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# Investor-State vs. State-State Dispute Settlement

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# INVESTOR-STATE VS. STATE-STATE DISPUTE SETTLEMENT

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#### Abstract

International investment agreements have provoked intense criticism in the policy debate during recent years. Particularly contentious has been their "ISDS" mechanisms, which enable investors to litigate against host countries. This paper examines whether host countries would be better off with state-state dispute settlement (SSDS), as often alleged, assuming that SSDS cause political/diplomatic litigation costs that are not present with ISDS. Two separate reasons why host countries might benefit from SSDS are identified, but neither provides a convincing argument for host countries to move to SSDS. The paper concludes that host countries should reduce the stringency of their agreements, rather than introduce imperfections in the dispute settlement systems to reduce their bite.

**JEL Codes:** F21; F23; F53; K33 **Keywords:** ISDS, expropriation; international investment agreements; regulatory chill

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# 1 Introduction

The vices and virtues of *international investment agreements* have been intensively debated during recent years. Much of this critique concerns substantive undertakings in investment agreements, such as the commonly included obligations to provide "fair and equitable treatment", and to compensate in case of direct and indirect expropriation. Severe critique has also been directed against other features of dispute settlement mechanisms in the agreements. For instance, the possibility for arbitration of investment disputes to take place outside host country legal systems has been put into question, arbitrators have been alleged to be biased, the lack of appeal possibilities and the lac of transparency have been criticized, and the case law has been said to be incoherent.<sup>1</sup> A particularly contentious feature of virtually all of these agreements is that they do not only allow contracting states to litigate—State-State Dispute Settlement (SSDS)—they also include Investor-State Dispute Settlement (ISDS) mechanisms through which private investors are allowed to litigate against host countries.<sup>2,3</sup> The possibility for private investors to litigate against states is a rarity in International Law, since international agreements normally reserve the right to legally challenge the fulfillment of the obligations under the agreements to the contracting states. The ISDS mechanisms have been criticized on various grounds. Of most immediate relevance from an economic point of view is the claim that they cause "excessive" litigation, relative to some (normally unspecified) benchmark. Excessive litigation could be very costly to host countries in terms of legal costs, compensation payments, and reduced regulatory "policy space".<sup>4,5</sup>

Several high-profile disputes under investment agreements have fuelled the notion that ISDS causes excessive litigation. Many of these disputes have concerned the energy sector. A well-known case in the threat by TransCanada Corporation to litigate against the US under NAFTA regarding the Obama administration's decision to disallow the construction of the Keystone XL pipe line. The company was in the process of requesting USD 15 billion in damages when the decision by the Obama administration was overturned by the current administration. It seems unlikely that the Canadian government would have been willing to pursue the case had there only been SSDS in NAFTA.

The by far most prominent agreement with regard to investment litigation in general, and the

<sup>&</sup>lt;sup>1</sup>See e.g. Howse (2017) and Stiglitz (2008) for comprehensive overviews and discussions of the critique against investment agreements.

<sup>&</sup>lt;sup>2</sup>See Dolzer and Schreuer (2012) for an introduction to International Investment Law, and Bernasconi-Osterwalder (2014) for a discussion of legal aspects of SSDS.

<sup>&</sup>lt;sup>3</sup>The term ISDS is often used synonymously with investment agreements, but we here use it in its literal sense, as referring to a particular type of dispute settlement system.

<sup>&</sup>lt;sup>4</sup>See e.g. Gertz (2017), Johnson et al. (2015), Menon (2018), Roberts (2014), Salacuse (2007), and Trevino (2013) for recent discussions of SSDS, and other non-ISDS mechanisms.

 $<sup>^{5}</sup>$ Some observers who are highly critical of certain basic features of IIAs, do not percieve that the legal standing of private investors is problematic. For instance, Howse (2017), and over two hundred academics addressing President Trump concerning the NAFTA renegotiations, argued that the problem is not the legal standing of private investors, but rather that the agreement allows investors to by-pass the domestic legal system; the latter letter is available at https://www.citizen.org/system/files/case\_documents/isds-law-economics-professors-letter-oct-2017\_2.pdf.

energy sector in particular, is the *Energy Charter Treaty* (ECT), an investment-cum-trade agreement covering the energy sector. The ECT has approximately 50 members, including all 27 EU countries (Italy recently withdrew), and a number of former socialist countries in Asia. Of the approximately 860 known investment disputes, 119 have taken place under the ECT. A number of high-profile ECT disputes seem to illustrate the importance of the ISDS mechanism. For instance, there have been more than 40 litigations against Spain regarding the removal of support to renewable energy. Only a few cases have yet been decided, but Spain has already been requested to pay over EUR 200 million in compensation. Italy and the Czech Republic have also been the targets for such litigations, albeit with fewer cases than Spain. Most of the litigants in these cases are European firms. It is hard to believe that European governments would have pursued these litigations on behalf of their investors, had the ECT only allowed for SSDS.

Another suggestive example is the litigation by the energy company Vattenfall AB against Germany regarding the decision in the wake of the Fukushima accident to speed up the phase-out of nuclear energy. Vattenfall AB is a private limited liability company, but it is fully owned by the Swedish state. The litigation has been ongoing with Social Democrats and the Green Party in a coalition government. These parties have made repeated commitments in the past to phase out nuclear power in Sweden. But this government now effectively litigates by proxy against a nearby EU member's decision to phase out its nuclear power. It seems inconceivable that this government would have litigated directly against Germany through the SSDS mechanism in the ECT. But since the litigation formally takes place through a private firm, the government can distance itself from the litigation decision and the political fall-out it would cause.<sup>6</sup>

There have also been contentious disputes outside the energy sector that seem to illustrate the role of ISDS. A well-known example is the litigation by Phillip Morris against Australia regarding its tobacco plain packaging legislation, which Phillip Morris largely lost. It seems unlikely that the Obama Administration would have been willing to pursue the case on behalf of the tobacco company; it is more unclear what position the current US administration would take in this regard.

The mounting skepticism toward ISDS is also reflected in the fact that several countries have moved toward some form SSDS. For instance, the investment chapter of the US-Australia trade agreement of 2005, which includes investment protection, only allows for SSDS, and this only after investors have exhausted the possibilities to use local legal systems. South Africa is moving in the same direction.<sup>7</sup> Brazil never had an ISDS agreements, and its new model investment treaty is based on SSDS. <sup>8</sup> In side letters to the Comprehensive and Progressive Trans-Pacific Partnership, New

<sup>&</sup>lt;sup>6</sup>It should be said that the politics of the case is further complicated by the fact when Sweden in 1997 closed the Barsebäck nuclear reactor, Sweden compensated the German energy firm E.On. It might appear justifiable for Sweden to expect the same treatment when the roles are reversed.

<sup>&</sup>lt;sup>7</sup>This requirement that investors must first take their cases to host country courts, can serve as a filter that protects both home and host country governments, since investors might be deterred from bringing disputes if these domestic legal processes are slow, unless having strong cases.

<sup>&</sup>lt;sup>8</sup>Another reason for the increasing focus on SSDS is that preferential trade agreements today routinely include investment undertakings. There is a tension in these agreements in that most other chapters allow solely for SSDS.

Zealand has excluded ISDS with Australia and Peru, and reduced the scope for ISDS with three other partner countries. A further, and very recent example, is the recently concluded renegotiation of NAFTA. In a public testimony, the US Trade Representative Robert Lighthizer stated:

Why should a foreign national be able to come in and not have the rights of Americans in the American court system but have more rights than Americans have in the American court system? It strikes me as something that at least we ought to be skeptical of and analyze. So a US person goes into a court system, goes through the system and they're stuck with what they get. A foreign national can do that and then at the end of the day say "I want three guys in London to say we're going to overrule the entire US system."<sup>9</sup>

The revised version of the NAFTA has drastically reduced the scope for ISDS. Canada has completely withdrawn from ISDS, and the possibility to use ISDS in investment disputes between Mexico and the US has been substantially reduced.

The purpose of this paper is to throw some light on the difference between ISDS and SSDS from an economic point of view. To the best of our knowledge, there exist no economic analysis of the difference between ISDS and SSDS. This largely reflects a more general lack of literature on investment agreements, and in particular on dispute settlement in IIAs. The main exception to this dearth of literature is the seminal analysis by Aisbett et al (2010) (see below). There is a recent small theory literature, but although it often purports to address "ISDS", it does not highlight differences between ISDS and SSDS as modes of dispute settlement.<sup>10</sup> Instead, the term is used to denote investment agreements more generally.

The more specific aim is to examine whether it is in the interest of host countries to switch from ISDS to SSDS by allowing them more "policy space", as often seems to be argued in the policy debate. To this end, we focus on the standard argument in the legal literature for why ISDS was introduced in investment agreements, which holds that litigation by states on behalf of their investors tends to create political/diplomatic "enforcement costs" that do not arise when litigation is made by private parties on purely commercial grounds. The purpose of introducing ISDS was hence to *depoliticize* investment disputes.<sup>11</sup>

The model to be employed, which is laid out in Section 3, builds on the analysis of investment protection as it applies to regulatory (or indirect) expropriation in Horn and Tangerås (2017, "H-

One can perhaps also see the changes that the EU is undertaking with regard to the investment undertaking in their ageements, whereby the adjudication mechanism is taking a form that is very similar to the dispute settlement mechanism in the WTO, as a step toward a convergence of ISDS and SSDS.

<sup>&</sup>lt;sup>9</sup>The testimony was on March 21, 2018, before the US House Ways and Means Committee.

<sup>&</sup>lt;sup>10</sup>See the contributions by e.g. Janeba (2016), Kohler and Stähler (2016), Konrad (2017), Schjelderup and Stähler (2016), and Horn and Tangerås (2017).

<sup>&</sup>lt;sup>11</sup>See e.g. Vandevelde (2005, 174-175). Sykes (2005) points to additional advantages for investor; for instance, an investor might not have enough to offer its government to induce it to litigate on behalf of the investor, and retaliation by the home country need not lead to compensation for investors. Other possible sources of differences are that source country governments might put less value on compensation payments to do their investors, or that ISDS might allow for faster resolution of disputes.

