Does the Rule of Law Matter? The WTO and US Antidumping Investigations

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Abstract

Are states constrained by international law? Recent studies suggest that the legal regime of the World Trade Organization (WTO), in particular, has no independent effect on members’ trade policies. We argue, in contrast, that the WTO’s “rule of law” is likely to deter protectionist practices against other members, including those lacking the ability to retaliate. The WTO accomplishes this by providing for enforcement in the form of a robust dispute settlement system, which raises the costs of protectionism by magnifying the negative reputational and precedent consequences of noncompliance. We test these competing hypotheses using a dataset of 921 United States (US) antidumping (AD) investigations and 2,539 potential cases which were never initiated, from 1978 through 2001. We find that the US is less likely to investigate and impose AD duties against countries that are members of the WTO. The WTO legal regime deters protectionist practices against fellow members, especially against those unable to credibly threaten retaliation.
I. Introduction

Are states constrained by international law? The skeptical answer is that, absent a central authority to enforce it, international law is merely a guise for the strong to have their way. Looking at the global trade regime, in particular, recent studies seem to lend some weight to this view, suggesting that the World Trade Organization (WTO) is of little consequence (Rose 2003, 2004), or that its effectiveness depends on member countries having sufficient market power to retaliate for transgressions (Gowa and Kim 2005; Blonigen and Bown 2003; Bagwell and Staiger 2002; Mavroidis 2000). This “power-oriented” perspective implies that the institution matters only if backed by the interests of powerful states.

We dissent from this view. Specifically, we argue, the WTO regime raises the costs of protectionism by providing for enforcement of existing market access commitments in a robust dispute settlement system. The legal system puts a member’s reputation more clearly on the line, vis-à-vis its own citizens, private investors and traders, and third-party states. It also raises the cost of protection by generating judgments that affect future export interests of members challenged in dispute settlement. These effects of the WTO legal system apply even to countries that lack the credible market capacity to retaliate against fellow members’ protectionist actions. We thus hypothesize that the WTO’s “rule of law” should deter protectionism against other members, including (indeed, especially) those lacking the ability to retaliate.

Of course, this argument is not new. Yet despite the longstanding debate over the merits of the power- and rules-oriented views of international law, the field has not succeeded in producing evidence that can adequately discriminate between these two contrasting perspectives. This is because of the profound, and widely-appreciated, problem of the “dogs that don’t bark.” As Finlayson and Zacher (1981, 599) put it, “[i]t is impossible to know how many protectionist
actions have *not* been undertaken because of the existence of GATT obligations.” Such actions do not typically surface in the empirical record. Consequently, studies of international trade agreements have only examined the association between membership and *observed* levels of trade or protection. But such studies, as many have argued, may be biased by the fact that countries join the legal regime *because* they are ready to cooperate, rather than the other way around. So far, it has proven difficult to falsify this skeptical interpretation of such correlative evidence. For this reason, Simmons (1998, 89) cautions that, while it can be shown “that much international behavior is *consistent with* international law” (italics added), “it has been far more difficult, however, to show any causal link between legal commitments and behavior.”

Our paper aims to resolve this debate unequivocally and, for the first time, using direct evidence on the “dogs that don’t bark.” To do so, we utilize a research design never before brought to bear on this question, focusing on the political economy of United States (US) antidumping (AD) policy. Specifically, we look at a broad pool of comparable *opportunities* for the US to impose new protectionism against other countries, including cases in which the government decided *not* to impose AD duties. Taking this analysis one step farther back, we also incorporate evidence on similar cases of potential protectionism which US import-competing producers, themselves, declined to bring before the government in the first place. We thus avoid overstating the effects of international law—and sidestep concerns about selection bias—by scrutinizing identifiable instances of protection that did not happen as well as those that did.

Drawing on this insight, we construct a dataset of 921 US antidumping (AD) investigations, supplemented by 2,539 potential cases never initiated, from 1978 through 2001. We then use this set of cases and “controls” to test our hypothesis against the expectations of the
power-oriented perspective. Our analysis controls for a wide variety of other determinants of the demand for and supply of antidumping protection, including – we hasten to emphasize – the actual import volume and price for the product in question. We find that the US is less likely to investigate and impose new AD duties against members of the WTO, even those lacking market power. Specifically, we find that the probabilities of being named in a US antidumping petition, and of having duties imposed, are about 25 percent lower for an average member of the WTO (or its predecessor, the General Agreement on Tariffs and Trade, GATT) than for a non-member. Moreover, if anything, the deterrent impact of the WTO is greater, not weaker, for members of the trade regime that lack the credible capacity to retaliate with protection of their own.

The implication, of course, is that international law has a concrete and independent effect on states’ trade policies. Those countries that are unable to “hit back” with trade sanctions can still effectively use the law to guard against adverse behavior by the strongest state in the trading system. This paper provides some of the first direct evidence of this point, lending clear support to the rules-oriented perspective.

As noted earlier, at one time, scholars thought that it would be impossible to ever know how many protectionist actions were prevented by the existence of the GATT/WTO regime. As a sign of the contribution we feel the paper’s method makes, we can bring it to bear on this age-old question. How many impositions of antidumping duties by the US did the GATT/WTO thwart (from 1978 through 2001)? The answer is… 143 [118, 167]. For reference, note that the actual number of observed duties imposed by the US imposed during this period was 413; and the average AD action directly affected $175 million of annual imports (in 1995 prices).

The paper proceeds as follows. Section II sets out the rules-oriented perspective on international law and motivates this empirical project against the backdrop of the literature on the
subject. Section III lays out our testable hypothesis as applied to the domain of US antidumping decisions. Sections IV and V describe our empirical research design and results, and section VI concludes by highlighting some implications of our findings for debates about the impact of international law.

II. The Literature

The rules-oriented perspective on international law enjoys a long theoretical tradition. What ties this perspective together is the argument that codified rules constrain state behavior. For example, some argue that international law helps governments “tie hands” vis-à-vis their domestic constituents. In the trade domain, this would mean resisting protectionist demands at home by citing WTO obligations. These obligations may weigh heavily due to reputational harm ensuing from noncompliance (Abbott 2000; Finlayson and Zacher 1981, 600; Simmons 2000). To varying degrees, different types of dispute settlement provisions, in particular, can make noncompliance costly (Keohane, Moravcsik, and Slaughter 2000). Others contend that international law’s effects are due chiefly to the transparency that institutions provide, which makes it easier to monitor the actions of others and detect defections when they occur (Keohane 1984). Still others contend that the law derives its potency from normative agreement among the community of nations and their citizens that compliance is desirable even when costly.² What these views have in common is their claim that adherence to the law is not merely a function of coincidence of interests or of market power relationships among states. Our argument focuses more narrowly on how the potential for WTO litigation deters protectionist practices against its

¹ Figures in square brackets here and elsewhere in this paper denote 95 percent confidence interval bounds.
² Hudec (1987, 214) attributes the impact of GATT dispute settlement to this source, writing, “The basic force of the procedure [comes] from the normative force of the decisions themselves and from community pressure to observe them.”
members, and while this conjecture accords with some of these other views, this paper’s main contribution is empirical rather than theoretical.

