ELSEVIER International Review of Law and Economics 27 (2007) 291–311

International Review of Law and Economics

BITs and bargains: Strategic aspects of bilateral and multilateral regulation of foreign investment

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Abstract

Bilateral investment treaties (BITs) provide international standards for the protection of foreign investment. Andrew Guzman has argued that BITs represent a prisoner's dilemma for developing countries—they would have been better off operating under customary international law. We formalize and critique Guzman's claim and demonstrate that a prisoner's dilemma is not necessary to explain the developing countries' behavior. Instead, the optimal strategy for newly independent states may have been to reap a windfall gain by a temporary period of expropriation and then to use BITs to commit to respecting property rights to new foreign investments. Finally, we argue that a multilateral agreement on investment (MAI) is now unlikely because the widespread coverage of BITs has narrowed the achievable surplus of an MAI.

JEL classification: F21; F53; F55; K33; O16; O19; O24

Keywords: Foreign direct investment; Bilateral investment treaties; Multilateral investment agreement; Prisoner's dilemma; Customary international law

States that receive foreign investment face a standard commitment problem: They want to attract investors because of the potential benefits that flow from capital investment, but once an investment is made, the host state has an incentive to renege on the terms of the investment, imposing high taxes and regulation or even nationalizing the investment. Enforceable contracts are the standard solution to these problems, but under customary international law,

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0144-8188/$ – see front matter
doi:10.1016/j.irle.2007.07.005

contracts between private investors and states are of dubious enforceability. Over the past 50 years, bilateral investment treaties (BITs) have emerged to fill this lacuna of international law by providing international standards for the treatment of foreign investments, a *pacta sunt servanda* ("pacts must be respected") for host states vis-à-vis foreign investors, and an international dispute resolution process for enforcing those standards. The history of the international legal regulation of foreign investment suggests that the current patchwork regime of BITs resulted from the strategic decisions of capital importers and exporters.

Andrew Guzman provides the seminal discussion of the impact of BITs in a 1998 paper entitled "Why LDCs Sign Treaties that Hurt Them." He argues that, on the margin, low-income countries find that signing a BIT is better than refusing to sign, but that a regime where BITs cover the world is worse for developing countries than a regime in which BITs do not exist. This is an important claim because the number of BITs has risen rapidly in recent years to about 2500 at the end of 2005. They are major instruments for the governance of cross-border investment. Furthermore, the United Nations Conference on Trade and Development (UNCTAD) has supported the BIT regime, organizing meetings in which developing and transitional countries sign BITs, not only with developed nations but also with each other (United Nations Conference on Trade and Development [UNCTAD], 2000). If this effort might do more harm than good, then it is important to understand how that could be so.

Guzman's basic argument is that a multi-party "prisoner's dilemma" exists under which each developing country has an incentive to sign BITs with developed countries that may supply foreign direct investment (FDI) or other types of investment capital (Guzman, 1998, pp. 666–667). At any point in time, the benefits to a less developed country of signing a BIT with a wealthier country may exceed the value of staying out and losing investment funds to rival countries. However, once all become part of a system that protects outside investors, BITs do not give any less-developed country a competitive advantage over any other, and most of the surplus from foreign investment is transferred to the investors. Thus, developing countries might be better off if the option of signing BITs were not available. Of course, as Guzman recognizes, the BITs regime may be better for developing countries than a no-BIT regime if the overall level of investment flowing to developing countries is sufficiently increased—the net result depends upon the relative magnitudes of the increased total flow of investment versus the lower benefits earned by developing countries per dollar of investment. But Guzman argues that the initial resistance of developing countries to rules of customary international law that protect foreign investment implies that the latter effect dominates, making developing countries worse off. As Guzman notes, his argument is a direct application of work on competitive markets and its extension to the inter-state competition for investment (Guzman, 1998, p. 672). The inter-governmental literature demonstrates both that competition can limit rent seeking by individual governments, but that, at the same time, it favors mobile owners of capital who can pick their locations (Rose-Ackerman & Engel, 2001; Rose-Ackerman & Rodden, 1997). Inter-state competition for investment funds can limit the benefits obtained by governments and their taxpayers.

This paper builds on and critiques Guzman's analysis. We first formalize Guzman's argument using a simple stylized model of BIT signings. Our analysis clarifies the assumptions behind Guzman's paper and also demonstrates weaknesses in his analysis. Given our critique of Guzman's model, we propose an alternative explanation for the initial resistance of developing countries to international rules protecting foreign investment and the subsequent rapid increase in BITs. In particular, we argue that the optimal strategy for newly independent states may have been to reap a windfall gain by a temporary period of expropriation and then to use BITs to commit to respecting the property rights of foreign investors going forward.

We then discuss an issue that Guzman only raises in passing. Despite the proliferation of bilateral agreements, attempts to create a multilateral agreement on investment (MAI) have foundered. Why is this so? One might have thought that as the number of very similar bilateral arrangements increased, a multilateral agreement would become easier, not harder, to accomplish. An MAI is a third option distinct from both a regime of customary international law and a system with broad BIT coverage. Guzman argues that the failure to conclude an MAI arises from the unwillingness of developing countries to assent to a multilateral instrument, and he argues that this further supports his hypothesis that international legal protections for foreign investment make developing countries worse off. He also argues that once BITs are in place, these same countries may prefer an MAI to a widespread BITs regime.[1] In contrast, we argue that a multilateral investment regime is *less* likely to arise once many BITs are in place. The widespread coverage of BITs narrows the surplus achievable by an MAI and may make potential signatories less willing to bear the costs of hammering out an agreement.

Section 1 gives a brief history of the evolution of the international law governing foreign investment and provides a strategic explanation for why developing countries individually signed BITs while collectively opposing the incorporation of a similar regime into customary international law. Section 2 formalizes this strategic explanation of BITs as a non-cooperative game. Section 3 considers the implications of the BIT model for the likelihood of a multilateral agreement on foreign investment. Section 4 concludes.

1. A brief history of international law on foreign investment

1.1. Customary international law

Prior to the modern era of bilateral investment treaties, customary international law on foreign investment provided weak protections to foreign investment. Traditionally, the international law protecting the property of foreign investors was part of the general law on state responsibility for injuries to aliens. Only the home state of an expropriated foreign investor, not the foreign investor, could seek redress by espousing the foreign investor's claim. Furthermore, a simple breach of contract between the host state and a foreign investor did not give rise to a claim under the law of state responsibility; rather, a host state was only liable to the home state for egregious treatment of a foreign investor that amounted to a breach of the "minimum standard" for the treatment of the foreigner.[2]

[1] Guzman (1998, p. 679). Guzman (p. 641, note 11) lists the few regional multilateral investment protection instruments that existed as of 1996 and notes that efforts at the OECD to produce a comprehensive treaty stalled.

