

Dispute Settlement in Trade & Environment Disputes: How Does the WTO Mechanism Perform?

Cristiane Lucena Carneiro, University of Sao Paulo

cristiane.lucena@usp.br

Prepared for the 2014 Conference on the Political Economy of International Organizations

Princeton, N.J.

This paper analyzes how the WTO Dispute Settlement Understanding performs when dealing with a particular cluster of trade disputes. These disputes are characterized by trade barriers imposed for environmental and public health reasons; in this paper, they are referred to as T&E disputes. T&E disputes have been channeled through the WTO dispute settlement mechanisms, which contain strong enforcement mechanisms that are expected to deter non-compliance. Nonetheless, empirical evidence suggests that these disputes have a low probability of reaching a settlement and often generate final rulings that are not complied with (Busch and Reinhardt 2004; Davey 2005a). The study concentrates on three T&E disputes decided by the WTO between 1996 and 2001, identifies several aspects that distinguish these disputes, and argues that an alternative dispute resolution (ADR) procedure proposed by Brams and Taylor (1996, 1999), called Adjusted Winner (AW), may increase the chances of compliance and present the parties with a superior outcome. An application of AW based on data from interviews with government officials and policy experts generates an ADR outcome for each of the three cases. This is followed by a comparison between this outcome and the actual adjudication outcome in each dispute. The analysis shows that recourse to AW may provide more opportunities for compliance by presenting the parties with an outcome that is more fair, in terms of three criteria: efficiency, envy-freeness, and equitability. Turning to ADR is particularly appropriate when states' concerns with their reputation have a limited role as an enforcement mechanism. I argue that developments of compliance theory that focus on this limited role of reputation offer a plausible explanation for the poor record of compliance that T&E disputes display. Based on Downs and Jones (2002, 2004), I argue that the WTO regime encompasses multiple sub-regimes with specific and segmented reputational consequences. I propose that the pattern of non-compliance observed in T&E disputes can be explained by the opportunity to insulate negative reputational consequences from other areas of the international trade regime that states value higher.

I. Introduction

Since 1947, GATT has become an increasingly institutionalized regime, gradually developing ever stronger enforcement mechanisms. This process of institutionalization is most evident in the evolution of dispute settlement mechanisms and in the expansion of the regime into areas that were originally outside of GATT's reach, such as intellectual property and agriculture. The establishment of the World Trade Organization (WTO) in 1995 can be seen as the most recent chapter in this process of institutionalization.

This paper assesses how the new enforcement framework fares in one area of the GATT/WTO regime that presents compliance problems: international trade disputes characterized by trade barriers imposed for environmental and public health concerns – so called T&E disputes. T&E disputes have been channeled through the WTO dispute settlement procedures, wherein strong enforcement mechanisms were expected to deter non-compliance. Nonetheless, empirical evidence suggests that these disputes have a lower rate of settlement and often lead to final rulings that have a lower rate of compliance. Timely compliance is seldom the case in these disputes.

The analysis contrasts the quasi-adjudicatory mechanism available at the GATT/WTO to an alternative dispute resolution (ADR) procedure called Adjusted Winner (Brams and Taylor 1996, 1999). Based on data from interviews with government officials and policy experts, I suggest that the ADR route increases the probability of compliance because it offers both parties in the dispute an outcome that is more fair. In the second and third sections I discuss compliance in the GATT/WTO regime, using the outcome of international trade disputes brought to the system as an indicator of compliance. Section three concentrates on T&E disputes. Section four analyzes the role of “friendly settlement” in the GATT/WTO regime, focusing on T&E disputes; this section presents findings from some of the 33 interviews conducted for this project. The data are used subsequently to instruct three case studies, which illustrate the comparison between the ADR and the quasi-adjudicatory frameworks. A final section concludes.