T"), which in turn borrows important features from Aisbett et al (2010).<sup>12</sup> Absent an agreement, the interaction takes place in three stages. In a representative industry, firms first make irreversible investments. An exogenous regulatory shock that determines the welfare impact of the investment for host country welfare is then realized. Finally, having observed the shock, the host country either allows production or it regulates, in the latter case effectively shutting down production. Two fundamental distortions interact to form the outcome. First, the host country interest in attracting foreign investments stems from the positive externalities they cause. But depending on the realization of the regulatory shock, investments may occasionally turn out also to have undesirable effects. When firms invest, they disregard these consequences for the host country. Second, when the host country decides on whether to regulate, it does not factor the effect of regulation for investors into its decision. There is thus a tendency toward overregulation. These distortions can interact in rather complex fashion, simple as they are when considered separately. But they can create a form of hold-up problem where there is too little investment, and too much regulation, from a joint welfare point of view. The role of the investment agreement is to partially or fully remedy these distortions.

An investment agreement is introduced in Section 4. The agreement is formed at the outset of the interaction, and specifies *when* regulation is compensable, and by *how much*. The agreement is based on a benchmark for the severity of the regulatory shock, such that the host country is allowed to regulate without compensation for regulatory shocks that are more severe than the benchmark value, but requests compensation if there is regulation for less severe shocks—we denote this as the *level of investment protection*. This level is determined during the negotiation over an agreement. The novelty in this paper relative to H-T is that the agreement also states whether investors or the source country government *has legal standing* to litigate against the source country.

Section 5 characterizes the outcome with an investment agreement. The host country will in equilibrium abstain from regulating for sufficiently weak shocks, and it will regulate without having to compensate when the shock is more severe than the benchmark stipulated in the agreement. But the host country might regulate despite having to pay compensation for a range of intermediate shocks. In such instances litigation is required to enact the compensation payments. To capture the above-mentioned standard rationale for ISDS, it is assumed that litigation under SSDS exposes the source country government to political costs that are not borne by private investors when litigating. A shift from ISDS to SSDS will thus introduce a form of *enforcement costs*. Due to these political litigation costs, the source country government tends to litigate less frequently than private investors all else equal.

The paper identifies two mechanisms through which host countries might benefit from switching from ISDS to SSDS. One possibility is that the tendency toward less litigation that comes with SSDS will allow the host country to benefit from *escaping its protection commitments in certain industries*.

<sup>&</sup>lt;sup>12</sup>Aisbett et al (2010) also provide a useful overview over the regulatory takings literature, and an introduction to central legal features of IIAs.

To capture this source of gain, which seems in line with what proponents of changing to SSDS have in mind, Section 6 assumes that the level of investment protection is exogenously determined, and unaffected by the shift from ISDS to SSDS. Such a shift will then have no effect for the host country in industries where the political litigation costs are small enough not to deter the source country from litigating in case of compensable regulation. But when the litigation costs exceed this level, the direct effect of shifting from ISDS to SSDS will indeed be beneficial for the host country, since only a *subset* of all cases where the source country government could successfully litigate will then actually be brought to litigation. The host country will hence not have to pay compensation for these cases. But there is an additional benefit for the source country when the source country abstains from litigating due to the litigation costs, in that the host country can then without cost regulate whenever this is unilaterally optimal. Hence, SSDS allows more frequent uncompensated regulation, and will yield less frequent compensation payments, for given investment. It might thus appear as if SSDS is beneficial to the host country, as the popular argument suggests.

This argument does not take into account that the shift to SSDS will tend to reduce firms' incentives to invest, that this in turn will affect the incentives to regulate, and that the net effect on host country welfare therefore is ambiguous. The shift to SSDS will unambiguously reduce the welfare of the source country government however, since it will be exposed to enforcement costs that its investors did not have to carry with ISDS, or alternatively have to at least partly give up on enforcing compensation for its investors.

The second mechanism through which a shift to SSDS might benefit the host country, is by affecting the outcome of the negotiations between the parties over the substantive provisions in the agreement, here represented by the level of investment protection. For reasons to be explained in Section 7, the negotiations are likely to yield a too high level of protection from the host country's perspective with ISDS. Hence, *if* a shift to SSDS reduces the level of protection somewhat, it will tend to benefit the host country. This will come about more frequent regulation, a reduced range of regulatory shocks for which there is litigation, and a reduced magnitude of each compensation payment—changes that could all be seen as reflecting increased host country policy space.

Again there are counter-arguments to the claim that a shift to SSDS is beneficial for the host country. First, it is unclear whether the shift to SSDS will reduce or increase the level of investment protection—this will depend on the exact circumstances at hand, including the magnitude of the political litigation costs. Second, and more importantly, if the host country is able to control the choice of dispute settlement system, it would be better off to use its bargaining power to negotiate less demanding substantive undertakings in the agreement, while maintaining ISDS. Put differently, the problem with the investment agreement from a host country perspective is not the ISDS mechanism as such, but the substantive undertakings that are enforced using this mechanism.

# 2 The Energy Charter Treaty

In light of the importance that the ECT plays for investment disputes, we very briefly describe the agreement. The negotiations over the ECT were initiated shortly after the fall of the Berlin Wall. Signed in 1994, the agreement entered into force in 1998.<sup>13</sup> The general purpose of the ECT is "... to promote long-term cooperation in the energy field (Art. 2)". An important political driving force behind the creation of the ECT was the desire to ease former socialist countries' transition toward becoming market economies, and to become members of the GATT/WTO. There were also EU interests in getting access to cheap, and geographically close, sources of energy supply.

The ECT is unusual in several respects: It is one of very few investment agreements that covers a single industrial sector; it was one of the first agreements to include both trade and investment undertakings in the same agreement; and the ECT is the only multilateral investment agreement to date, being open to accession by any country. The vast majority of the currently 49 Contracting Parties are European, or former transition, countries, and all members of EU 28 except for Italy (which recently withdrew) are signatories of the ECT, and the EU itself is independently a signatory.<sup>14</sup>

The ECT has in many respects the same building blocks as traditional bilateral investment treaties: it requests "fair and equitable treatment", there are non-discrimination rules, both in terms of National Treatment, and Most-Favored Nation treatment, and it includes a standard form of expropriation provision. But the ECT imposes in certain respects a more stringent regime than the traditional investment agreements. For instance, Art. 10(1) requests:

Each Contracting Party shall ... encourage and create stable, equitable, favorable and transparent conditions for Investors of other Contracting Parties to make Investments in its Area. Investments shall also enjoy the most constant protection and security ...

The agreement also includes carve-outs from the commitments. Art. 24 specifies general grounds for exceptions from the obligations in the ECT. Of most interest from a regulatory point of view is Art. 24(2), which stipulates that the agreement

... shall not preclude any Contracting Party from adopting or enforcing any measure (i) necessary to protect human, animal or plant life or health...

This language is borrowed from the General Exceptions clause in Art. XX GATT. Similarly to in the GATT, exceptions under Art. 24 ECT require that the measures do not constitute "disguised

<sup>&</sup>lt;sup>13</sup>The structure of the agreement is somewhat complex, since.... We are focusing here on the ECT part of ....

<sup>&</sup>lt;sup>14</sup>The non-EU members of the ECT are Afghanistan; Albania; Armenia; Azerbaijan; Bosnia and Herzegovina; Iceland; Switzerland;Former Republic of Yugoslavia; Georgia; Japan; Kazakhstan; Kyrgyzstan; Liechtenstein; Moldova; Mongolia; Montenegro; Tajikistan; Turkey; Turkmenistan; Ukraine and Uzbekistan. The agreement has also been signed, but not ratified, by Australia, Belarus, Norway, and Russian Federation have not ratified the agreement, but Belarus applies the agreement provisionally.

protection", or "arbitrary or unjustifiable discrimination". But the scope of the exceptions clause seems to be significantly further restricted in the ECT by the requirement that the measures in question are

...duly motivated and shall not nullify or impair any benefit one or more other Contracting Parties may reasonably expect under this Treaty to an extent greater than is strictly necessary to the stated end.

There is also a further important restriction to the scope of the exceptions clause in Art. 24 in that it does not apply to the expropriation rules. Hence, the carve-outs for regulatory policies seem quite restricted.

As most investment agreements, the ECT contains rules concerning compulsory dispute settlement. It allows for ISDS regarding investment promotion and investment protection undertakings. Investors can bring disputes to either host country courts, to international arbitration, or to "... any applicable, previously agreed dispute settlement procedure". There are certain exceptions to this rule, however. For instance, some countries have reserved the right to refuse to have their disputes resubmitted to international arbitration after adjudication in a local court. As all investment agreements, the ECT also provides for SSDS.

119 disputes have been brought under the ECT at the time of writing, all of which involving ISDS.<sup>15</sup> The ECT is thus by far the investment agreement with the largest number of litigations. More than half of these disputes concern renewable energy measures in Spain (42), Italy (11), and the Czech Republic (6), respectively. Italy withdrew from the ECT in 2016, but investment in place at the time of withdrawal will be protected for a further 20 years. Of the 45 cases that have so far been concluded, 18 cases where decided in favor of the responding state, 14 in favor of the investor, and the remaining 13 cases where discontinued, settled, or decided in favor of neither party.

## 3 The setting absent an investment agreement

The setting absent an investment agreement very similar to the one in H-T. We consider a country that is potential host to foreign direct investment from a source country in a number of industries. The industries might differ with regard to technology, demand, etc. But they are assumed to be economically unrelated, to allow us to focus on a representative industry. In each industry there is a number of firms, which are assumed to be identical to allow for a simple exposition in terms of a representative firm. For expositional simplicity, we also assume that there are no domestic firms in the industries under consideration. As shown by H-T, these assumptions could be generalized in many regards.

<sup>&</sup>lt;sup>15</sup>Data on disputes are taken from UNCTAD Investment and from http://investmentpolicyhub.unctad.org/isds and from https://energycharter.org/what-we-do/dispute-settlement/all-investment-dispute-settlement-cases/..

At the outset, the representative foreign investor makes the irreversible investment  $k \ge 0$  in the host country. The firm's investment cost  $R(k) \ge 0$  is a strictly increasing, weakly convex function of the investment k. The investor receives the operating profit  $\Pi(k) \ge 0$  if production is allowed;  $\Pi(k)$  is strictly increasing and strictly concave in k, and  $\Pi(0) = 0$ .