[2] Weil (2001) describes the evolution of international law on foreign investment from the weak protections offered by the law on state responsibility to the robust protections in modern BITs.

Sornarajah (2004) partitions the history of international law on foreign investment into two periods: the colonial period and the post-colonial period. In the 18th and 19th centuries, most foreign investment was made by nationals of the colonial powers in their respective colonies and was protected by the governance structures set up by the imperial powers. Such colonial investment had no need for protection under international law.

However, the flow of foreign investment from the US to Latin America lacked the institutional protections enjoyed by foreign investment from European states to their colonies. It was in the context of disputes between US foreign investors and Latin American host states that two competing principles of international law on foreign investment emerged—the Hull Rule and the Calvo Doctrine.

The Hull Rule contains the classic formulation of the customary international law on compensation for expropriation as espoused by developed states: A foreign investor is entitled to "prompt, adequate and effective compensation" upon expropriation by the host state. This formulation of the rule of compensation originated in a letter from US Secretary of State Cordell Hull to the Mexican Government in 1938 during a dispute over Mexican expropriation of property owned by US nationals. It is assumed by some scholars to have been an accurate statement of customary international law at the time.[3]

However, a competing norm also emerged that disavowed any international legal rights of foreign investors. Named after Argentinean jurist Carlos Calvo, the Calvo Doctrine requires aliens to submit to exclusive jurisdiction of domestic courts and have no more rights than nationals of the host state. Thus, they are only entitled to compensation upon expropriation to the extent that the domestic law of the host state provides for compensation. The Calvo Doctrine was the predominant position of Latin American states on the law of foreign investment.[4]

The protections afforded foreign investment under customary international law were dramatically weakened in the 1960s, as newly independent states emerged from the process of decolonization and began threatening foreign investments with nationalization and regulation. Developing countries sponsored a series of resolutions in the United Nations General Assembly that progressively weakened protections for foreign investment in customary international law by casting doubt on whether the requisite state practice and *opinio juris* existed. In 1963, General Assembly Resolution 1803 declared that states had "permanent sovereignty over natural resources." It called for expropriated foreign investors to be paid "appropriate compensation, in accordance with the rules in force in the State taking such measures in the exercise of its sovereignty and in accordance with international law."[5] Importantly, it did not contain the Hull Rule's stronger "prompt, adequate and effective" formulation of the compensation standard.

More General Assembly resolutions followed in the 1970s that further eroded the Hull Rule. In 1973, Resolution 3171 reiterated the principle of permanent sovereignty over natural resources and expressed an even weaker compensation standard. It asserted "that each State is entitled to determine the amount of possible compensation and the mode of

[3] See, e.g. Dolzer (1981, p. 558).
[4] Sornarajah (2004, p. 38).
[5] G.A. Res. 1803, U.N. GAOR, 17th Sess., Supp. No. 17, at 15, U.N. Doc. A/5217 (1962), reprinted in 2 I.L.M. 223 (1963).

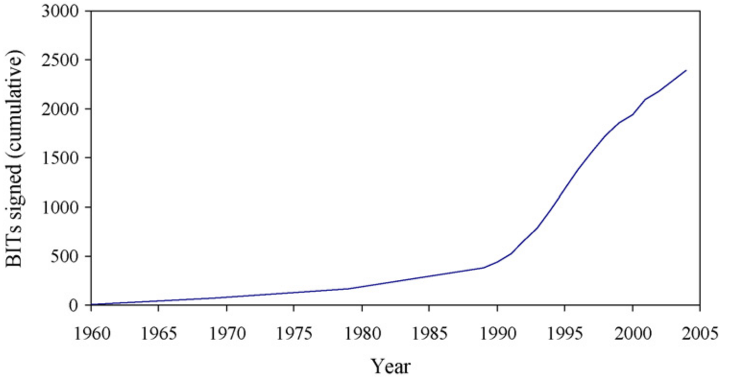

Fig. 1. The proliferation of BITs. Note: Data from UNCTAD, available at http://www.unctad.org/iia.

payment, and that any disputes which might arise should be settled in accordance with the national legislation of each State carrying out such measures," essentially a restatement of the Calvo Doctrine.[6] The following year the General Assembly declared the establishment of a "New International Economic Order," and again asserted the right of states to expropriate foreign investors in order to gain effective control over their natural resources.[7] The New International Economic Order included the Charter of Economic Rights and Duties of States, which reiterated that compensation was a matter of domestic law of the expropriating state.[8]

During this period, some developing countries expropriated foreign investors especially in natural resource sectors such as petroleum and mining. Kobrin (1984) found that the number of expropriations of foreign investors increased during the 1960s and early 1970s, peaking around 1975. Expropriations then declined, becoming rare by the early 1990s.[9]

1.2. The rise of bilateral investment treaties

Despite the weakening of customary international legal protections of foreign investment during the post-colonial period, the period also witnessed the beginning of a regime of bilateral treaties to protect foreign investment. Although they collectively resisted a stringent compensation standard in the U.N. General Assembly, individual developing countries concluded bilateral investment treaties with developed states, beginning with a treaty between West Germany and Pakistan in 1959.[10] Fig. 1 depicts the growth in the number of BITs signed since 1960. In the past 15 years, the number of BITs signed has exploded, reaching

[6] G.A. Res. 3171, U.N. GAOR, 28th Sess., Supp. No. 30, at 52, U.N. Doc. A/9030 (1973), reprinted in 13 I.L.M. 238 (1974).

[7] G.A. Res. 3201, U.N. GAOR, 29th Sess., Supp. No. 1, at 3, U.N. Doc. A/9559 (1974), reprinted in 13 I.L.M. 715 (1974).

[8] Charter of Economic Rights and Duties of States, Article 2(2)(c), G.A. Res. 3281, U.N. GAOR, 29th Sess., Supp. No. 31, at 50-55, U.N. Doc. A/9631 (1974), reprinted in 14 I.L.M. 251 (1975). Dolzer (1981) argues that this resolution establishes that the Hull Rule no longer represents customary international law.

[9] Minor (1994).

[10] For a general historical account of the growth of BITs, see United Nations (1992).