The motivation is simple: the view that law matters has long been taken as an article of faith. Only recently have scholars begun to subject this article of faith to empirical scrutiny, with as-yet inconclusive results. For example, Simmons (2000) looks at why governments commit to, and comply with, monetary rules set out by the International Monetary Fund. She finds that states generally do comply, and concludes that “legalization strengthens commitment.” In a similar vein, Davis (2004) examines whether trade negotiations under the GATT/WTO enable governments to credibly link issues, which enables them to influence which constituents politically mobilize and, in turn, to roll back agricultural protection. She concludes that, in the case of Japanese and European negotiations with the US, the answer is yes.

But, using comparable methods, others have found largely negative results. For instance, Hathaway (2002) asks whether treaties are simply “window-dressing” in the area of human rights law. Her results suggest that those countries which ratify treaties are no more likely to uphold human rights than those which do not ratify. Likewise, Rose (2003, 2004) turns to the GATT/WTO and argues that, while members of the multilateral regime have witnessed an increase in trade, this is not attributable to the institution itself.

Putting aside their differing conclusions on the influence of international law, studies of this sort are open to criticisms of selection bias, which as Simmons (1998, 89-90) explains is the single biggest hurdle for studies of international institutions. The concern, as explained by Downs, Rocke and Barsoom (1996, 380), is that compliant behavior might be traceable to a harmony of interests in the first place, as opposed to the independent constraints levied by international law. This presents an almost insurmountable problem for empirical research.
because individual opportunities for compliance or noncompliance are hard to observe.\textsuperscript{3} Hence few studies are able to define an appropriate and comparable population of potential cases of noncompliance, from which all actual cases of defection are selected. Work on GATT/WTO dispute settlement has sought to come to grips with this problem, comparing cases of compliance and noncompliance against rulings and, similarly, cases of concessions and non-concessions in all disputes (e.g., Reinhardt 2001; Busch and Reinhardt 2003a; Bown 2004a). These studies, however, are limited insofar as they can only deal with formal complaints that are filed in Geneva.\textsuperscript{4} As Hudec (1993, 360) rightly points out, however, the law should deter violations from happening in the first place, and thus only a small subsample of cases are likely to be brought for adjudication.

\textit{US Antidumping Procedures}

The process by which AD duties are awarded is important in framing the paper’s empirical research design. Antidumping cases are initiated by a domestic producer(s) who alleges that a foreign producer(s) is selling at “less-than-fair-value” (usually below the cost of production) in the US market. The goal is to obtain a duty that offsets the margin of “dumping,” or the difference between a fair price and the one being charged. For our purposes, the key is how petitions of this sort are vetted by the two US agencies charged with overseeing US AD decisions.

First, a domestic producer(s) decides whether to file a petition with the International Trade Administration in the Department of Commerce (DOC). Second, if there is a filing, the

\textsuperscript{3} For a recent study that attempts to correct for this problem explicitly in its estimation strategy, see Ringquist and Kostadinova’s (2005) examination of the impact of the 1985 Helsinki Protocol on pollution emissions.

\textsuperscript{4} Bown (2005) overcomes this limitation by examining why some US trade remedies actions go unchallenged while others are the subject of WTO complaints.
US International Trade Commission (USITC) can either reject the petition (given insufficient evidence, for example), in which case it issues a negative preliminary ruling, or send the case on to the Department of Commerce (DOC) after rendering a positive preliminary ruling. Third, the DOC then investigates, issues a preliminary ruling of its own as to whether dumping is occurring, which if positive will then activate provisional antidumping duties. Finally, the USITC must decide whether the dumping (as decided by the DOC) is causing “material injury” to the domestic producer(s). If so, it issues a positive final decision, and the DOC imposes a final antidumping duty order based on the assessed dumping margin (see USITC 2005, II-23).

Given the relative ease of obtaining AD protection in the US (as elsewhere), the puzzle is why so few investigations occur. Specifically, out of the many foreign countries supplying a significant share of the imports of a typical product, why are only a small number ever named in petitions? Scholars agree that the answer cannot be that the economic merits of antidumping enforcement differ across potential cases. Such merits are scarce in general, and US legal standards are so permissive that high duties can be imposed even on foreign firms making a profit on exports—indeed, even on those selling abroad for higher prices than at home (Blonigen and Prusa 2003). Instead, the literature argues that the decision is affected by political context: specifically, the threat of retaliation, backed by sufficient market power in relation to US exporters (Blonigen and Bown 2003, Bagwell and Staiger 2002). For this threat to be credible, though, US industry must export a sizable amount to the target country. If not, such threats are likely to be seen as superfluous. In this light, Blonigen and Bown (2003) interact GATT/WTO

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5 In practice, as several former Commerce Department employees attest, the US authorities engage in “margin shopping,” or “looking at different ways to calculate an importer’s costs or prices and choosing the one that helps fatten the prospective [dumping] margin to a desirably high level” (Washington Post, July 13, 2003, F1).
6 The literature exhibits a remarkable degree of consensus on the general point that political economy considerations, rather than purely legal criteria, shape US AD decision-making (Hansen 1990; Moore 1992; Rosendorff 1996).
membership with market power to test if this capacity for retaliation deters US AD determinations. They focus, in particular, on the product of US export exposure and a variable indicating the target country’s access to or experience with the GATT/WTO dispute settlement mechanism. They hypothesize that “US petitioning industries are less likely to name foreign countries in an AD petition for which there is higher exposure (in terms of US exports to countries with AD laws) to retaliation” (Blonigen and Bown 2003, 252-3).

The problem with this empirical literature on antidumping, however, is that it has failed to examine the independent deterrent impact of membership in the WTO regime, as apart from the deterrent impact of the retaliatory capacity of member-states themselves. And this is the critical question in the debate over the power-versus rule-oriented perspectives on international law. These studies ignore the fundamental point, emphasized by a number of scholars (Rosendorff 2005; Kucik and Reinhardt 2007; Sykes 1991), that the trade regime functions to limit unilateral retaliation even while it facilitates multilaterally-authorized sanctions. That is, targeted countries which are not GATT/WTO members may actually have a freer hand in retaliating, given that the trade regime requires members to exhaust dispute settlement before seeking authorization to suspend concessions (retaliate), a process that can take several years. Our point is that, if the rule of law matters, it should matter for the GATT/WTO membership as a whole, not just those members with sufficient market power to credibly threaten retaliation.

III. The Argument

WTO membership gives states access to dispute settlement, which, by subjecting these to judicial review, and potentially granting the target country authorization to retaliate, raises the costs of protectionism. First, an adverse ruling at the WTO can hurt the defendant (here, the US)
even if the complainant lacks the ability to retaliate. This is because such a verdict has the effect of setting an unfavorable—if informal—precedent that can hurt the defendant’s prospects as a complainant later on, or leave it vulnerable to similar suits by others. Indeed, rulings add to the acquis of case law at the WTO (Palmeter and Mavroidis 2004, 56), such that the question of whether the complainant will (can) retaliate is usually of less concern to the defendant than how any verdict might affect the defendant’s own prospects as a complainant in related cases in the future. At a minimum, noncompliance with dispute settlement verdicts raises the problem of “dirty hands” – when the complainant itself is violating the same legal provision that the complainant accuses the defendant of violating – which complicates a country’s ability to get others to settle on favorable terms in the shadow of the law.