For the host country, an investment creates benefits in terms of consumer surplus, employment, technological spill-overs, learning-by-doing in the work-force, and so forth—the exact nature of these benefits are immaterial for our purposes. After the investments have been committed, an industry-specific shock  $\theta$  is realized that affects the net benefit to the host country of allowing production. High realizations of  $\theta$  could represent the arrival of severely adverse information regarding environmental or health consequences of the production process or the goods produced, or other factors affecting the desirability of the investment. The shock is continuously distributed on  $[\underline{\theta}, \overline{\theta}]$ with cumulative distribution function  $F(\theta)$  and density  $f(\theta)$ .

Having observed this common-knowledge shock, the host country decides whether to permit production or to regulate the production facility. The latter implies that the production is effectively shut down, and thus that there are no operating profits:  $\Pi(k) = 0$ . This is the sole consequence of regulation for the source country. The host country welfare in case production is allowed is  $V(k, \theta)$ . It captures the net of the positive and negative effects of the investment, with  $V_{\theta}(k, \theta) < 0$ .  $V(k, \theta)$ can be either positive or negative if there is production, and it is zero if there is no production. The marginal net benefit of investment can also be positive or negative,  $V_k(k, \theta) \ge 0$  (subscripts on functional operators denote partial derivatives throughout), but V is strictly concave in k.<sup>16</sup> To ensure that there is a role to play for investment and regulation, we assume that for any k > 0, the host country prefers to allow production if the shock is sufficiently mild,  $V(k, \theta) > 0$ , and to regulate if it is sufficiently severe,  $V(k, \overline{\theta}) < 0$ .

We solve for the interaction backwards in standard fashion. Absent an investment agreement, the last stage of the interaction is the decision by the host country of whether to regulate, given the investments, and given the realized regulatory shock  $\theta$ . The host country will regulate whenever the regulatory shock is more severe than the critical level  $\Theta(k) \in (\underline{\theta}, \overline{\theta})$  defined by

$$V(k,\Theta) \equiv 0,\tag{1}$$

since regulation yields zero welfare level for the host country.

Investments are made prior to the realization of the regulatory shock  $\theta$ , and prior to the regulatory decision. Firms do not take account of how their respective investments affect the probability

<sup>&</sup>lt;sup>16</sup>Functions  $\Pi(k)$ , R(k), and  $V(k, \theta)$  are assumed to be twice continuously differentiable.

of regulation.<sup>17</sup> If the investor expects regulation for  $\theta > \theta'$ , its expected profit is

$$\int_{\underline{\theta}}^{\theta'} \Pi(k) dF(\theta) - R(k)$$

and the optimal investment is

$$K(\theta') \equiv \arg\max_{k} F(\theta')\Pi(k) - R(k)$$

with associated first-order condition (FOC)

$$F(\theta')\Pi_k(k) = R_k(k)$$

It follows from  $F(\theta') > 0$ , and  $R_k > 0$ , that  $\Pi_k(K(\theta')) > 0$  in the relevant region, and from the second-order condition that  $K_{\theta} > 0$ . The expected profit is

$$\Pi(\theta') \equiv F(\theta')\Pi(K(\theta')) - R(K(\theta'))$$

which must be non-negative in order for the firm to invest.

The equilibrium no-agreement outcome  $(k^N, \theta^N)$  will then be given by

$$k^N = K(\theta^N)$$
 and  $\theta^N = \Theta(k^N)$ 

 $\theta^N$  is thus the cut-off value for regulation, when investment is  $k^N$ , and the investment will be  $k^N$  when firms foresee the cut-off level for regulation to be  $\theta^N$ .

The equilibrium expected profit for investors is

$$\tilde{\pi}^N \equiv F(\theta^N) \Pi(k^N) - R(k^N)$$

and the equilibrium expected host country welfare is

$$\tilde{v}^N \equiv \int_{\underline{\theta}}^{\theta^N} V(K(\theta^N), \theta) dF(\theta).$$

Finally, note that there are two basic distortions at work. First, when the foreign firms make their investment decisions, they disregard both the positive and the negative externalities from their investment for the host country. Second, when the host country makes it regulatory decision, it disregards the source country welfare that is generated through production, and that takes the form of operating profits. Each of these distortions is simple, but their interaction is less trivial. The

 $<sup>^{17}</sup>$ H-T show that it is easier to implement the first best outcome in the case of a single investor if the investor takes into account how the investment affects the host country's incentives for regulation, compared to when this effect is ignored.

outcome will typically entail distortions of both investment and regulation, however.

## 4 An investment agreement

To remedy the distortions to investment and regulatory decisions, the home and the host countries can enter into an investment agreement at the outset of the interaction, before investments are made.

#### 4.1 The terms of an agreement

The efficiency of any agreement is of course largely determined by the contractual freedom of the parties. We want the agreements to be considered to share fundamental contractual features with actual investment agreements. In particular:

(a) An agreement stipulates transfer payments posterior to host country decisions to shut down firms, and nothing else;

(b) There are no payments to or from outside parties;

(c) Regulation without compensation might be permitted for severe regulatory shocks;

(d) Any compensation equals foregone operating profits; and

(e) The agreement specifies whether ISDS and/or SSDS is allowed.

Investment agreement are hence highly incomplete in several regards. For instance, there is no direct contracting on investment levels or regulation, instead the investors and the host country retain unilateral discretion over these decisions. Also, there cannot be any direct subsidies, taxes on investors, or punitive damages.

To capture features above, we assume that an investment agreement formally consists of two components. The first is a *compensation function* T that stipulates when regulation is compensable, and the amount to be paid. To represent features (a)-(e) above, the requested compensation is

$$T = \begin{cases} \Pi(k) & \text{if } \theta \le \theta' \\ 0 & \text{if } \theta > \theta'. \end{cases}$$
(2)

That is, compensation is required if the regulatory shock  $\theta$  is weaker than a threshold value  $\theta'$ , but not for shocks that are more severe than  $\theta'$ . Furthermore, whenever regulation is compensable, the compensation should equal the foregone operating profits.<sup>18</sup>

The novel aspect of the present analysis compared to that in H-T is that agreement also specifies whether states or investors have *the right to litigate* concerning alleged violations of the agreement. The purpose of the paper is to contrast two scenarios in this regard. One scenario is meant to capture what is currently normal practice in the case of ISDS agreements (which corresponds to the setting in H-T). As noted above, these agreements normally allow both investors and states to

 $<sup>^{18}</sup>$ H-T show that the compensation scheme (2) has several desirable efficiency properties, simple as it is.

litigate, but states still refrain from doing so in practice. To avoid strategic interactions between source country governments and their investors regarding who should litigate, we assume that only investors can litigate in the ISDS regime. In the alternative setting, denoted SSDS, the source country government, but not investors, are allowed to litigate.

The specification of the dispute settlement system applies to all industries in both countries, as is almost invariably the case in IIAs. But the substantive undertakings—the level of protection  $\theta'$  that the agreement specify—is country and industry-specific. This is not a self-evident assumption. IIAs have few if any explicit industry specific obligations (the Energy Charter Treaty being a prominent exception). But as argued by H-T, it is conceptually hard to compare regulatory treatment across industries: what would it mean to say that an agreement gives the same degree of protection to a nuclear power investment, as to an investment in an auto plant? The level of protection that an agreement imposes will thus have to be determined for each industry separately. This is also reflected in the treaty texts, which often state that the substantive obligations have to be interpreted in light of the specific circumstances at hand. To capture this, we assume that the substantive obligations are in the form of industry-specific levels of protection. But due to the separation of the industries, we continue not to introduce industry indices to save on notation.

#### 4.2 The sequence of events with an investment agreement

When the host and the source country have entered into an agreement specifying a level of investment protection  $\theta'$ , and a dispute settlement mechanism (ISDS or SSDS), the sequence of events runs as follows in each industry:

- (1) Firms invests;
- (2)  $\theta$  is realized;
- (3) The host country decides whether:
  - to allow production;
  - to regulate with compensation; or
  - to regulate without compensation.
- (4) Investors/source country decide whether to litigate.

The last stage, litigation, determines with full accuracy whether a particular regulation is compensable or not. To capture the common notion that governments face political and/or diplomatic costs when initiating a litigation against foreign states that are not felt by private investors, we assume that SSDS gives rise to a political/diplomatic cost L for the source country government that investors would not be exposed to.<sup>19</sup> While analytically very simple, but we believe this formalization captures a central feature of the common perception of the difference between ISDS and SSDS. We will discuss alternative formulations in Section 9.<sup>20</sup>

 $<sup>^{19}</sup>$ This is hence not the process costs, since there is no reason to believe that they would be systematically different for firms and governments, on particular not if the government would use private law firms as is often done in practice.

<sup>&</sup>lt;sup>20</sup>Another possible difference between ISDS and SSDS is that with SSDS the government might litigate on behalf

# 5 The equilibrium outcome with an investment agreement

In what follows we will solve for the equilibrium recursively. Since L = 0 implements the outcome with ISDS, and SSDS corresponds to L > 0, we assume that  $L \ge 0$  to encompass both types of dispute settlement systems.

#### 5.1 Litigation incentives

For an agreement to be meaningful to must stipulate more investment protection than would result in its absence. Hence, we focus on cases where  $\theta' > \theta^N$ . Assume a setting where an agreement requests such a level of investment protection  $\theta'$ , where a representative firm has invested k, and where regulation has occurred without compensation. If  $\theta > \theta'$ , there will clearly be no litigation, since regulation is not compensable. But regulation is compensable if  $\theta \leq \theta'$ . With ISDS, the investor will always litigate when compensable regulation has occurred, since it will yield compensation  $\Pi(k)$ , but does not give rise to any costs.<sup>21</sup> With SSDS, the source country government will face political/diplomatic litigation costs. For there to be litigation, enough compensation must be at stake relative to the litigation costs, that is, it is required that  $\Pi(k) \geq L$ . There is thus a minimal investment level  $\bar{K}(L) \equiv \Pi^{-1}(L)$ ) that is just enough to trigger litigation, with  $\bar{K}(0) = 0$ , and  $\bar{K}_L(L) > 0$  for  $L \geq 0$ . Hence, the higher is L, the larger the investments have to be to induce the source country government to litigate. We will refer to the constraint  $k \geq \bar{K}(L)$  as the *enforcement constraint* for the industry.

**Lemma 1** There will be litigation if and only if  $\theta < \theta'$ , uncompensated regulation has occurred, and  $k \ge \bar{K}(L)$ .

