# Fear of Crowds in WTO Disputes: Why Don't More Countries Participate?\*

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#### Abstract

WTO members that are affected by a trade dispute can join litigation as a third party and gain access to otherwise private negotiations. Participation has a negligible cost. Yet states rarely join cases as third parties, even when they have a material interest at stake. We construct a formal model of strategic third party participation in the WTO that shows that third parties increase the probability of litigation. This creates strategic interdependence: as more states become third parties, the benefit of participation decreases and each state becomes less likely to join. We test our theoretical model by examining each country's decision to participate or not in every WTO dispute since 1995. The findings offer strong support for our model: states shy away from joining when it's too crowded.

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# 1 Introduction

"Nobody goes there anymore; it's too crowded." — Yogi Berra.

International organizations aspire to egalitarian decision-making among sovereign states, yet weak and poor states are often excluded from participation. Some of these organizations explicitly give powerful states more influence, such as the UN Security Council (Johns, 2007). Others have formal rules that offer a voice to small countries, such as consensus decision-making in the International Monetary Fund, but these rules can mask informal norms that allow powerful countries to set the agenda and push for their preferred outcome, especially when the stakes are high (Stone, 2011; Vreeland, 2007). Critics argue that such "organized hypocrisy" reduces the legitimacy of international organizations, and leads to political outcomes that go against the interests of poor states (Steinberg, 2002; Heisenberg, 2007).

One of the institutions most dogged by these criticisms is the World Trade Organization (WTO). The WTO has been described as a "country club" of wealthy countries that excludes poor countries from decision-making. Under the WTO's "green room" model, rich countries often arrive at a private consensus amongst themselves and then present their decisions to the remainder of the membership for an up-or-down vote.<sup>1</sup> The WTO's dispute settlement system is often singled out by critics for its lack of transparency and limited participation by poor countries (Smythe and Smith, 2006).

This participation deficit in international organizations could be chalked up to power politics. Few IR scholars would contest the claim that power increases a state's ability to achieve its goals, both under anarchy and within institutions. Yet there are other possible ways to account

<sup>&</sup>lt;sup>1</sup>For example, Bolivia, Cuba, Ecuador, and Nicaragua recently complained that "[T]he WTO has become an organization that is not led by its Members, in which decision-making based on facts is not governed by consensus, and negotiation meetings are not open to participation by all Members" (WTO WT/MIN(11)/W/4, December 2011). A number of NGOs have formulated similar criticisms: Oxfam International and nine other NGOs released a 2003 memo claiming that the WTO features the "proliferation of 'informal', undocumented and exclusive meetings, amounting to lack of transparency and inability of many countries to participate."

for exclusionary decision-making in international organizations. Some argue that the difficulty of decision-making within any group grows in proportion to its size.<sup>2</sup> Others argue that international organizations suffer from a broader-deeper trade-off: as an institution grows larger, the depth of attainable cooperation decreases because the institution must satisfy those states that are least willing to cooperate (Downs, Rocke and Barsoom, 1998; Gilligan and Johns, 2012). Limits on participation may thus be necessary to promote effective decision-making and deep cooperation.

While these arguments are plausible, we argue that an additional factor may be at work: participation does not always benefit small states. Most political rhetoric trumpets the cost of exclusion for poor states, but we contend that poor states often rationally choose not to participate in international organizations because participation can harm their interests. Our argument puts forward two provocative claims: (i) sometimes exclusionary decision-making can benefit those very states that are excluded from participation; and (ii) observed exclusion may reflect rational decisions by poor states not to participate, rather than formal or informal constraints on participation. Exclusionary decision-making may be a better outcome than the frequent mention of illegitimacy would have one believe.

In response to its perceived participatory deficit, the WTO has promoted third party participation in trade disputes. Third parties are countries other than the litigants that are allowed into the room during otherwise private negotiations between complainant and defendant countries. Third party participation is nearly costless and allows countries to participate actively in both bargaining and litigation without bearing the cost of filing a case.

Such participation delivers far more than a veneer of legitimacy to the proceedings. Negotiations can generate *private benefits* that are received only by those countries that are present in private negotiations, including discriminatory settlements, transfers through technical assistance programs, or any other targeted benefits. Discriminatory settlements, which exclude nonlitigants,

<sup>&</sup>lt;sup>2</sup>Keohane and Nye (2001); Martin (1992); Johns and Pelc (Forthcoming).

are proscribed by WTO rules.<sup>3</sup> Yet this proscription has proven difficult to enforce, since the content of mutually agreeable solutions is usually private (Bown, 2009; Alschner, 2012, 54). In contrast, litigation can create *public benefits* that are received by all WTO members. These benefits can be created by changes in the defendant's behavior that affect all of its trading partners under the most-favored nation principle. There also exists an inherent public benefit to a panel ruling clarifying the law and upholding institutional values (Fiss, 1984; Lauterpacht, 1958). Finally, when a case goes to litigation, third parties can *voice* their interests, which need not match those of the complainant, by raising new issues and legal arguments that shape the political impact of a ruling. Since all members receive public benefits, one might expect that all affected countries will always join as third parties to gain access to private benefits and to voice their interests at little additional cost.

Given the widely extolled benefits and low cost of third party participation, it is surprising how few countries join disputes. The average case in our sample has just under four third parties, but if we account for countries' economic interests in a trade dispute, cases should draw an average of over 14 third party participants.<sup>4</sup> Legal scholars have also shown surprise at the low level of third party participation (e.g. Horlick, 1998, 690). Why don't more countries participate?

We argue that while participants fare better than nonparticipants during WTO disputes, states often have incentive to *not* participate because their participation makes it more difficult for litigants to settle their dispute. We construct a formal model in which nonlitigants make strategic decisions about whether to become third parties. We show that as more states join private negotiations, it becomes more difficult to reach a negotiated settlement. Since third party participants only receive private benefits if there is a settlement, a larger number of third parties reduces the likelihood that the case will generate private benefits. This creates interdependence in nonlitigant

<sup>&</sup>lt;sup>3</sup>Dispute Settlement Understanding (DSU), Article 3.5.

<sup>&</sup>lt;sup>4</sup>We generate this figure using trade flows for the products at issue in every WTO dispute, per Section 4.

decision-making. If no other state becomes a third party, then disputants are likely to settle and an affected state has a strong incentive to join the case and receive a private benefit. However, if many other states become third parties, then litigation grows more likely and participants are unlikely to receive private benefits. Participation still allows a state to voice its interests, but when private benefits are large each individual state has less incentive to participate as more other states become third parties. In other words, we expect that WTO members fear crowds in dispute settlement. As more states become third parties, the benefit of participation decreases and each individual state becomes less likely to join, even if no formal barrier blocks its participation.

We test our model on a dataset that considers every WTO member's decision to join, or not, every dispute since the WTO's inception in 1995. We first show that participants do indeed fare better than nonparticipants. We then model each country's decision to participate as conditional on every other country's decision. To identify our model, we instrument for the total number of third parties (excluding the country under observation), using the rest-of-world's total trade stake in the dispute. The findings provide strong support for our model. States shy away from joining a case when it's too crowded.

More generally, our model illustrates one reason why states often have incentive to not participate in international organizations. Most international disputes begin with private negotiations. If the disputants are not able to reach a settlement, then many disputes are heard by a technocratic body, such as a court or regulatory institution, which may be to everyone's disadvantage. Even if those actors who are present in the room do better than those who are excluded, excluded actors may prefer not to participate if their involvement pushes the dispute into a technocratic domain that is costly for the actors. After testing our arguments in the WTO, we describe how our model applies to other contexts, including sovereign debt renegotiations.

# 2 Third Party Participation in WTO Dispute Settlement

#### 2.1 Overview

WTO dispute settlement is decentralized. Individual states can challenge perceived violations that harm their interests. The institution does not enforce its rules, but provides information about its members' behavior (Johns, 2012; Johns and Rosendorff, 2009). As such, the good functioning of the WTO requires its members to make decisions about whether to: file a dispute; become a third party to another member's dispute; or refrain from involvement altogether.

Once a case is filed, each nonlitigant must decide how to respond. It can become a cocomplainant and share the litigation costs, or, as is far more common, it can join as a third party. Article 10 of the Dispute Settlement Understanding (DSU) reads that "[a]ny Member having a substantial interest in a matter before a panel [...] shall have an opportunity to be heard by the panel and to make written submissions to the panel."<sup>5</sup> However, third parties almost always join before a panel is created, during otherwise private consultations.<sup>6</sup> Third parties can be procomplainant, pro-defendant, or mixed in their policy preferences, but we focus on pro-complainant third parties because the vast majority of third parties whose partisanship we observe—over 70% in our sample—are pro-complainant, and the relevant literature has focused exclusively on procomplainant third parties.

Defendants can block third party participation but almost never do so, with only a handful of blocks by the defendant in the first years of the WTO (Davey and Porges, 1998). This is easily explained. If a defendant blocks a potential third party, then this state has an incentive to file its own parallel case. This would be far costlier for the defendant than having that country present

 $<sup>^{5}</sup>$ Only member governments can be third parties. Private parties can submit *amicus curiae* briefs, yet these are often disregarded by panels and do not allow private parties to observe bargaining or litigation.

<sup>&</sup>lt;sup>6</sup>Busch and Reinhardt (2006) count only five instances where a country joined at the panel stage and not at the start of consultations.

as a third party.<sup>7</sup> Additionally, this country could still gain third party status at the panel stage under Article 10 of the DSU.

Consultations are private negotiations among the complainant, defendant, and third parties, with the goal of reaching a "mutually agreeable solution." The WTO explicitly encourages such settlement as its preferred alternative to litigation.<sup>8</sup> Private settlements allow the defendant to avoid the normative impact of an adverse ruling, and the litigants to reach an agreement away from domestic interest group pressure. In this way, about 63% of the disputes in our sample never proceed to a panel ruling. If the states cannot reach a settlement during consultations, the complainant can request panel formation and litigation begins.