Second, dispute settlement constitutes a highly visible venue, behavior in which can endanger the defendant’s reputation in the eyes of several critical audiences, including its own citizens at home; private market actors, traders and investors; and third-party states. Transparency provisions within the WTO regime, even outside of dispute settlement, may be important as well. But the act of filing a dispute, and the escalation of ensuing litigation⁷, constitute highly salient acts that allow outside audiences to make judgments about the degree to which a government’s promises are credible. Of course, citizens, market actors, and other states may observe the underlying policy choice that give rise to a dispute. But such actions may not directly bear on the credibility of the government’s commitments. For instance, such protectionist actions may be justified in a number of ways that are compatible with the legal regime’s provisions (e.g., health and safety regulations, legitimate escape clause provisions, etc.).

The WTO’s robust dispute settlement system is unique, in this regard, in serving as the definitive

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⁷ This is particularly true, when, as is common in WTO disputes, third party states become involved in dispute settlement (Busch and Reinhardt 2006).
judgment about the compatibility of a member’s actions with its commitments in the trade law regime. For this purpose, it has no rival. Thus, even if audiences can observe the underlying policies, to the extent that they are concerned about the credibility of a government’s commitments, they will nonetheless update their assessments of a country’s reputation based on dispute settlement developments. By anticipation, then, having a recourse to dispute settlement enables a member to make it more costly for another member to impose a new protectionist measure against it. And this function does not require that the country potentially targeted by such protection have the market power necessary to threaten retaliation of its own.

We thus expect that WTO membership will deter US AD investigations and duties, even on the part of those countries lacking the market power to retaliate. This, we contend, is a more direct test of the efficacy of law than what the literature has offered to date, both because we are able to get around the selection bias critique, and because we give full voice to both the power- and rules-oriented perspectives.

Hypothesis

The implication of the rule-oriented perspective is clear enough with respect to the decision by the US authorities, who can expect WTO members to potentially invoke dispute settlement procedures against an AD order. The petitioning industry’s decision about which countries to name, however, is not directly tied to consequences flowing from WTO dispute proceedings. 8 Nevertheless, as the economic literature on antidumping agrees (e.g., Blonigen and Prusa 2003), there are nontrivial costs to filing a petition which can in some cases outweigh the benefits of doing so. Hence, by simple backward induction, the industry should build its

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8 However, one study has found that the filing of a WTO complaint significantly reduces the stock market value of firms benefiting from the protectionist measure being challenged (Desai and Hines 2004).
government’s anticipated response to the target’s WTO membership into its petitioning decision. If the legal regime deters an affirmative finding, it should thus deter the naming of a member country in the petition in the first place.

To test for the independent impact of law, we focus on a simple variable: formal membership in the GATT/WTO membership. Formal, rather than informal, membership is the best indicator, because informal members do not have access to dispute settlement. Our hypothesis, tailored to our empirical focus on US AD policies, is thus as follows:

**Hypothesis:** If a country is a GATT/WTO member, it is less likely to be targeted in US AD investigations and duty orders, controlling for its market power.

**IV. Research design**

We model both the demand for as well as the supply of antidumping protection. Specifically, we examine how GATT/WTO membership affects two dependent variables: (a) whether a given supplier country is named by private industry in a US AD petition and (b) whether the US authorities issue an affirmative decision on that petition, ending in the imposition of AD duties.

**The Dataset**

We start with a list of all US AD investigations begun from 1978 through 2001. This initial list has 921 observations, one per country named in each petition. We group related

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9 We thank Bruce Blonigen for providing the core list of investigations used in Blonigen and Bown (2003). We would also like to thank Tom Prusa, who provided the product codes addressed in all of the pre-1994 cases. We ourselves updated case outcomes and the products petitioned in a number of the more recent cases in the list, following Blonigen and Bown’s (2003) sources. Identification of products relies upon 5- or 7-digit TSUSA codes for the 1978-1988 period; 8-digit Harmonized System codes for the 1989-1993 period; and 4-, 5-, 6-, 8-, and 10-digit codes in the 1994-2001 period, as they are named in the petition. This paper’s data on product- and country-level import and export volumes by year is from Feenstra, Romalis, and Schott (2002) for 1978-1988 and the USITC (http://dataweb.usitc.gov) for 1989-2001.
investigations into families prompted by the same petition; they share the same date and products. For example, a pair of November 26, 2001 investigations against China and South Africa over ferrovanadium imports fits into one family, constituting two observations. The average petition has 2.3 country targets and, thus, investigations. For each petition, we then construct a list of control observations, one for every non-named country supplying three percent or more of US imports of any one of the products named in that petition in the year it was filed.\textsuperscript{11}

Because Canada, Belgium, Austria, and the Czech Republic all supplied sufficient amounts of ferrovanadium to the US, in the case mentioned above, they enter our dataset as this petition’s controls.

The file has 2,539 controls, or about 2.8 per case. The result is a complete dataset totaling 3,460 cases and controls. Remarkably, 43 percent of the controls actually exported more (to the US) of the product in question than at least one of the countries named in the associated petition; 23 percent exported more than the largest supplier named. Similarly, in 42 percent of the control observations, the supplier’s product-specific imports were priced lower than the comparable imports of at least one of the countries named in the petition; 27 percent were priced lower than the imports of that product from all of the named suppliers. Indeed, 16 percent of these controls supplied more of the product in question, at a lower price, than all suppliers actually targeted in the investigation. Why weren’t these controls also named, given that they constituted at least as severe a competitive threat to US producers? The point is that the controls in the sample constitute a legitimate reference point for comparison in terms of indicators

\textsuperscript{10} From a complete set of 1,043 investigations we omit 122 due to missing data on one or more of the covariates used in our analysis.

\textsuperscript{11} In the preliminary determination phase of a US AD investigation, the Department of Commerce terminates cases in which the targeted country supplies less than 3 percent of total US imports of that product, though there are exceptions (USITC 2005, II-39). Such potential cases are thus unlikely to be filed in the first place, so we apply this sampling cutoff following Blonigen and Bown (2003, 260-1, 265). There would be about 8400 more controls if we did not apply the three percent cutoff.
relevant to the dominant statutory and political criteria (i.e., import price and volumes, respectively) that shape US antidumping decisions in practice.

**Dependent Variables**

Our first dependent variable, *Petition*, is 1 if the country was named in that petition, 0 otherwise. In effect, it classifies observations as “cases” or “controls.” Our second dependent variable, *Affirmative*, is 1 if the US authorities ultimately imposed AD duties on the target country. *Affirmative* is zero for all other types of case outcomes, including negative determinations as well as withdrawn or terminated investigations. Of course, we do not observe the investigation’s outcome if no petition was ever filed. *Affirmative* is one in 45 percent of the 921 decisions.

