

Disputes in International Investment and Trade

Ralph Ossa, Robert W. Staiger and Alan O. Sykes

Zurich, Dartmouth, Stanford

September 2020

- Firms supplying foreign countries are protected by two types of international agreements
 - If they engage in FDI, investment agreements protect against expropriation
 - If they engage in exporting, trade agreements secure foreign market access
 - Increasingly combined with other provisions into comprehensive agreements
- The dispute settlement procedures in these agreements are highly controversial
 - Massive protests in Europe against investment provisions in CETA and TTIP
 - US decision to block the appointment of judges to the WTO Appellate Body

- The dispute settlement procedures differ markedly for investment and trade agreements:
 - ➊ Standing: Investor-state dispute settlement (ISDS) versus state-to-state dispute settlement (SSDS)
 - ➋ Nature of the remedy: Cash damages versus tariff retaliation
 - ➌ Remedial period: Retrospective remedies versus prospective remedies

- We develop parallel models of trade and investment agreements, which capture the different problems they are designed to solve
 - Trade agreements are *government-to-government*, protecting market access commitments negotiated between governments
 - Investment agreements are *government-to-investor*, solving a government commitment problem vis-a-vis foreign investors
- We then use these models to analyze the observed dispute settlement processes from a positive and a normative angle
 - Can we explain the observed differences in institutional design? Would a change in the institutional design improve efficiency?

- In principle, the observed differences in institutional design across trade and investment agreements can be explained as a consequence of the different problems these agreements solve
 - The fact that trade agreements are *government-to-government* while investment agreements are *government-to-investor* goes a long way in explaining the observed differences
- However, the observed institutional design of investment agreements is efficient only under certain parameter restrictions which may or may not apply in reality and in all circumstances
 - For an investment agreement to be welfare improving at all, its dispute settlement body (DSB) has to be sufficiently good and domestic institutions have to be sufficiently weak
 - And even then, ISDS only improves over SSDS if the government is too lenient in filing disputes which requires restrictions on additional parameters

- Dispute settlement procedures in trade agreements
 - We build on Maggi and Staiger (2011) but ask novel questions and expand the focus to a comparative analysis of trade and investment agreements
- Dispute settlement procedures in investment agreements
 - Prior work includes Konrad (2017), Horn (2018), Stahler (2018), Horn and Tangeras (2019), Janeba (2019), Kohler and Stahler (2019) and Sykes (2019)
 - We ask novel questions, use a distinct framework, and expand the focus to a comparative analysis of trade and investment agreements

- To avoid a large taxonomy of cases, we consider one institutional difference at a time:

- ➊ Standing
- ➋ Nature of the remedy
- ➌ Remedial period

- We consider a trade agreement between an importing country and an exporting country that includes vague language (e.g. “serious injury”) for some states of the world
- The importer government chooses whether to restrict imports ($\tau \in \{FT, P\}$) and the exporter complainant chooses whether to file a complaint with a dispute settlement body (DSB)
- The exporter complainant is the government under state-to-state dispute settlement (SSDS) and an exporting industry under exporter-state dispute settlement (ESDS)

- The importer government always gains from protection (gaining $\gamma_G(s) > 0$) and the exporter complainant always suffers from protection (losing $\gamma_f^*(s) < 0$ for $f = \{G^*, E^*\}$)
- Protection is efficient in all states $s \in \sigma^P$:

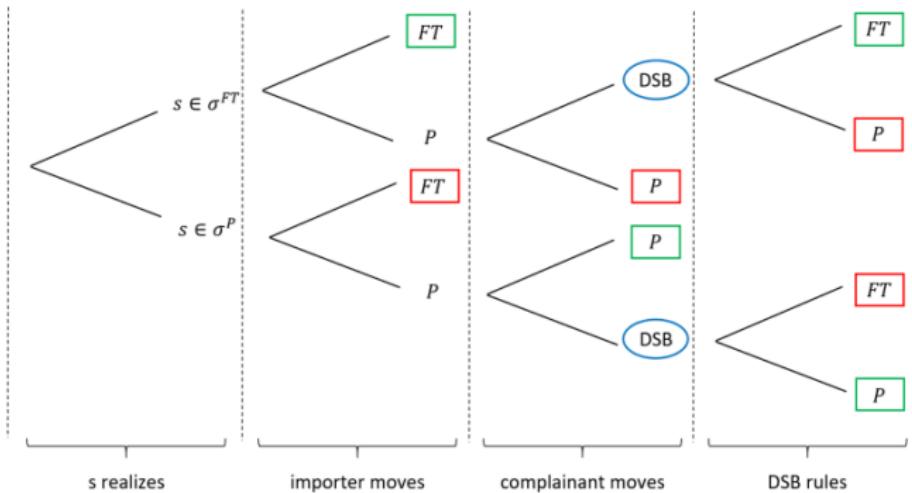
$$\Gamma(s) = \gamma_G(s) + \gamma_{G^*}^*(s) > 0 \text{ for } s \in \sigma^P$$