## 2.2 Private Benefits, Public Benefits, and Voice

Private negotiations allow states to reach deals that provide *private benefits* to the litigants, leaving out other Members. The WTO requires that all mutually agreeable solutions "shall be consistent with [WTO] agreements and shall not nullify or impair benefits accruing to any Member under those agreements, nor impede the attainment of any objective of those agreements."<sup>9</sup> Yet it is difficult to enforce WTO rules when states negotiate agreements in private. Third parties thus perform an enforcement function by limiting discriminatory settlements (Kucik and Pelc, 2013).

It is difficult to assess how pervasive private benefits are, precisely because settlements are kept private. Yet it is a telling sign that we observe discriminatory settlements even in publiclynotified solutions. Consider the recent deal in the *U.S.—Cotton* dispute, which was initiated by Brazil against US cotton subsidies. The US did not remove its subsidies, but instead established the Brazilian Cotton Institute, a fund for "technical assistance" to foreign farmers, and granted it \$147.3 million a year. In exchange, Brazil suspended its case. There was little disagreement

<sup>&</sup>lt;sup>7</sup>This risk is explicitly stated in DSU Article 4.11: "If the request to be joined in the consultations is not accepted, the applicant Member shall be free to request consultations."

<sup>&</sup>lt;sup>8</sup>See DSU, Articles 3.7 and 22.1.

<sup>&</sup>lt;sup>9</sup>DSU Article 3.5.

about what this deal amounted to. As U.S. Congressman Jeff Flake of Arizona stated: "Because our subsidies violate WTO rules, we're now paying millions to subsidize Brazilian agriculture."<sup>10</sup> US Congressman Barney Frank of Massachusetts described the deal as "the single stupidest thing the Federal Government could do."<sup>11</sup> The U.S.—Cotton case shows that litigants can sometimes skirt rules that explicitly prohibit discriminatory settlements, even in well-publicized disputes, and provide private benefits to the countries in the room.

In the U.S.—Cotton case, the disputants were two large economies and the third parties were poor African and South American cotton producers. Yet despite their small size, the third parties appear to have benefited from the settlement. Brazil announced in late 2012 that Brazilian Cotton Institute funds would be given to developing countries.<sup>12</sup> Brazil previously funded cotton programs in Benin and Chad, which were third parties in the dispute. The first new recipient of Institute funds is expected to be Paraguay, another third party in the case.<sup>13</sup> Access to negotiations means that countries are not left out of an eventual deal. By becoming third parties, even poor nonlitigants can receive private benefits, which are not extended to the membership as a whole.

In contrast, all WTO members benefit if the defendant makes concessions that create a *public benefit*. For example, suppose that a defendant loses a panel ruling and agrees to reduce its steel tariff. Under the most-favored nation (MFN) principle, all WTO steel exporters should benefit from the same reduced tariff. A panel ruling followed by an MFN concession can thus ensure that every exporter of the product at issue benefits, regardless of whether it participated as a third party.

A panel ruling can lead to additional public benefits, independent of the defendant's behavior. While litigation is costly for disputants, the information that is revealed during litigation

<sup>&</sup>lt;sup>10</sup>Congressional Record, April 21, 2010, p. H2702.

<sup>&</sup>lt;sup>11</sup>Congressional Record, February 18, 2011, p. H1222.

<sup>&</sup>lt;sup>12</sup>See press release of the UN Food and Agricultural Organization, "\$20 million project aims to transfer Brazilian know-how in support of cotton farmers," October 17, 2012. Accessed at: <a href="http://www.fao.org/news/story/en/item/162607/icode">http://www.fao.org/news/story/en/item/162607/icode</a> on March 17, 2013.

<sup>&</sup>lt;sup>13</sup>http://infosurhoy.com/cocoon/saii/xhtml/en\_GB/features/saii/features/main/2013/02/18/feature-02

can benefit others. The WTO operates under a system of *de facto* precedent (Bhala, 1998-1999; Pelc, 2010). Rulings can be extended to disputes between other countries about other goods and services. One key role of international courts is to develop law via jurisprudence (Lauterpacht, 1958). By clarifying legal obligations, a court can facilitate the settlement of future disputes (Johns, 2013). Additionally, a panel ruling can benefit all members if it upholds WTO values or promotes secondary objectives, such as efficiency (Fiss, 1984; Benvenisti, 2004).<sup>14</sup>

For example, in 2002, the US challenged Japanese regulations that limited apple imports to prevent the spread of fire blight, a fruit disease. Both the panel and the Appellate Body found that Japan lacked "sufficient scientific evidence" that fire blight could be transmitted by mature apples. Across-the-board bans were therefore more restrictive than necessary to assure food safety. The ruling created a strong precedent that helped all countries that wished to export apples to Japan. New Zealand, an apple exporter, rejoiced at the US victory. A New Zealand apple producer declared: "[t]he Americans will now sit down to negotiate a protocol with the Japanese and we will hope to piggy-back on that."<sup>15</sup> The New Zealand media soon announced that "following a [WTO] case which ruled that commercially-traded apples did not transmit [fire blight] ...it appeared possible to negotiate new and more favourable access conditions for New Zealand apples."<sup>16</sup> New Zealand's benefit from the ruling was huge. In 2005, when the dispute concluded, New Zealand shipped barely any apples to Japan. In 2008, they shipped 21,865 kg. That number more than doubled two years later, and then *tripled again* the following year.<sup>17</sup> The ruling benefited the broader membership by opening the Japanese market to all apple exporters.

The ruling also helped to open the markets of other countries with similar fire blight regulations. It gave New Zealand a bargaining tool against Australia, which had banned New Zealand

<sup>&</sup>lt;sup>14</sup>We thank Jeff Dunoff for conversations about this.

<sup>&</sup>lt;sup>15</sup>Statement by Phil Alison, chairman of Pipfruit New Zealand Growers, in "Apple Growers Reject WTO Ruling," *Sydney Morning Herald*, 27 November 2003. Available via LexisNexis.

<sup>&</sup>lt;sup>16</sup> "Japan asked to review apple entry requirements." *Scoop*, 16 August 2005. Available at: <a href="http://www.scoop.co.nz/stories/PA0508/S00399.htm">http://www.scoop.co.nz/stories/PA0508/S00399.htm</a>>.

<sup>&</sup>lt;sup>17</sup>Data from COMTRADE.

apples for 85 years. New Zealand's Trade and Agriculture Minister, Jim Sutton, stated that "there was no need to take a dispute case against Australia ... at the moment, as the WTO had already ruled comprehensively on the issue in a case between Japan and the United States."<sup>18</sup> Sutton also announced that "We will also be looking for better access to other markets, such as South Korea, which also restricts access because of fire blight."<sup>19</sup> The dispute brought by the US not only opened Japanese markets to non-US exporters, but also challenged similar regulations in countries like South Korea, and opened the door to resolving an 85-year old quarrel between New Zealand and Australia. Naturally, not all precedents will favor all members. We can expect, however, that insofar as *de facto* legal precedents consist of interpretations of rules that members jointly negotiated and agreed on, on average, these precedents should further the objectives of the institution, and thus provide public benefits.

Finally, participants benefit from the ability to *voice* their interests during trial (Hirschman, 1970). While WTO third parties are overwhelmingly pro-complainant, their preferred policies need not match those of the complainant. In the public realm of litigation, third parties often make arguments and voice opinions that differ from those of the complainant. While a WTO panel is not required to rule on third party arguments, their written and oral statements are recorded in the panel report and frequently mentioned in subsequent discussions (Lester, 2011). A state therefore benefits from being able to voice its opinions during litigation.

Private benefits are most likely during pre-litigation negotiations.<sup>20</sup> Disputants need only notify the membership that they have reached a mutually agreeable solution to end the dispute

<sup>&</sup>lt;sup>18</sup> "Promises not worth the paper they're printed on." *Scoop*, 15 July 2005. Available at: <a href="http://www.scoop.co.nz/stories/PA0507/S00330.htm">http://www.scoop.co.nz/stories/PA0507/S00330.htm</a>>.

<sup>&</sup>lt;sup>19</sup>Ibid.

 $<sup>^{20}</sup>$ Kucik and Pelc (2013) show that complainants gain significantly more than the membership when they settle with the defendant prior to a ruling, but this advantage disappears entirely after a ruling.

settlement process.<sup>21</sup> They usually do not disclose the terms of this solution.<sup>22</sup> Additionally, there will be a limit to how much a defendant can concede in any dispute. If this concession creates a public benefit, it is likely to be shallow since it is shared by the entire membership. Finally, since settlements are private, WTO members that do not participate will find it difficult to challenge the settlement precisely because they do not know the exact terms of the deal (Nakagawa, 2007, 858). Private negotiations allow the complainant to demand deep concessions that benefit only those states in the room, rather than to push for shallower, public benefits.

Public benefits are more likely after litigation. Litigation publicizes the facts of the case, assigns blame, and clarifies expectations for compliance. Because litigants will find it more difficult to reach discriminatory settlements, the defendant is more likely to make MFN-compliant concessions, which benefit all members.<sup>23</sup> In the model below, we assume that early settlement creates private benefits and litigation creates public benefits. This assumption is reasonable because it matches the concerns of the WTO. The WTO has pushed for third party participation in large part because it believes that affected states may be harmed if they are not present in private negotiations since these negotiations are more likely to create private, rather than public, benefits.

The combination of private benefits, public benefits, and voice suggests that states should join any case that affects their trade interests. If a case settles, third parties receive private benefits,

and if the case goes to litigation, third parties receive public benefits and can voice their interests.