#### 5.2 Regulation incentives

Consider next the host country's decision problem, when an agreement stipulates a level of investment protection  $\theta'$ , and the investment level is k, and assume that it is large enough for the enforcement constraint to be fulfilled:  $k \ge \bar{K}(L)$ . The host country never regulates when  $\theta \le \Theta(k)$ , since it then prefers production to regulation (regardless of whether there is an agreement), and it will always regulate for  $\Theta(k) \le \theta' < \theta$ , since this requires no compensation according to the agreement, and it is desirable from a unilateral perspective. But for  $\theta$  in the intermediate range  $(\Theta(k), \theta')$ , compensation is required, and the host country decision is less clear. The host country choice of whether to regulate or not will for this region depend on whether it is worthwhile to regulate despite having to pay compensation. Define therefore  $\Theta^C(k)$  as the level of the regulatory

of a whole industry, or even investors in general, whereas with ISDS private investors typically litigate regarding their own compensation only. The ongoing ISDS litigations against Spain regarding renewable energy is an example of the latter.

<sup>&</sup>lt;sup>21</sup>Section 9 discusses the impact of private litigation costs.

shock for which the host country is indifferent between allowing production, and regulating with a compensation payment,

$$V(k, \Theta^C(k)) \equiv -\Pi(k) < 0,$$

where the left-hand side is the welfare from allowing production, and the right-hand side is the welfare from the compensation payment. Observe that for a given level of investment, there will be less regulation under the agreement compared to when there is no agreement, as should be expected:  $\Theta^{C}(k) > \Theta(k)$ , since  $V_{\theta} < 0$ . The host country will hence regulate if either  $\theta > \max[\Theta(k), \theta']$  since it then unilaterally prefers regulation and there is no compensation requirement, or if  $\theta > \Theta^{C}(k)$  so that the host country prefers regulation *regardless* of whether this requires compensation payments.

When the agreement stipulates compensation payments, and these will be enforced by the source country  $(k \geq \bar{K}(L))$ , the host country can choose between paying compensation directly, or regulate without paying compensation, face litigation, and this way be made to pay the compensation. As the model is formulated, the host country will be indifferent, since the outcome is the same—the payment of compensation. In order for the political litigation costs to matter, there must at least potentially be litigation, and this requires that the host country regulates without spontaneously paying compensation for compensable regulation. It is generally speaking not straightforward to explain why rational parties end up in a dispute however, since disputes are typically costly for both parties.<sup>22</sup> At the same time we observe a large number of investment disputes in practice, so there must be something that induces the parties to go to arbitration despite these costs. For host country governments, this might plausibly be explained by political gains from resisting challenges by foreign investors.<sup>23,24</sup> For the sake of analytical simplicity we will not introduce such considerations into the model, but instead just assume that in the choice between regulating and paying compensation spontaneously, and regulating without compensation, the host country will choose the latter even if both choices ultimately lead to the same compensation payment within the model. For instance, we could instead assume that the host country randomizes between regulating with and without spontaneously paying compensation when it knows that it will ultimately have to pay compensation. As long as there is some strictly positive probability for regulation to occur without compensation, the litigation costs would enter the picture in the same way as in what follows.

We can thus more formally characterize the host country's incentives with regard to regulation as follows, when taking into account the enforcement incentives:

**Lemma 2** If the investment agreement stipulates the investment protection level  $\theta'$ , and investment is k, the host country regulates for:

 $<sup>^{22}</sup>$ Most formal explanations of disputes assume asymmetrically informed parties, partly stochastic determinations, etc. Aisbett et al (2010) provide an interesting analysis of an investment agreement with less than perfectly informed arbitrators.

 $<sup>^{23}</sup>$ See e.g. Salacuse (2007, pp.149) for a discussion of the political factors that might motivate governments to take disputes to formal arbitration.

<sup>&</sup>lt;sup>24</sup>Or perhaps a legal process is necessary to verify both liability and the magnitude of compensation when the facts of the case (and perhaps also the law) are unclear.

(i)  $\theta > \Theta(k)$  if  $k < \bar{K}(L)$ ; (ii)  $\theta > \Theta(k)$  if  $k \ge \bar{K}(L)$  and  $\theta' \le \Theta(k)$ ; (iii)  $\theta > \theta'$  if  $k \ge \bar{K}(L)$  and  $\Theta(k) < \theta' < \Theta^C$ ; and (iv)  $\theta > \Theta^C(k)$  if  $\Theta^C < \theta'$ .

## **Proof:**

Part (i): With  $k < \bar{K}(L)$  there is no enforcement, so the host country regulates whenever this is unilaterally optimal, which is for  $\theta > \Theta(k)$  by definition.

Part (ii): With  $k \ge \overline{K}(L)$  there is enforcement for  $\theta \le \theta'$ , but this is immaterial since the host country has no unilateral interest in regulating for  $\theta \in (\theta', \Theta(k))$ . But it will regulate for  $\theta \ge \Theta(k)$  without having to compensate.

Part (iii): Since  $\theta' < \Theta^C(k)$ , it will regulate without compensation for  $\theta > \theta'$ . It would prefer to regulate for  $\theta \in (\Theta(k), \theta')$  if it did not have to compensate. But since there is enforcement, this is not possible.

Part (iv): The host country will regulate despite having to compensate, which will be required since their is enforcement, for  $\theta \in (\Theta^C(k), \theta')$ . It will also regulate  $\theta > \Theta^C(k)$ , but without having to compensate.

In all four cases the regulatory shock is sufficiently severe that the host country would prefer to regulate as long as it does not have to pay compensation. In case (i) the agreement is not enforced. In case (ii) the degree of protection with the agreement is so low that it will never constrain the host country, there will thus not be any violation of the agreement.

In case (iii) the host country will regulate as long as it does not have to pay compensation  $(\theta > \theta')$ . This case is illustrated in Figure 1a, where the horizontal axis measures the regulatory shock  $\theta$ . The two lines at the bottom show the host country incentives to regulate depending on whether compensation is required or not. The next line depicts an agreement with a level of investment protection  $\theta' < \Theta^C(k)$ . The uppermost line shows the resulting optimal behavior. There will hence be regulation if and only if  $\theta > \theta'$  in this case.

Case (iv) is where the host will regulate for  $\theta > \Theta^C(k)$ , even if this requires compensation payments for the range  $\theta \in (\Theta^C(k), \theta')$ . As pointed out in H-T, this implies that the simple compensation scheme in (2) induces the host country to *fully internalize* the externalities of its regulatory decision, absent litigation costs. It also means that there will be litigation in order to extract compensation. This scenario is illustrated in Figure 1b, which is constructed as Figure 1a, but for the case where  $\theta' > \Theta^C(k)$ . This is the setting which we ultimately will concentrate on as being the most interesting for the present issue.

(Figure 1a and b about here)

#### 5.3 Investment incentives

Assume that the agreement stipulates the level of investment protection  $\theta'$ . Recall that we assume that the representative investor does not take account of the impact of the investment decision on the probability of regulation. But the investor must still form expectations regarding when there will be regulation. The investor rationally foresees that if  $k < \bar{K}(L)$ , there will not be any litigation in case of compensable regulation, and that the host country then will regulate for  $\theta > \Theta(k)$ . The expected profit is then

$$F(\theta^N)\Pi(k) - R(k)$$

and the optimal investment volume is  $k^N$ .

If  $k \geq \bar{K}(L)$ , the investor will expect that if  $\theta' < \Theta^C(k)$  there will be regulation without compensation for  $\theta > \theta'$ , and regulation with compensation for  $\theta' < \Theta(k)$ . If  $\Theta^C(k) < \theta'$  there will be regulation with compensation for  $\Theta^C(k) < \theta < \theta'$ , and regulation without compensation for  $\theta > \theta'$ . Hence, for  $k \geq \bar{K}(L)$  the firm will obtain the operating profits for  $\theta \leq \theta'$ . The expected profit is then

$$F(\theta')\Pi(k) - R(k)$$

and the optimal investment level is  $K(\theta')$ .

Having derived the investment behavior as a function of the level of investment protection  $\theta'$ with an agreement, we can define the level of investment protection  $\overline{\Theta}(L)$  that just suffices to trigger litigation in case of compensable regulation:

$$\Pi(K(\bar{\Theta})) \equiv L$$

In what follows it will be more convenient to express the enforcement constraint as  $\theta' \geq \bar{\Theta}(L)$ , rather than using the equivalent expression  $K(\theta') \geq \bar{K}(L)$ .

**Lemma 3** If the investment agreement stipulates investment protection level  $\theta'$ , the investment will be:

 $\begin{array}{ll} (i) & K(\theta') \ if \ \theta' \geq \bar{\Theta}(L); \ and \\ (ii) \ k^N \ if \ \theta' < \bar{\Theta}(L). \end{array}$ 

#### 5.4 The equilibrium

Having derived the incentives regarding investment, regulation and litigation, we can now characterize the equilibrium outcome for a given agreement. To this end, and for future use, we make a couple of additional definition. First, let  $\theta^E$  be the maximal level of investment protection for which the host country does not have to compensate if regulating. It is given by  $^{25}$ 

$$\theta^E \equiv \Theta^C(K(\theta^E))$$

In order to ensure that  $\theta^E$  is unique, we impose the following condition:

$$\frac{d}{d\theta'}[\theta' - \Theta^C(K(\theta'))] > 0 \text{ iff } \theta' > \theta^E$$
(3)

This ensures that the increase in investment that follows from an increase in the level of investment protection  $\theta'$  does not trigger an increase in the regulatory threshold  $\Theta^C$  that is larger than the increase in  $\theta'$ . It is hence similar to the "stability" conditions used in e.g. oligopoly theory.<sup>26</sup>

Second, let  $\bar{\Theta}(L)$  be the level of investment protection that is just enough to induce enough investment to trigger litigation in case of compensable regulation:

#### $\Pi(K(\bar{\Theta})) \equiv L$

Lemmas 1-3 then yield the following characterization of the outcome for any given level of investment protection  $\theta'$ :

**Proposition 1** Assume that there is an agreement with the investment protection level  $\theta' > \theta^N$ . If  $\theta' \ge \overline{\Theta}(L)$  the agreement yields:

- (i) investment  $K(\theta')$ ;
- (ii) regulation iff  $\theta > \min[\theta', \theta^E]$ ; and
- (iii) litigation iff  $\theta^E \leq \theta \leq \theta'$ .
- If  $\theta' < \bar{\Theta}(L)$  the agreement yields:
- (i) investment  $k^N$ ;
- (ii) regulation iff  $\theta > \theta^N$ ; and
- (iii) no litigation.