And free trade is efficient in all states $s \in \sigma^{FT}$:

$$\Gamma(s) = \gamma_G(s) + \gamma_{G^*}^*(s) < 0 \text{ for } s \in \sigma^{FT}$$

- The DSB attempts to implement the efficient policy based on a noisy signal of $\Gamma(s)$, making a mistake with probability $qk(s) \in (0, 1/2)$, with litigation costs $c(s)$ and $c_f^*(s)$

Standing - Trade agreements - Timing



⇒ Equilibrium disputes always reflect opportunistic behavior on part of the importer government or the exporter complainant

Standing - Trade agreements - Choices

- Foreign complainant files if $\tau = P$ and

$$\Pr(\text{DSB ruling is } FT|s) \times |\gamma_f^*(s)| > c_f^*(s) \quad (1)$$

- Importer government chooses $\tau = P$ if (1) fails or if (1) holds and

$$\Pr(\text{DSB ruling is } P|s) \times \gamma_G(s) > c(s) \quad (2)$$

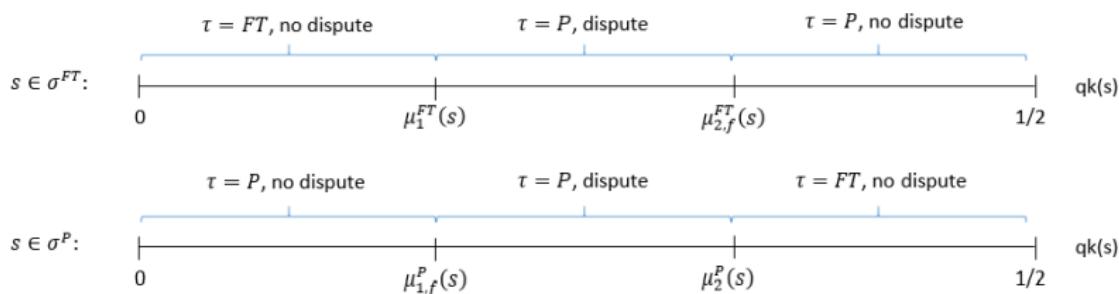


Figure 2a: Illustration of Lemma 1

- The expected efficiency loss relative to the first best associated with standing choice $f \in \{G^*, E^*\}$ can be written as

$$\begin{aligned} L(V_f) &= \sum_{s \in \{\sigma_{2,f}^{FT} \cup \sigma_{2,f}^P\}} p(s) qk(s) |\Gamma(s)| \quad (\text{DSB error}) \\ &+ \sum_{s \in \{\sigma_{2,f}^{FT} \cup \sigma_{2,f}^P\}} p(s) [c(s) + c_f^*(s)] \quad (\text{litigation costs}) \\ &+ \sum_{s \in \{\sigma_{3,f}^{FT} \cup \sigma_3^P\}} p(s) |\Gamma(s)| \quad (\text{distorted choices "in the shadow of DSB"}) \end{aligned}$$

⇒ Optimal standing choice can be inferred from the sign of $\Delta_{E^*, G^*} \equiv L(V_{E^*}) - L(V_{G^*})$

Standing - Trade agreements - SSDS vs ESDS

- We assume

$$c_{G^*}^* = c_{E^*}^* \equiv c^* \quad (\text{Assumption 1})$$

$$|\gamma_{G^*}^*(s)| < |\gamma_{E^*}^*(s)| \quad (\text{Assumption 2})$$

⇒ Moving from SSDS to ESDS amounts to the foreign government delegating filing decisions to a more aggressive filer than itself