II. Compliance in the GATT/WTO Regime

The literature on the political economy of trade disputes and compliance therein has

made great strands towards the task of explaining the motivation for state compliance. Departing from Downs (1998) and later on Helfer and Slaughter (2005), the literature has analyzed the impact of strong enforcement mechanisms and the rationale for state behavior. The GATT/WTO regime that emerged from the Uruguay Round of multilateral trade negotiations is often mentioned as an example of increased institutionalization and legalization, wherein higher compliance rates were the ultimate goal of the negotiators (Downs, Rocke, and Barsoom 1996; Downs 1998; Downs and Jones 2002; Guzman 2005; Goldstein et al 2000).

Koremenos (2007) focuses on dispute resolution provisions to find that the nature of the problem that states are trying to address through the agreement in question influences their choice of dispute resolution mechanism, if any. Her analysis shows that agreements that address “complex cooperation problems” are associated with denser dispute resolution mechanisms (2007; 202). In the case of the WTO, Prisoner’s Dilemma-like incentives help explain states’ choice for a highly legalized dispute resolution procedure, which contemplates strong delegation.

Work by Bobick and Smith (2013) analyzes the impact of leader turnover on the initiation of disputes and on the level of concessions by the defendant. They find that leader change in the defendant state increases the level of concessions; moreover, this effect is greater in authoritarian regimes. Leader change also increases the chances of dispute initiation. A focus on domestic politics (leader change) as an independent variable reminds us that negotiations at the level 2 – to use Robert Putnam’s two-level games terminology (1993) – do influence disputes on the level 1.

Domestic politics is also at the center of Davis’ (2012) explanation for states recourse to adjudication. Here, the focus is not so much on leader turnover, but on interest group politics, the influence of these groups on the government’s decision to pursue litigation internationally, and the incentives these groups have to mobilize in the first place. The author departs from the assumption that the demand for enforcement is not constant, but rather varies; this variation can be explained in great measure by domestic politics.

From the perspective of the theory of legalization, the marked move toward hard law accomplished by the Uruguay Round, especially in the area of delegation, was

expected to enhance the record of regime compliance. Rather, the protracted nature of T&E disputes counters these expectations and challenges the predictions of this literature.¹ Indeed, based on post-Uruguay Round data, Busch & Reinhardt (2004) find that T&E disputes have a lower chance of settling early, and often lead to final rulings where implementation is either delayed or absent (Davey 2005a).

Given the absence of satisfactory theoretical explanations for states' poor record of compliance with T&E obligations, how can we begin to understand the logic behind states behavior in this area of the GATT/WTO regime? Recent research suggests that states have different incentives to comply because they ultimately have different reputations (Downs and Jones 2004, 2002). Furthermore, states want to reserve the prerogative to violate an agreement when confronted with temporary domestic imbalances that render compliance too costly (Rosendorff 2005). Thus, the role of state reputation – in its dynamic aspects (Tomz 2008), has become an important factor to explain behavior, including in the aftermath of T&E disputes.

I argue that the GATT/WTO regime offers multiple anecdotes of varying reliability rates, suggesting that this regime may be an instance where states enjoy multiple reputations. In other words, the regime allows for multiple reputations in the sense discussed by Downs and Jones (2002, 97). In fact, the WTO itself refers to the trade liberalization regime it encompasses as “WTO covered agreements.” The agreements subsumed therein may be perceived as possessing distinct incentive structures that generate different levels of compliance and sub-regime specific reputations.

In light of these developments in compliance theory, I argue that the GATT/WTO regime consists of a cluster of sub-regimes, which have distinct and varying, i.e. unstable, net benefits associated with compliance. Two sets of circumstances hinder compliance in

¹ Hard legalization refers to any arrangement where the levels of obligation, delegation, and precision are high, in keeping with the theoretical framework proposed by Abbott, Keohane, Moravcsik, Slaughter, and Snidal (2000). The term obligation conveys the degree to which a commitment is legally binding and mandatory or can be made so through adjudication; delegation refers to whether powers of interpretation, implementation, and/or adjudication have been granted to a third-party; and precision signals the degree to which rules and commitments are clearly specified (2000, 401).

this sub-regime: the opportunity to contain reputational costs, as mentioned above, and the recurrent clashes between trade liberalization and environmental protection objectives.² Even though the tension between trade liberalization and environmental protection dates back to the original GATT in 1947, the move toward hard law sponsored by the Uruguay Round rendered the problem more noticeable and perhaps more acute. In the next section I discuss the problems of compliance in the T&E area more specifically.