2392 by the end of 2004.[11] BITs are now the dominant source of international law protecting foreign investment in developing countries, and they provide robust protections to foreign investors. However, almost no BITs have been signed between developed countries probably because investors believe that the domestic legal systems in the host countries are sufficient and will not be applied in a discriminatory fashion.[12]

BITs typically require compensation upon expropriation; they also give other rights to foreign investors to be treated as well as domestic investors ("national treatment") or other foreign investors ("most favored nation treatment"). BITs typically provide for international arbitration of disputes. Early BITs provided only for state–state arbitration, but in the early 1970s a few treaties provided for investor-state arbitration and by 1990, as the number of BITs took off, investor–state arbitration had become the dominant mode of dispute resolution stipulated in new BITs (Montt, 2007).[13] The 1965 Washington Convention established the International Center for the Settlement of Investment Disputes (ICSID), housed within the World Bank, as an arbitration institution for resolving investor–state disputes, and accession by each party to the Washington Convention is now often a prerequisite to conclusion of a BIT.[14] Recently, countries have begun renegotiating BITs and typically agree to stronger investor protections than were provided in the original BITs.[15]

Although the terms of BITs are generally reciprocal, providing the same rights for each party, until the 1990s most BITs were signed between a developing country and a developed country, and, in practice, covered a one-way flow of investment.[16] In the early 1990s, emerging economies in the developing world and in Central and Eastern Europe began signing BITs with each other and with poorer countries throughout the world. During the 1990s developing countries signed 477 BITs with developed countries, 436 with other developing countries, and 230 with countries in Central and Eastern Europe (UNCTAD, 2005b, p. 5). This trend, which continues today, is partly a result of a strong push by UNCTAD to extend the reach of BITs, but it also reflects the growing importance of emerging economies such as China, India, and Malaysia as international investors and their consequent demand for greater legal protections of their foreign investments. Nevertheless, most

[11] Only 1718 BITs had actually entered into force, however (United Nations Conference on Trade and Development (2005, p. 7; hereafter UNCTAD).

[12] A tabulation of BITs as of January 2000 showed that the countries of Western Europe (excluding Malta), the US, Canada, Iceland, Israel, Japan, Australia, and New Zealand had only four BITs between them (UNCTAD, 2000, pp. 7–14).

[13] Under traditional international law, states are the only subjects that can enter into binding agreements; agreements between non-state entities such as multinational corporations and states are generally not enforceable. Most modern BITs provide a mechanism for states to enter into binding agreements over the terms of a foreign investment with corporations (Weil, 2001).

[14] Convention on the Settlement of Investment Disputes between States and Nationals of Other States, Mar. 18, 1965, 17 U.S.T. 159, reprinted in 4 I.L.M. 524 (1965), hereafter ICSID Convention.

[15] UNCTAD (2005a, p. 6).

[16] UNCTAD (2000). Sornarajah (2004, p. 206) emphasizes that even BITs signed between developing countries are typically between countries with a one-way flow of investment between them. An important exception is the North American Free Trade Agreement, which contains an investment chapter modeled after US BITs and covers reciprocal investment flows among the US, Canada, and Mexico. North American Free Trade Agreement, Chapter 11, Dec. 17, 1992, Can.-Mex.-U.S., 32 I.L.M. 289 and 605 (1993).

FDI still originates in the developed world. In 2004 UNCTAD estimated that of total FDI outflows of $730 billion in 2004, $637 billion or 87% originated in developed countries. On the other side of the ledger, inflows to developing countries and South East Europe and the CIS have risen to $280.3 billion or 40% of the total,[17] but the top five recipients, China, Hong Kong (China), Brazil, Mexico, and Singapore accounted for over 60% of this amount, and, as UNCTAD points out, the figures for Hong Kong and Singapore are distorted upward by roundtrip FDI (UNCTAD, 2005b, 2006, p. 7, 36n6). Thus it seems reasonable to suppose that most developing countries receive the bulk of their FDI from developed countries even though the share coming from emerging economies has been growing over time.

1.3. Attempts at a multilateral agreement on investment

Despite the growing number of bilateral agreements, attempts to construct a multilateral regime for regulation of foreign investment, akin to the multilateral regime for trade under the WTO, have foundered.

The Washington Convention of 1965 established a multilateral dispute resolution mechanism for investor–state disputes, but it represents a lone success in establishing a multilateral regime for foreign investment. However, the Convention does not provide any legal standards for treatment of foreign investment and simply addresses procedural issues of dispute resolution.

In the 1960s, the OECD began drafting a multilateral agreement to govern foreign investment, the Draft Convention on the Protection of Foreign Property,[18] which contained robust protections for foreign investment. The treaty was never adopted, but it served as a model for subsequent European BITs. In 1995, the OECD again began working on a multilateral agreement on investment. The MAI was initially intended to be an agreement between the developed states of the OECD but was to be open to accession by developing states. Developing states participated in the negotiations only as observers and thus had little ability to influence the negotiations.[19] OECD member countries planned to present the agreement to developing countries as a *fait accompli* after successfully negotiating the terms among themselves.[20] The MAI provided the right to non-discriminatory and most-favored-nation treatment[21] and required compensation for both direct and indirect (i.e. regulatory) takings.[22] The draft text was generally more protective of foreign investment than most BITs; it included a right of nationals of each party to establish foreign investments in the

[17] Note that $280.3 billion is 38% of $730 billion, the measure of outflows. However, $280.3 billion is 40% of inflows of $695 billion. The discrepancy between inflows and outflows of $35 billion is just one indication of the problems with the data on FDI. Preliminary figures for 2006 report a total or $896.7 billion in FDI inflows with $323.4 billion or 36.1% going to developing countries and those in South East Europe and the CIS. The 2005 figures for inflows are revised figures presented in UNCTAD (2006) along with preliminary 2005 figures.

[18] Schwarzenberger (1969, pp. 153–169) provides a description and analysis of the draft convention.

[19] Sornarajah (2004, p. 293).

[20] Sornarajah (2004, p. 291).

[21] Muchlinski (2000, p. 1043).

[22] Muchlinski (2000, p. 1045).

territory of the other parties[23] and prohibited host states from imposing conditions on foreign investors.[24]

But this attempt too ultimately failed because OECD member states were unable to agree on some basic investment liberalization issues. First, some OECD members were reluctant to open certain industries to foreign investment. In particular, Canada and France were concerned that their cultural industries would be swamped by the US entertainment industry.[25] The draft agreement permitted countries to exempt particular industries,[26] and countries submitted extensive lists of exceptions, but no agreement was ever reached on this aspect of the treaty.[27] Another sticking point was the right of EU countries to discriminate in favor of other EU countries. The EU proposed creating an exception that would have allowed EU states to adopt laws that discriminated in favor of other EU states. Otherwise, due to the most-favored-nation clause in the MAI, all parties to the MAI would have had to be treated by EU members like other EU members.[28] In addition, anti-globalization non-governmental organizations objected to the absence in the draft text of any responsibilities of multinational corporations for the environment or human rights violations. They mobilized, applying domestic political pressure within OECD countries.[29] Due to these difficulties, the agreement was officially declared dead in 1998.[30] Since the failure of the OECD MAI, a working group has been formed within the WTO to explore creating a regime for investment within the auspices of the WTO.[31]

1.4. Explaining the success of BITs and the failure of multilateral efforts at investment regulation

The history of international law on foreign investment presents a seeming inconsistency. Although opposing stringent standards for the protection of foreign investment in customary international law, developing countries have rushed to sign bilateral agreements that contain these same high standards. Guzman (1998) offers an explanation for this puzzle, arguing that each individual developing country had incentives to sign BITs because it believed

[23] MAI Draft Text as of April 24, 1998, Chap. III, para 1. These rights are known as “rights of establishment” or “pre-entry rights” and would constitute a significant liberalization of investment flows. Most existing BITs do not provide a right of establishment and extend protections only to “approved” investments (Sornarajah, 2004, p. 215).