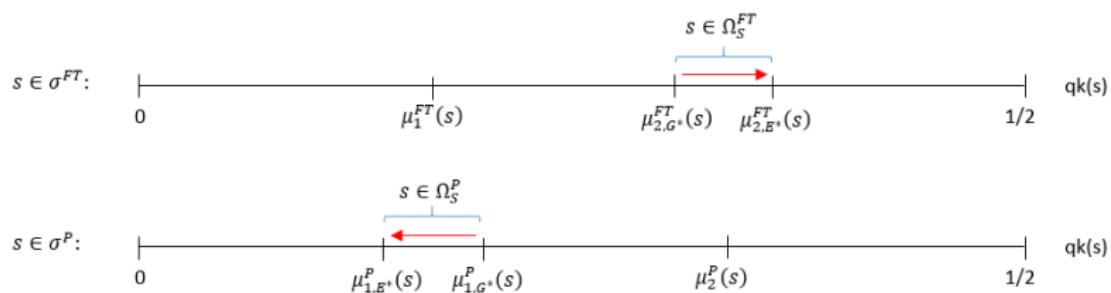


Figure 2b: From SSDS to ESDS

Proposition 1. *Governments, but not their exporters, should have standing to bring disputes in an optimally designed trade agreement. That is, an optimally designed trade agreement should include SSDS, but not ESDS.*

- The exporter government already litigates too much under SSDS since it does not take the importer's litigation costs into account
- It is easy to see that the efficiency loss associated with moving from SSDS to ESDS is positive so that SSDS dominates ESDS

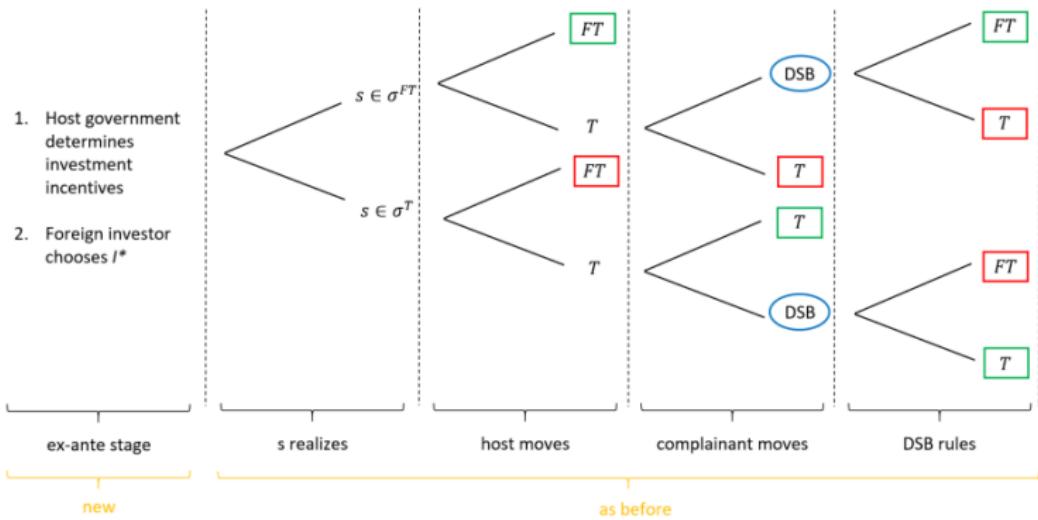
$$\Delta_{E^*, G^*} = \underbrace{\sum_{s \in \Omega_S^{FT}} p(s) \{ [qk(s) |\Gamma(s)| + c(s) + c^*(s)] - |\Gamma(s)| \}}_{>0 \text{ since the government does not see a filing as worth the dispute costs}}$$

$$+ \underbrace{\sum_{s \in \Omega_S^P} p(s) [qk(s) |\Gamma(s)| + c(s) + c^*(s)]}_{>0 \text{ since the efficient policy gets challenged more often}}$$

⇒ Trade agreement is government-to-government so governments should have standing

- We now consider an investment agreement between a host country and a foreign country which is primarily concerned with solving a government commitment problem
- Relative to our earlier model of trade agreements we make three main modifications:
 - ① The host government chooses an investment policy $\iota = \{FT, T\}$, where T is a stand-in for a wide variety of policies that could be interpreted as a "taking"
 - ② There is an ex-ante investment stage after which the foreign investment is sunk but the host government can entice foreign investors with up-front investment incentives
 - ③ We model investment more explicitly than we modeled trade, to be clear about the nature of the commitment problem as well as the various inefficiencies that can arise
- ⇒ Under laissez-faire, there is now an ex-ante and an ex-post inefficiency. The incentives address the former while the agreement addresses the latter

