</sup> K P Gallagher and M B L Birch (2006), 'Do Investment Agreements Attract Investment? Evidence from Latin America', *Journal of World Investment Law and Trade* 7 at 961.

<sup>10</sup> Tobin and Rose-Ackerman, op. cit.; P Busse et al. (February 2008), 'FDI Promotion through Bilateral Investment Treaties: More than a BIT?', Kiel Working Paper No. 1403, Kiel Institute for the World Economy, Kiel, at 25.

<sup>11</sup> Y Z Haftel (2010), 'Ratification Counts: US Investment Treaties and FDI Flows into Developing Countries', 17 *Review of International Political Economy* 248 (explaining the different result from Gallagher and Birch by looking at BITs that were ratified, not just signed); and T Siegmann (2007), 'The Impact of Bilateral Investment Treaties and Double Taxation Treaties on Foreign Direct Investment', University of St. Gallen Law and Economics Research Paper Series, Working Paper No. 2008–22, St. Gallen, (adopting a similar explanation).

<sup>12</sup> E.g. R Banga (2006), 'Do Investment Agreements Matter?', 21 Journal of Economic Integration 40 (comparing BITs between APEC members and those between ASEAN members).

<sup>13</sup> E Neumayer and L Spess (2005), 'Do Bilateral Investment Treaties Increase Foreign Direct Investment in Developing Countries?', 33 World Development 1567. Egger and Merlo found that signing a BIT had a positive effect on FDI stocks in a study of BITS involving OECD countries and

country and signing a BIT.<sup>14</sup> Unlike Salacuse and Sullivan and Hallward-Driemeier, Neumayer and Spess used a very broad sample of 119 countries. Also, instead of using data from single years over a period of time, they looked at aggregate flows over a long period using a dataset running from 1970–2001.<sup>15</sup> They found a positive relationship between signing BITs and foreign investment inflows. In addition, Neumayer and Spess found evidence that the positive impact was more significant for countries with riskier domestic environments. They concluded that such countries would be more likely to experience an increase in inward investment as a result of signing a BIT on the basis that BITs function as substitutes for institutional quality in host countries. This conclusion conflicts directly with Hallward-Driemeier's conclusion that developing countries cannot expect BITs to substitute for domestic institutional quality.<sup>16</sup>

A number of other studies have found a positive relationship between signing a BIT and total inward investment.<sup>17</sup> Tobin and Rose-Ackerman did a new study in 2006 with an even larger sample, including 137 countries and using five-year averages of total FDI flows over the period 1980–2003.<sup>18</sup> They found a positive correlation between signing BITs and inward FDI in developing countries. They also found that the positive effect of signing a BIT decreased as the number of BITs worldwide increased. More recently, however, Büthe and Milner found that the more BITs a country signed, the more positive was the effect on aggregate investment inflows.<sup>19</sup>

In a 2007 study, Yackee<sup>20</sup> sought to replicate the results obtained by Neumayer and Spess, but used a dataset that included a longer time period, and a broader measure of investment agreements that included BITs, free trade agreements and other agreements containing investment provisions that are substantially similar to those found in a BIT. He also incorporated some other minor adjustments to the Neumayer and Spess model. In contrast to the results of Neumayer and Spess, Yackee's results

transition economies (P Egger and V Merlo (2007), 'The Impact of Bilateral Investment Treaties on FDI Dynamics', 30 *World Economy* 1536). Significantly, Egger and Merlo found that while there was a significant contemporaneous effect associated with entering into a BIT, the long-run impact was larger. See, similarly, P Egger and M Pfaffermayr (2004), 'The impact of bilateral investment treaties on foreign direct investment', 73 *Journal of Comparative Economics* 788, at 790.

- 14 Ibid
- 15 Salacuse and Sullivan, op. cit., and Hallward-Driemeier, op. cit., used cross-sectional data for single years.
- 16 Two recent studies reached the same conclusion as Hallward-Driemeier regarding complementarity: Siegmann, op. cit., at 76; and Busse et al. (2008), op. cit., at 15.
- 17 Aggregate investment flows (T Büthe and H V Milner, 'Bilateral Investment Treaties and Foreign Direct Investment: A Political Analysis', in Sauvant and Sachs, op. cit.; R Grosse and L J Trevino (2005), 'New Institutional Economics and FDI Location in Central and Eastern Europe', 45 Management International Review 123; Banga, op. cit.; Siegmann, op. cit., at 76).
- 18 Tobin and Rose-Ackerman (2006), op. cit.
- 19 Büthe and Milner, op. cit., at 213.
- 20 J W Yackee (2007), 'Do BITs Really Work? Revisiting the Empirical Link between Investment Treaties and Foreign Direct Investment', Legal Studies Research Paper No. 1054, University of Wisconsin Law School, Madison.