[24] MAI Draft Text as of April 24, 1998, Chap. III. Such conditions are known as “performance requirements” and examples include requiring foreign investors to purchase a certain proportion of inputs locally and setting minimum export levels.

[25] Sornarajah (2004, p. 292).

[26] MAI Draft Text as of April 24, 1998, Chap. IX.

[27] Muchlinski (2000, p. 1042).

[28] UNCTAD (1999, pp. 14–15).

[29] Sornarajah (2004, p. 292).

[30] On Oct. 28, 1998, the OECD Chairman’s released a statement explaining the failure of the negotiations over the MIA, available at http://www1.oecd.org/media/release/nw98-101a.htm, stating that “[t]here was a consensus among delegates on the need for and value of a multilateral framework for investment. . . . At the same time, delegates noted that significant concerns have been raised during consultations on the MAI. They include issues of sovereignty, protection of labour rights and environment, culture and other important matters.”

[31] Sornarajah (2004, pp. 303–311) discusses the recent attempt to establish an investment regime under the WTO.

that doing so would result in a diversion of investment flows from capital-importers not covered by BITs to countries covered by BITs. This greater flow of foreign investment into BIT countries would initially result in higher total benefits to BIT countries from foreign investment, despite the reduction in the ability of the host state to extract value from each unit of foreign investment. Countries that initially do not sign BITs would then experience a drop in their inward flow of foreign investment and thus have an incentive to sign BITs to eliminate the advantage of BIT countries.

As BITs proliferate, competition between capital-importers will eventually result in a lessening of the gains to the importing country from each unit of foreign investment and may ultimately result in an overall welfare loss in capital-importing states relative to a world without BITs. In the absence of BITs, Guzman argues, developing countries would still receive some foreign investment flows and may be able to reap greater aggregate benefits from foreign investment than under the BIT regime because they would be able to extract more value from each unit of foreign investment. Their inability credibly to commit to foreign investors would lessen competition between developing countries for foreign investment. If investment is sufficiently "price" inelastic, developing countries would be better off under a legal regime that does not provide strong protections to foreign investment or for the enforceability of contracts between foreign investors and host states than they are under the current patchwork BIT regime.

Guzman (1998, p. 676) argues that the resistance of developing countries to the incorporation of the Hull Rule into customary international law implies that developing countries are indeed worse off under a regime that gives legal protections to foreign investors against expropriation. In the fight against the Hull Rule, they were essentially acting as a cartel. The General Assembly provided an institution within which to collude. Acting together, they maximized their collective welfare. However, private incentives to cheat on that cartel were strong, and developing countries did so by signing BITs.

Obviously, for Guzman's strategic explanation of BIT signings to make sense, BITs must have an impact on foreign investment flows. However, the empirical evidence for such an effect is conflicting. Neumayer and Spess (2005) find that the number of BITs signed has a large impact on subsequent FDI inflows. However, using different methodologies and data sets, Hallward-Driemeier (2003) concludes that BITs have little impact on foreign investment flows. In addition, an examination of the geographical spread of BITs shows that many early BITs were signed with very low-income countries perhaps as a substitute for generous infusions of foreign aid. They were not primarily motivated by the commercial interests of developed countries. In short, the empirical impact of BITs remains contested, but we note that officials of both developing and developed states seem to believe that the BITs they sign will stimulate investment.[32] It is also an article of faith at UNCTAD which promotes such treaties as part of its strategy to increase cross border investment.

[32] This belief is typically reflected in the language of the treaty. For example, the BIT between Argentina and the United Kingdom states that the countries have agreed to the BIT "[d]esiring to create favorable conditions for greater investment by investors of one State in the territory of the other State;" and "[r]ecognising that the encouragement and reciprocal protection under international agreement of such investments will be conducive to the stimulation of individual business initiative and will increase prosperity in both States." Agreement Between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Republic of Argentina for the Promotion and Protection of Investments, UK Doc. Argentina No. 1 (1991), CM 1449.

There are several problems with sorting out the effect empirically. In particular, once BITs become pervasive, their impact on any one country's inward FDI is likely to be small. In the extreme, if all developing countries have signed BITs with a particular developed country, the BIT variable will have no explanatory power in cross-sectional data because it does not vary across the countries of interest. That could be so even if abrogating such a treaty would lead to a large drop in investment and even if FDI flows from rich to poor countries would be lower in a non-BIT world. Tobin and Rose-Ackerman (2007) in a recent paper demonstrate that BITs do seem to have a positive but declining marginal impact on FDI as the world coverage of BITs increases. Our analysis proceeds on the assumption that BITs do have a causal effect on foreign investment, as they enable host states credibly to commit not to expropriate foreign investors. However, we recognize that this effect remains contested as an empirical matter.

2. The BIT model

We formalize Guzman's account of the strategic aspects of BITs with a simple non-cooperative game theoretic model and derive the formal condition necessary for BITs to represent a prisoner's dilemma. We then offer an alternative explanation for the resistance of developing countries to the Hull Rule and argue that a prisoner's dilemma is, therefore, not necessary to explain the behavior of developing countries.

In our model we retain Guzman's distinction between rich capital exporters and poor capital importers, although we recognize that, at present, some BITs function as reciprocal agreements between countries. However, in practice, even BITs between "developing" countries usually involve one country that expects to be the source of most investment funds and one that expects to be the host. Furthermore, BITs signed between two very low-income countries are likely to be of only symbolic importance and are not the result of a competitive search for investment funds. Thus we believe that it is valuable to model BITs as devices to encourage investment from a richer to a poorer country. Because we are concerned with BITs, not FDI flows in general, we model only the flow of capital from rich to poor countries; the capital that flows between rich countries is outside the scope of our model.