III. Compliance in the T&E Sub-Regime

Among the sub-regimes embedded in the GATT/WTO is the trade and environment (T&E) sub-regime, which consists of a set of environmental protection and public health norms that impact trade liberalization commitments.³ The T&E sub-regime is characterized, among other traits, by the fact that states may attach different utilities to it, in comparison to other sub-regimes. This is due to the fact that interest group politics in the T&E area often entertain diffuse costs and benefits associated with regulation (Wilson 1980). If compliance with the T&E sub-regime is subject to specific incentives and if the reputation of states does not necessarily carry over to other areas of the GATT/WTO regime, it follows that violations of the T&E sub-regime may be very attractive in certain circumstances. I propose that the record of non-compliance prevalent in the T&E sub-regime can be explained by this multiple reputation argument.

I preface this analysis by pointing to Downs and Jones suggestion that “reputation promotes compliance with international law most in trade and security and least in environmental regulation and human rights,” because the latter two areas present incentives to defect that are segmented (2002, 106). In other words, a violation by country A of its obligations under the Convention on Climate Change is likely to have a minor impact on

² Krist identified twenty-two multilateral environmental agreements that raise WTO issues (Krist 2001, 4).

³ “The Final Act signed in Marrakesh in 1994 is like a cover note. Everything else is attached to this.” (WTO website, consulted on 12/29/2005). Among the independent agreements attached to the Final Act are the Agreement on Agriculture, the Agreement on Sanitary and Phytosanitary Measures, the Agreement on Textiles and Clothing, the Agreement on Technical Barriers to Trade, the Agreement on Trade-Related Investment Measures, the Agreement on Anti-Dumping, the Agreement on Safeguards, and several others.

country A's reputation within the GATT/WTO regime. This is also a consequence of the fact that trade and security regimes tend to generate private goods agreements, whereas protection of the environment and of human rights is more commonly translated into public goods agreements (2002, 105).

One of the well documented problems the T&E sub-regime confronts is a poor record of early settlement in disputes that arise from this sub-regime (Reinhardt and Busch 2000). In line with the low probability of settlement associated with T&E disputes Reinhardt and Busch identify, Guzman and Simmons (2002) argue that there is something inherent to the disputed issue that may influence the probability of settlement. They frame settlement as a proxy for compliance, bringing awareness to the fact that ultimately the Dispute Settlement Understanding (DSU) enforcement mechanisms rely on economic sanctions imposed by one of the parties. For this reason, settlement remains the ultimate goal of the system. They show that certain issues are more prone to early settlement, because they are more amenable to transfers.⁴ These are the so-called continuous issues. In the words of Guzman and Simmons (2002, 2),

When the subject matter of the dispute has an all-or-nothing character and leaves little room to compromise (which we will refer to as a discontinuous variable), as might be true of health and safety regulations, for example, the parties' ability to reach an agreement through the use of transfers is restricted. Settlement through negotiation may be even more difficult when governments cannot easily fashion side payments to compensate for a major indivisible concession. In contrast, if the subject matter of the dispute permits greater flexibility (a continuous variable), such as the setting of a tariff level, the parties can more easily structure appropriate transfer payments by adjusting that variable.

They hypothesize that the latter type of case is more conducive to settlement. "Non-continuous" issues, on the other hand, are likely to lead to adjudication outcomes that may

⁴ Guzman and Simmons use the term "transfer" to illustrate how certain issues are more fungible than others. For example, an import tariff can be scaled down more easily than an import ban can be removed, and as a consequence tariff negotiations should entail less friction as compared to negotiations over bans.

not generate compliance, because such issues are averse to side payments and transfers. T&E disputes fit their description of a non-continuous case inasmuch as in these disputes the legality of a ban often constitutes the issue at stake. For this reason, they offer an example of cases that are not prone to early settlement and may ultimately generate compliance problems.