showed no statistically significant positive relationship between BITs and FDI for a large minority of his observations. While he found some evidence of a positive relationship in relation to developing countries that had low levels of political risk, he found no evidence to support Neumayer and Spess's conclusion that the benefits of BIT signing were greater for countries with higher political risk. Indeed, his observations supported the conclusion that the opposite was true. In other words, the magnitude of the positive effect of BIT signing on investment increases as political risk declines. Yackee re-ran the analysis looking only at strong BITs, which he defined as those having binding investor state arbitration. The results obtained with this more limited dataset were consistent with his general findings. Significantly, he found that all his results were sensitive to various modelling choices. A similar conclusion was reached by Tobin and Rose-Ackerman.

#### Other forms of IIAs

There is stronger evidence that preferential trade and investment agreements (PTIAs) lead to increased inward FDI for party states, both from within the countries that are party to the agreement and from other countries seeking a platform for serving the countries that are parties to the PTIA.<sup>21</sup> In one recent study, researchers suggested a qualification to this result, based on their analysis of FDI flows between 1978 and 2004. They found that FDI is positively associated with a PTIA only if it creates commitments regarding the admission of investment. The presence of dispute settlement procedures in PTIAs, such as investor-state arbitration, was found to be less significant. The study also found that PTIAs without strong investment provisions may even discourage FDI by encouraging businesses from other party states to export to the host state, rather than investing in the host state to serve its market.<sup>22</sup>

# Challenges associated with empirical studies of investment flows

In summary, there is some evidence that IIA obligations have a positive effect on FDI flows, though the empirical record is relatively thin and not entirely consistent. Overall, our understanding of the effects of IIAs on investment flows through the use of studies that use investment flow data to determine if there is an investment-inducing effect associated with signing an IIA is limited by several factors.

## Problems with empirical models

Most studies looked simply at the correlation between IIAs and investment inflows and assumed that if the relationship was positive over time, that is signing an IIA

<sup>21</sup> UNCTAD (2007), Bilateral Investment Treaties 1995–2006: Trends in Investment Rulemaking, UN publication, Sales No. E.06.II.D.16, United Nations, New York and Geneva, at 105–6, describes this conclusion as based on a consensus of the literature.

<sup>22</sup> A Berger et al. (2010), 'Do Trade and Investment Agreements Lead to More FDI? Accounting for Key Provisions Inside the Black Box', Kiel Working Papers, No. 1647, Kiel Institute for the World Economy, Kiel, at 25.

was associated with increased investment, either from an IIA partner or generally from all countries, then it was the IIA that caused the increased investment. It is possible, however, that higher levels of bilateral investment encourage countries to negotiate IIAs, rather than the other way around.<sup>23</sup> This might occur, for example, where investors in a host state sought the protection of an IIA between their home state and the host state after making their investment and then their home state government negotiated a treaty. Alternatively, there may be variables that the model has left out that may affect investment flows. Most significantly, few studies to date have sought to separate the effects of IIAs from domestic policy changes liberalising the environment for FDI or otherwise promoting FDI.<sup>24</sup> In one of the few studies that have rigorously controlled for these kinds of problems, Aisbett concluded that it is impossible to say that IIAs caused increased investment flows.<sup>25</sup> In her view, the results found by Salacuse and Sullivan and by Neumayer and Spess are unreliable because they do not deal adequately with the possibility of reverse causation or other potential causes for the results observed, such as pro-investment domestic reform.<sup>26</sup>

#### Problems with data

There are a number of problems with using existing data to explain the relationship between FDI flows and signing investment treaties. One of the problems is that the data on investment flows for certain sectors, such as services, and for some countries, particularly least developed countries, are not always comparable or reliable.<sup>27</sup> This is particularly true regarding data on bilateral flows.<sup>28</sup> Investment flow data are also plagued by other problems associated with the complex organisation of transnational businesses. For example, sometimes investments may be identified as coming from a particular foreign country in which the entity making the investment is organised, but the real source of capital is another country. A national of one state may make an investment in that state through a wholly owned subsidiary corporation organised under the laws of another state. This kind of 'round-tripping' investment could be recorded as a foreign investment from the other state, even though it is really a domestic investment. Similarly, an investment that originates in one state may be identified as originating in another state if it has been flowed through a subsidiary organised under the laws of that other state. Such a structure might be adopted for

<sup>23</sup> This problem is an example of what is referred to as 'endogeneity'. It arises where there are various possible interactions between what the researcher is trying to observe (in this case changes in investment flows) and other variables used in regression analysis to explain what is observed (in this case, the conclusion or number of IIAs).