2.1. Players

Assume that many rich countries each export capital to a large number of poor countries and that poor countries are homogenous and offer identical investment opportunities. The only difference between poor countries is the legal regime that governs their foreign investment relationships with rich countries—that is, whether they have or have not signed a BIT with each rich country. Assume that the choices of rich country investors depend only on the regime in place with their home country. They make their choices independently of the legal regime governing investments between poor countries and *other* rich countries. This simplifying assumption allows us to analyze the legal regimes of each rich country separately, vastly simplifying the analysis. The model presented below analyzes the legal regimes governing investment flows between a single rich country and many poor countries.

The entire world economy is then just a series of replicas of this model, one for each rich country.

2.2. Strategies

Investment between a particular rich country and each poor country can either be governed by a BIT or depend on the weak protections of customary international law and host state domestic law. Assume that the rich country's investors always prefer the protections offered by BITs.[33] Poor countries face a more difficult choice; although BITs may increase the flow of investment to a poor country, we assume that they limit the country's ability to extract value from that flow.

Poor countries choose whether to propose a BIT to the rich country, knowing that the rich country will always agree to a BIT. We assume that there is a continuum of poor countries subscripted by $i \in [0,1]$. Let $b_i \in \{0,1\}$ denote whether poor country i proposes a BIT to the rich country, with $b_i = 1$ if so, $b_i = 0$ otherwise, and let b denote a particular profile of such choices by poor countries. Without loss of generality, order the poor countries so that all poor countries that offer a BIT to the rich country are ordered ahead of the non-BIT poor countries in any given strategy profile b.[34] The aggregate fraction of all possible BITs signed with the rich country is then:

$$n(b) = \int_0^1 b_i \mathrm{d}i \tag{1}$$

Thus, $n(b)$ can range from zero if no BITs are signed to one if all poor countries sign a BIT with the rich country. Note that, because of the assumption of a continuum of countries, the aggregate fraction of BITs is unaffected by the choice of any individual poor country. This captures the perfect competition assumption that each poor country is small compared to the aggregate size of the world economy.

2.3. Payoffs

Assume that when a poor country signs a BIT with a rich country, the benefits to the poor country are a function of the total number of BITs signed by that rich country with *other* poor countries. Denote this benefit function by $t()$. Similarly, the benefits each poor country derives from foreign investment from the rich country when it has *not* signed a BIT is a function of the total number of BITs signed by the rich country, denoted by $c()$. The shape of the $t()$ and $c()$ functions determine the equilibria of the model.

To motivate the assumptions on the $t()$ and $c()$ functions presented below, consider a simple example. Suppose that there are two identical poor countries, A and B, and one rich country. With no BITs, suppose that the rich country invests X in each country each year. Suppose that the rate of return to foreign investment is r and the returns are split equally

[33] That is, signing BITs with every poor country is a strictly dominant strategy for the rich country. We present the reduced form model with the strictly dominated strategy elements removed from the rich country's strategy set, leaving only a trivial singleton strategy set for the rich country—sign all BITs.

[34] This ordering is used so that b is integrable with respect to i.

between the investor and the host country. With no BITs, each poor country earns $rX/2$ and the rich country investors earn a total of rX.

Now suppose that country A signs a BIT with the rich country. Assume that A now obtains less of the return on each dollar of foreign investment because it has committed to the terms of the BIT. Under the BIT, A obtains only $w < 1/2$ of the gains. Suppose that, because of the BIT, total FDI increases by I, all of which goes to A, and, in addition, A now receives d units of FDI funds that would otherwise have been invested in B. Thus A's FDI increases to $X + I + d$, and B's falls to $X - d$. With just this one BIT in the economy, country A earns $wr(X + I + d)$. Assume this is greater than the $rX/2$ it received without the BIT. Simplifying, this implies that $w(I + d) > X[(1/2) - w]$. The rich country investors now earn more from their investments in poor countries: $r[(1 - w)(X + I + d) + (X - d)/2] > rX$. Country B, however, earns only $r(X - d)/2$, which is less than the $rX/2$ it received with no BITs.

B now has an incentive to sign a BIT as well. Suppose that if it does so, total FDI increases by another I units and that the d units of FDI diverted to A now flow again to B. Both A and B now receive $X + I$ units of FDI and obtain benefits of $wr(X + I)$. B has an incentive to sign this BIT if these benefits are higher than the benefits it obtained from FDI when only A had a BIT. This is true if $wr(X + I) > r(X - d)/2$ or $wI + d/2 > X[(1/2) - w]$. Note that under the assumption we made above that guaranteed that the first BIT benefited A – i.e. $w(I + d) > X[(1/2 - w]$ – this condition holds for B now as well, and B has an incentive to sign the BIT.

In this simple model, both A and B have incentives to sign BITs with the rich country. However, whether A and B are made better off by their BITs relative to a world without BITs depends on the parameters of the model. Both A and B are better off if and only if: $wr(X + I) > rX/2$ or $rwI > rX[(1/2) - w]$, i.e. the gains from the additional investment generated by the BITs outweigh the reduction in the benefits from investments that would have been made without a BIT. If, instead, $rwI < rX[(1/2) - w]$ then poor countries are made worse off by BITs. The rich country clearly does better with both BITs signed—its investors now earn $2(1 - w)r(X + 2I) > rX$. This example makes clear that poor countries may be caught in a prisoner's dilemma where they have incentives to sign BITs but are made worse off with a BITs regime. However, it also illustrates that such a result is by no means necessary. It depends on the tradeoff between FDI creation and sharing of gains between investors and host countries.

Moving from our simple three-country model back to the continuous case, the underlying dynamic is the same. Countries will sign BITs whenever it is in their interest, but may not be able to maintain those gains as more and more countries sign up. Consider first a world in which no poor countries have signed BITs, so that $n(b) = 0$. World foreign investment flows are at their lowest in this state of the world, as poor countries have not committed to protect foreign investors.