 $<sup>^{21}</sup>$ Even such notifications are imperfect. The very first dispute filed at the WTO, brought by Singapore against Malaysia, was criticized for leading to an undisclosed settlement. As the Chairman of the DSB stated, "it was important that ... Members considered the need to register formally not only the initiation of disputes but also the settlement and resolution thereof'. *This precedent had not been followed*." Emphasis added. DSB Minutes from 24 April 1996. WTO Document: WT/DSB/M/15.

<sup>&</sup>lt;sup>22</sup>Some disclosures of settlements contain a single sentence, e.g. WTO Document: WT/DS297/2.

 $<sup>^{23}</sup>$ This is reflected in the length of the notifications of mutually agreed solutions. The average length of a mutually agreed solution is 9 pages when reached prior to a ruling, and 28 pages when reached after a ruling. This difference is highly statistically significant. Yet these documents have the same legal status, and are constrained by the same legal requirements for openness (data collected by the authors).

## 2.3 Why Not Participate?

Countries do not pursue all suspected violations at the WTO.<sup>24</sup> Controlling for legal merit, states are more likely to initiate cases when: they have more past experience with dispute settlement; their economy is larger; their trade at issue is larger; and their retaliatory capacity against the defendant is larger. Conversely, states are less likely to initiate cases if they are economically dependent on or have a preferential trade agreement with the defendant.<sup>25</sup>

Previous explanations of third party participation have emerged from these earlier arguments about who initiates disputes. Just as states are less likely to file a dispute if they are vulnerable to retaliation by the defendant, scholars have argued that states are less likely to become third parties if they fear angering the defendant (Elsig and Stucki, 2011; Bown, 2005). These arguments are highly plausible. However, we focus on an alternative explanation for two reasons. First, these arguments ignore the distinguishing feature of third parties: they are allowed in otherwise private negotiations without bearing litigation costs. Second, if nonparticipation is motivated by fear of retaliation, then we should see bandwagoning rather than fear of crowds. When the fear of angering the defendant is dominant, the cost of challenging a powerful actor should decrease as the number of allies increases. There should be "strength in numbers." As more countries become third parties, the retaliation cost of participation should decrease. This should create bandwagoning: each country's likelihood of joining should increase in the number of other countries that join. This directly contradicts our theory, so we can evaluate these competing hypotheses in our empirical analysis.

<sup>&</sup>lt;sup>24</sup>Bown (2009, 2005); Busch and Reinhardt (2003); Davis and Bermeo (2009).

<sup>&</sup>lt;sup>25</sup>Davis and Bermeo (2009); Busch, Reinhardt and Shaffer (2009).

#### 2.4 The Impact of Third Parties

Suppose the disputants reach an early settlement. The defendant is still susceptible to challenges by affected countries not present during negotiations, which is why defendants almost never block third parties. A defendant would rather let a state participate than have that state file its own complaint. From the defendant's point of view, third parties never increase, and can decrease, the odds of future cases. If early settlement occurs, the defendant benefits from third parties.

However, third parties are costly for the complainant if an early settlement is reached. An additional third party can only decrease, and never increase, the complainant's share of private benefits. There will always be a limit on the defendant's willingness to change its behavior to avoid litigation. Having more states involved in negotiations means that, all things equal, more states must share the spoils of any settlement. So the complainant is harmed by third parties if there is an early settlement.

If there is litigation, states no longer fight over concessions, but rather focus on the political impact of the panel report. Despite its elaborate dispute settlement procedures, the WTO remains a fundamentally diplomatic institution. Perceptions about a litigant's behavior affect the way it is treated in the future. Panel reports often establish the extent of a violation and whether the violation was a willful breach or a technicality. This is why countries often fight to limit unfavorable findings even when these findings do not influence the ruling's overall direction (Busch and Pelc, 2010). A ruling also affects how future legal issues are likely to be resolved. There is a growing consensus that the WTO operates under *de facto* precedent because rulings generate "legitimate expectations" about the future treatment of similar issues (Bhala, 1998-1999; Pelc, 2010). A ruling strengthens or weakens the merit of future cases and changes the understanding of WTO rules.

Absent third parties, panel rulings are interpreted in a purely legalistic fashion. Third parties bring their own opinions, preferences, and arguments. Even staunchly pro-complainant third parties often differ in their justifications for opposing the defendant. This diversity of voices moves rulings from the legal to the political realm (Johns and Pelc, Forthcoming). Broad third party participation often suggests that a legal issue is ambiguous or subject to competing interpretations. While a third party always benefits voicing its interests, it does not necessarily benefit from other third parties doing so. The overall effect of third parties is to soften losses and render wins more ambiguous. WTO disputants always prefer winning to losing, regardless of third party participation. However, third parties discount both the benefits of winning and the costs of losing—lowering the winner's payoff and raising the loser's payoff—when compared to a case without third parties. Third parties thus change the nature of public benefits.

## 3 Theory

#### 3.1 Model

The model begins when a complainant initiates a dispute against a defendant. The defendant has taken some action that harmed the complainant and other "nonlitigants." For example, US cotton subsidies harmed Brazil, the complainant in U.S.-Cotton, and other cotton-producing countries. We call the latter nonlitigants because they were affected by the dispute but were not co-complainants. Players vary in how much trade they have at stake: a state that produces more cotton has more at stake than one that produces less. We let  $\tau_C$  denote the complainant's trade stake, and  $\tau_i$  denote nonlitigant *i*'s trade stake. The defendant's trade stake is the sum  $\tau = \tau_C + \Sigma_i \tau_i$ . Some of the nonlitigants joined the U.S.-Cotton case as third parties; others did not. We refer to the former group as "participants" and to the latter group as "nonparticipants."<sup>26</sup>

As Figure 1 shows, Nature first chooses the strength of the complainant's case,  $\pi$ , which is the probability the complainant wins the ruling if there is litigation.<sup>27</sup> The complainant learns this

<sup>&</sup>lt;sup>26</sup>We assume  $\tau_i > 0$  always, so we ignore WTO members that are not affected by the dispute.

<sup>&</sup>lt;sup>27</sup>The distribution of  $\pi$  is specified in the Appendix.

probability but the defendant and nonlitigants do not. Each nonlitigant then chooses whether to participate as a third party. We denote the number of nonlitigants that become third parties by the endogenous parameter n. The complainant then demands share x of the total trade stake.<sup>28</sup> We make no assumption about the form of the demand; we only assume that it benefits the plaintiff and is costly to the defendant. If the defendant accepts, there is an early settlement. If the defendant rejects, the panel hears the case and issues a ruling. The complainant wins the ruling with probability  $\pi$  and the defendant wins with probability  $1 - \pi$ . This ruling affects the total trade stake,  $\tau$ , because the ruling also affects nonlitigants.

## [Figure 1 here.]

Complainant and the defendant payoffs are shown in Table 1(a). Larger demands increase the complainant's payoff and decrease the defendant's payoff if they settle. Third parties help the complainant if she loses the ruling, but harm her if she wins or the case settles. Third parties have the opposite effect on the defendant: they help the defendant if he loses or the case settles, but harm him if he wins the ruling. Both players pay a cost, k > 0, if the case goes to litigation. Finally, a ruling applies to the total trade stake, so the complainant can win only  $\tau_C$  but the defendant can lose the total trade stake,  $\tau = \tau_C + \Sigma_i \tau_i$ .

[Table 1 here.]

#### 3.2 Bargaining Behavior

We first examine bargaining after nonlitigants have made their participation decisions. At this point, both litigants know the number of third parties. We examine the fully separating weak perfect Bayesian equilibrium.<sup>29</sup>

 $<sup>^{28}</sup>$ The complainant can demand a share of the total trade stake because the defendant may give up more than the complainant's trade stake to avoid litigation.

<sup>&</sup>lt;sup>29</sup>We assume that off-the-equilibrium-path beliefs satisfy universal divinity (Banks and Sobel, 1987). When k is small, the fully separating equilibrium is unique.

#### **Proposition 1.** In equilibrium:

(a) The complainant's demand increases in the strength of her case and the number of third parties.

(b) The defendant is less likely to accept larger demands.

The more likely the complainant is to win a ruling, the more she demands in pre-litigation negotiations. The defendant can infer the strength of the complainant's case from the size of her demand. That is, after hearing the demand, the defendant is no longer uncertain about the probability that the complainant will win a ruling. The complainant's demand also increases in the number of third parties. Even if all players knows the strength of the case, none knows for certain which player will win the ruling. Third parties increase the defendant's payoff from settlement, but they have a mixed effect on his expected utility from litigation: third parties help if he loses and harm if he wins. So third parties increase the desirability of settlement relative to litigation for the defendant. The complainant can therefore demand more.

Intuition might suggest that the defendant should be more likely to accept larger demands because he knows they are being chosen by stronger types. However, the opposite must hold in any equilibrium: larger demands must be accepted with a lower probability (Gilligan, Johns and Rosendorff, 2010; Johns and Pelc, Forthcoming). To understand this result, suppose large demands are *more* likely to be accepted. Then a complainant with a weak case has incentive to bluff by making larger demands. By asking for more, she would be more likely to receive a larger settlement and less likely to go to litigation, which she believes she will lose. The complainant would always benefit from bluffing and make the largest possible demand. But if larger demands are *less* likely to be accepted, the implicit threat of litigation disciplines the complainant. Weak types would not mimic stronger types because this would increase the probability of litigation, which weak types want to avoid. The defendant is therefore less likely to accept larger demands.

This behavior implies:

#### **Corollary 1.** In equilibrium:

- (a) Stronger cases are more likely to go to litigation.
- (b) Cases with more third parties are more likely to go to litigation.

Because stronger cases are more likely to go to litigation, observed rulings should be biased in favor of the complainant. Empirical evidence supports this claim in the WTO: in our dataset, complainants win just short of 90 percent of cases. We assume that panelists rule purely on a case's legal merits ( $\pi$ ) and are not biased for or against trade liberalization. However, selection effects create biased rulings even if judges are not themselves biased. There is also abundant evidence that WTO cases with more third parties are more likely to go to litigation (Busch and Reinhardt, 2006; Davey and Porges, 1998; Johns and Pelc, Forthcoming). Corollary 1 isn't our main result, but it demonstrates that our argument is consistent with previous empirical analysis and our assumptions are plausible.