Two features of the dependent variables are worth highlighting. First, the economic literature on antidumping emphasizes the fact that the *investigation*, particularly when it results in a positive preliminary determination, imposes costs on the foreign supplier (Staiger and Wolak 1994). This is true even if the final determination is negative. Hence, if we only looked at final decisions, we would miss a crucial domain of effect for the contemplated protection. Moreover, the legal teams conducting domestic AD litigation are certainly sophisticated enough to induce the likely impact of GATT/WTO law on the final decisions of US authorities. They should accordingly factor this into the decision over whether to bring the case in the first place. If so, only looking at final AD actions would fail to reveal any anticipatory effect that GATT/WTO might have on the petition choice itself. Doing so might also cause selection bias for inferences about the role of GATT/WTO in decisions themselves. The dependent variable at this stage is thus at least as important as the final decision.
Second, our coding of *Affirmative* does not distinguish among the various alternative ways an investigation may end. For our purposes, the key issue is how different outcomes affect the foreign supplier’s welfare. As Prusa (1992) demonstrates, AD investigations that are withdrawn or terminated early are certainly trade-restricting, but they tend to reflect collusive settlements among the petitioning and targeted firms. Such settlements may be profitable to the targets, just as foreign firms prefer voluntary quota restrictions over tariffs. Hence, given that an investigation is underway and has proceeded past a positive preliminary determination (a key point, as noted above), from the targeted country’s perspective, the most negative outcomes occur only when duties are imposed, i.e., when *Affirmative* equals one.

**Independent Variables**

*Regime Membership.* Our chief explanatory variable is dichotomous: *GATT/WTO*, coded 1 if the potential target country was a formal member of the trade regime in the year of the petition, and 0 otherwise. Out of the 88 countries in our dataset, 23 were non-members at some point in the file. Non-members include China, Taiwan, Thailand, Mexico, Russia, Vietnam, Venezuela, Saudi Arabia, El Salvador, Panama, and Ecuador, among others. 433 observations (12.5 percent) are of non-members, though a disproportionate 19.2 percent of the filed cases were against non-WTO targets. We expect *GATT/WTO* to have a negative coefficient in both dependent variables’ equations.

*Market Power.* The target country’s credible capacity to retaliate in the form of some kind of trade sanctions is derived from its position as a large and price-sensitive importer of products from the United States. Such consumption increases the target’s price-setting market power, such that its actions can lower the world price of overall US exports. We measure this

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12 For a precedent on this front, see Blonigen and Bown (2003).
capacity in the variable *US Export Dependence*, which is the volume of total US exports to the target country, in the petition year, as a percent of US gross domestic product. The median observation’s country imported about 0.15 percent of US GDP annually. US bilateral exports exceeded 0.5 percent of US GDP at some point for only 3 of the 88 countries in our dataset (Canada, Japan, and Mexico). *US Export Dependence* should have a negative association with the filing of AD petitions and affirmative AD decisions.

*Import Price and Volume.* Naturally, the chief statutory criterion affecting antidumping decisions by the US authorities is the price of the imported products under investigation. As we shall see in the regression results below, this indeed proves to be a powerful predictor of antidumping petitions and affirmative decisions. If GATT/WTO members happen to supply higher-priced exports, then they would not be as liable to antidumping actions due to spurious considerations rather than to the impact of the trade law regime. Hence we construct a variable, *Product Relative Price*, which indexes the per-unit product-specific price of imports from a given supplier, relative to a reference price (the per-unit average price of imports into the US from *all* suppliers of the product in question in that same year). In particular, *Product Relative Price* is the natural log of the supplier’s price as a percent of this reference price. Its sample median unsurprisingly corresponds to 102 percent. *Product Relative Price* exhibits only a small correlation (0.13) with *GATT/WTO*, but even this modest association disappears once we take per capita income into account, since rich countries’ exports are more expensive, and rich

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13 We emphasize that, should the target choose to retaliate, it has the practical freedom to do so on any product, not simply the products the US is considering imposing a duty on. The relevant numerator here, from the state’s perspective, is thus total US exports to the target country. Further, note that Blonigen and Bown (2003) choose to normalize this concept by US exports to the world, rather than US GDP. The two versions are virtually identical, however, with a 0.89 correlation. Not surprisingly, our findings are the same regardless of which formulation of *US Export Dependence* is used.

14 We calculated this using raw data, at the appropriate disaggregated product level, from Feenstra, Romalis, and Schott (2002).
countries are more likely to be in the WTO. We include \textit{Product Relative Price} in both equations in the analysis. However, to head off any later misinterpretations of our findings about GATT/WTO, we also wish to emphasize this critical point: GATT/WTO members’ exports of the products named in US antidumping petitions are not more expensive than comparable exports from countries not in GATT/WTO. So far as assessments of dumping are based on the market price of the product in question – which they must be, as noted earlier, since the calculations of ‘fair value’ have wide latitude to achieve politically desired results – then GATT/WTO members by this measure ‘dump’ no less frequently than non-members.

Relatedly, as prior studies demonstrate, AD duties are more likely when the volume of imports in question is larger. Therefore, we include the variable \textit{Log Product Imports}, or US imports of the affected product(s) in the year of the petition, expressed in logged constant 1995 US dollars. For the purposes of explaining which countries get named in the petition, this variable counts all products ultimately addressed in any of the investigations resulting from that petition. For our analysis of the outcomes of cases once filed, \textit{Log Product Imports} counts only those particular products named in the investigation against the specific target country. There is little difference, in practice, however. The average investigation concerned $175 million (1995 prices) of annual imports, though that figure varies widely depending on the product at issue.

\textit{Other Controls}. Several other attributes of a potential case are also important. Our analysis takes account of the overall amount of US imports from the potential target country in the year of the petition, as a percentage of US GDP, in the variable \textit{US Import Penetration}. This has little bearing on the legal features of US antidumping proceedings. However, high levels of imports may make any US protectionist pressures against the source country more politically

\footnote{An ordinary regression of \textit{Product Relative Price} on \textit{GATT/WTO} and \textit{Log Per Capita Income} (where the latter variable is discussed below), for the sample of 3460 observations, yields a coefficient on \textit{GATT/WTO} of 0.074, with...}
salient in that year, regardless of the value of imports of the product in question (e.g., Irwin 2005, 9-10). Total imports from the potentially targeted country are just over one-fifth of a percent of US GDP in the median observation.

The Department of Commerce designates certain countries as “Non-Market Economies” (NMEs) for the purposes of its assessment of “less-than-fair-value” pricing. In such cases, the DoC bases its “normal value” figure on the cost of the relevant factor inputs in market economies of comparable levels of development, which also produce the goods in question. This use of substitute data tends to make the case easier to prove. We accordingly add a dichotomous control variable, Non-Market Economy, to flag such country targets.\(^\text{16}\) 12 countries are NMEs at some point in our dataset, constituting 4 percent of the control observations and 15 percent of the investigations. It is important to note that the terms of China’s WTO accession agreement allow the US to continue treating it as an NME, for AD purposes, for 15 years afterwards. That means China counts as an NME in all cases and controls in our dataset. If there is any change over time in petitioning and affirmative rates in US AD cases against China, it is not because of a change in NME status.