Now consider what happens when a single poor country signs a BIT with the rich country. The rich country's investors now have a single place which has made a binding international legal commitment to respecting property rights. As in the simple example, investors prefer the protections the BIT offers to the protections they are able to create under contracts and customary international law. Consequently, some of the foreign investment that would have flowed to other poor countries is diverted to the BIT host state. Furthermore, the total amount of foreign investment increases, as the lowered risk of expropriation in the BIT state increases the expected return to foreign investments. The poor country with the lone BIT thus receives an increase in the flow of investment and has substantial bargaining power vis-à-vis the rich country's investors as it is the only poor country that offers such a safe investment climate. Thus, we assume the benefits to the poor country from investment under that first BIT are greater than the benefits from investment under no BITs. In terms of the model, we assume

$$t(0) > c(0) \tag{2}$$

Now suppose another poor country concludes a BIT with the rich country. With another host state making a binding legal commitment to respect the property rights of foreign investors, the first poor country to sign a BIT has lost some bargaining power. Furthermore, some of the foreign investment that had been diverted to the first BIT country is instead diverted to the second BIT country. Finally, total world investment flows increase because another set of investment opportunities exists in a country with a secure property rights environment. As more poor countries sign BITs, the previous BIT countries receive still less diverted investment, and they have less bargaining power vis-à-vis rich country investors. Thus, we assume that the benefit that poor countries derive from investment relationships under a BIT is *decreasing* in the total number of BITs signed by the rich country, or:

$$t'() < 0 \tag{3}$$

Consider the situation of poor countries that have not yet signed BITs. As argued above, some of the investment to these non-BIT countries is diverted to BIT countries. Thus, signing a BIT imposes a cost on non-BIT countries so that the benefits to investments in countries that are *not* covered by a BIT are *decreasing* in the total number of BITs, or:

$$c'() < 0 \tag{4}$$

Finally, consider the situation in which the vast majority of poor countries have signed BITs, but there remain a few holdout poor countries that have not signed a BIT. These countries receive far diminished investment flows, and despite their ability to extract maximum value from each unit of foreign investment, they receive so little investment that they would be better off signing BITs so that they can successfully compete for foreign investment. We assume then that

$$t(1) > c(1) \tag{5}$$

The utility function of each poor country is simply:

$$u_i(b) = b_i t[n(b)] + (1 - b_i)c[n(b)] \tag{6}$$

Eq. (6) says that the country earns $t(n)$ with a BIT and $c(n)$ with no BIT at every level of n. Fig. 2a and b sketches two sets of curves that satisfy these assumptions. $t()$ may remain above $c()$ over the entire domain, as in Fig. 2a, or the two curves might cross and then re-cross, as in Fig. 2b.

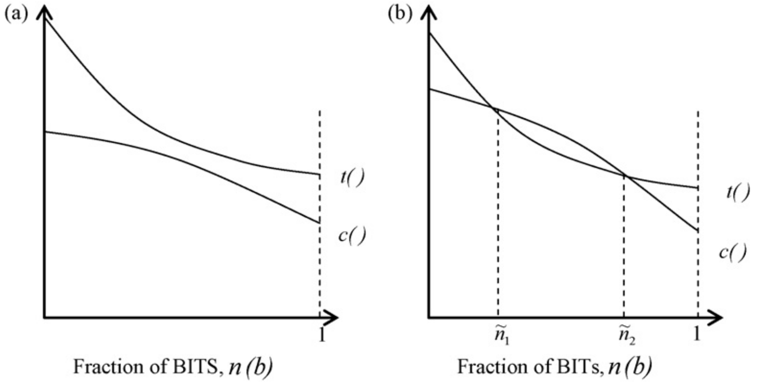

Fig. 2. Benefits to poor countries under alternative BITs regimes.

2.4. Equilibria

First, note that any strategy profile b such that $t[n(b)] > c[n(b)]$ and $n(b) < 1$ is not a Nash equilibrium of the game because each poor country that has not signed a BIT has an incentive to deviate by signing a BIT because the returns to investment under a BIT exceed the returns to investment under customary international law. Thus, given Eq. (2), the strategy profile in which no BITs are signed is not a Nash equilibrium.

2.4.1. Partial bilateral treaty equilibria

If the $t()$ and $c()$ curves cross at some $\tilde{n} \in (0, 1)$, as in Fig. 2b, then the strategy profile that results in $n(b) = \tilde{n}$ BITs is a Nash equilibrium of the game. This is so because with $t(\tilde{n}) = c(\tilde{n})$, each poor country is indifferent among all strategy choices since, given the choices of other poor countries, the returns to investment relationships governed by BITs are equal to the returns to investment relationships governed simply by customary international law. The set of partial bilateral treaty equilibria is $\{b{:}c[n(b)] = t[n(b)], n(b) \in (0,1)\}$. A partial bilateral treaty equilibrium is stable if the $t()$ curve crosses the $c()$ curve from above, for example where $n(b) = \tilde{n}_1$ in Fig. 2b.

In contrast, a partial bilateral treaty equilibrium is unstable if the $t()$ curve crosses the $c()$ curve from below; a slight perturbation in the number of BITs signed would cause a change to a different equilibrium. In Fig. 2b, $n(b) = \tilde{n}_2$ is unstable because if a few more countries signed BITs, it would create an incentive for all poor countries to sign BITs, leading to a new equilibrium at $n(b) = 1$. Similarly, if a few less poor countries signed BITs, the equilibrium would unravel and come to rest at $n(b) = \tilde{n}_1$.

2.4.2. Full bilateral treaty equilibrium

The strategy profile in which $b_i = 1 \forall i \in [0,1]$, resulting in the full set of BITs ($n(b) = 1$), is a Nash equilibrium of the game if and only if $t(1) \geq c(1)$, which we have assumed is true. If the $t()$ curve remains above the $c()$ curve over the entire domain, as in Fig. 2a, such that $t(n) > c(n) \forall n \in [0,1]$, then this equilibrium is the *only* equilibrium of the game.

If both a partial bilateral treaty equilibrium and a full bilateral treaty equilibrium exist as in Fig. 2b, then the payoffs to poor countries are greater in the partial treaty equilibrium than in the full treaty equilibrium, since Eq. (3) implies that $t(\tilde{n}) > t(1) \forall \tilde{n} < 1$. The rich country would prefer the full bilateral treaty equilibrium to the partial bilateral treaty equilibrium because, by assumption, the rich country always derives greater benefits from foreign investment under BITs than from investment under customary international law.

2.5. Analysis

The equilibria derived above apply to the investment relationships of each rich country because we have assumed that these investment relationships do not interact. Thus, the model predicts that each rich country will succeed in concluding BITs with poor countries until either the benefits derived by poor countries from BIT and non-BIT investments are equalized or all poor countries have concluded BITs with the rich country. Importantly, the model does not assume that capital-importing countries end up worse-off in the full BIT equilibria relative to the state of the world without any BITs signed. Only in a partial BIT equilibrium do they clearly derive fewer benefits from foreign investment under a BIT with a rich country than they would if BITs were not available.

Guzman claims that BITs “are harmful to capital importers as a group because they lead to a world in which contracts between firms and host states are binding” (Guzman, 1998, p. 679). He argues that developing countries resisted the incorporation of the Hull Rule into customary international law because they are worse off under a regime in which they are all able to make binding commitments to not expropriate foreign investors than they are under a regime without a strict compensation standard in which developing countries are able to extract more value from foreign investors. BITs permit developing countries to credibly commit to the terms of investments. Guzman argues that under a BITs regime, developing countries compete for foreign investment by bidding down the implicit price offered to foreign investors, with the result that investors reap most of the surplus from foreign investment. In contrast, he claims that if developing countries are unable to make binding commitments, competition for foreign investment will be less, and host states will obtain a greater share of the benefits from the smaller investment flow that remains. But this strong claim is not a logically necessary consequence of the model. The net effect of FDI on developing countries under a BIT regime compared with traditional customary international law is an empirical question. Guzman, however, argues that if poor countries are not worse off under BITs, then the two phenomena of developing countries resisting the Hull Rule yet aggressively signing BITs are irreconcilable (Guzman, 1998, pp. 676–677).