#### 3.3 Participation Behavior

We can now consider nonlitigant behavior. Third parties change pre-litigation bargaining between the complainant and defendant, so each nonlitigant's decision about whether to participate will depend on its beliefs about how other nonlitigants will behave. There is no obvious way to model these decisions. In the real world, states can often observe the choices of others before deciding whether to participate. However, the WTO has no rules about the order in which nonlitigants decide.

Rather than imposing an arbitrary game form, we adopt a general perspective by examining nonlitigant best response functions. That is, we examine how incentives change in response to beliefs about the behavior of other states. This approach comes with a cost: we cannot infer *which* states will join a case. However, the benefit of this approach is that we can derive very general results about the likelihood that a nonlitigant becomes a third party. Researchers who wish to examine which states become third parties can impose additional assumptions on the game and our results will still hold.

Table 1(b) shows a nonlitigant *i*'s payoffs if  $\hat{n}$  other nonlitigants become third parties.<sup>30</sup> Suppose the case settles. We let r > 0 denote the value of having the case *resolved* and assume that each nonlitigant prefers resolution to litigation. We let b > 0 denote the added *private benefit* that a participant receives if the case settles and assume that this parameter is large.<sup>31</sup> So if nonlitigant *i* knew for certain that the case would settle, it would choose to participate.

When the case goes to litigation, each nonlitigant receives the value of its trade stake,  $\tau_i$ , if the complainant wins. This is the *public benefit* of litigation that all nonlitigants receive. Third parties once again affect litigation payoffs by helping losers and harming winners. If the complainant wins, then nonlitigant *i*'s payoff decreases in the number of other third parties; but if the complainant loses, *i*'s payoff increases in the number of other third parties. We assume that nonlitigants pay no litigation cost.<sup>32</sup> Finally, we let v > 0 denote the value of being able to *voice* interests during litigation. So if nonlitigant *i* knew for certain that the case would be litigated, it would once again choose to participate.

At first glance, these payoffs suggest that nonlitigants should always become third parties because participation allows a state to receive a private benefit or to voice its interests. However, this logic ignores the impact of participation on bargaining: third parties increase the probability of litigation. When a nonlitigant chooses whether to participate, it recognizes that its decision will change the number of third parties.

To understand strategic participation, we must first understand the impact of a nonlitigant's

 $<sup>^{30}</sup>$ We cannot display all payoffs in one matrix because participation decisions change the realized number of third parties in Table 1(a).

 $<sup>^{31}\</sup>mathrm{In}$  section 3.5 we discuss how our results change for small values of b.

<sup>&</sup>lt;sup>32</sup>This sets the highest possible bar for our model because it ensures that participation decisions are not driven by legal capacity. In section 3.5 we discuss how our results change if we add participation costs.

trade stake. If a nonlitigant has a small trade stake, then the private benefit payoff  $(b\tau_i)$  and the voice payoff  $(v\tau_i)$  are relatively small compared to the risk of increasing the probability of litigation. However, as a nonlitigant's trade stake increases, the private benefit and voice payoffs grow larger and a nonlitigant is more tempted to become a third party. This ensures:

**Proposition 2.** As a nonlitigant's trade stake increases, its benefit of participation increases.

The top portion of Figure 2 shows this effect. The horizontal axis shows a nonlitigant's trade stake, while the vertical axis shows the benefit of participation. As the upward-sloping lines show, this benefit is always increasing in the nonlitigant's trade stake, regardless of the number of other third parties.

## [Figure 2 here.]

#### 3.4 Fear of Crowds

We can now address our key question: if participation is relatively costless and allows countries to receive private benefits and to voice their interests, why don't more WTO members become third parties? The key mechanism in our model is that third parties increase the probability of trial. If third parties did not affect bargaining, then a nonlitigant could join a case without changing the probability of trial. If the cases settles, the nonlitigant prefers receiving a private benefit to being left out. If the case goes to trial, the nonlitigant prefers voicing its interests to remaining silent. So if participation did not change the likelihood of litigation, then every affected state should participate. However, because third parties *do* change bargaining outcomes, there is an implicit strategic cost of participation: by entering the room, a nonlitigant makes it more difficult for states to settle. Third parties become spoilers during trade consultations.

The decision about whether to participate is thus inherently strategic. If there are no other third parties, the case is likely to settle. So if an individual state becomes a third party, it is very likely to receive private benefits. In contrast, if there are many other third parties, the case is unlikely to settle. So if an individual state becomes a third party, it can probably voice its interests but it is unlikely to receive private benefits. When private benefits are large, the benefit of participation decreases in the number of other third parties.

**Proposition 3.** As the number of other third parties increases, a nonlitigant's benefit from participation decreases.

Figure 2 shows this main result. Regardless of the size of a nonlitigant's trade stake, the benefit of participation decreases as the number of other third parties increases.

Another way to interpret this result is to consider the minimum trade stake at which a nonlitigant wants to participate. There is always a trade stake threshold that makes a player indifferent between joining and not joining. If a nonlitigant's trade stake is smaller than this threshold it will not participate, but if its trade stake is larger it will participate. By Proposition 3, as the number of other third parties increases, a nonlitigant receives less benefit from participation, which means that the nonlitigant must have more at stake to be willing to join. Therefore the trade stake threshold grows larger as more states join the case. This is shown in the bottom portion of Figure 2.

**Corollary 2.** As the number of other third parties increases, the trade stake threshold—the value at which a nonlitigant is indifferent between participating and not participating—increases.

Figure 3(a) shows this result.<sup>33</sup> Corollary 2 implies that cases that attract more third parties should, on average, have higher third party trade stakes. This is counterintuitive. Because a larger trade stake increases the benefit of participation, we might expect that countries with the most at stake should also be most likely to join. Under this logic, increasing the number of third parties should mean that the average third party has less, rather than more, at stake. Yet due to

 $<sup>^{33}\</sup>mathrm{Figure}$  created in R from a simulation of equilibrium behavior.

strategic interdependence, our theoretical expectation here is the opposite. Figure 3(b) shows that reality matches up with this counterintuitive implication: the average trade stake of WTO third parties increases in the number of third parties. This provides further preliminary evidence of our theory's plausibility.

[Figure 3 here.]

#### 3.5 Robustness

As in any formal model, our results rely upon assumptions that help us to identify and understand a causal mechanism. To be confident in the model's explanatory value, we should consider whether the findings are robust to alternative assumptions.

One key assumption in our model is that participation is costless. We make this assumption because it sets the highest possible bar for the theory given our research question. But all of our results still hold if there are small entry costs to participation or small litigation costs for third parties.<sup>34</sup> Additionally, as discussed below, complainants can influence how difficult it is for nonlitigants to become third parties (Johns and Pelc, Forthcoming). It is relatively easy for affected states to become third parties to cases filed under GATT Article XXII:1, but more difficult for cases filed under GATT Article XXIII:1. We can alter our model by adding an entry cost that is higher for an Article XXIII case than for an Article XXII case. States are less likely to join when the entry cost is higher, but all of our results still hold. We control for this distinction in our empirical analysis.

We also assume that the private benefit is large. If we instead assume that private benefits are small but the voice benefit is large, we reach the opposite conclusion: players will bandwagon. This logic works as follows. If no other states become third parties, the case is likely to settle and a third party cannot voice its interests. But if many other states become third parties, the case is

 $<sup>^{34}\</sup>mathrm{All}$  robustness checks are available from the authors.

more likely to go to litigation and a third party is more likely to receive the voice payoff. So if the voice parameter is large, a nonlitigant is more likely to join as the number of other third parties increases.

In practice, we expect that bandwagoning occurs when the complainant finds it politically or economically unfeasible to buy off its trade partners through private benefits. In such a case, the primary benefit of the dispute settlement process is that it allows states to publicly voice their opposition to the complainant's trade policy. Bandwagoning seems apparent in some disputes, like US—Steel Safeguards, where the defendant, for domestic political reasons, was unlikely to back down and negotiate a settlement. Members nonetheless rushed to join the case, with Brazil, Canada, China, Cuba, Japan, Korea, New Zealand, Norway, Switzerland, Taiwan, Thailand, Turkey, and Venezuela immediately joining as third parties. These third parties were very vocal in arguing that the US's action was impermissible. Though highly salient, such cases are rare. The WTO's primary objective is settlement, which makes private benefits the main objective of most complainants. By comparison, voice is likely a secondary concern that is activated when private benefits cannot be secured. Most cases are thus likely to conform to the fear of crowds logic, rather than bandwagoning.

Because our model is compatible with both dynamics, our empirical tests face a high bar. We cannot categorize every dispute by whether private benefits or voice were dominant. Note that all disputes in our sample are merchandise disputes, meaning that they concern quantifiable stakes. We submit that such cases are likely to allow for the capture of private benefits. There are surely some merchandise cases that hinge, instead, on expressing voice, as per the possible example of US-Steel Safeguards, above. If anything, our empirical tests are thus biased *against* the effect that we are trying to identify. If we observe fear of crowds in our aggregate data, then the impact of crowds for cases that do match our assumptions is even larger.

## 4 Empirics

#### 4.1 Data Description

What drives a nonlitigant's decision to participate as a third party in a WTO dispute? Why do so few countries decide to do so? The WTO represents the ideal laboratory for addressing our research question, given the richness of data about both participants *and* nonparticipants. To test the drivers of participation, we thus construct an expansive dataset that covers the main factors in all WTO members' decisions to join, or not to join, every WTO dispute since 1995.<sup>35</sup>

This represents a considerable data gathering exercise, since we need a reliable external predictor of each country's propensity to join a given dispute. For this, we use each country's stake in the dispute, defined in terms of trade flows into the defendant's market of the product legally at issue. Most WTO disputes concern trade in specific products, allowing us to measure the extent to which a given country's economic interests are likely to be influenced by the outcome of a given case. We then collect data on a number of other factors that may drive members' decision to participate or not. We describe all our right-hand-side variables below.