Issue specificity, in particular the level of issue continuity as proposed by Guzman and Simmons (2002), offers a compelling explanation for the challenges that compliance with rulings in T&E disputes presents to WTO members. In regards to compliance, disputes over non-continuous issues can be equated to disputes involving non-tariff measures. Bown (2004), in his study of the economic features of the dispute settlement processes that lead to trade liberalization commitments, recognizes that T&E disputes, which he refers to as disputes concerning allegations over non-tariff measures, are less likely to lead to liberalization (818). His analysis corroborates hypotheses that attribute the likelihood of trade liberalization to the plaintiff's capacity to retaliate and to the impact a negative ruling has on the defendant, using data on disputes filed from 1973 to 1998.

His research brings the power to retaliate to the forefront of the debate on compliance, aside from the better-understood role of reputation in the system. These findings, which are based on empirical analysis covering a representative period of GATT litigation (1973 to 1995), have important implications for cases that involve developed and developing countries, because the capabilities of the latter to retaliate are obviously limited. Davis and Bermeo (2009) suggest that once developing countries have overcome "startup costs" associated with WTO litigation, they tend to become recurring users of the system. Their findings are corroborated by Guzman and Simmons (2005), who find evidence for what they label the "capacity hypothesis," which seeks to explain recourse to the system by low income states by these countries' higher expectations with respect to returns.

If compliance relies heavily on the existence of retaliatory power, as Bown suggests, and if T&E issues make disputes more difficult to settle, then when such disputes involve developing and developed countries on opposing sides, the prospects for compliance are doomed. Because of the negative consequences T&E disputes may carry for the GATT/WTO regime, a stronger commitment to devising institutions that will be better

equipped to resolve such disputes is necessary. Martin (2001, 141) argues that the adversarial nature of the DSU is not appropriate to handle T&E disputes. Dunoff (1994b, 1090), writing about adjudication mechanisms broadly defined, calls attention to the zero-sum outcome these mechanisms entail and emphasizes states' preference for diplomatic alternatives to litigation. Along these lines, I argue that ADR offers negotiators a powerful tool to facilitate settlement. Table 1 compares the outcome of the three trade disputes decided by the WTO that I analyze in section five to an alternative dispute resolution outcome, which was calculated using the Adjusted Winner procedure.

Figure 1 about here

A closer look at the figure shows that the Appellate Body decision in all three cases favors one of the parties disproportionately, whereas ADR offers an outcome that guarantees satisfaction in the range of eighty percent of each party's preferences, as in the Asbestos case, thereby promoting efficiency, equitability, and envy-freeness. The data reveals that ADR offers a more fair resolution in all three cases, one that would likely encounter fewer obstacles to compliance.

IV. The Case for Non-Adjudicatory Mechanisms in T&E Disputes

The WTO decides trade disputes according to the procedures established by the Dispute Settlement Understanding, which is a quasi-adjudicatory mechanism that affords the opportunity to appeal a decision and the possibility of retaliatory measures to be imposed by the countries themselves when compliance is not forthcoming. The DSU also provides mediation, good offices, and arbitration as tools to foster “friendly settlements.”⁵ In light of this institutional framework, approximately 30 percent of all trade disputes filed with the WTO reach a friendly settlement (Leitner and Lester 2013).⁶ Nevertheless, these friendly settlements cannot be attributed to the use of good offices, conciliation, and mediation (Petersmann 2000, 33). Art. 5 of the DSU, which regulates recourse to good

⁵ The term “friendly” is used in the literature to differentiate this outcome from a “court settlement,” often referred to only as settlement. While the latter is judiciable, the former is not. In practical terms, a plaintiff can enforce a court settlement through the judiciary, while this option is not available when friendly settlements are concluded.