Translating Guzman’s claim into our model, Guzman implies that either the world is in a partial bilateral treaty equilibrium or it is in a full bilateral treaty equilibrium and

$$t(1) < c(0) \tag{7}$$

If either holds, then poor countries face a true prisoner’s dilemma in which the non-cooperative payoffs are less than the cooperative payoffs, yet each poor country faces incentives not to cooperate. This would explain poor countries’ resistance to the Hull Rule.

However, this condition is not a necessary condition for developing countries to sign BITs. If the BITs curve, $t()$, remains sufficiently above the customary international law curve, $c()$, poor countries will have an incentive to sign BITs and end up *better off* in equilibrium. Thus, the individual non-cooperative choices made by poor countries might, as Guzman asserts, produce an outcome that is worse than the pre-BIT status quo, but this is not a *necessary* implication of the above model.

Guzman (1998, p. 676) recognizes that whether BITs do indeed make developing countries worse off is an empirical question, but he argues that the resistance of developing countries to the Hull Rule can only be rationalized if stringent legal rules protecting foreign investment made developing countries worse off. Thus, we conclude our analysis by asking if there might be an alternative explanation for developing countries' opposition to the Hull Rule.

One possibility is to add time and history to the story. In the 1960s, the newly decolonized nations had little to gain by respecting investments made in the past. Even if the BIT regime provided higher payoffs from future investment than a non-BIT regime for poor countries, the availability of bilateral treaties as a commitment mechanism may have created an incentive for poor countries to resist the Hull Rule and expropriate past investments. Their optimal strategy would be to expropriate past investments to extract value, but then to commit to respecting property rights in the future. The Hull Rule of customary law would not have allowed them to extract a windfall from this temporary period of expropriation. If BITs had not been available, the optimal strategy for poor countries might have been to support a customary law rule requiring compensation and not to expropriate because of reputation concerns. However, the availability of BITs as a credible commitment device going forward created a commitment problem for *rich* countries. Rich countries could not credibly commit to punish poor countries for expropriation by refusing to invest in the future or by refusing to sign BITs. A BIT provided a way for a country to make a clean break with the past and announce a credible newfound commitment to protecting the property of foreign investors.[35]

This alternative explanation is supported by the history of expropriations of foreign investors. As documented by Kobrin (1984) and Minor (1994), expropriations of foreign investors by developing countries increased throughout the 1960s and peaked shortly after the New International Economic Order resolutions were passed in the U.N. General Assembly in the early 1970s. Subsequently, developing countries rushed to sign BITs and expropriations became increasingly rare. Thus, resistance by developing countries to a stringent compensation standard in customary international law does not imply that BITs are harmful to developing countries. The resistance to the Hull Rule may rather have represented an optimal strategy for dealing with past investments despite the fact that BITs are beneficial as a way to attract new investment.

[35] Of course, as one reader of this paper suggested, even a treaty-based commitment might not be credible coming from some polities. However, it remains true that "almost all nations observe almost all principles of international law and almost all of their obligations almost all of the time" (Henkin, 1979, p. 47), a fact that we take as given in our analysis. For a review of various explanations for the widespread compliance with international law, see Koh (1997).

This explanation also sheds some light on an empirical puzzle outside the framework of our model: the timing of the sudden increase in BIT signings that occurred in the 1990s. Although the first BIT was signed in 1959, by the end of 1989 there were only 385 BITs in the world economy. However, by 2004 the number had ballooned to 2392.[36] The alternative explanation offered above for developing country resistance to the Hull Rule suggests that they had an incentive to wait until they had extracted more value from investment left from the colonial period before entering into BITs. Almost all the early treaties were signed between Germany and Switzerland, on the one hand, and poor countries, mostly in Africa. Of the 56 BITs signed between 1959 and 1967, 45 were signed by either Germany or Switzerland. Neither was a major colonial power, and they signed BITs with countries that would not have had much German or Swiss capital to expropriate. What we are suggesting is that the newly independent states faced a tradeoff between expropriating the capital stock left over from the colonial period and providing guarantees designed to encourage new investment. Most BITs, however, cover past investments so our suggestion needs to be tested against the experience of BIT negotiators who dealt with the issue of property expropriated before BITs were signed. Did developed countries simply write off past actions by newly independent states as a *fait accompli*, or did they try to structure the BITs to permit compensation claims based on expropriations prior to the BIT?[37]

3. Implications of BITs for a multilateral agreement on investment

Finally, consider the difficulties of concluding a multilateral agreement on investment. Such an MAI would result from a cooperative bargaining process and must be individually rational for each country. Assume that an MAI requires unanimous agreement by all countries, rich and poor, and that it would supersede all existing legal regimes governing foreign investment. Assume further that the existing legal regimes that govern investment flows from each rich country are equilibria of the BIT game of Section 2, so that the equilibrium payoffs of the BIT game form the threat values for bargaining over the MAI.

It should be possible to create an MAI that would produce larger aggregate benefits from investment than any set of bilateral arrangements because providing a single uniform multilateral regime reduces the transaction costs of foreign investment.[38] Furthermore, if the existing set of bilateral relationships does not provide legal protections for investment

[36] UNCTAD (2005b, p. 24).

[37] Two other factors contributed to the rapid increase in BITs. One was the dissolution of the Soviet Union and the consequent emergence of formerly socialist states in Central and Eastern Europe. Those countries signed 455 BITs in the 1990s or 29% of all those signed in the decade (UNCTAD, 2000, p. 4). Secondly, UNCTAD pushed BITs as a way of strengthening investment cooperation *between* developing countries beginning in 1999 (UNCTAD, 2000, pp. 2–3), and this effort led to an increase in treaties between developing countries. Whether such BITs have actually increased cross-border investment flows remains to be seen. Investment inflows to very low-income countries remain at very low levels. In 2005 the entire continent of Africa was estimated to have received only 3% of all inward FDI (UNCTAD, 2005).