**Trade Flows** For each dispute, we collect the amount of bilateral trade at stake, which we measure as the level of exports for the product at issue, from each nonlitigant country to the defendant's market. Our premise is straightforward: the greater the amount of exports at stake in a dispute's resolution, the more likely a non-litigant will be to join the proceedings, all else equal.

We take the products at issue in each dispute from the Horn and Mavroidis (2011) dataset, hosted by the World Bank.<sup>36</sup> Some disputes cover a single product, while others cover more than twenty. These products also vary in their level of disaggregation, from two-digit HS products (for disputes challenging a broad barrier) to 10-digit HS products (for disputes challenging a narrower

<sup>&</sup>lt;sup>35</sup>The most recent dispute in our data is DS423.

 $<sup>^{36}</sup>$ We update this dataset ourselves to the present day using WTO requests for consultations posted by complainants, which contain a mention of the precise product(s) at issue.

barrier). We translate these into a series of six-digit products for every dispute, e.g. by listing all the six digit products that fall under a 2-digit product. For each of these products, we gather data for each member's trade into the defendant's market. In doing so, we rely on the COMTRADE database, accessed through the World Integrated Trade Solution (WITS), hosted by the World Bank.

Using these exports data, we construct our *Trade Stake* variable, which we define as the absolute logged amount of exports at stake for every non-litigant at t-1, the year prior to the dispute's initiation. The result is to our knowledge the most complete dataset of countries' interests in trade disputes throughout the WTO era.

In relying on trade data for the identification of our main model, we set aside all nonmerchandise disputes, which are cases that do not challenge a barrier over a specific product, but rather a piece of domestic legislation or regulation, such as intellectual property laws. These cases correspond to about a fifth of the WTO caseload. We remove these observations since it is unfeasible to assess a country's *ex ante* stake in a nonmerchandise dispute, in the way that we can when disputes are fought over barriers on identifiable products. We are left with 321 WTO disputes for which we have trade data on disputed products.

Alternative Explanations While our theory demonstrates an interdependent relationship between members' decisions to join, we are aware of a number of alternative explanations. We begin by accounting for what may be the most salient explanation for participation: legal capacity. Scholars have claimed that beyond income and material concerns such as the fear of retaliation, countries do not participate because they lack the requisite know-how and bureaucratic apparatus (Busch, Reinhardt and Shaffer, 2009; Davis and Bermeo, 2009; Guzman and Simmons, 2005). Indeed, we have been assuming that third party participation is costless: third parties need not make any statements, they technically require only a single representative in the room, and they have no further obligations within litigation. Yet it may be that assessing the benefit of joining is, itself, a function of legal capacity. As per the literature, the best proxy for such capacity is simply prior experience. We code two variables to capture such experience: *Complainant History*, which is the number of disputes a country has filed as a complainant prior to the dispute's initiation; and *Third Party History*, which corresponds to the number of times the country under observation has participated as a third party before the dispute at hand.

The advantage of including both variables at once is that it allows us to see whether the effect of experience is specific to the institutional role played. Moreover, controlling for complainant history, the number of times a nonlitigant has been a third party also taps the notion that some countries may emerge as focal third party players, whom others expect to participate often. We would expect such countries to participate disproportionately more than their income or past experience as litigants would lead one to believe. For similar reasons, we include countries' *Income*, as a rough measure for capacity, which we code as the log of a country's GDP per capita, in the year prior to the dispute's initiation.

Next, and to test the beliefs of Elsig and Stucki (2011) against our own, we create a variable, *Aid Dependence*, coded as the log of total aid in constant dollars from the defendant to the nonlitigant country in the year prior to a dispute's initiation. If countries fear losing aid support by joining cases against donor countries, this variable should exhibit a negative effect on the odds of joining. In our robustness checks we also verify the effect of both retaliatory capacity (Bown, 2009) and retaliation exposure of nonlitigants. The first is coded as every defendant's total exports to every nonlitigant's markets, in the year prior to the dispute's initiation. If we suspect that retaliatory capacity enboldens countries to join disputes, then we would expect it to be positively signed. The second is its opposite: it is coded as the nonlitigant's total exports to the defendant's market. If this taps vulnerability to subsequent reprisals, which would scare countries away from

joining, it should be negatively signed.

**Dispute Characteristics** We also control for a number of dispute-specific features that may influence countries' choice to join the dispute as third parties. Our first control variable in this respect indicates whether the complainant filed under GATT Article XXII:1 or under Article XXIII:1. This is a procedural choice that makes it easier or harder for third parties to join. As a WTO training module puts it, "the choice between Articles XXII:1 and XXIII:1 of GATT 1994 is a strategic one, depending on whether the complainant wants to make it possible for other Members to participate."<sup>37</sup> Our variable Article XXII is coded as 1 if the complainant promoted third parties through Article XXII, and 0 if it sought to limit third party participation through Article XXIII. We expect it to be positively related to the odds of participation.

We also add a variable to reflect the extent to which the dispute at hand is likely to be of interest to all WTO members, beyond the bilateral trade volume at stake, by looking at the type of alleged discrimination. The simplest way to do this is to distinguish bilateral from multilateral disputes. We draw on Bown (2004) to construct this variable, which we call *Multilateral*, and which roughly reflects national treatment discrimination vs. most-favored nation discrimination. All national treatment cases are coded 1, for multilateral: if domestic producers are favored over exporters, this is likely to affect all exporters. All MFN cases, where one country claims to receive less favorable treatment than another exporter, are coded 0, for bilateral. Similarly, all antidumping (AD) cases, save for those that allege an improper application of the AD code, are coded as bilateral, since antidumping is a targeted policy. Safeguards cases, on the other hand, unless they regard the application of safeguards in a way that would have systemic implications, are coded as multilateral, since they are applied in an MFN fashion. This single variable is better-suited for our purpose than the alternative means of coding the issue raised, which is to include dummies for all agreements (e.g. Antidumping, Procurement, Agriculture, etc), since these can entail quite different concerns, that

<sup>&</sup>lt;sup>37</sup>WTO Dispute Settlement System Training Module: Chapter 6.2.

would be categorized as either multilateral or bilateral.<sup>38</sup> Though nonmerchandise cases do not enter our sample, the supermajority of these, which concern domestic legislation and intellectual property rights, would fall under the multilateral category. In sum, there is little ambiguity in this dichotomous coding.

#### 4.2 Participation Has Its Benefits

We begin by assessing a primary assumption of our model. Our theory implicitly assumes that third parties, on average, fare better than nonparticipants. We argue that all interested nonlitigants can receive public benefits, but only participants can receive additional private benefits. Nonlitigants do not stay out because they think that in so doing they will fare better than third parties. Rather, they decide not to join because they think that their participation will change bargaining outcomes such that even as a third party, they would emerge at a net loss.

To assess this initial premise, we examine the trade flows of the products at issue in the dispute after its conclusion. These trade flows should capture both the public and private benefits flowing from dispute settlement. We then examine the change in these exports for third party countries in comparison to all nonparticipating members, controlling for trade flows prior to the dispute's initiation. We effectively ask, how much does participating as a third party increase your access to the defendant's market (relative to nonparticipation)?

Our unit of observation is the country-product-year. Our sample consists of the trade flows of all countries other than the complainant and defendant in a given dispute for all available years after the end of that dispute. The last year of a dispute corresponds to the last formal WTO event. If a settlement is reached short of a panel report, then the dispute ends at the formal announcement of the mutually agreeable solution.

<sup>&</sup>lt;sup>38</sup>For instance, while subsidy cases are multilateral, some are inherently bilateral: e.g. we treat the two cases involving large civil aircraft as bilateral, since they concern a duopoly.

Our dependent variable in the first set of estimations is the logged level of exports into the defendant's market for the products at issue. We are interested in the sign of the coefficient for the third party dummy, which is coded as 1 if a given country participated as a third party, and 0 otherwise. If third parties gain more access than nonparticipants, controlling for trade flows prior to the dispute, we expect this coefficient to be positive. We begin by running a panel regression with dispute fixed effects and robust standard errors clustered on the dispute.

The results are shown in Table 2. In the first two columns, the dependent variable is the logged level of exports to the defendant. The first estimation (Column 1) shows a sparse model that controls only for *Trade Stake*, corresponding to the level of exports at *t*-1, and which thus acts as a lagged dependent variable; and the defendant's logged GDP, since compliance with settlements and rulings may vary in accordance with the defendant's market power. The second estimation (Column 2) substitutes the dispute fixed effects for defendant fixed effects as a means of accounting for unobservable features of the defendant that may affect compliance. We also add: the log of the complainant's market size; a dummy indicating whether the dispute reached a ruling; and a count of the number of pro-complainant third parties in the dispute. In both the first and second estimations, third parties see higher levels of trade following a dispute, controlling for the level of trade prior to the dispute.

#### [Table 2 here.]

In our third estimation (Column 3), we shift our focus to the growth of exports, rather than their levels. We calculate growth in trade flows as the percent difference between and the year under examination, for all years following the end of the dispute. We keep the right hand side of this third estimation as the first estimation (Column 1), and additionally include the log of the complainant's GDP. We once again run a panel regression with dispute fixed effects and robust standard errors clustered on the dispute. Third parties appear to fare better than nonparticipants even when looking at export growth, rather than levels.

These tests remain willfully simplistic. Indeed, they ignore this paper's main argument, which is that third party participation is the result of strategic calculation. Third party participation is treated as exogenous in the models in Table 2. Yet these tests remain useful in showing that third parties fare better on average than nonparticipants, when looking at post-dispute trade flows. Remarkably, this does not mean that rational countries will therefore always choose to join—next, we explore why.