Standing - Investment agreements - Timing



- The host country is small in world capital markets, facing an infinitely elastic ex-ante supply of foreign capital at the world rate of return r^*
- A single foreign investor makes an investment I^* , facing elastic demand for output Q . $Q = I^*$, I^* is sunk, and $\tilde{P}(I^*)$ is the market clearing price
- Operating profits are $PS(I^*) = \tilde{P}(I^*)I^*$, consumer surplus is $CS(I^*) = \int_{\tilde{P}(I^*)}^{\infty} D(P) dP$, and production/consumption may generate a negative local externality $e(I^*, s) = e(s)I^*$
- Either: $e(s) = 0$ so that $PS(I^*) + CS(I^*) > 0$ and the ex-post social value of the investment is positive. We label states of the world in which this applies as $s \in \sigma^{FT}$
- Or: $e(s)$ large so that $PS(I^*) + CS(I^*) - e(I^*, s) < 0$ and the ex-post social value of the investment is negative. We label states of the world in which this applies as $s \in \sigma^T$

- If $s \in \sigma^{FT}$, $\iota = T$ results in the government taking over production at a fraction $\kappa \in (0, 1)$ of the original productivity
- If $s \in \sigma^T$, $\iota = T$ results in the government shutting down the production facility so that production no longer occurs
- Conditional on I^* , the ex-post gains from a taking $\Gamma(I^*, s)$ are therefore given by:

- $s \in \sigma^T$:
$$\underbrace{[0]}_{\text{joint payoff for } \iota=T} - \underbrace{[PS(I^*) + CS(I^*) - e(I^*, s)]}_{\text{joint payoff for } \iota=FT} = e(I^*, s) - PS(I^*) - CS(I^*) > 0$$
- $s \in \sigma^{FT}$:
$$\underbrace{[\kappa PS(I^*) + CS(I^*)]}_{\text{joint payoff for } \iota=T} - \underbrace{[PS(I^*) + CS(I^*)]}_{\text{joint payoff for } \iota=FT} = -(1 - \kappa) PS(I^*) < 0$$

- We assume that domestic institutions (e.g. domestic courts) allow the host government to commit to implement the first-best policies with probability \bar{p}
- If this was all, investment would be such that $\bar{p}p^{FT}\check{P}(I_C^*) = r^*$ and the host government's expected payoff would be

$$E_s [\bar{w}(I_C^*, \iota_C, s)] = p^{FT} [CS(I_C^*) + (1 - \bar{p})\kappa PS(I_C^*)]$$

- It is easy to show that $\frac{dE_s[\bar{w}(I_C^*, \iota_C, s)]}{d\bar{p}} > 0$, which illustrates that the host government has a commitment problem and might thus want to sign an investment agreement
- Intuitively, the foreign investor gets an expected return of r^* anyway so that the host government pays the price for any deviation from the first best

- Are simple up-front investment incentives (e.g. tax holidays) perhaps sufficient to solve the host government's commitment problem?
- The host government can induce any I^* by offering foreign investors $\{r^* - E_s[\rho_C(I^*, s)]\} I^*$ conditional on investing I^*
- This can address the ex-ante inefficiency due to underinvestment but not the ex-post inefficiency resulting from takings in states $s \in \sigma^{FT}$

Lemma. *An up-front investment program can help solve the host government's commitment problem with regard to foreign investors, but it cannot by itself achieve the first-best as long as $(1 - \bar{p})(1 - \kappa) > 0$.*

- Can an investment agreement improve host government welfare over a simple up-front investment program?
- On the one hand, an investment agreement reduces the ex-post inefficiency due to inefficient takings in states $s \in \sigma^{FT}$
- On the other hand, it adds new ex-post inefficiencies by preventing some efficient takings in states $s \in \sigma^T$ and adding litigation costs

Proposition 2. *The introduction of an investment agreement can lead to efficiency gains and benefit the host government relative to stand-alone up-front investment incentives for foreign investors if and only if the quality of the court is sufficiently high and the quality of domestic institutions is sufficiently weak.*

⇒ We henceforth assume parameters to be such that an investment agreement leads to efficiency gains and turn to the question of optimal standing