Another idiosyncratic, yet widely appreciated, feature of US antidumping politics is that the steel industry files a disproportionately large number of cases. We use Standard Industrial Classification (revision 3, 1987) code 3312 to mark the steel observations (constituting our dichotomous variable Steel), which make up 31 percent of our dataset as a whole, and 36 percent of the investigations themselves.\(^\text{17}\)

\(^a\) two-tailed \(p\)-value greater than 0.10.
\(^{16}\) We thank Tim Truman of the US International Trade Administration at the Department of Commerce for providing a list of countries so designated over time.
\(^{17}\) Blonigen and Bown (2003, 259).
We also control for the logged per capita real GDP of the potential target country, in $\log$ \textit{Per Capita Income}. This control speaks to the competitive threat posed to import-competing US firms from labor- (rather than capital-) abundant countries (i.e., those with low per capita incomes). If this simple extrapolation from the Heckscher-Ohlin trade model is correct, then higher per capita income should decrease the probability of US AD duties.

Our analysis controls for four variables capturing the closeness of the US foreign policy relationship with the potential target country. It is hypothetically possible, though by no means a feature of US AD law, that government responsiveness to petitions would be lower if the US were concurrently seeking to support or avoid alienating foreign governments deemed important for national security reasons. The reinstatement of US nonreciprocal trade preferences for Pakistani exports at the time of the invasion of Afghanistan illustrates this potential dynamic. In any case, we simply wish to control for this possibility. We do so using dichotomous variables flagging countries fighting alongside the US in an armed conflict (\textit{Conflict Coalition Member}, 1 in 7\% of the observations), countries in a formal alliance with the US (\textit{Ally}, 1 in 70\%), and countries with whom the US maintains a free trade agreement (\textit{PTA}, 1 in 6\%), all measured in the year of the petition. We also add the Polity IV score measuring how democratic the target country is in that year, to ensure that any GATT/WTO effect is not merely an artifact of the prevalence of democracies in its membership.\textsuperscript{18}

Finally, we include a variable, \textit{GSP Fraction}, which measures the proportion of the potential target’s total exports to the United States that fell under the Generalized System of Preferences (GSP) program. Imports through GSP face zero tariffs, in contrast to the typical nonzero rates faced by non-GSP suppliers. As Özden and Reinhardt (2005b) have argued,

\textsuperscript{18} Sources: PRIO’s Armed Conflict Dataset, version 3.0 (Gleditsch et al. 2002); Mansfield and Reinhardt (2003); Jaggers and Gurr (1995).
however, GSP benefits lie outside of the GATT/WTO regime and can be (and have often been) unilaterally removed by the US. Hence, the more a country’s exports depend on GSP benefits, the more vulnerable it is to any (never explicit) threat to remove those benefits. It is thus possible – though the issue has never before been tested – that GSP-dependent countries would be more reluctant to retaliate against any single AD action by the US, in the form of either unilateral measures or use of GATT/WTO dispute settlement. US firms and the US authorities may consequently be less deterred from initiating AD actions against targets whose exports are more vulnerable to the removal of GSP benefits.

Identification of Petition Equation. The variables that shape the final decision by US authorities on antidumping investigations should similarly figure, by anticipation, in decisions by US industry associations about which suppliers to name in the petition in the first place. However, the logic of such industry decisions is shaped by other considerations as well, which do not bear on the goals of the US antidumping authorities. To this end, we construct the variable, Log US Product Export Share, which is based on the value of US exports to the potential target country, as a percent of US exports to the world, all in terms of just the specific product(s) in question. (The variable as measured is the natural log of one plus that percentage, to deal with the multiple cases with zero exports.) This variable speaks to the vulnerability of the specific petitioning US industry to retaliation from the potential target state: how dependent are this industry’s exports on that one market? The fear of potential retaliation on the part of the US government, however, must necessarily take all industries into account, not just the petitioning firm(s); this motivation is captured in the variable mentioned earlier, US Export Dependence. Hence we include Log US Product Export Share in just the Petition equation below, not the Affirmative equation as well.
The Statistical Model

We jointly estimate two equations, one for each of our dichotomous dependent variables, Petition and Affirmative, using a Heckman-like probit selection model. The model corrects for the failure to observe values of Affirmative in the unfiled observations. The equations are:

\[
\Pr(\text{Petition}_i = 1) = F \left( \beta_{P_1} + \beta_{P_2} (GATT/WTO_i) + \beta_{P_3} (\text{US Export Dependence}_i) + \kappa_i \lambda_p + e_i \right)
\]

and

\[
\Pr(\text{Affirmative}_i = 1) = F \left( \beta_{A_1} + \beta_{A_2} (GATT/WTO_i) + \beta_{A_3} (\text{US Export Dependence}_i) + \kappa_i \lambda_A + u_i \right)
\]

where \( \kappa_i \) is a vector of all the above control variables for observation \( i \); \( \lambda_A \) and \( \lambda_p \) are vectors of equation-specific coefficients for those variables; and \( F \) is the standard normal cumulative density function. The estimation allows \( \rho = \text{Corr}(e_i, u_i) \neq 0 \). Note that the Petition equation is identified to the extent that, as previous research indicates\(^{19}\), Log US Product Export Share proves to be a powerful predictor of petitioning behavior.

V. Results

Before turning to the multivariate analysis, consider some simple but revealing patterns in the data. Figure 1 displays the average petition and affirmative decision rates for all observations and all filed cases, respectively, broken down by the target country’s GATT/WTO membership status. The record here shows that GATT/WTO members have a much more favorable experience in both domains. Only 25 percent of GATT/WTO members supplying sufficiently large amounts of the product in question are ultimately named in the petition,
whereas 41 percent of non-members are named. Antidumping duties are imposed in only 42 percent of the cases against GATT/WTO members, but they are imposed in 56 percent of the cases against non-members.\textsuperscript{20} This is a striking pattern, even if only suggestive.

The case of China is especially telling. China is second only to Japan in the number of AD cases investigated in our dataset (92). China accounts for more new AD duty orders in the past 12 months (11) than all other countries combined (10).\textsuperscript{21} However, it is an appealing case because it acceded to the WTO in 2001. 68 percent (of 76) of our sample’s AD investigations initiated prior to 2001 against China ended affirmatively in duties, but only 50 percent (of 18) initiated from 2001 through 2003 ended similarly. This is despite the fact that the flood of imports into the US from China in the past few years has made it the most salient target for US firms seeking import relief, and the hands-down favorite “unfair trade” target for members of the US Congress. Certainly the shift is not due to any other obvious factor: recall that the US treatment of China as a non-market economy, for LTFV calculation purposes, remains constant in this period. And in the AD investigations against China, the average affected imports are literally 6 times larger (in real terms) in the WTO period than before, so these are not merely “easy” negative cases. Rather, it appears that China’s WTO membership has indeed helped shield it from the worst excesses of US antidumping protectionism in the past few years.

\textit{Multivariate Analysis}

Table 2 shows the results of our regression analysis. The model fit is fine. The fact that the correlation of errors across the two equations, $\rho$, is significantly different from zero reaffirms our decision to estimate the two equations jointly. Estimating the equations separately

\textsuperscript{20} These differences are both significant at $p < 0.01$ in chi-squared tests.
\textsuperscript{21} Source: www.usitc.gov.
would thus yield selection bias, concealing the GATT/WTO’s true effect. Diagnostics reveal relatively high bivariate correlations among several variables, but most exhibit small-to-moderate correlations. This complication only makes our positive inferences all the more conservative. We report heteroskedasticity-consistent standard errors.