#### 4.3 Testing the Fear of Crowds Effect

We move on to our main question: why don't more countries join WTO dispute settlement as third parties? Our argument is based on strategic interdependence. This poses an empirical challenge because every country's decision hinges on that of all others. We expect that the total number of third parties will affect each country's decision, which will, in turn, affect the total number of third parties.

To address this problem, we employ an instrumental variable approach. We instrument for the total number of third parties by looking to the world's combined stake in the dispute at issue, excluding the country under examination. Specifically, we code our instrument, which we call rest-of-world (ROW) stake, by summing the exports from all nonlitigants to the defendant, leaving out the state under examination, in the year prior to the start of the dispute. Our instrumental variable is a powerful predictor of our endogenized variable; that is, the number of nonlitigants that eventually join as third parties. In our analysis, we also run a series of Kleibergen-Paap tests for weak identification, to further increase our confidence that the model is identified. Most importantly, theory offers support for the exogeneity of the instrument for our purposes. There is no viable rationale for thinking that a given country's participation as a third party would be directly affected by the stake of the rest of the world in the trade at issue. Indeed, when we regress our instrument on the other exogenous variables, the partial residuals are uncorrelated with the decision to join as a third party, offering support for the exogeneity of our instrument. And while there is reason to believe that "all trade is correlated" in the contemporary globalized economy, since we are looking at specific product categories, the stake of one country in a particular industry is unlikely to be systematically correlated with that of another country.

Our results are shown in Table 3. In the first column, we begin by showing a highly parsimonious estimation. We include only the *Trade Stake* of the country under observation in the dispute on the right-hand-side. In the column 2, we add a number of controls: *Article XXII*, the *Log Income* of the country under observation, a country's third party and complainant *Experience*, and whether the legal issue at hand is *Multilateral* in nature. In the column 3, we add a variable that tests the argument in Elsig and Stucki (2011) about aid dependence, as the bilateral aid the nonlitigant receives from the respondent.

Finally, in column 4, we take a closer look at the issue of partisanship. While our theory treats all third parties as favoring the complainant, our empirical analysis up to this point considers all third parties irrespective of their partisanship. This is first, because a supermajority of third parties are pro-complainant; and secondly, because of a fundamental data availability problem: since we can only observe third parties' partisanship if third parties submit written or oral statements that are recorded in the panel report, we have little to go on in the case of disputes that do not result in a ruling. We nonetheless collect the available data on third party partisanship by coding all available submissions, which we classify as pro-complainant, pro-defendant, or mixed (Busch and Pelc, 2010). Pro-complainant third parties make up 78% of all third parties. We rerun our main estimation using the odds of being a pro-complainant third party as our dependent variable. The results, which naturally entail a smaller sample, limited to disputes where we can

observe partisanship, are shown in the last column of Table 3.

#### [Table 3 here.]

The findings provide consistent support for the overcrowding hypothesis. Across all model specifications, the greater the number of other countries that join as third parties, the lower the likelihood that the WTO member under observation will join. This effect is substantively strong. In the first specification, if we hold all control variables at their mean (with dummy variables at their mode), then increasing the number of third parties from the sample mean to one standard deviation above the mean reduces the probability that a nonlitigant will join a dispute by almost two-thirds, from 18.7% down to 6.8%. In other words, third parties fear overcrowding, and behave accordingly.

First, our basic premise appears sound: the more countries have at stake in terms of trade flows, the more likely they are to join: Log Trade Stake is significant and positive throughout. Additionally, and as expected, if the complainant promotes third parties by filing under Article XXII, this considerably increases the likelihood of a given country joining as a third party. The average impact of Article XXII corresponds to a 19% increase across our three specifications. Multilateral issues are far more likely to see a given country joining—with all variables at their means, and all else equal, multilateral issues are 52% more likely of having the country under observation join. Aid Dependence is negatively signed, but falls short of statistical or substantive significance. While it is likely that it plays a real role in specific cases, as detailed in Elsig and Stucki (2011), on average aid does not seem to be a big driver of members' decision to participate across all WTO members and disputes. Wealthier countries somewhat appear less likely to join, suggesting that third party status may be of special value to poor countries. This negative relationship remains, but decreases, when we remove the two Experience variables.

The latter variables provide an interesting result. While a past history of dispute initiation

has strictly no effect on the odds of joining the dispute, a past history of third party participation has a strong, positive effect, controlling for a country's wealth. The reason could be that the legal capacity called on for third party participation is developed only by having played this specific role in the past. A more likely explanation is that some countries emerge as focal third party participants, and countries expect them to join most disputes. These countries participate disproportionately more than their interest in the dispute or their wealth would lead us to expect.

Finally, the results only gain in strength in our last estimation, in column 4 of Table 3. This is what we would expect, since here we are looking only at the subset of participants that we know our theory applies to best. The cost of the magnified effect is borne in terms of a reduced sample, now limited to those disputes that produced a panel ruling, which nonetheless does not affect the significance of our findings.

We end by run a series of robustness checks to ensure that our findings are not sensitive to estimation decisions. First, we verify whether one possible alternative explanation is supported. We add a measure of the retaliatory capacity (Bown, 2009) and retaliation exposure of nonlitigants. These variables measure both sides of the total trade relationship between each WTO member and the defendant in each dispute. Across all estimations, retaliatory capacity is significant and positive, while retaliation exposure shows no effect. In other words, nonlitigants appear to be emboldened by the ability to sanction trade, but undeterred by the risk of having their own trade sanctioned. Importantly, these variables have no effect on our main result: members still fear crowds, and behave accordingly.

We also include a variable for disputes where either the US or the EU is the respondent. While one may think that this would lead countries to be more wary of joining as third parties, the variable actually shows a weak positive effect. More importantly, our main finding is unaffected. Similarly, we control for another proxy of the stake in the dispute, coded as the *change* in bilateral trade between each non-litigant and the defendant in the three years prior to the dispute. This is demanding of our data, and the sample is reduced somewhat as a result. The variable is negatively signed and positive, meaning that the more a nonlitigant has lost trade in the three years prior to the dispute, the more likely it is to join. The main results remain unchanged in strength. We also add a China dummy, given the literature on how China especially uses third party status as a means of learning. The dummy is only weakly positive at the 10 percent level, and does not affect our results.

## 4.4 Timing: Do we See a Rush to Join?

Our analysis has shown that on average, countries have an incentive to avoid overcrowding in negotiations. If they have reason to believe that many other countries will be in the room, they may strategically choose to stay out. Yet we have also shown that all things equal, being in the room is better than not being in the room. The corollary of those two claims taken together is an incentive to joining early, leaving to others the risk of overcrowding. Generalizing the question beyond the WTO, we may wonder whether the knowledge that everyone's presence in the room may work out to everyone's disadvantage also means that there is competition over who gets in, and who does not. Do the data bear this out? Is there a rush to join?

To find out, we observe the exact date at which each third party joined the consultations in every dispute in our sample. These dates are available in the WTO documents through which countries request to participate. Third parties nearly always stay on during litigation if the case proceeds to a panel. A visual representation of these data is presented in Figure 4. Every country's decision to participate appears as a circle. To offer a reference in time, we indicate the conclusion of consultations (either because of a request for a panel or because of a mutually agreed settlement) with an x. The average period between the start of a dispute and the end of consultations in our sample is 146 days.

A look at Figure 4 supports the notion of a rush to get in the room. The first third party joins an average of 14 days after the initiation of a dispute, likely reflecting the required bureaucratic process in the home country.<sup>39</sup> But then the average period between two consecutive third parties joining is less than 2 days. Overall, we observe that countries' decisions to join are highly clustered in time.

## 5 Broader Implications

Our argument is not unique to the WTO. We began with Yogi Berra's well-known quip that Ruggeri's restaurant in St. Louis was so crowded that "no one goes there anymore." The phrase is a riff on the common idea that trendy venues lose their appeal if they become too well-known, and thus too crowded. Suppose Ruggeri, the owner of the restaurant, is aware of this dynamic but enjoys eating at his own restaurant. His position is analogous to that of a nonlitigant deciding whether to join a dispute. All things equal, Ruggeri wants to eat at his restaurant, but this increases the number of patrons and hurts the restaurant's reputation for being overcrowded. If this bad reputation endures, the restaurant will lose its trendy image and regular customers, hurting business in the long run. On a busy night, Ruggeri may choose not to eat to avoid overcrowding. His concern for the restaurant's profitability can thus trump his desire for a good meal. Similarly, actors may decide not to participate in international organizations, even if participants are better off, on average, than nonparticipants. Negotiations grow more complicated as more parties join, so actors may choose to stay out of negotiations to avoid becoming spoilers.

This same dynamic is apparent in sovereign debt negotiations, which take place when a state grows unable to service its debt. As with WTO consultations, there is no formal institution

<sup>&</sup>lt;sup>39</sup>The request to join is a formal move, resulting in a WTO document that is assigned a formal document number.

governing these negotiations (Dickerson, 2004). A state and its creditors want to reach an agreement that restructures debt obligations, which could include new loans, reduced principle or interest rates, or extended repayment deadlines. These agreements are often called "hair cuts" because creditors voluntarily reduce obligations—"trim" their profits—to keep a debtor solvent. Absent an agreement, a state and its creditors face a risky gamble. They may receive a bailout from an institution like the International Monetary Fund or the European Central Bank. But if they cannot receive such assistance in a timely manner, the state defaults on its debts and creditors write off most, if not all, of the debt.

Creditors have a strong incentive to participate in these negotiations because an agreement will affect creditors differently based on their size and asset holdings (Lipson, 1985). Participants can secure private benefits by writing terms that are favorable to their own interests. Yet as in trade disputes, many creditors routinely decide *not* to participate: terms are usually negotiated by a core group of creditors and then presented to the others for approval (Lipson, 1985, 204). Despite forgoing the ability to affect the terms of the agreement, the excluded creditors consent to their exclusion.