**Proof:** The proposition follows more or less immediately from the above: If  $\theta' \geq \overline{\Theta}(L)$ , the agreement will be enforced if compensable regulation occurs. The investment will hence be  $K(\theta')$ . If  $\theta' \leq \theta^E$ ,  $\theta' \leq \Theta^C(K(\theta'))$  by (3). There is then regulation iff  $\theta \in (\Theta(K(\theta')), \theta')$ , and there is

$$V(K(\theta^E), \theta^E) \equiv -\Pi(K(\theta^E))$$

<sup>26</sup>A sufficient condition for this to hold is that  $\Theta_k^C < 0$ , or that  $\Theta_k^C$  is "small" if positive. To see what this would entail, note that the definition of the function  $\Theta^C$  implies that

$$\Theta_k^C(k) = -rac{[V_k(k, heta) + \Pi_k(k)]}{V_ heta(k, heta)}$$

The sign of  $\Theta_k^C$  is generally speaking ambiguous, since  $V_{\theta} < 0$  and  $\Pi_k > 0$ .

<sup>&</sup>lt;sup>25</sup>Alternatively, we could have defined  $\theta^E$  by

then no requirement to compensate, so there will not be any litigation. If  $\theta^E < \theta'$ ,  $\Theta^C(K(\theta')) < \theta'$ . There is then regulation for  $\theta \in (\Theta(K(\theta')), \theta')$ , and compensation is required for  $\theta \in (\Theta^C(K(\theta')), \theta')$ . It will be enforced through litigation since  $\theta' \ge \overline{\Theta}(L)$ . The second part of the Proposition follows from Lemma 3.

We are now prepared to address our main issue: whether there are benefits for host countries from shifting from ISDS to SSDS, and in particular benefits that can be said to reflect increased host country "policy space". As will be shown, the framework above includes two mechanisms through which a shift from ISDS to SSDS might give rise to the suggested types of benefits for the host country. We will consider these in the two next sections.

# 6 SSDS to escape protection commitments

Traditional investment agreements typically apply across the whole economy, without explicitly industry-specific obligations. But the agreements often suggest that the commitments should be interpreted in light of the specific circumstances in the respective industries. But even so, it seems as if host countries in practice occasionally end up in situations where they would have preferred certain industries not to be covered by their agreements. There are several reasons why this might occur. For instance, the host countries might find the arbitration panel interpretations of the agreements to be too strict restrictions in certain industries. Or perhaps the agreements do not generate as much investment inflow as the host countries had hoped for, or perhaps the benefits from the inflows are not as large as hoped for. Yet another possibility is that external factors might have changed in unforeseen ways. The agreements are long-term commitments and host countries might e.g. have become more developed, thereby putting larger values on the possibility to regulate without interference than they did when they entered into the agreements. All of these above explanations seem to have some degree of plausibility as a depiction of actual agreements. But they are also all hard to reconcile with a full-information, frictionless theory of bargaining.

If a host country finds itself in a situation where an investment agreement is not beneficial in some industry, since the costs due to the restrictions the agreement imposes on its policy space are larger than the benefits it creates from increased investment, the host country can escape its obligations by terminating their agreements. Indeed, some countries have taken this path in practice. But a less drastic alternative might be to somehow reduce the enforcement of the agreements—switching to SSDS is commonly seen as a means of achieving this. To examine whether such a switch will tend to have the suggested benefits for host countries in the present analytical framework, we will consider such a switch for given, arbitrary levels of investment protection across industries.

**Proposition 2** Changing from ISDS to SSDS in an industry with given level of investment protection  $\theta' \ge \overline{\Theta}(L)$ : (i) has no impact if  $\theta' \le \theta^E$ ;

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(ii) only has the effect of imposing expected enforcement costs on the source country if  $\theta' > \theta^E$ .

Hence, as long as the litigation costs are sufficiently small, there will be no benefits, nor any costs, for the host country from switching to SSDS. The only effect will be to impose litigation costs on the source country in case there is compensable regulation in equilibrium.

There will be more significant impact of changing the dispute settlement system if the enforcement constraint is violated with SSDS, however:

**Proposition 3** Changing from ISDS to SSDS for an industry with given level of investment protection  $\theta' < \bar{\Theta}(L)$ :

(i) increases the frequency of regulation for  $\theta^N < \theta' \leq \theta^E$ ;

(ii) has ambiguous implications for the frequency of regulation for  $\theta^E < \theta'$ ;

(iii) wipes out litigation and compensation payments for  $\theta^E < \theta'$ ; and

(iv) reduces investment from  $K(\theta')$  to  $K(\theta^N)$ .

#### **Proof:**

(i) With  $\theta' \leq \theta^E$ , there is regulation for  $\theta > \theta'$  with ISDS. The frequency of regulation is thus  $1 - F(\theta')$  in this case. It is  $1 - F(\theta^N)$  with SSDS, since  $\theta' < \overline{\Theta}(L)$ . The claim follows from the fact that F is increasing, and  $\theta' > \theta^N$ .

(ii) There is regulation for  $\theta > \Theta^C(K(\theta'))$  with ISDS. The frequency of regulation is thus  $1 - F(\Theta^C(K(\theta')))$  in case of ISDS, and it is  $1 - F(\theta^N)$  with SSDS. While  $\theta' > \theta^N$  implies that  $K(\theta') > K(\theta^N)$ , it is still possible that  $\Theta^C(K(\theta')) < \theta^N$  since we allow for  $\Theta_k^C < 0$ .

(iii) Follows directly from the fact that there is no enforcement.

(iv) With  $K(\theta') < K(L)$  there will not be any enforcement in case of compensable regulation for  $k \le K(\theta')$ , and the host will consequently regulate for such k whenever  $\theta > \Theta(k)$ . Hence, investment will fall to  $K(\theta^N)$  and there will be regulation for  $\theta > \Theta(K(\theta^N)) = \theta^N$ .

The Proposition thus shows that a switch to SSDS might indeed allow the host country more "policy space," as often suggested to be desirable. It can reduce litigation and compensation , and possibly also induce increased regulation. Hence, switching to SSDS might solve problems where agreements are sufficiently ill-designed for certain industries that it would be better with no agreement for these industries. A natural example of this scenario might be the tobacco industry: while investors have full incentives to litigate with ISDS, a source country government might be unwilling to litigate on behalf of the firms due to the bad reputation that this will cause—that is, the political litigation costs are very high. Some recent agreements have also excluded tobacco from the protection.

But while these consequences are beneficial as such for the host country, they do not come for free: the expectation of increased regulation will reduce investment in these industries where the enforcement constraint is violated with SSDS, and this tends to hurt the host country. There is no guarantee that the unravelling of the agreement that is brought about through the switch to SSDS will occur only in industries where the host country would prefer no agreement. The switch to SSDS might also reduce investment in industries where the host country would be better off with the existing agreement than in the no-agreement situation. This will tend to be harm the host country from an ex ante point of view. The unravelling of protection must thus be desirable "on average", across industries, in order for the host country to benefit.

**Observation 1** For given levels of investment protection across industries, a switch from ISDS to SSDS will be inconsequential for the host country in some industries, and cause unravelling of the agreement in other industries. For the switch to benefit the host country, the net effect of the unravelling across affected industries must be positive.

It can also be noted that as long as a shift from ISDS to SSDS has any impact, the source country loses by being exposed to enforcement costs, and/or by being deprived of investment protection.<sup>27</sup>

# 7 SSDS to reduce negotiated investment protection

The previous Section showed how a shift to SSDS might possibly benefit the host country, assuming arbitrary and constant levels of investment protection. These assumptions served to create a situation where a host country finds itself bound by an agreement that is harmful, at least as it applies to certain industries. This seems (at least to the author) as a plausible depiction of actuality with regard to some agreements and industries. But it can hardly be said to be representative of agreements more generally. The level of protection is negotiated between the parties. Even though the texts of the traditional agreements typically do not contain industry-specific obligations, they often stipulate that applications of the agreements should be sensitive to industry-specific circumstances. To the extent that the obligations are de facto industry-specific in this sense, it would be more appropriate to view them as efficient outcomes of negotiations, rather than as being exogenously determined.

Another problem with the above approach is that the form of dispute settlement is in practice negotiated jointly with the investment protection obligations. Until recently, virtually all actual negotiations have resulted in ISDS. But we have recently seen a number of countries removing ISDS from their agreements. It seems plausible that this might trigger demands for renegotiation of the substantive provisions of the agreements from the partner countries. This raises the question of whether a host country benefits from a switch to SSDS when this will *affect the negotiated level of investment protection*? To address this question, we need to introduce a bargaining stage at the outset of the interaction.

<sup>&</sup>lt;sup>27</sup>With a violated enforcement constraint, the level of protection with ISDS is  $\theta'$  regardless of whether there is compensable regulation or not in equilibrium, and it drops to  $\theta^N$  with SSDS.

#### 7.1 Negotiations

The terms of an agreement are determined at the outset of the interaction through negotiations. For expositional reasons we first derive the negotiated level of investment protection for a given dispute settlement system. To this end, we must first establish expressions for the expected welfare of the two parties.

#### 7.1.1 Expected welfare

The expected welfare of the parties will depend on whether there are compensation payments in equilibrium, and whether the enforcement constraint binds. When the enforcement constraint is fulfilled ( $\theta' \geq \bar{\Theta}(L)$ ), the host country expected welfare is

$$\tilde{V}(\theta') \equiv \begin{cases} \int_{\underline{\theta}}^{\theta'} V(K(\theta'), \theta) dF \text{ for } \theta' \leq \theta^E \\ \int_{\underline{\theta}}^{\Theta^C(K(\theta'))} V(K(\theta')), \theta) dF(\theta) - \tilde{C}(\theta') \text{ for } \theta' > \theta^E \end{cases}$$
(4)

where

$$\tilde{C}(\theta') \equiv [F(\theta') - F(\Theta^C(K(\theta')))]\Pi(K(\theta'))$$

is the expected compensation payment. If the enforcement constraint is violated  $(\theta' < \bar{\Theta}(L))$ , the host country welfare is  $\tilde{v}^N$ . The corresponding source country expressions are for  $\theta' \ge \bar{\Theta}(L)$ 

$$\tilde{Y}(\theta',L) \equiv \begin{cases} \tilde{\Pi}(\theta') \text{ for } \theta' \leq \theta^E \\ \tilde{\Pi}(\theta') - \tilde{M}(\theta',L) \text{ for } \theta' > \theta^E \end{cases}$$
(5)

where  $\tilde{M}$  is the expected enforcement costs,<sup>28</sup>

$$\tilde{M}(\theta',L) \equiv [F(\theta') - F(\Theta^C(K(\theta')))]L$$
(6)

and the expected source country welfare is  $\tilde{y}^N$  for  $\theta' < \bar{\Theta}(L)$ .