The results forcefully uphold our hypotheses. The coefficient of $GATT/WTO$ is negative and statistically significant at (two-tailed) $p < 0.002$ in the selection equation and $p < 0.02$ in the outcome equation. The legal regime deters US AD petitions and duties. This effect does not derive from the country’s retaliatory market power, but from the rule of law itself. That is not to say that market power is irrelevant. Indeed, in the Petition equation, the industry’s dependence on the potential target country for its export revenues, $\log \text{US Product Export Share}$, has a strong and statistically significant negative impact on the odds the industry will name the country in its petition. The US economy’s overall dependence on exports to the potential target country, $\text{US Export Dependence}$, likewise proves to have a statistically significant and negative effect on the probability of a positive AD decision and, by anticipation, of investigations in the first place. But these effects apply regardless of the country’s membership in the trade regime: as the results show, $GATT/WTO$ tangibly benefits even those countries that have little—if any—market power.

Our confidence in the results is greater because the effects of the control variables accord with intuition as well. Not surprisingly, the greater the relative price of imports of the disputed product from the potential target ($\text{Product Relative Price}$), the lower the chance of an

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22 For example, $\text{US Import Penetration}$ and $\text{US Export Dependence}$ are correlated at 0.92; but $GATT/WTO$ is correlated with $\text{Non-Market Economy}$ and $\text{Democracy}$ at only -0.45 and 0.52, respectively; likewise, $\log \text{Income}$ scores at -0.53 and 0.65 with $\text{Non-Market Economy}$ and $\text{Democracy}$ ($N=3460$); $\text{PTA}$ is correlated at 0.61 with $\text{US Export Dependence}$; the other correlations are notably lower.

23 Results are the same if we cluster the SEs by petition.

24 This result is convenient, in that it speaks to the adequacy of identification in the selection model.
investigation or an imposed duty. For an otherwise average case, discounting the product from 100 down to just 50 percent of the world reference price would increase the odds both of being investigated and of a duty by 18 percent. Similarly, the larger the volume of bilateral imports—of the affected product(s) in particular (Log Product Imports) and of all goods (US Import Penetration)—the greater the chances of an investigation and a positive AD duty order. Both have a sizable substantive impact: for example, moving Log Product Imports from its sample minimum to its maximum value, with other variables at their means, increases the predicted probability that Petition equals one from 0.07 to 0.49. Potential cases involving the steel industry are significantly more likely to be petitioned, and non-market economies bear a disproportionate brunt of investigations and imposed duties as well. And, for a given level of threat to US producers, wealthy countries are less likely to be named in a petition and to be the subject of an AD order, if investigated. It is, however, somewhat unexpected that allies and democracies, ceteris paribus, are more frequently named in petitions.\(^{25}\) Finally, as it turns out, countries with a greater share of their exports to the US falling under the GSP program do indeed pose a weaker deterrent threat to US antidumping actions: they are named more often in petitions, with some suggestion that more duties are imposed on them as well.

Having established the correspondence of the model’s results with intuition, we can turn back to the substantive impact of GATT/WTO membership. Consider a country that supplies more than a de minimis amount (3% share) of a product to the US. Now assume that the US industry is filing an antidumping petition against a firm in at least one country on that product. For an otherwise-average supplier not in the WTO, the probability of being named in the petition is 0.31 [0.27, 0.36]. If that country were, however, in the WTO, it would have only a 0.24 [0.23, 0.26].

\(^{25}\) The logged value of that year’s total US foreign aid to the potential target country, in constant 1995 dollars (USAID 2003), is not significant if added to both equations (and does not alter our main results).
probability of being included in the investigation. This is a 23 [17, 29] percent reduction in the odds. What about the impact on the imposition of AD duties in the end? The country in question, if not in the WTO, faces a 0.19 [0.14, 0.23] probability of duties being imposed, which shrinks to 0.13 [0.12, 0.15] if it is in the WTO. That is, WTO membership reduces the probability of an AD duty by 29 [19, 37] percent for the average (significant) supplier.

The estimates allow us to make some counterfactual comparisons to make more clear how much the WTO matters here. Recall that the sheer volume of imports of the product is a major determinant of US antidumping actions. The average country in the sample supplies the US with $175 million of annual imports of the named product(s). If that average country were not in the WTO, it would have a 40 percent chance of being investigated and a 24 percent chance of having AD duties imposed. Now imagine this country joins the WTO, which lowers its odds of facing AD actions by the US. How much would its exports to the US of that product have to increase to make its prospects of facing AD actions the same as before it acceded to the WTO? Judging by the estimates from Model 1, its exports of that product would have to grow by a factor of 10 (or 16) for it to have the same odds of being investigated (or having duties imposed on it).

Now, for a final counterfactual comparison. How many additional AD investigations might the US have conducted if no country had been a member of GATT or WTO in this period? We can generate predictions by zeroing out GATT/WTO and leaving the other variables at their observed sample values. There are 3460 potential investigations in our sample; of these, 921 were actually initiated. The model predicts that 207 [190, 222] more of these would have been investigated if there had been no multilateral trade regime. Since, as is widely recognized, the AD investigation itself, as apart from any resulting duty order, has significant trade and welfare
costs, this is indeed a sizable effect. Continuing with this counterfactual, however, 413 of the 921 observed investigations ended with duties being imposed. Had there been no GATT/WTO in this sample period, the estimates imply that an additional 143 [118, 167] affirmative decisions would have been made. Given the economic scope of the average case, affecting $175 million dollars of annual imports, that adds up to roughly $25 billion of annual import revenues for US trading partners. Not a bad value for the world’s leanest multilateral bureaucracy.

**Sensitivity Tests**

Our results are robust to a wide variety of statistical challenges. The signs, statistical significance, and net substantive impact of *GATT/WTO* remain the same in both equations if we add (1) a dummy for China or for EC members\(^\text{26}\); (2) dichotomous variables denoting that the target has conducted an AD investigation of its own in the past 5 years (against any target) and that it has an AD measure in force against the US that same year\(^\text{27}\); or (3) the US growth and unemployment rate, as well as dummy variables flagging US congressional and presidential election years and the party of the president.

The findings are likewise robust to alternative formulations of the dependent variable, such as coding late withdrawn cases or even all withdrawn/suspended/terminated cases as

\[
\text{Affirmative} = 1.\quad \text{28}
\]

What is more, if we substitute the AD duty ordered (which averages 50 percent when imposed) in place of our dichotomous variable *Affirmative* and re-estimate the model using Heckman’s two-step procedure, we get virtually identical results. Indeed, GATT/WTO membership cuts its expected ad valorem percentage duty by 34 [3, 65] points.

\(^{26}\) Moreover, neither dummy proves to be statistically significant in either equation.

\(^{27}\) Source: Zanardi (2004); Congressional Budget Office (2001, 116-125).