[38] An MAI could provide weakly larger aggregate benefits because, at the very least, it could reproduce the exact set of legal rules contained in a BIT regime. An MAI could likely improve on this complex regime through codifying these legal rules into a single code, as well as by improving on the substantive legal rules. The complexity of the current regime of BITs imposes costs on both investors and host states. UNCTAD (2005, p. 15) describes this

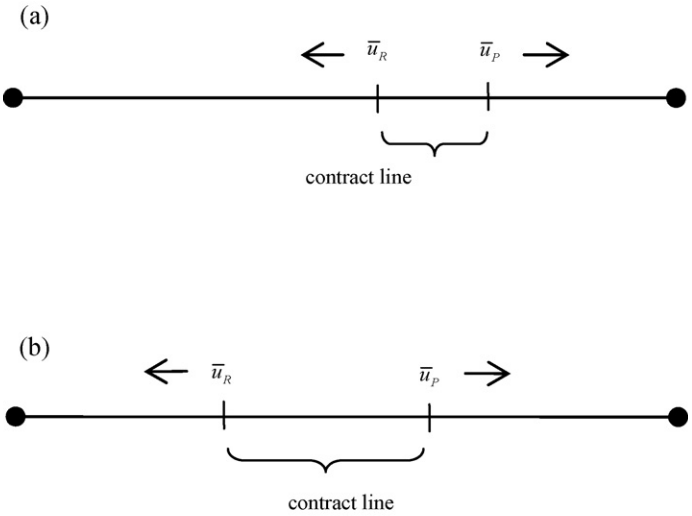

Fig. 3. (a) Bargaining from full BIT equilibrium; (b) bargaining from partial BIT equilibrium.

flows between every country pair, an MAI would be an improvement by extending legal protection to those investment flows. It could, for example, cover investment flows between rich countries as well as any rich-poor flows not covered by existing BITs. Denote the total sum of benefits generated by foreign investment between any rich country/poor country pair under an MAI by M. The surplus from this simplification and rationalization of the legal framework protecting foreign investment must be divided between the rich and poor countries. Terms in an MAI that would affect this division (and potentially also the size of the surplus) include the amount of flexibility poor countries retain in regulating foreign investment (e.g. requiring foreign investors to purchase local inputs) and any environmental or other standards imposed on investors.

If the MAI must be unanimously adopted, it will be concluded only if the division of the resulting surplus is individually rational for each country, that is, if the payoffs under the MAI exceed the equilibrium payoffs of the BIT game. Consider, then, the division of this surplus under both a full bilateral treaty equilibrium status quo, in which all possible BITs are signed, and a partial bilateral treaty equilibrium, in which each rich country has signed BITs with a fraction of poor countries. Fig. 3a depicts a line of length M. The payoffs to rich countries under the full-bilateral treaty equilibrium are marked on the line as $\bar{u}_{\mathrm{R}}$, measured from the left. The payoffs to poor countries under the full-bilateral treaty equilibrium are marked on the line as $\bar{u}_{\mathrm{P}}$, measured from the right. The interval between these points is the contract line—the set of possible surplus divisions that would be individually rational for

complexity, stating, "[T]he international framework of investment rules continues to expand at the bilateral, sub-regional, regional, and inter-regional levels. This suggests that the present system of multifaceted and multilayered investment agreements will become even more complex in the future, raising further the likelihood of conflicting rules and investment disputes, as well as the costs of compliance for both governments and business [sic] of the parties to the agreements."

both rich and poor countries, given their threat values set by the equilibrium payoffs of the BIT game.

Fig. 3b reproduces the line, using the equilibrium payoffs from the partial bilateral treaty equilibrium. Note that the contract line is longer, reflecting the assumed inefficiency of the partial bilateral treaty equilibrium relative to the full bilateral treaty equilibrium, but includes allocations that are more favorable to poor countries than the best allocation for poor countries on the contract line produced from a full bilateral treaty status quo.

Negotiating and concluding an MAI is a costly process. As the surplus achievable by an MAI narrows, it is less likely that countries will be willing to bear the transaction costs of creating an MAI. Thus an MAI is more likely to result from a partial bilateral treaty equilibrium where the surplus is larger than from a full bilateral treaty equilibrium, and *a fortiori*, it would be even easier to conclude an MAI if there were no BITs in the world economy. In the face of bargaining costs, the proliferation of BITs may well have made it more difficult to conclude an MAI by narrowing the surplus a multilateral framework could create.

The failure of the 1998 OECD MAI thus appears, in part, attributable to the success of BITs. Given the strong protections provided by BITs, an MAI would have to offer at least as strong protections to foreign investors as those provided by BITs. And, indeed, the terms of the draft MAI largely followed the US model BIT, which provided stronger protections than most other BITs.[39] Unless it tracks the US model, the US would have little reason to join the MAI. However, some provisions in the US model proved to be too strong for some OECD members. Without a large surplus to be gained from an MAI, given the success of BITs, and with perceived costs of opening new domestic sectors to foreign investment, some OECD members balked at forming an MAI. Under an MAI developed states would be unable to target protections solely to inward foreign investors from net capital-*importing* nations. Despite their reciprocal terms, existing BITs largely cover one-way flows of investment between states party to them. The capital-exporting state desires protections for its nationals' investments abroad, and the capital-importing state desires to encourage investment. However, some capital-exporting states that also import capital do not want to open up certain sensitive sectors of their economy to investment from abroad. BITs allow these countries to selectively grant rights that few will use in return for rights that protect their nationals' foreign investments. But a multilateral agreement would necessarily include many large capital exporters within its ambit, and an MAI that provides rights to establish foreign investments in member states would potentially result in new and unwelcome investment flows into large developed states. This issue was the primary stumbling block of the 1998 OECD MAI, as France and Canada were unwilling to liberalize investment in their cultural industries.

4. Conclusion

Guzman's (1998) strategic analysis of BIT signings provides a convincing explanation for the explosion of BITs, and the BIT model presented in this paper formalizes his account.

[39] Muchlinski (2000, p. 1041).

Our model, however, permits one to see the limitations of Guzman's formulation. We model the unraveling mechanism and derive conditions under which the resulting equilibria make developing countries worse off. Guzman is mistaken in his claim that the resistance of poor countries to the Hull Rule in customary international law implies that the BITs regime is worse for developing countries than customary international law. The initial resistance of developing countries to strong protections of foreign investment in customary international law may instead have resulted from opportunistic one-time expropriations, followed by commitments to respect property rights in the future, rather than from a welfare loss caused by the patchwork BIT regime. Given the strong protections provided by the current BIT regime to foreign investors, and the resistance to full liberalization of inward investment by some developed states, it seems unlikely that an MAI will be concluded. Any such instrument would have to provide protections to foreign investors at least as strong as those provided in a typical BIT, yet such an agreement is unpalatable to some developed states.

Acknowledgement

We thank Alex Kaufman and Michael Kremer for valuable comments.

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