*Ceteris paribus*, creditors benefit from participating in negotiations. Yet if the cost of their participation is that agreement becomes less likely, they may prefer to stay out and accept the core group's terms. Just as the shadow of litigation looms over WTO consultations, the possibility of a default, which harms all creditors, shapes sovereign debt negotiations. The underlying tradeoff is analogous to that in the WTO: creditors may get a smaller cut of the pie if they don't participate, but increase the expected size of the pie by making an agreement more likely.

International negotiations are often characterized by strategic nonparticipation. Despite popular concerns about illegitimacy and fairness, exclusionary decision-making can benefit excluded actors if it makes agreement more likely and prevents a worse outcome. Both WTO dispute settlement and sovereign debt negotiations demonstrate that nonparticipation can be a rational choice. Nonparticipation does not always imply that weak actors face formal or informal constraints.

# 6 Conclusion

Third parties at the WTO are believed to increase transparency, help developing countries acquire legal capacity, and informally enforce WTO rules by decreasing the likelihood of discriminatory settlements. Participation appears equally beneficial for third parties themselves: they can extract private benefits from settlement and voice their interests during litigation without paying the high cost of being a complainant. Indeed, we find that third parties fare better on average than nonparticipants in their subsequent exports. This generates a puzzle: why don't more countries participate as third parties?

We argue that participation is strategically interdependent. The decision to participate raises the total number of third parties, which lowers the likelihood of early settlement. So as more states become third parties, the benefit of participation decreases and each state becomes less likely to join. We test our theoretical model by examining each country's decision to participate or not in every WTO dispute since 1995.

Alternative explanations obtain less support. There are undoubtedly cases where an affected state does not join because it is dependent on aid from the defendant, but these concerns have little impact on average. Previous third party experience, which may indicate legal capacity or status as a focal participant, has a positive effect, but previous complainant experience does not. The most persistent determinant of (non)participation appears to be who else is in the room. The greater the number of other third parties, the less likely a given country is to join. The empirical findings thus support our theoretical argument: states fear crowds in WTO disputes. One implication of our findings is that second-best participation solutions—such as the WTO "green room" model or committee- or club-based decision-making—may enjoy greater tacit acceptance than is commonly believed. All things equal, every country would prefer to be in the room, but may strategically exercise restraint and stay out to prevent overcrowding. Criticism of exclusionary international organizations, especially from small and poor states, may thus serve the function of political theater for the sake of domestic audiences.

Another implication of our findings concerns the impact of third parties on early settlement. Many observers have expressed concern that third parties can hinder pre-litigation bargaining, and thus may have problematic welfare effects (Porges, 2003; Busch and Reinhardt, 2006; Davey and Porges, 1998). Our analysis suggests that these fears may be overstated. Nonlitigants internalize their impact on bargaining outcomes when they choose whether to become third parties. Countries have an incentive to avoid crowds even though participants do better, on average, than nonparticipants.

# Appendix

There is a complainant (C), a defendant (D), and N nonlitigants. Let  $x(\pi, n)$  denote the demand chosen by type  $\pi$  given n. Let s(x) denote the probability that the defendant settles given x. Let f denote the density function for  $\pi$  and assume full support on  $[\pi_L, \pi_H]$  where  $0 < \pi_L < \pi_H < 1$ . Assume  $\tau_C > 2N$  and k > 0 is small. We derive the fully separating equilibrium and assume that off-the-equilibrium-path beliefs satisfy universal divinity (Banks and Sobel, 1987).

*Proof of Proposition 1.* Under a fully separating strategy the defendant can correctly infer  $\pi$ , given x. The defendant accepts iff:

$$(1-x)\tau + n \ge (1-\pi)\tau - (1-2\pi)n - k \quad \Leftrightarrow \quad x \le \pi + \frac{2(1-\pi)n + k}{\tau}$$

The optimal demand is:

$$x^*(\pi, n) = \pi + \frac{2(1-\pi)n+k}{\tau}$$
(1)

Note that  $x^*(\pi, n) > 0$  always and  $x^*(\pi, n) \le 1 \Leftrightarrow k \le (\tau - 2n)(1 - \pi)$ . The complainant's expected utility is:

$$EU_{C}(x|\pi,n) = s(x)(x\tau - n) + [1 - s(x)] [\pi\tau_{C} + (1 - 2\pi)n - k]$$
  

$$\Rightarrow \frac{\partial EU_{C}(x|\pi,n)}{\partial x} = s(x)\tau + s'(x)(x\tau - n) - s'(x) [\pi\tau_{C} + (1 - 2\pi)n - k] = 0$$
  

$$\Leftrightarrow x = \frac{\pi\tau_{C} + 2(1 - \pi)n - k}{\tau} - \frac{s(x)}{s'(x)}$$
(2)

Combine conditions (1) and (2):

$$\left[\frac{\pi (\tau - \tau_C) + 2k}{\tau}\right] s'(x) = -s(x) \quad \Rightarrow \quad s^*(x) = \exp\left(\frac{-x\tau}{\Gamma(\pi)}\right) \quad \text{where } \Gamma(\pi) \equiv \pi (\tau - \tau_C) + 2k$$

Note that  $0 < s^*(x) \le 1$  always. Given universal divinity, the defendant rejects  $x > \max \{x^*(\pi, n)\}$  and accepts  $x < \min \{x^*(\pi, n)\}$ . This yields equilibrium behavior:

$$\begin{aligned} x^*(\pi, n) &= \pi + \frac{2(1-\pi)n+k}{\tau} \\ s^*(x) &= \begin{cases} 1 & \text{if } x < \min\{x^*(\pi, n)\} \\ \exp\left(\frac{-x\tau}{\Gamma(\pi)}\right) & \text{if } x \in [\min\{x^*(\pi, n)\}, \max\{x^*(\pi, n)\}] \\ 0 & \text{if } x > \max\{x^*(\pi, n)\} \end{cases} \end{aligned}$$

So:

$$\begin{aligned} \frac{\partial x^*(\pi, n)}{\partial \pi} &= 1 - \frac{2n}{\tau} > 0\\ x^*(\pi, n+1) - x^*(\pi, n) &= \frac{2(1-\pi)}{\tau} > 0\\ \frac{\partial s^*(x)}{\partial x} &= -\exp\left(\frac{-x\tau}{\Gamma(\pi)}\right) \left(\frac{\tau}{\Gamma(\pi)}\right) < 0\end{aligned}$$

_	_	_	-

Proof of Corollary 1.

$$\begin{aligned} \frac{\partial s^* \left(x^*(\pi, n)\right)}{\partial \pi} &= \exp\left(\frac{-x^*(\pi, n)\tau}{\Gamma(\pi)}\right) \left[\frac{\left(\tau - \tau_C\right)\left(2n + k\right) - 2k(\tau - 2n)}{\Gamma(\pi)^2}\right] > 0 \quad \text{for small } k \\ s^* \left(x^*(\pi, n+1)\right) - s^* \left(x^*(\pi, n)\right) &= -\exp\left(\frac{-x^*(\pi, n)\tau}{\Gamma(\pi)}\right) \left[1 - \exp\left(\frac{-2(1-\pi)}{\Gamma(\pi)}\right)\right] < 0 \end{aligned}$$

Proof of Proposition 2. Choose an arbitrary nonlitigant *i*. Let  $\hat{n} \in \{0, 1, 2, ..., N-1\}$  denote the number of other third parties. Rescale  $r\tau_i$  and  $(r+b)\tau_i$  to give the following expected utilities:

	Settle	Trial
Join	$\pi \tau_i + (1 - 2\pi) \widehat{n} + v \tau_i + \rho + b \tau_i$	$\pi \tau_i + (1 - 2\pi)\widehat{n} + v\tau_i$
Don't Join	$\pi \tau_i + (1 - 2\pi)\widehat{n} + v\tau_i + \rho$	$\pi \tau_i + (1 - 2\pi) \widehat{n}$

Player i has expected utility functions:

$$EU_{i} (\text{Join}|\hat{n}) = \int_{\pi} [\pi \tau_{i} + (1 - 2\pi) \,\hat{n} + v\tau_{i} + s^{*} (x^{*} (\pi, \hat{n} + 1)) (\rho + b\tau_{i})] f(\pi) d\pi$$
  
$$EU_{i} (\text{Don't Join}|\hat{n}) = \int_{\pi} [\pi \tau_{i} + (1 - 2\pi) \,\hat{n} + s^{*} (x^{*} (\pi, \hat{n})) (v\tau_{i} + \rho)] f(\pi) d\pi$$

The benefit of joining is:

$$\begin{split} \Lambda_i\left(\widehat{n},\tau_i\right) &\equiv EU_i\left(\operatorname{Join}|\widehat{n}\right) - EU_i\left(\operatorname{Don't}\,\operatorname{Join}|\widehat{n}\right) \\ &= \int_{\pi} \left[v\tau_i + s^*\left(x^*\left(\pi,\widehat{n}+1\right)\right)\left(\rho + b\tau_i\right) - s^*\left(x^*\left(\pi,\widehat{n}\right)\right)\left(v\tau_i + \rho\right)\right]f(\pi)d\pi \end{split}$$

Then:

$$\frac{\partial \Lambda_i\left(\hat{n},\tau_i\right)}{\partial \tau_i} = \int_{\pi} \left[ v + s^* \left(x^*\left(\pi,\hat{n}+1\right)\right)b + \frac{\partial s^*\left(x^*\left(\pi,\hat{n}+1\right)\right)}{\partial \tau_i}\left(\rho + b\tau_i\right)\right) \\ -s^*\left(x^*\left(\pi,\hat{n}\right)\right)v - \frac{\partial s^*\left(x^*\left(\pi,\hat{n}\right)\right)}{\partial \tau_i}\left(v\tau_i + \rho\right) \right] f(\pi)d\pi$$

and:

$$\frac{\partial s^* \left(x^* \left(\pi, n\right)\right)}{\partial \tau_i} = s^* \left(x^* \left(\pi, n\right)\right) \left[\frac{\alpha \left(\pi, n\right)}{\Gamma \left(\pi\right)^2}\right]$$
  
where  $\alpha \left(\pi, n\right) \equiv \pi \left[\pi \tau_C + 2\left(1 - \pi\right)n - k\right] > 0$  for small  $k$ 