#### 7.1.2 The bargaining outcome

We will not assume any specific bargaining process, but just represent the bargaining outcome  $\Theta^{Neg}(L)$  as the solution to a general problem

$$\max_{\theta'} B(\tilde{V}(\theta'), \tilde{Y}(\theta', L))$$
(7)

subject to the constraint  $\theta^N \leq \theta' \leq \theta_{\max}$  for L = 0. The lower bound on the level of investment protection is the no-agreement outcome  $\theta^N$ . The upper bound  $\theta_{\max}$  is the highest level of investment

 $<sup>^{28}\</sup>tilde{Y}(\theta',L)$  is continuous in  $\theta'$ , but has a kink at  $\theta^E$  since with  $\theta' > \theta^E$  the home faces expected enforcement costs.

protection that the host country is willing to accept; it is the higher of the two solutions to  $\tilde{V}(\theta_{\max}) = \tilde{v}^N$ . The maximand  $B(\tilde{V}, \tilde{Y})$  is assumed to be strictly increasing in both arguments, and strictly concave in  $\theta'$ . This could be compatible with e.g. Nash Bargaining, or maximization of joint welfare.

If there is an interior solution to the maximization problem in (7), the outcome of the bargaining is given by

$$\Theta^*(L) \equiv \arg \max_{\theta'} B(V(\theta'), Y(\theta', L))$$
  
s.t.  $\theta^N \le \theta' \le \theta_{\max}$ 

with the associated FOC

$$B_V(\tilde{V}, \tilde{Y})\tilde{V}_\theta(\theta') + B_Y(\tilde{V}, \tilde{Y})\tilde{Y}_\theta(\theta', L) = 0$$
(8)

The parties will then in equilibrium have conflicting interests with regard to whether to increase the level of protection, with the host country preferring less, and the source country preferring more, protection than the negotiated outcome; this follows from the fact that

# $\tilde{Y}_{\theta} = f(\Theta^*(L))\Pi(K(\theta')) > 0$

and consequently  $\tilde{V}_{\theta}(\theta') < 0$  at an interior solution by (8). With a binding enforcement constraint it is formally possible to have an interior solution with regard to the participation constrains where instead  $\tilde{V}_{\theta} > 0$  and  $\tilde{Y}_{\theta} < 0.^{29}$  This seems to be an empirically less plausible scenario however, so we focus on cases where the source country would prefer more protection, and the host country less, than what is negotiated. We also assume that there is an interior solution with ISDS, that is, that  $\Theta^{Neg}(0) = \Theta^*(0)$  with  $\tilde{V}(\Theta^*(0)) > \tilde{v}^N$  and  $\tilde{Y}(\Theta^*(0), 0) > \tilde{y}^N$ .

Figure 2 illustrates the setting with ISDS. The horizontal axis measures the level of investment protection  $\theta'$  in both graphs. The upper graph shows the expected welfare of the source country, which is increasing in the level of investment protection from the level of  $\theta^N$ . The lower graph gives the expected welfare of the host country, which by assumption increases at  $\theta^N$ —if not there would be no scope for an agreement— and reaches a maximum at  $\hat{\theta}$ , after which it declines until hitting the reservation level for the host country,  $\theta_{\text{max}}$ . The negotiated solution hence is hence the level of  $\theta'$  that maximizes  $B(\tilde{V}(\theta'), \tilde{Y}(\theta', 0))$  in the interval  $(\hat{\theta}, \theta_{\text{max}})$ .

(Figure 2 about here)

$$\tilde{Y}_{\theta} = f(\theta')[\Pi(K(\theta')) - L] + f(\Theta^{C}(K(\theta')))\Theta_{k}^{C}K_{\theta}L$$

<sup>&</sup>lt;sup>29</sup>This follows from

with  $\theta' = \Theta^*(L)$ . The first term captures the benefit to Home from investment protection for additional realizations of  $\theta$  (albeit that the profits come in the form of compensation payments for these states). The second term reflects the fact that for some realizations of  $\theta$  for which the source country already receives protection, it will now have to litigate (if  $\Theta_k^C < 0$ ), or alternatively that there will be realization of  $\theta$  for which it no longer has to litigate (if  $\Theta_k^C > 0$ ). Whether the second effect dominates the first will partly depend on the magnitude of the enforcement costs.

#### 7.2 The impact of shifting to SSDS

We assumed above that there is an interior solution to the bargaining problem with ISDS, and that the agreement imposes industry-specific obligations. This implies that the negotiated level of investment protection with ISDS is too high from the point of view of the host country in each industry. Consequently, the host country would benefit from a shift to SSDS that *reduces* the level of protection to some  $\theta' \geq \hat{\theta}$ . A reduction of protection would not only benefit the host country overall, but would also do this through adjustments to the regulatory regime that are suggested in the debate to be beneficial:

**Proposition 4** A marginal reduction in the level of protection in an industry from  $\Theta^*(0)$  would:

- (i) reduce the range of regulatory shocks for which there is litigation;
- (ii) reduce the magnitude of each compensation payment; and
- (iii) benefit the host country.

#### **Proof:**

(i) There is litigation for  $\theta \in (\Theta^C(K(\theta'))), \theta')$ . This range is increasing in  $\theta'$  due to the stability condition (3).<sup>30</sup>

(ii) Each compensation payment is  $\Pi(K(\theta'))$ . The claim follows from  $\Pi_k > 0$  and  $K_{\theta'} > 0$ .

(iii) Already shown above.  $\blacksquare$ 

The case for SSDS is hence stronger here than with an arbitrary level of investment protection in the sense that a reduction would be beneficial in *any* industry. But is there reason to believe that a shift to SSDS would indeed reduce the negotiated level of protection?

The following Proposition characterizes the outcome with SSDS in the case where the negotiated level of protection with ISDS will entail equilibrium litigation and compensation payments ( $\theta^E < \hat{\theta}$ ), this being the most interesting case:

**Proposition 5** With  $\theta^E < \hat{\theta}$ , SSDS yields:

(i)  $\Theta^{Neg}(L) = \Theta^*(L) \text{ if } \bar{\Theta}(L) \le \Theta^*(L);$ 

(ii)  $\Theta^{Neg}(L) = \overline{\Theta}(L)$  if  $\Theta^*(L) < \overline{\Theta}(L) \le \theta_{\max}$ ; and

(iii) no agreement if  $\overline{\Theta}(L) > \theta_{\max}$ .

Case (i) captures the one of the two mechanisms through which a shift to SSDS can affect the negotiated outcome: by affecting the source country's (marginal) benefit of investment protection. As can be seen from the bargaining problem above, litigation costs L can affect both the level of expected welfare of the source country,  $\tilde{Y}(\theta', L)$ , and the marginal benefit of investment protection,  $\tilde{Y}_{\theta}(\theta', L)$ . Both these effects are likely to affect the bargaining outcome, but the direction is unclear.

<sup>&</sup>lt;sup>30</sup>The effects for the frequency of regulation is unclear, however, for  $\theta' > \theta^E$ . It is  $1 - F(\Theta^C(K(\theta')))$  in case of ISDS. While  $K(\theta')$  would fall with a reduction in  $\theta'$ , the effect on the regulatory cutoff  $\Theta^C(K(\theta'))$  is ambiguous since  $\Theta_k^C \ge 0$ .

To see this, consider the simple case where the bargaining process maximizes the aggregate welfare, that is,  $B(\tilde{V}, \tilde{Y}) \equiv \tilde{V} + \tilde{Y}$ ; this could capture a situation where the parties have side payments (perhaps in the form of trade liberalization commitments that are negotiated simultaneously with the investment agreement). Now consider a small step from ISDS toward SSDS, as captured by a marginal increase in L. The effect on the negotiated level of investment protection is then given by

$$\Theta_L^* = \frac{-\tilde{Y}_{\theta L}}{\tilde{V}_{\theta \theta} + \tilde{Y}_{\theta \theta}}$$

The denominator is negative by the second-order condition, so the sign of  $\Theta_L^*$  is that of  $Y_{\theta L}$ :

$$\tilde{Y}_{\theta L} = -\tilde{M}_{\theta L} = -[f(\theta') - f(\Theta^C(K(\theta')))\Theta_k^C K_{\theta}] \ge 0$$

The indeterminacy of the sign of this term stems from the ambiguous effect of the level of investment protection on the expected political litigation costs. As can be seen from (6), a higher level of investment protection will affect both bounds of the range of  $\theta$  for which there is litigation. It would increase the upper limit, which would tend to make  $\tilde{Y}_{\theta L}$  negative. But it would have unclear effects for the lower bound  $\Theta^C(K(\theta'))$ , due to the ambiguous sign of  $\Theta_k^C$ . If  $\Theta_k^C < 0$ , the lower bound on the range would fall, and  $\tilde{Y}_{\theta L}$  would be ambiguously negative, in which case the shift toward SSDS would reduce the negotiated level of protection. If  $\Theta_k^C > 0$ , the impact on  $\tilde{M}$  will depend on the marginal frequencies at both ends of the range.<sup>31</sup> It is conceivable that  $\tilde{M}_{\theta} < 0$  when the frequency of  $\theta$  falls significantly over the range ( $\Theta^C(K(\theta)), \theta'$ ), in which case  $\tilde{Y}_{\theta L} > 0$ . It is hence indeterminate whether the negotiated level of protection falls with SSDS even with joint welfare maximization.<sup>32,33</sup>

$$B(\tilde{V}(\theta'), \tilde{Y}(\theta', L)) \equiv \tilde{V}(\theta')\tilde{Y}(\theta', L)$$

From the FOC

$$B_{\theta}(\tilde{V}(\theta'), \tilde{Y}(\theta', L)) = \tilde{V}_{\theta}(\theta')\tilde{Y}(\theta', L) + \tilde{V}(\theta')\tilde{Y}_{\theta}(\theta', L) = 0$$

it follows that

$$\Theta_L^* = -\frac{1}{A} [\tilde{V}_{\theta} \tilde{Y}_L + \tilde{V}(\theta') \tilde{Y}_{\theta L}] \gtrless 0$$
<sup>(9)</sup>

with A < 0 by the SOC. The first term in the brackets is non-negative since  $\tilde{V}_{\theta} < 0$  and  $\tilde{Y}_L = -\tilde{M}_L \leq 0$ . It is hence in this sense even more unlikely that a shift to SSDS will reduce the level of investment protection with Nash Bargaining.