\(^{28}\) If we run the model with a broader sample including all suppliers of the petitioned products, not just those above the three percent cutoff, the results are virtually identical as well.
The GATT/WTO regime therefore reduces the level of duty imposed just as it decreases the probability of an AD action in the first place.

One question concerns the potential difference between the GATT and WTO regimes. If we break GATT/WTO into two separate variables, each with its own interaction with US Export Dependence, tests of equality of each pair of coefficients fail to reject the null, in both the Petition and Affirmative equations (with $p=0.46$ and $p=0.13$, respectively). Consequently, there is no statistically discernible difference between GATT’s and the WTO’s ability to deter US AD investigations and duty orders. This fits with prior observations and evidence about the relative vitality of the widely-underappreciated GATT dispute settlement regime (e.g., Busch and Reinhardt 2003b; Hudec 1999).

**Conditional Impact of GATT/WTO Regime**

There is one important alternative interpretation of the results that we have not yet addressed. Namely, a number of prominent studies have argued that the benefits of the trade regime apply only to the great powers or to countries with the most market power. For instance, for Bagwell and Staiger (2002), the regime serves to facilitate reciprocal arrangements to reduce terms-of-trade externalities, but only for countries whose policies can affect the terms of trade. Along these lines, Bagwell and Staiger (2006) provides (indirect) evidence that only the larger countries are able to win sizable concessions from other members in the multilateral trade rounds. Gowa and Kim (2005) examine the impact of GATT membership on trade flows and find that the regime boosted commerce among pairs of industrialized nations but not for others.

This market-power driven interpretation of the impact of the trade regime is precisely the opposite of what we have argued. The evidence from Model 1 alone cannot falsify this
interpretation: hypothetically, the GATT/WTO coefficients there (which equal about -0.2) could be a composite of, say, a -0.5 value for large developed economies and 0 for small, poor ones. Thus, to address this alternative interpretation directly, we conduct a follow-up analysis, Model 2, reported in Table 3.

Model 2 uses the same sample, merely adding one new variable to each equation: an interaction term, the product of GATT/WTO with our measure of market power, US Export Dependence. If the argument implied by Bagwell and Staiger (2002, 2006), Gowa and Kim (2005), or Blonigen and Bown (2003) were correct, then the coefficient of this interaction term would be negative. That would signify that membership in the WTO deters AD actions the most when the target’s market power is the greatest. The argument of this paper, in contrast, requires that the interaction term’s coefficient be non-negative.

There is, however, a complementary theoretical position that might expect a strictly positive value for that coefficient. If Model 2’s coefficient for US Export Dependence were negative and its coefficient for GATT/WTO × US Export Dependence were positive, that would mean the trade regime weakens the deterrent impact of market power, leveling the playing field between the mighty and weak. How could the system have this particular effect? Assume, in a world without the WTO, that countries with significant market power are accustomed to threatening or actually implementing unilateral protectionist retaliation to counter their partners’ contemplated antidumping actions. As Sykes (2001), Rosendorff (2005), and others (e.g., Kucik and Reinhardt 2007) have argued, however, one of the chief purposes of the trade regime is to limit the use of such unilateral retaliation against presumably legitimate invocations of escape clause provisions in the WTO, of which antidumping is, broadly conceived, the most important. This perspective suggests that, for a country with a sufficiently large and credible unilateral
retaliation capacity, being in the WTO could be a *hindrance* to the effective deterrence of AD actions by its trade partners. The WTO may prevent members from imposing unjustified protection, but it also may protect members from vigilante justice when they exercise their rights to use allowable forms of trade protection.

It is now time for the head-to-head test of these competing perspectives. As Table 3 shows, the findings are in, and they decisively reject the realist interpretation of Model 1’s results. Specifically, the coefficient estimate of $GATT/WTO \times US\ Export\ Dependence$ is not less than zero in the *Petition* and *Affirmative* equations. Indeed, these two estimates are both positive, and so much so that we can reject the null that it equals zero in the *Petition* equation with two-tailed $p<0.001$. (The test yields $p=0.14$ in the *Affirmative* equation.) In Model 2, the net coefficient of $US\ Export\ Dependence$ for a WTO member is -0.57 (SE = 0.17) for petitioning, and -0.83 (SE = 0.21) for final duty decisions. These are considerably attenuated from the corresponding values of -2.47 and -2.27 for non-members. Countries in a position to be targeted by US AD actions get less bang for their buck out of their market power over the US, in terms of deterring those AD actions, if they are in the WTO than if they are not. The flip side of this, given the more extreme and negative coefficient estimate for $GATT/WTO$ in Model 2’s two equations, is that countries that totally *lack* market power are considerably more insulated from US AD actions than they otherwise would be. If we express the impact of market power on the probability of US AD measures as a steep and negatively-sloped line, that line’s slope flattens and gets closer to zero for countries that have recourse to the protections of the multilateral trade regime.

We thus conclude that the rules-oriented interpretation of our main findings in Model 1 is the appropriate one. The WTO provides a shield against adverse new protectionist measures by
one’s trade partners, and, if anything, the shield works better, not worse, for countries lacking a credible capacity to retaliate on their own.

VI. Discussion and Implications

This paper weighs in on the debate between the power- and rules-oriented perspectives on international law. It asks whether a country’s membership in the GATT/WTO deters US AD investigations and duty orders against it. Our results clearly show that it does, strongly endorsing the rules-oriented perspective.

How generalizable are our findings? By far the world’s biggest importer, the US has more market leverage over its partners than any other country. If a potential case fails to be investigated, or fails to end in duties, it is not because the US is inclined to “go easy” on selected friends or strategic partners. After all, this paper controls for a wide variety of such factors, which turn out to be either irrelevant, or counterproductive, in deterring US AD duties. Our findings should thus be highly generalizable, for if the legal regime deters US antidumping actions, it should deter those of other countries as well. In fact, our findings accord nicely with those reported in Francois and Niels (2004) on Mexican AD decisions.

This study makes three main contributions. First, the paper provides one of the only direct empirical tests of the deterrent effect of international law by itself, as apart from state power. Prior studies attempting to associate regime membership with compliance have often confronted vexing concerns about selection bias. For instance, in asking whether WTO members maintain lower average trade barriers than non-members, Rose (2004) is not able to make any direct observation of the reference point, the essential variation across countries in the initial

29 Recall that these included alliance status, participation alongside US in an ongoing armed conflict, democracy level, partnership with the US in a free trade agreement, and (c.f. note 25) US foreign military and economic aid.
frequency and intensity of protectionist temptations. It is once again worth quoting Finlayson and Zacher’s (1981, 599) gloomy depiction of the profundity of this problem, that “[i]t is impossible to know how many protectionist actions have not been undertaken because of the existence of GATT obligations.” Scholars of international institutions have been forced to seek only indirect, not direct, evidence about the central question in the field: what difference do institutions make?

This paper’s test, we argue, unequivocally resolves this analytical quandary. In contrast to most of the existing literature, we directly observe micro-level “non-cases” as well as “cases” in which a state considers whether to introduce new protectionist measures. In fact, we take that selection process back one additional step to the articulation of protectionist demands by import-competing industry groups. The upshot is that we are able to show that the global trade regime prevents individual protectionist policies, compared to an identified reference population. In this sense, international law shapes the slate of protectionist demands that governments must entertain in the first place.