So:

$$\begin{aligned} \frac{\partial \Lambda_i\left(\hat{n},\tau_i\right)}{\partial \tau_i} &= \int\limits_{\pi} \left[ v + s^* \left( x^*\left(\pi,\hat{n}+1\right) \right) b + s^* \left( x^*\left(\pi,\hat{n}+1\right) \right) \left( \frac{\alpha\left(\pi,\hat{n}+1\right)}{\Gamma\left(\pi\right)^2} \right) \left(\rho + b\tau_i\right) \right. \\ &\left. - s^*\left( x^*\left(\pi,\hat{n}\right) \right) v - s^*\left( x^*\left(\pi,\hat{n}\right) \right) \left( \frac{\alpha\left(\pi,\hat{n}\right)}{\Gamma\left(\pi\right)^2} \right) \left( v\tau_i + \rho \right) \right] f(\pi) d\pi > 0 \quad \text{for large } b \\ \end{aligned}$$

Also:

$$\lim_{\tau_{i} \to 0} \Lambda_{i}(\hat{n}, \tau_{i}) = -\rho \int_{\pi} \left[ s^{*} \left( x^{*}(\pi, \hat{n}) \right) - s^{*} \left( x^{*}(\pi, \hat{n} + 1) \right) \right] f(\pi) d\pi < 0$$

$$\lim_{\tau_{i} \to \infty} \Lambda_{i}(\hat{n}, \tau_{i}) = \lim_{\tau_{i} \to \infty} \int_{\pi} \left[ v \tau_{i} + s^{*} \left( x^{*}(\pi, \hat{n} + 1) \right) \left( \rho + b \tau_{i} \right) - s^{*} \left( x^{*}(\pi, \hat{n}) \right) \left( v \tau_{i} + \rho \right) \right] f(\pi) d\pi = \infty$$
because  $\lim_{\tau_{i} \to \infty} s^{*} \left( x^{*}(\pi, \hat{n}) \right) = \lim_{\tau_{i} \to \infty} s^{*} \left( x^{*}(\pi, \hat{n} + 1) \right) = \exp(-1)$ 

By the intermediate value theorem, each  $\hat{n} \in \{0, 1, 2, ..., N-1\}$  has a unique cutting-point  $\hat{\tau}(\hat{n}) > 0$  such that  $\Lambda_i(\hat{n}, \hat{\tau}(\hat{n})) = 0$ . So  $\Lambda_i(\hat{n}, \tau_i) < 0$  for all  $\tau_i < \hat{\tau}(\hat{n})$  and  $\Lambda_i(\hat{n}, \tau_i) > 0$  for all  $\tau_i > \hat{\tau}(\hat{n})$ .

Proof of Proposition 3. Because  $\hat{\tau}(\hat{n})$  is unique:

$$\Pr(i \text{ joins}|\widehat{n}) = \Pr(0 \le \Lambda_i(\widehat{n}, \tau_i)) = \Pr(\widehat{\tau}(\widehat{n}) \le \tau_i) = 1 - F(\widehat{\tau}(\widehat{n}))$$

So  $\Pr(i \text{ joins} | \hat{n} + 1) < \Pr(i \text{ joins} | \hat{n}) \text{ iff } \hat{\tau}(\hat{n}) < \hat{\tau}(\hat{n} + 1).$  Define:

$$\begin{split} \Psi_{i}\left(\widehat{n},\tau_{i}\right) &\equiv \Lambda_{i}\left(\widehat{n},\tau_{i}\right) - \Lambda_{i}\left(\widehat{n}+1,\tau_{i}\right) \\ &= \int_{\pi} \left\{ \left[s^{*}\left(x^{*}\left(\pi,\widehat{n}+1\right)\right) - s^{*}\left(x^{*}\left(\pi,\widehat{n}+2\right)\right)\right]\left(\rho+b\tau_{i}\right) \right. \\ &- \left[s^{*}\left(x^{*}\left(\pi,\widehat{n}\right)\right) - s^{*}\left(x^{*}\left(\pi,\widehat{n}+2\right)\right)\right]\left(v\tau_{i}+\rho\right)\right\} f(\pi)d\pi > 0 \quad \text{for large } b \end{split}$$

Note that  $\Psi_i(\hat{n}, \tau_i) < 0$  for large v. But for large b:

$$\Lambda_{i}\left(\widehat{n}+1,\widehat{\tau}\left(\widehat{n}\right)\right) < \Lambda_{i}\left(\widehat{n},\widehat{\tau}\left(\widehat{n}\right)\right) = 0 = \Lambda_{i}\left(\widehat{n}+1,\widehat{\tau}\left(\widehat{n}+1\right)\right)$$

Since  $\Lambda_i$  is strictly increasing in  $\tau_i$ :  $\hat{\tau}_i(\hat{n}) < \hat{\tau}_i(\hat{n}+1)$  and  $\Pr(i \text{ joins}|\hat{n}+1) < \Pr(i \text{ joins}|\hat{n})$ . *Proof of Corollary 2.* Implied by  $\hat{\tau}_i(\hat{n}) < \hat{\tau}_i(\hat{n}+1)$  for each i and  $\hat{n} \in \{0, 1, 2, ..., N-1\}$ .

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Figure 1: Model Structure



Figure 2: Fear of Crowds

Figure 3: Average Trade Stake of Third Parties

(a) Theoretical Expectation



(b) Actual Data from WTO Disputes





Figure 4: Timing of Participation Decision

# Table 1: Model Payoffs

(a) After participation decisions

	Settle	C wins	D wins
Complainant	$x\tau - n$	$ au_C - n - k$	n-k
Defendant	$(1-x)\tau + n$	n-k	$\tau - n - k$

where n is the realized number of third parties

(b) During participation decisions

	Settle	C wins	D wins
Participant	$(r+b)\tau_i$	$\tau_i - \hat{n} + v\tau_i$	$\widehat{n} + v\tau_i$
Nonparticipant	$r au_i$	$ au_i - \widehat{n}$	$\widehat{n}$

where  $\widehat{n}$  is the number of other third parties and:

$$(r+b) \tau_i > r\tau_i > \pi\tau_i + (1-2\pi) \hat{n} + v\tau_i > \pi\tau_i + (1-2\pi) \hat{n}$$

Variable	Coefficient	Coefficient	Coefficient
	(Std. Err.)	(Std. Err.)	(Std. Err.)
	Exports logged	Exports logged	Exports Growth
	(1)	(2)	(3)
Third Party	$0.41^{**}$	$0.32^{*}$	0.43**
	(0.14)	(0.15)	(0.15)
Trade Stake	$0.87^{**}$	$0.89^{**}$	-0.13**
	(0.02)	(0.01)	(0.02)
Log Defendant GDP	$1.86^{**}$	$1.44^{**}$	$2.01^{**}$
	(0.29)	(0.29)	(0.29)
Log Complainant GDP		0.03	-0.18
		(0.04)	(0.15)
Panel Ruling		0.03	
		(0.18)	
Third Parties Count		$-0.06^{\dagger}$	
		(0.03)	
Intercept	-51.81**	-40.74**	-50.79**
	(8.34)	(8.55)	(8.80)
N	23847	23646	23646
$\mathbb{R}^2$	0.78	0.76	0.16
F	1037.36	908.30	18.37

Table 2: Benefit of Participation on Exports

Significance levels :  $\dagger : 10\% \quad * : 5\% \quad ** : 1\%$ 

Table 2: Fixed effects on dispute estimation of export levels, with robust standard errors clustered on dispute in column 1. Fixed effects on defendant estimation of export levels, with robust standard errors clustered on dispute in column 2. Fixed effects on dispute estimation of export growth, with robust standard errors clustered on dispute in column 3.

	Coefficient	Coefficient	Coefficient	Coefficient
	(1)	(2)	(3)	(4)
Number of Third Parties	-0.20***	-0.21***	-0.21***	
	(0.01)	(0.01)	(0.01)	
Number of Pro-C Third Parties				-0.29***
				(0.04)
Log Trade Stake	$0.04^{***}$	$0.02^{***}$	$0.02^{***}$	$0.07^{***}$
	(0.01)	(0.01)	(0.01)	(0.01)
Article XXII		$0.59^{***}$	$0.59^{***}$	$0.70^{***}$
		(0.04)	(0.04)	(0.12)
Log Income		-0.04*	-0.03*	-0.03
		(0.02)	(0.02)	(0.04)
Log Third Party Experience		$0.21^{***}$	$0.21^{***}$	$0.45^{***}$
		(0.04)	(0.04)	(0.08)
Log Complainant Experience		0.03	0.04	-0.12
		(0.04)	(0.04)	(0.07)
Multilateral Issue		$0.31^{***}$	$0.30^{***}$	$0.40^{***}$
		(0.04)	(0.04)	(0.09)
Aid Dependence			-0.00	
			(0.00)	
Constant	$0.28^{***}$	-0.31	-0.33	$-1.51^{*}$
	(0.08)	(0.27)	(0.27)	(0.59)
N	2735	2462	2462	1197
* $p < 0.05$ , ** $p < 0.01$ , *** $p < 0.001$				

## Table 3: Fear of Crowds: IV Model of Participation

Table 3: Number of Third Parties is instrumented in a first-stage equation, using rest-of-world trade stake as instrument. Robust standard errors in parentheses.