<sup>33</sup>To see the issues involved, note first that  $\Theta^C(K(\theta')) < \theta'$ , this being the condition for equilibrium compensable regulation. Second, it follows from (3) that the upper bound on the range of  $\theta$  for which there are compensable regulation (and thus enforcement costs with SSDS)—that is  $(\Theta^C(K(\theta)), \theta')$ —increases faster in  $\theta'$  than the lower bound. But it is still possible that  $\tilde{M}_{\theta} < 0$  for certain  $\theta' \in (\theta^E, \bar{\theta})$ . The reason is that as  $\theta'$  increases, the impact on  $\tilde{M}$  will also depend on the frequencies at both ends of the range. But since condition (3) implies that  $\Theta_k^C K_{\theta} < 1$ , it would suffice that  $f(\cdot)$  is non-decreasing for  $\tilde{Y}_{\theta L} < 0$ . Similarly,  $\Theta_k^* < 0$  would suffice, but it would seem arbitrary to assume this to hold.

<sup>&</sup>lt;sup>31</sup>The stability condition (3) ensures that  $\theta'$  grows faster than  $\Theta^C(K(\theta'))$ , as we increase  $\theta'$ , but we here also have to take account of the marginal frequencies.

 $<sup>^{32}</sup>$ It would also be ambiguous with a Nash Bargaining solution. For instance, let the maximand for a Nash Bargaining problem with reservation utilities normalized to zero be

Figure 3 illustrates one possible constellations compatible with case (i). The dashed curves reproduce the ISDS setting. In the lower graph, the solid curve shows the expected welfare of the host country when the enforcement constraint is high in the sense that  $\bar{\Theta}(L) > \hat{\theta}$ , but low enough so that the interior solution is unconstrained:  $\Theta^*(L) > \bar{\Theta}(L)$ . The upper graph shows how the expected source country welfare is lower with SSDS than with ISDS due to the litigation costs for  $\theta' > \theta^E$ ; this is illustrated by the thinner curve, which has a kink at  $\theta^E$ . Formally, this comes from the fact that  $\tilde{Y}_L = -M_L < 0$  in this case, as can be seen from (5).But since the enforcement constraint implies that there will be no enforcement unless  $\theta' \ge \bar{\Theta}(L)$ , the relevant part with SSDS is the thicker drawn curve. The graph assumes that the level of protection falls with SSDS,  $\Theta^*(L) < \Theta^*(0)$ , but it could also increase. The distinguishing feature of this case is that the outcome with SSDS differs from that with ISDS since the value (and the marginal value) of investment protection is reduced for the source country, but that the enforcement constraint  $\bar{\Theta}(L) \le \Theta^*(L)$  still does not bind. The outcome would be qualitatively the same with less restrictive enforcement constraints.

#### (Figure 3 about here)

Case (ii) in Proposition 5 highlights the other mechanism through which a shift to SSDS might affect the negotiated level of investment protection: when the litigation costs are sufficiently high that the enforcement constraint would be violated if the parties where to implement the unconstrained negotiated outcome  $\Theta^*(L)$ , they might prefer to *increase the level of protection in order to ensure that the agreement is enforced*. This mechanism will clearly tend to *increase* the negotiated outcome. But due to the presence of the mechanism described above, it is conceivable that the enforcement constraint will be binding even though  $\bar{\Theta}(L) < \Theta^*(0)$ . This possibility would arise if  $\Theta^*_L(0) < 0$ , since  $\theta' \ge \bar{\Theta}(L)$  could then start to bind at a  $\theta' < \Theta^*(0)$ . It would in this case be possible to have  $\Theta^{Neg}(L) = \bar{\Theta}(L) < \Theta^*(0)$ . This outcome is less likely however, the larger are the political litigation costs, since  $\bar{\Theta}(L)$  increases in L.

Case (ii) is a straightforward implication of the framework at hand. But it still does strike us as somewhat implausible empirically. It does not seem very plausible that the parties would design an investment agreement such that it just induces enough investment for litigation to be worthwhile. We therefore leave this possibility aside.

Case (iii) in Proposition 5 captures the political costs are so high relative to the profits and welfare benefits from investment, that there is no solution to the bargaining problem with SSDS. The shift then implies that the agreement unravels. This will reduce the welfare of both parties, since it was assumed that the parties preferred the agreement with ISDS to the no-agreement situation.

To conclude, despite our simple formalization of enforcement costs, the impact of shifting from ISDS to SSDS depends in a rather complex way on the profitability of the industry, and the magnitude of the political costs of enforcing the agreement in the industry, since these will determine whether the enforcement constraint binds. It will also depend on the nature of the bargaining process, which will determine how the negotiated level of investment protection responds to the enforcement costs imposed on the source country. A shift to SSDS can benefit the host country by reducing the level of investment protection. This is more likely to occur if the political litigation costs are small. But there does not appear to be any presumption that the level of investment protection will fall.

# 8 The inefficiency of SSDS

As we have just seen, if the level of investment protection is negotiated, but the host country can control the type of dispute settlement system, the host country would gain from switching from ISDS to SSDS if  $\Theta^{Neg}(L)$  is marginally lower than  $\Theta^*(0)$ . But since the source country would prefer ISDS to SSDS for any level of protection that is agreed upon, the host country would be even better off if it could use its command over the dispute settlement system to induce the source country to accept a lower level of protection than what would result with SSDS, against getting ISDS.

Formally, suppose the dispute settlement system is SSDS, and  $\hat{\theta} > \theta^E$ . For any level of investment protection  $\theta' \geq \bar{\Theta}(L)$ , a shift from SSDS to ISDS with maintained level of protection would not affect host country welfare, but the source country would be strictly better off since it would avoid expected enforcement costs. Hence, if the host country could condition a switch to ISDS on a small reduction in the level of protection, it would benefit both parties. In the alternative scenario where  $\theta' < \bar{\Theta}(L)$ , the outcome will be the same as with no agreement. But since we have assumed that there is scope for an agreement with ISDS—that is, that there is some level of protection that makes both parties better off than no agreement—both parties would be better of with a switch to ISDS:

**Proposition 6** Assume  $\theta^E < \hat{\theta}$ . The host country would benefit from switching from ISDS to SSDS if this reduces the negotiated level of investment protection. But if the host country could condition the choice of ISDS on a level of investment protection that is lower than what would result with SSDS, both parties could be made to benefit from the ISDS outcome.

As yet another way of highlighting the inefficiency of SSDS, consider the case where the parties have access to side payments in their negotiations. This could for instance take the form of trade liberalization commitments by the source country if the investment agreement is part of a trade agreement. In this case the negotiations will effectively maximize the aggregate surplus, which we can write as

$$\tilde{W}(\theta',L) \equiv \tilde{Z}(\theta') - \tilde{M}(\theta',L)$$

with

$$\tilde{Z}(\theta') \equiv \tilde{V}(\theta') + \tilde{\Pi}(\theta')$$

The negotiated outcome is then

$$\Theta^{Neg}(L) \equiv \arg \max_{\theta'} \tilde{W}(\theta', L)$$
  
s. t.  $\theta' \ge \bar{\Theta}(L)$ 

The difference in aggregate welfare with ISDS and SSDS is

$$\tilde{W}(\Theta^*(0),0) - \tilde{W}(\Theta^{Neg}(L),L) = Z(\Theta^*(0)) - Z(\Theta^{Neg}(L)) + \tilde{M}(\Theta^{Neg}(L),L)$$

There are thus two reasons why ISDS yields higher aggregate welfare than SSDS in this case: first, to the extent that there is compensable regulation in equilibrium with SSDS, a shift to SSDS will cause a direct welfare loss from the litigation costs; M > 0 in the above expression. Second, a shift to SSDS might distort the negotiated level of investment protection. This is represented in the expression above by the fact that the sum of the first two terms on the right-hand side is negative, since

$$\Theta^*(0) \equiv \arg\max_{\theta'} \ Z(\theta')$$

It is possible to only have the first type of distortion; this occurs if  $\Theta^*(0) < \overline{\Theta}(L) < \theta^E$  since Consequently:

**Proposition 7** Assume that  $\theta^E < \hat{\theta}$  and that the parties have access to side payments in their negotiations. A shift from ISDS to SSDS will then reduce aggregate welfare by: (i)  $\tilde{M}(\Theta^{Neg}(L), L)$  due to political litigation costs; and (ii)  $Z(\Theta^*(0)) - Z(\Theta^{Neg}(L))$  due to distorted investment and regulation.

**Proof:**  $\theta^E < \hat{\theta}$  implies that there is litigation with ISDS. The direct effect of shifting to SSDS would then be to impose expected litigation costs  $\tilde{M}(\Theta^*(0), L)$ . This will change the outcome of the bargaining, and thus affect investment and regulation. There would be no effect of the switch to SSDS only if  $\Theta^*(L) \le \theta^E$ , but this cannot be an outcome of the negotiation even with litigation costs, since the host country welfare is strictly increasing for  $\theta' < \hat{\theta}$ , and the source country welfare is weakly increasing in this range.

## 9 Alternative formulations of the ISDS/SSDS distinction

We have formalized the standard explanation for the introduction of ISDS—political and/or diplomatic enforcement costs—in an analytically very simple, but we still believe descriptive, way. But there are alternative ways of doing this, of course.