- We now assume

$$\bar{c}_{G^*}^* = \bar{c}_{I^*}^* \equiv \bar{c}^* \Rightarrow \bar{c}_{G^*}^*(I^*, s) = \bar{c}_{I^*}^*(I^*, s) \equiv \bar{c}^*(I^*, s) \quad (\text{Assumption 1}')$$

$$\bar{\gamma}_{G^*}^* < \bar{\gamma}_{I^*}^* \equiv 1 \Rightarrow |\bar{\gamma}_{G^*}^*(I^*, s)| < |\bar{\gamma}_{I^*}^*(I^*)| = PS(I^*) \quad (\text{Assumption 2}')$$

- Analogous to before, moving from SSDS to ISDS amounts to the foreign government delegating filing decisions to a more aggressive filer than itself

Proposition 3. *Investors should have standing to bring disputes in an optimally designed investment agreement, if the foreign government faces high political costs of initiating a dispute, the host government is highly inefficient in orchestrating takings for $s \in \sigma^{FT}$ and bears little cost of defending itself in court, and if expropriation is socially efficient only in unusual circumstances. That is if $\gamma_{G^*}^*$, κ , c , and p^T are sufficiently low, an optimally designed trade agreement should include ISDS.*

- On the one hand, the government is an imperfect agent for investors which pushes towards ISDS. On the other hand, the dispute settlement process encourages excessive litigation which pushes towards SSDS
- For ISDS to be optimal, the principal-agent problem must be severe (and therefore $\gamma_{G^*}^*$ low) and the excessive-litigation problem must be mild (and therefore κ and c low) so that the government under-files in states $s \in \sigma^{FT}$
- Moreover, this under-filing in states $s \in \sigma^{FT}$ needs to be sufficiently strong relative to the inevitable over-filing in states $s \in \sigma^T$. This happens, for example, if these states are sufficiently rare (and therefore p^T low)

⇒ Investment agreement is government-to-investor so investors should have standing, but...

▶ Equation

- Does it make sense that we observe SSDS in real-world trade agreements and ISDS in real-world investment agreements?
- For trade agreements, SSDS makes sense since it limits the natural incentive to over-file while not creating an offsetting principal-agent problem
- For investment agreements, however, ISDS can make sense since the government only acts as an imperfect agent of the covered investor; but it does not make sense in all circumstances

⇒ There is a case for having SSDS in trade agreements and ISDS in investment agreements, but the case for ISDS is far from absolute

- So far, we have assumed that damage payments are not part of the court's ruling so that the losing party simply has to "cease and desist"
- In reality, however, convicted violators have the option to continue their violation and compensate the injured party through damage payments
- While trade agreements allow the injured party to engage in reciprocal retaliation, investment agreements explicitly provide for cash payments
- We now explore this second institutional difference, taking as given that trade agreements use SSDS and investment agreements use ISDS

- Instead of forcing the Home government to cease and desist when convicted, we now allow it to maintain $\tau = P$ or $\iota = T$ and make damage payments
- We compare two institutional setups: one in which the DSB allows reciprocal retaliation and another in which the DSB awards cash damages
- The key trade-off featured by our extended model is that reciprocal retaliation is less efficient but that cash damages are harder to assess for the DSB
- Damages to an investor are easier to quantify than damages to an exporter government, so that it makes sense to only award cash damages in investment agreements

► Short version

- When retaliation is the remedy, it is so inefficient that Home always switches to $\tau = FT$ when convicted so that our baseline model continues to apply
- When cash payments are the remedy, they are perfectly efficient so that consumer surplus and producer surplus can be costlessly transferred internationally
- Denoting the cash damages by $d^*(s)$, we assume that

$$\Pr[d^*(s) > |\gamma_{G^*}^*(s)|] = m(s),$$

$$\Pr[d^*(s) < |\gamma_{G^*}^*(s)|] = m(s), \text{ and}$$

$$\Pr[d^*(s) = |\gamma_{G^*}^*(s)|] = 1 - 2m(s)$$

- We further assume that

$$d_{high}^* \equiv E[d^*(s) | d^*(s) > |\gamma_{G^*}^*(s)|] > \gamma_G(s) \text{ for all } s$$

and conversely that

$$d_{low}^* \equiv E[d^*(s) | d^*(s) < |\gamma_{G^*}^*(s)|] < \gamma_G(s) \text{ for all } s$$

so that court mistakes have consequences for policy choices

- The expected efficiency loss of the cash institution relative to the first best can be written as