<sup>24</sup> Yackee (2007), op. cit. Studies have tried to address trade openness in their models. One study that did try to control for this found a positive correlation between IIAs and investment inflows (Busse et al. (2008), op. cit.).

<sup>25</sup> E Aisbett (2009), 'Bilateral Investment Treaties and Foreign Direct Investment: Correlation versus Causation', in Sauvant and Sachs, op. cit.

<sup>26</sup> Ibid.

<sup>27</sup> J W Yackee (2010), 'Do Bilateral Investment Treaties Promote Foreign Direct Investment? Some Hints from Alternative Evidence', 51 *Virginia Law Review* 397 at 410.

<sup>28</sup> Ibid. at 410-11.

various reasons, including seeking to take advantage of a low tax rate in the state in which the subsidiary is incorporated and the existence of an IIA between the state of incorporation of the subsidiary and the state in which the investment is made. In connection with these kinds of investments, investment flow statistics may not accurately reflect the true source of an investment.

The use of aggregate investment data may mask possible variations in the investment effects of IIAs from sector to sector. Different kinds of investments are likely to be affected by IIA commitments in different ways, though it is not clear what the effect will be. For example, it might be that investments in sectors where the international movement of capital is relatively easy, such as services, may be greatly affected by IIAs, while investments in sectors such as natural resources may not be affected by IIAs signed by a country that does not possess resources available for exploitation.<sup>29</sup> An alternative and opposite analysis is also possible. Investments with more sunk costs benefit more from the protections in an IIA. Thus investments in sectors such as natural resources, where there are substantial sunk costs that cannot be recovered unless the investment earns income for many years, may be more affected by IIAs. Other sectors, such as financial services, which do not involve significant sunk costs and where returns start to be earned earlier in its life cycle, may be little affected by IIA protection. Also, it may be that small and medium-sized businesses value IIA protection more highly, since large transnational corporations are often in a position to negotiate for commitments directly from the state.<sup>30</sup> As a result, IIA protection may have a greater effect on small and medium-sized investors. None of these kinds of considerations have been accounted for in the models used to date.

It may be that the sensitivity of investment flows to signing an IIA varies by the mode of investment entry. Perhaps investments in a country by foreign investors on their own are more likely to be affected by the country signing an IIA than investments in the form of joint ventures involving foreign and local partners, because the involvement of local partners may mitigate local political risk.

Finally, looking only at FDI inflows may not fully capture the FDI effects of IIAs. Such an approach does not measure investments that would have moved to another country in the absence of the IIA.<sup>31</sup>

## IIAs with different strengths

Studies that use long-term data lump together many treaties signed by states over an extended period of time that may have varying terms providing quite different levels of protection for investors.<sup>32</sup> In particular, as noted, many early treaties did not provide

<sup>29</sup> This is suggested by D L Swenson (2005), 'Why Do Developing Countries Sign BITs?' 12 University of California Davis Journal of International Law & Policy 131; Busse et al. (2008), op. cit., come to the opposite conclusion in their study (at 23).

<sup>30</sup> UNCTAD (2007), Treaties 1995–2006, op. cit., at 52–3.

<sup>31</sup> Swenson (2005), op. cit.

<sup>32</sup> Ibid. Swenson developed a model that looked at the investment effects of signing a BIT, including effects occurring not only after the BIT was signed, but also for a period prior to signing during which

for investor-state arbitration, which significantly increases the effectiveness of the investor-protection provisions.<sup>33</sup> Few empirical studies control for the relative strength of IIA obligations. It may be that a more significant positive effect on investment inflows would be associated with IIAs incorporating stronger commitments. As noted above, however, those studies that looked only at the effects of strong US BITs have come to conflicting results.

# Alternative evidence

In an attempt to address some of the methodological and data problems associated with the empirical studies discussed above, some researchers have surveyed investors to try to get a sense of the relative importance to them of the presence of an IIA in making decisions about where to invest. In a 2007 survey of transnational corporations for UNCTAD, more than 70 per cent of the respondents reported that the existence of an IIA with a country from which they would benefit did play a role in their decision about whether to invest in that country. Fewer than 25 per cent of the respondents, however, said that IIAs were relevant 'to a very great extent'. Only 23 per cent did not consider them 'at all'. Nine per cent of respondents answered 'don't know'. Out of 33 factors, the existence of an investment treaty ranked about in the middle in terms of its relative importance. It ranked higher in relation to investments in transition economies.