⁶ This figure is probably higher, because Leitner & Lester's data does not include settlements that occur before a WTO panel is established.

offices, conciliation, and mediation in the WTO, has rarely been used. Early settlements occur more often through informal and confidential negotiations between the parties, sometimes conducted under the auspices of one of the specialized committees of the WTO. In these negotiations terms of settlement are not disclosed. Furthermore, little is known about the reasons why the percentage of settlement among T&E disputes is much lower than that of non-T&E disputes (Busch and Reinhardt 2004, 12).⁷

Because of the potential hindrance environmental trade barriers present for international trade (Fontagné, Kirchbach, and Mimouni 2005)⁸, because trade disputes contesting these barriers have only a small chance to settle (Simmons and Guzman 2002, Busch and Reinhardt 2004), and because of the poor record of compliance with final rulings in these cases (Davey 2005a), it is important to study non-adjudicatory means to resolve these disputes. Here, incorporating a structured ADR mechanism, such as Adjusted Winner, as a procedural step in the resolution of T&E disputes may enhance the probability of early settlement. I will make this argument.

A Word on Adjusted Winner

Adjusted winner is an ADR procedure that satisfies the properties of efficiency, envy-freeness, and equitability. An outcome is efficient when there is no allocation that would make one party better off without simultaneously making the other party worse off. Envy-freeness means that no party in a bilateral dispute will be willing to exchange his or her share of the final agreement for the opponent's share. An outcome is equitable when the same fraction of the total is allocated to the parties in a dispute, according to each party's perception of its own preferences. In other words, AW ensures that each party obtains the same percentage of points from the settlement. For a detailed description of AW and proof of its properties, see Brams and Taylor (1996, 1999), which contain several applications to different kinds of disputes. The key to applying AW lies in the assessment of points by

⁷ The probability of early settlement for non-T&E disputes, also called non-systemic disputes, is 60 percent, whereas the probability of early settlement for T&E disputes is only 38 percent (Busch and Reinhardt 2004, 12).

⁸ Fontagné, Kirchbach, and Mimouni (2005) find that "88% of the value of world trade is in products potentially affected by environmental trade barriers, while 39% of the value of world imports is potentially subject to a protectionist use of such measures."

each party, as well as the definition of issues that are involved in the dispute. Also, it is necessary that the parties have an understanding on what winning and losing on each issue means. Point allocation involves three successive steps: (1) identifying the issues; (2) making them as independent as possible from each other; and (3) assigning points to each issue according to their value to each party.⁹

Once a WTO panel has been established to hear a complaint, identifying the issues does not require much effort, because the brief presented by the complainant lists the arguments of fact and law pertaining to the dispute. For the purposes of applying AW, these arguments must be set so as to be as independent of each other as possible. This is a crucial step, because AW requires that the parties allocate points to each issue separately. Legal arguments are often construed so as to reinforce the main claim in a lawsuit. As a result, they become intrinsically linked within a web of legal principles, statutes, and doctrines. T&E disputes are the prototype of disputes that involve multiple elements. In this case, economic (trade) and systemic (environmental) interests are implicated. An attempt to resolve the dispute in a non-adjudicatory manner can happen right before the panel decides the case on first instance. At this point in time the parties are well aware of the issues and have incurred costs associated with the adjudication process, which makes them receptive to the idea of ADR. Findings by Busch and Reinhardt (2000) reinforce this point. Their quantitative analysis of disputes filed from 1948 to 1999 indicates that,

The probability of settlement is not evenly distributed across the events leading up to a ruling. In particular, concessions by defendants appear significantly more likely *after* a panel has been established, but *before* it has ruled (regardless of which way the verdict goes) (Busch and Reinhardt 2000, 5).

⁹ The procedure entails the following steps (based on Brams and Taylor 1999, 11): a. the two parties begin by independently (that is, secretly) distributing a total of 100 points across all the items or issues to be divided, depending on the relative value they attach to them; b. each party is (temporarily) given the items or issues on which it places more points; c. items from the party that gained a greater number of points (the initial winner) are transferred – in a certain order – to the party with the lower point total (initial loser) until the totals are equal; d. the order of transfer, which usually requires splitting one item, is determined by comparing the ratio of winner-to-loser points, beginning with the smallest ratio.