$$\begin{aligned}L(V_C) &= \sum_{s \in \{\sigma_{2,C}^{FT} \cup \sigma_{2,C}^P\}} p(s) qk(s) |\Gamma(s)| \quad (\text{DSB makes wrong ruling}) \\&+ \sum_{s \in \{\sigma_{2,C}^{FT} \cup \sigma_{2,C}^P\}} p(s) [c(s) + c^*(s)] \quad (\text{litigation costs}) \\&+ \sum_{s \in \{\sigma_{3,C}^{FT} \cup \sigma_{3,C}^P\}} p(s) |\Gamma(s)| \quad (\text{distorted choices "in the shadow of DSB"}) \\&+ \sum_{s \in \sigma_{2,C}^{FT}} p(s) [1 - qk(s)] m(s) |\Gamma(s)| \quad (\text{DSB awards low damages - new!}) \\&- \sum_{s \in \sigma_{2,C}^P} p(s) qk(s) [1 - m(s)] |\Gamma(s)| \quad (\text{DSB avoids high damages - new!})\end{aligned}$$

⇒ The cash institution introduces a new source of randomness which is bad in states $s \in \sigma^{FT}$ but good in states $s \in \sigma^P$

Proposition 4. *Allowing for retaliation instead of cash damages in a trade agreement is optimal if (1) the court's ability to assess cash damages is sufficiently bad (m large), and (2) free trade is sufficiently likely to be the efficient policy choice (p^{FT} large).*

- As $m(s) \rightarrow 0$, $V_C \succ V_R$ since cash damages then always make disputes result in the efficient policy choice by making the foreign government internalize all costs
- The ability to correctly assess damages becomes more valuable the worse the DSB is at making rulings, since incorrect rulings then effectively get overturned
- As $p^{FT} \rightarrow 1$, $V_C \prec V_R$ since cash damages then merely add another source of DSB error which makes it more likely that the foreign government can inefficiently maintain $\tau = P$

Proposition 5. *Allowing for cash damages instead of retaliation in an investment treaty is optimal if (1) the court's ability to assess cash damages is sufficiently good (m small), and (2) there is a non-trivial probability that a taking is the efficient policy (p^{FT} small).*

- This is just the reverse of Proposition 4 and the same intuition applies
- We again allow for up-front investment incentives and look for sufficient conditions as above
- We also again assume that retaliation is highly inefficient while cash transfers come at no efficiency cost

- Does it make sense that real-world trade agreements allow for retaliation and real-world investment agreements allow for cash damages?
- The real puzzle is why trade agreements do not allow for cash payments since they are clearly a more efficient way to pay damages
- We argue that cash damages are sufficiently hard to assess in trade disputes so that the less efficient retaliation is nevertheless preferred

⇒ There is a clear case for having retaliation in trade agreements and cash payments in investment agreements

- So far, we have assumed that litigation is effectively instantaneous in the sense that cases are adjudicated immediately and parties comply instantly
- In reality, however, the dispute settlement process moves slowly so that there is scope for pre-compliance harm
- While trade agreements allow only for prospective damages, investment agreements also cover retrospective damages
- We now explore this third institutional difference, taking again as given that trade agreements use SSDS while investment agreements use ISDS

- We introduce court delay by assuming that a fraction $\delta \in (0, 1)$ of the gains or losses associated with a particular policy choice occur prior to the DSB ruling
- With prospective damages, the losing party simply ceases and desists after the ruling. With retrospective damages, it also makes damage payments covering the pre-compliance harm
- Damage payments are potentially inefficient in the sense that only a fraction $\beta \in (0, 1]$ of each dollar given up by the home/host government reaches the foreign claimant
- Retrospective damages make sense if (δ, β) are high, since pre-compliance harm is then large and the costs of internalizing it are small, which plausibly applies to investment agreements

► Short version

- The problem with retrospective remedies in trade agreements

⇒ **Remark 1.** *If transfers in the context of a trade dispute are sufficiently costly (β small), then for any $\delta > 0$ the joint surplus under a trade agreement with retrospective remedies will approach the joint surplus associated with FT in all states, no matter how accurate the court may be (for any $q > 0$).*

- Trade protection is avoided even when it is warranted if it carries with it the risk of costly retrospective damage payments

Proposition 6. *A prospective remedy is optimal for a trade agreement provided that the degree of litigation delay is sufficiently short (δ small), transfers in the context of a trade dispute are sufficiently costly (β small) and the quality of the court is sufficiently high (q low).*