First, a common claim in favor of ISDS is that it provides for speedier resolution of disputes, which saves costs for the investors. Another explanation for why SSDS differs from ISDS could be that source country governments put less weight on the profits of their investors, compared to the investors themselves. To illustrate these alternative explanations, assume that both investors and the source country government face regular litigation costs C, such as legal fees. Assuming that no mistakes are made in arbitration, the investor will litigate in case of compensable regulation if  $\Pi(k) > C.^{34}$  With SSDS, the source country government faces the same process costs, as well as the political costs L. It also puts a smaller weight  $\gamma < 1$  on the profits of the investor relative to the administrative costs, than do the investors. Hence, the government will litigate if  $\gamma \Pi(k) > C + L.^{35}$ The parameter  $\gamma$  could alternatively capture the loss of profits due to a slower litigation process with SSDS,  $\gamma$  reflecting the discounting of future compensation payments. As can be seen, since  $C > (C + L)/\gamma$ , these alternative explanations for the difference between ISDS and SSDS share the basic feature with the explanation maintained in the main analysis above, that source country will be more reluctant to litigate than private investors.

But the approaches will also differ in certain respects.<sup>36</sup> The political enforcement costs L will only affect the outcome in situations where there is litigation, and the same is true for the discounting of the profit. But if the source country government puts less weight on the profit of an investor when deciding whether to litigate on behalf of the investor, the government will presumably also put less weight on the investor's profit when negotiating the agreement. This implies for instance that industries that are of less value to the source country government will have lower negotiated investment protection.

Second, it has been assumed above that the political/diplomatic enforcement are unrelated to the regulatory problem facing the host country, that is, that L and  $\theta$  are uncorrelated. This implies that the decision regarding whether to enforce the agreement is unrelated to the severity of regulatory problem, and consequently that SSDS might cause the agreement to unravel in industries where it is desirable with production for the host country (and thus from a "global" point of view).

It seems plausible that the political enforcement costs and the severity of the regulatory problem often are positively correlated, however: it should be particularly costly politically for source countries to pursue cases in instances where the host country regulations are addressing severe regulatory problem. For instance, it would likely cause a source country government a substantial loss of political goodwill if it were to litigate on behalf of a tobacco producer regarding non-discriminatory host country health measures against smoking.

Finally, it has been assumed that the source country carries enforcement costs only when litigating in order to obtain compensation. An alternative would be to assume that enforcement efforts

 $<sup>^{34}</sup>$ We assume that the investor is perfectly informed regarding whether regulation is compensable. This is a strong assumption in light of the amorphous text of IIAs, and the disparate case law.

<sup>&</sup>lt;sup>35</sup>We assume that the judicial mechanism that is used to resolve state-state disputes yields the same precision as those used for investor-state disputes. This is again a strong assumption, since in practice agreements might provide for rather different mechanisms; for instance, state-state disputes might go to bodies like the International Court of Justice, while investor-state disputes are typically arbitrated by ad hoc panels.

<sup>&</sup>lt;sup>36</sup>There is thus an distinction between the case where a home government does not put as much weight on investor profits or compensation payments, as captured by  $\gamma < 1$ , and where it does not want to (be seen) to hold the axe when enforcing the payments, as captured by the cost L.

are required more generally to induce the host country to abide by the agreement whenever it would unilaterally prefer to regulate, that is, for all  $\theta > \Theta(k)$ . The source country expected welfare would then be

$$\tilde{Y}(\theta',L) \equiv \tilde{\Pi}(\theta') - [F(\theta') - F(\Theta(K(\theta')))]L$$
(10)

whenever the enforcement constraint is fulfilled. The qualitative properties of the model would be much the same as above.

# 10 Conclusions

There have been frequent calls in the policy debate for changes to the dispute settlement system in investment agreements, and in particular to restrict the possibilities for private investors to litigate against host countries. In Europe, these calls have been fuelled in particular by contentious investment disputes in the energy sector. This paper is to the best of our knowledge the first economic analysis of the usefulness for host countries to heed these calls.

The paper focuses on the standard explanation for why SSDS yields less litigation than ISDS the political/diplomatic costs that source country governments face when enforcing agreements on behalf of their investors. We have identified two separate reasons why a host country might benefit from SSDS in this framework. The first is that a switch to SSDS essentially causes the agreement to unravel in certain industries, due to the source country government's unwillingness to enforce the agreement. This could be beneficial if the terms of the agreement are so demanding for the host country, that no agreement is better than the agreement with ISDS, and provided that the unravelling to a sufficient degree occurs in the right industries from the host country perspective. The second reason why a shift to SSDS might increase host country welfare is that it might cause a renegotiation of the investment protection to a somewhat lower level. This will trigger increased regulation, reduced compensation payments, etc., along the lines proposed in the debate. We have argued that neither of these mechanisms seems to provide convincing support of the usefulness for host countries to move toward SSDS, however.

First, when a shift from ISDS to SSDS leads to the unraveling of the agreement for a particular sector, there is no guarantee that this will occur in industries for which no protection is better than an agreement with ISDS, in particular not when the level of protection with ISDS forms part of a voluntary agreement. One reason for this is that the enforcement costs that the source country government faces need not correlate with the undesirability of the industries from a host country point of view.

Second, our framework offers no compelling support for the notion that negotiations under SSDS are likely to yield lower levels of investment protection than with ISDS.

Third, the existence of the enforcement costs under SSDS is a source of inefficiency, both since they tend to directly reduce the expected welfare of the source country, and indirectly by affecting the negotiated level of protection away from the ISDS level. SSDS is therefore inefficient, and host country could therefore benefit from offering the source country ISDS, against concession with regard to the negotiated level of protection.

We thus conclude that if an agreement with ISDS stipulates too much investment protection from the host country's perspective, and the host country is able to determine the type of dispute settlement system, it should primarily aim to change the substantive undertakings in the agreements, rather than introduce imperfections in the functioning of the dispute settlement system in order to deliberately hamper the efficacy of the agreement.

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Figure 1a: Regulation incentives with  $\theta' > \Theta^{c}(k)$ 

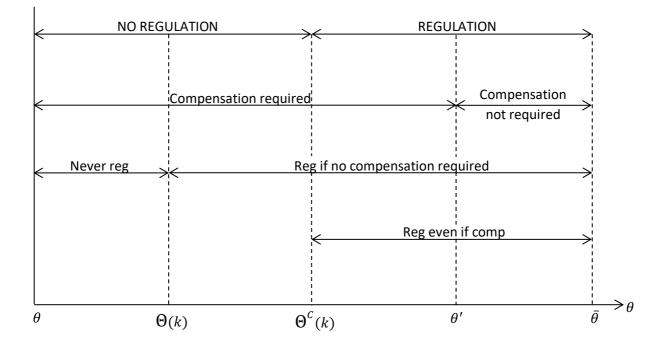
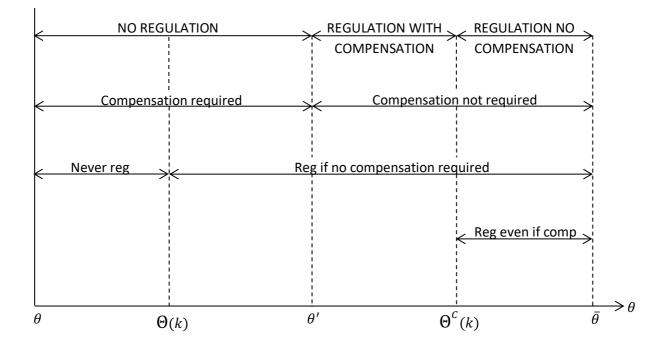
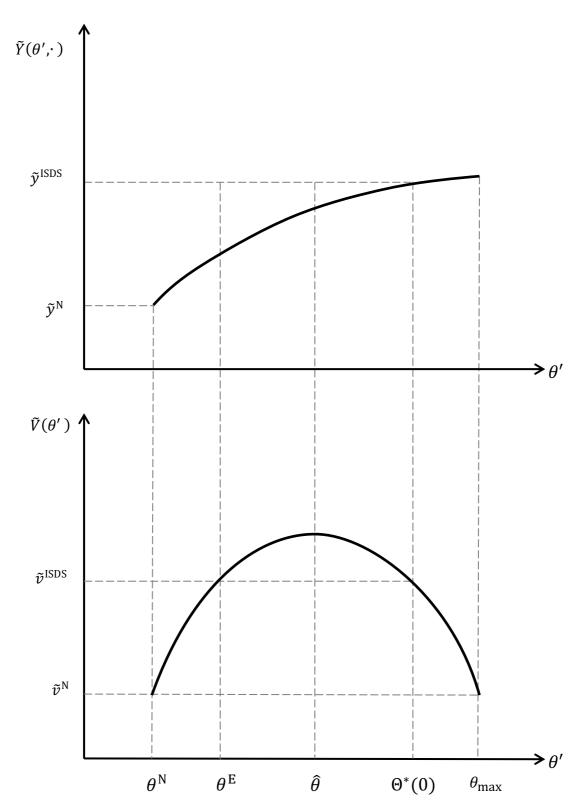


Figure 1b: Regulation incentives with  $\theta' < \Theta^{C}(k)$ 







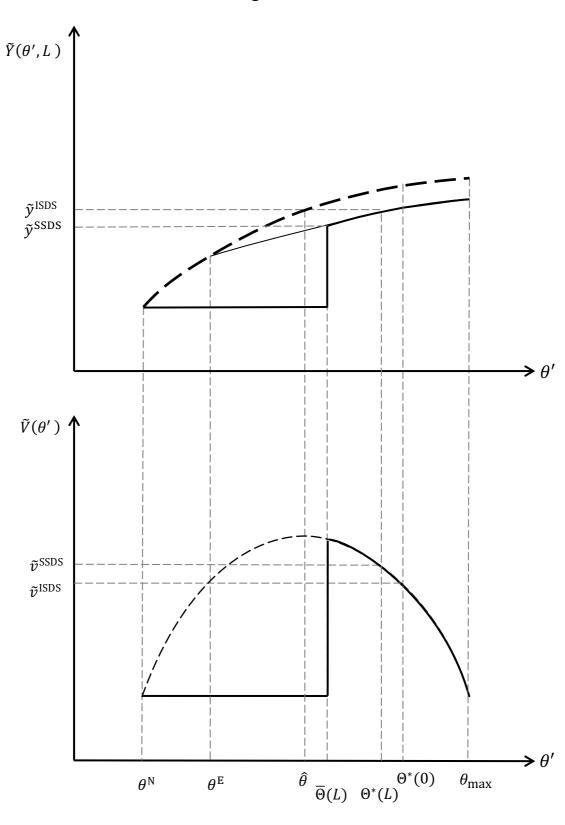


Figure 3