In a recent study, Yackee used several alternative measures to try to understand the effect of BITs on investment and concluded that there is little evidence that BITs are likely to have a significant effect on investors' decision making. First, he investigated whether the existence of BITs is correlated with a reduction in political risk. His hypothesis was that if BITs reduce political risk, then investment will be encouraged. Using data from two political risk-rating agencies, he tried to determine if signing BITs was correlated with lower political risk ratings. He found little evidence that signing BITs resulted in lower risk ratings for signatory countries. Second, Yackee looked at whether political risk insurers take into account the existence of a BIT in deciding whether and on what terms to issue insurance. If risk insurers take BITs into account, then investors are also likely to do so. He conducted an original survey of 56 insurers, both public and private, around the world. Nine of the fourteen political risk insurers that responded to his survey do not take BITs into account in assessing what premiums to charge, and eight said it was not their practice even to ask if a BIT was in place to protect the investor. Some of the others indicated that the existence of a BIT

investment might be stimulated by the anticipated signing of the agreement. She also attached more weight to lag effects than some other models. She found that new BIT signings in the early 1990s were not positively related to increased FDI, but that signing BITs in the late 1990s were positively related. In contrast, Siegmann, op. cit., found that BITs from 1985 to 1995 had a significant effect on investment flows, which treaties signed after 1995 did not.

- 33 Yackee (2007), op. cit., at 413.
- 34 L Kekic and K P Sauvant (2007), World Investment Prospects to 2011: Foreign Direct Investment and the Challenge of Political Risk, Economist Intelligence Unit and the Columbia Program on International Investment, London and New York, 96.
- 35 Yackee (2007), op. cit.

was an important consideration. Yackee concludes that there is little evidence from his survey to suggest that insurance underwriters, in general, consider BITs, and so it is unlikely that investors do either. Third, Yackee surveyed corporate counsel at major US corporations. Seventy-five (37%) of those surveyed responded. Even though awareness of BITs is probably increasing, with the growing number of high-profile investor-state arbitration claims, most respondents reported that they were fairly unfamiliar with them. With respect to their effectiveness, most of the respondents did not view the existence of a BIT as a significant factor in reducing the risk of adverse regulatory change. Only 5 per cent of respondents indicated that they viewed the existence of a BIT as very important to a decision to invest in a country.

### Conclusion

While a majority of studies to date have found a positive relationship between a country signing an IIA and increased investment into that country, other studies dispute those results on a variety of grounds.

Taking a step back from technical critiques of the empirical analyses, there is another reason to question the reliability of some of the studies showing a strong positive relationship between IIAs and investment flows. The magnitude of the positive correlation between signing an IIA and increased investment found in some studies, such as the near doubling of investment inflows predicted by Salacuse and Sullivan, seems implausibly large. IIAs will always be only one factor relevant to investor decision making. Depending on the investor and its business objectives, other host state factors will be much more significant, including: (i) the size of and rate of growth of the domestic market; (ii) per capita income; (iii) geographical proximity to investors' home states; and (iv) the ease of investing in a market, including the availability, cost, reliability and quality of inputs into production such as labour, electricity, telecommunications and transport infrastructure. It does not accord with the experience of host countries that BITs would have such a large independent effect, given the obvious importance of these various other factors. Consequently, very strong positive results, such as those in Salacuse and Sullivan, may themselves suggest that the various identified problems with empirical analysis of investment flows must be playing a significant role, and that the reliability of the results is suspect. This is not, however, the same thing as saying that IIAs do not attract investment. Nevertheless. the work of Yackee and others looking at alternative sources of evidence suggest that if there is a role, it is relatively small.

In addition, whatever the evidence of benefits associated with concluding IIAs in the form of increased FDI inflows, it is not clear that they are higher than the substantial costs developing countries incur in negotiating, signing, ratifying and complying with the obligations typically contained in such treaties. This concern regarding the net benefits of IIAs is shared by some of those researchers who found that FDI inflows did result from signing IIAs.<sup>36</sup>

<sup>36</sup> E.g. Neumayer and Spess, op. cit., at 1583; Büthe and Milner, op. cit., at 214.