- As $\beta \rightarrow 0$ and transfers become sufficiently costly, a trade agreement with retrospective damages always delivers $\tau = FT$ for any $\delta > 0$, which implies inefficient choices in states $s \in \sigma^P$ for any given court quality
- As $\delta \rightarrow 0$ and litigation delay becomes sufficiently short, a trade agreement with prospective damages looks just like a trade agreement in our baseline model with the familiar three inefficiencies
- These three inefficiencies can be brought arbitrarily close to zero by improving the court quality so that at some point prospective damages must dominate retrospective damages

- The problem with prospective remedies in investment agreements
- ⇒ **Remark 2.** *If litigation delay is sufficiently high ($\delta \geq \bar{\delta}$), the host government cannot improve upon a stand-alone program of up-front investment incentives to foreign investors by introducing an investment treaty with prospective remedies, no matter how accurate the court may be (for any $q > 0$).*
- Takings will always occur and the DSB will never be invoked whenever domestic institutions fail to provide commitment (i.e., with probability $1 - \bar{p}$) if litigation delay is sufficiently high and there is no prospect for retrospective damage payments

Proposition 7. A retrospective remedy is optimal for an investment agreement provided that the degree of litigation delay is sufficiently long (δ large), transfers in the context of an investment treaty are sufficiently efficient (β large) and the quality of the court is sufficiently high (q low).

- As $\delta \rightarrow \bar{\delta}$ and litigation delay becomes sufficiently long, an investment agreement with prospective damages becomes worthless, because it will always deliver the non-cooperative outcome $\iota = T$ whenever domestic institutions fail to provide commitment (i.e., with probability $1 - \bar{p}$)
- And provided that β is not too small and hence the cost of transfers is not too high, an investment agreement with retrospective damages improves over that outcome since it forces the host government to internalize the damages
- Such an investment agreement can be brought arbitrarily close to the first-best by increasing court quality so that at some point retrospective damages must dominate prospective damages

- Does it make sense that real-world trade agreements provide for prospective damages while real-world investment agreements feature retrospective damages?
- Retrospective damages make sense if the pre-compliance harm is large and the efficiency cost of internalizing it with damage payments is small
- We argue that this plausibly applies to investment agreements, while the opposite plausibly applies to trade agreements

⇒ There is a clear case for having prospective damages in trade agreements and retrospective damages in investment agreements

- In principle, the most controversial differences between trade agreements and investment agreements can be explained based on the different problems such agreements solve:
 - ① Investment agreements are about making commitments to investors, so to the extent that governments imperfectly represent investor interests it can make sense to give investors standing
 - ② The monetary harm suffered by investors as a result of expropriation is relatively easy to quantify, so it makes sense for investment agreements to opt for efficient cash damages rather than inefficient reciprocal retaliation
 - ③ Much of the harm suffered by investors occurs prior to the court ruling, so it makes sense for investment agreements to allow for retrospective damages given that efficient international cash payments are available

- However, the case for including ISDS provisions in investment agreements is far from absolute, and whether investment agreements are warranted at all cannot be taken for granted
 - For an investment agreement to be welfare improving, its DSB has to be sufficiently good and domestic institutions have to be sufficiently weak
 - And even then, ISDS only improves over SSDS if the government would be too timid in filing disputes which requires restrictions on additional parameters
- And finally, our findings for trade agreements apply to the (less common) provisions of investment agreements that solve market access problems

- The efficiency gain associated with moving from SSDS to ISDS conditional on $\bar{I}_{G^*}^*$ is

$$\Delta_{I^*, G^*} = \underbrace{(1 - \bar{p}) \sum_{s \in \Omega_S^{FT}} p(s) \{ [1 - qk(s)] (1 - \kappa) PS(\bar{I}_{G^*}^*) - \bar{c}(\bar{I}_{G^*}^*, s) - \bar{c}^*(\bar{I}_{G^*}^*, s) \}}_{\geq 0 \text{ impact of extra litigation under ISDS that challenges an inefficient policy}}$$

$$- \underbrace{\sum_{s \in \bar{\Omega}_S^T} p(s) \{ qk(s) [e(\bar{I}_{G^*}^*, s) - CS(\bar{I}_{G^*}^*)] - PS(\bar{I}_{G^*}^*) + \bar{c}(\bar{I}_{G^*}^*, s) + \bar{c}^*(\bar{I}_{G^*}^*, s) \}}_{< 0 \text{ impact of extra litigation under ISDS that challenges an efficient policy}}$$

▶ Back