That said, our results bear out the conclusions of studies that jump into the process later on. Specifically, they confirm existing evidence that defendants frequently settle early to avoid legal penalties, independently of the anticipation of trade sanctions by plaintiffs (e.g., Reinhardt 2001; Busch and Reinhardt 2003a). In other words, the paper makes clear that the “shadow of the law” weighs heavily on states as they contemplate new protectionist measures, just as it does once those measures are later brought to court.

Second, besides speaking to the general literature on international institutions, this paper’s findings weigh in on the particular debate regarding the influence of the GATT/WTO regime on trade. Rose (2003, 2004) sparked this debate with some provocative evidence
showing that the multilateral trade regime is not associated with greater bilateral trade flows among members, nor with overall trade liberalization by members. Other studies have produced the opposite finding (Tomz, Goldstein, and Rivers 2007; Özden and Reinhardt 2005a). No entry in this debate, however, has examined the kind of micro-level decisions over trade protection that this paper brings to bear. With such data we are able to endogenize the demand for protection in the first place, and we find a substantively strong, deterrent effect of the legal regime on protection among its members. Our results thus further challenge Rose’s negative conclusions about the WTO.

Third, the paper shows that international law can be especially valuable to those states lacking the capacity to retaliate. In other words, far from being a guise for the most powerful to get what they can, international law actually helps level the playing field for states less capable of throwing their weight around in the global economy. But, while this paper’s research design does not put this issue in the foreground, there is a wrinkle in the story. We find that wealthier states – as apart from states with larger market power, a distinct matter – have a greater ability to deter US antidumping investigations and duties. This accords with work showing that legal capacity is a prerequisite for countries taking full advantage of the WTO’s many improvements (Busch and Reinhardt 2003a), and similarly undercuts the view that greater legalization, per se, will improve the fate of developing countries (Kuruvila 1997; Lacarte-Muró and Gappah 2000). In truth, such a system is likely to bear witness to other asymmetries related to the capacity to use the trade regime’s legal system to aggressively deter adverse measures by one’s partners. For poorer states, in particular, this presents a “pick your poison” dilemma: a weakness in power or a weakness in legal capacity. Our results imply that that inequity in legal capacity can result

30 Experimental survey research, however, has the exciting promise of speaking to the voter connection potentially at work in international law. See Tomz (2006).
in trade policy outcomes which are systematically biased against poorer members of the regime. This, in turn, may undermine the legitimacy of the legal regime, and impair the push toward free trade on the part of developed and developing countries alike. This dilemma, of course, plagues domestic legal systems (Galanter 1974), just as it does international ones. The point on which to move forward is that international law, like its domestic counterpart, does help level the playing field, a finding that should help boost confidence in the returns on investing in legal capacity.
References


Jaggers, Keith, and Ted Robert Gurr. 1995. “Tracking Democracy’s Third Wave with the
Regime Type III Data.” *Journal of Peace Research* 32 (November): 469-482.


Table 1: Descriptive Statistics

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<th>Controls (N = 2539)</th>
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Table 2: Probit Selection Model of US Antidumping Petitions and Decisions, 1978-2001

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<tr>
<td>Conflict Coalition Member</td>
<td>–0.111</td>
<td>(0.096)</td>
<td>–0.277</td>
<td>(0.149)</td>
</tr>
<tr>
<td>Democracy</td>
<td>0.021**</td>
<td>(0.005)</td>
<td>0.014*</td>
<td>(0.007)</td>
</tr>
<tr>
<td>Ally</td>
<td>0.136*</td>
<td>(0.055)</td>
<td>0.123</td>
<td>(0.081)</td>
</tr>
<tr>
<td>Product Relative Price</td>
<td>–0.247**</td>
<td>(0.037)</td>
<td>–0.187**</td>
<td>(0.052)</td>
</tr>
<tr>
<td>Log Product Imports</td>
<td>0.094**</td>
<td>(0.011)</td>
<td>0.082**</td>
<td>(0.014)</td>
</tr>
<tr>
<td>Log US Product Export Share</td>
<td>–0.054*</td>
<td>(0.025)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Steel</td>
<td>0.107*</td>
<td>(0.042)</td>
<td>0.091</td>
<td>(0.063)</td>
</tr>
</tbody>
</table>

| N                           | 3,460    | 921       |
| Model χ²                    | 235.89** | (13 d.o.f.)|
| Error Correlation, ρ        | 0.954**  | (0.061)   |

Notes: * denotes two-tailed $p < 0.05$; ** $p < 0.01$. Robust standard errors in parentheses.

<table>
<thead>
<tr>
<th>Dependent Variable:</th>
<th>Petition</th>
<th>Affirmative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff.</td>
<td>SE</td>
</tr>
<tr>
<td>Constant</td>
<td>0.027</td>
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<tr>
<td>GATT/WTO</td>
<td>–0.507**</td>
<td>(0.100)</td>
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<tr>
<td>GATT/WTO × US Export Dependence</td>
<td>1.901**</td>
<td>(0.566)</td>
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<tr>
<td>US Export Dependence</td>
<td>–2.466**</td>
<td>(0.592)</td>
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<tr>
<td>US Import Penetration</td>
<td>0.427**</td>
<td>(0.092)</td>
</tr>
<tr>
<td>GSP Fraction</td>
<td>0.417</td>
<td>(0.246)</td>
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<tr>
<td>Non-Market Economy</td>
<td>0.597**</td>
<td>(0.091)</td>
</tr>
<tr>
<td>Log Per Capita Income</td>
<td>–0.089**</td>
<td>(0.027)</td>
</tr>
<tr>
<td>PTA</td>
<td>–0.190</td>
<td>(0.137)</td>
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<tr>
<td>Conflict Coalition Member</td>
<td>–0.116</td>
<td>(0.096)</td>
</tr>
<tr>
<td>Democracy</td>
<td>0.018**</td>
<td>(0.005)</td>
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<tr>
<td>Ally</td>
<td>0.128*</td>
<td>(0.055)</td>
</tr>
<tr>
<td>Product Relative Price</td>
<td>–0.249**</td>
<td>(0.037)</td>
</tr>
<tr>
<td>Log Product Imports</td>
<td>0.092**</td>
<td>(0.010)</td>
</tr>
<tr>
<td>Log US Product Export Share</td>
<td>–0.051*</td>
<td>(0.025)</td>
</tr>
<tr>
<td>Steel</td>
<td>0.112**</td>
<td>(0.042)</td>
</tr>
</tbody>
</table>

\[ N \] \hspace{2cm} 3,460 \hspace{2cm} 921

\[ \text{Model } \chi^2 \] \hspace{2cm} 238.86** (14 d.o.f.)

\[ \text{Error Correlation, } \rho \] \hspace{2cm} 0.954** (0.061)

Notes: * denotes two-tailed \( p < 0.05 \); ** \( p < 0.01 \). Robust standard errors in parentheses.
Figure 1. Proportion of Eligible Countries Named in a Petition and Proportion of Cases Ending in Affirmative Decision, by GATT/WTO Status, 1978-2001