Therefore, in their view, the optimal timing for settlement precedes the panel's decision.

An Application of Adjusted Winner to a Hypothetical WTO Dispute

Given an international trade dispute between two countries, A and B, and provided the issues in the dispute are relatively independent from each other, we assume there are four issues, which are identified as x , y , z , and w . The parties will be first asked to think about what winning and losing on each issue means. Subsequently, the parties will be asked to think about what a required division of one or two issues would look like. If the parties are ready to proceed, they will distribute 100 points among the four identified issues. This step completes the data collection phase. The facilitator is now in a position to process the numerical data and calculate the AW outcome, following the steps enumerated above:

Table 1 – Application of Adjusted Winner to a Trade Dispute

Issue/ Party	Country A	Country B
x	40	<u>50*</u>
y	<u>20</u>	10
z	20	<u>30</u>
w	<u>20</u>	10

* Underlined numbers indicate that the party initially wins on this issue when AW is applied

Initially, a party wins the issues on which it placed the higher number of points. In the example, A wins y and w , while B wins x and z . Since the parties' point totals are not equal, the procedure moves to the next step: the transfer of points from the initial winner to the initial loser, starting with the winner's issue that has the smallest ratio of winner-to-loser item. The ratios in this example are 1.25 for x and 1.5 for z . Issue x will be transferred from country B to country A. After this operation, A has 80 points, while B has only 30. Clearly, only a fraction of issue x is to be transferred. This is done by calculating the fraction α that B (the original winner) will keep, with the remaining of issue x going to A. Let α represent the fraction of x that country B will keep, with the remaining portion of

issue x being transferred from country B to country A. We select α in order to make the resulting point totals equal for country A (left side of the equation) and country B (right side of the equation).

$$40 + (40) \alpha = 80 - (50) \alpha$$

$$\alpha = .44$$

This calculation gives countries A and B final number of points:

A's total number of points: 57.8

B's total number of points: 57.8

This application of AW requires splitting one issue in order to even out each party's final point allocation. Country A wins on two issues that it valued more than country B (issues y and w), and it also wins the portion of issue x that will complement the number of points it originally received, which is the equivalent of 44.5 percent of issue x . Country B is disproportionately favored when AW is first applied. Initially, country B has 80 points, whereas country A has only 40. After the equitability adjustment phase, issue x , which is worth 50 points to country B, is split between the two parties. Country B ends up with the same amount of points as country A, that is 57.8, of which 27.8 points derive from issue x (or 55.5 percent).

This example also illustrates the three properties AW guarantees. Because neither party would exchange her allocation for that of the other, they will not envy each other's allocations. Efficiency stems from the fact that any gains given to country A will come at country B's expense. Equitability guarantees that the same fraction of the total is allocated to each party in the dispute, according to their own stated preferences over the disputed issues. These characteristics rarely occur in adjudication outcomes, what reinforces the argument I make here that recourse to AW is indeed a better way to resolve T&E disputes.

With respect to the properties AW entails, envy-freeness and equitability are particularly relevant in the context of WTO disputes, where the threat of punishment is not the main force promoting compliance. Indeed, ultimately the system lacks effective enforcement mechanisms. In the GATT/WTO regime, compliance is governed by reasons other than the common rationale for obeying a domestic court order. The DSU contemplates suspension of concessions to be imposed by the winning party as the

appropriate form of sanction for non-compliance, but it cannot help the fact that suspending concessions to a trade partner is often costly to the country that implements the sanction. These limitations of the enforcement mechanisms within the GATT/WTO regime can be countered by the properties of envy-freeness and equitability.

Envy-freeness enhances the opportunities for compliance because the parties are not only satisfied with the portion of the total that they received, but they also would not want the portion the other party ended up with. Because of the level of satisfaction associated with the notion of envy-freeness, the AW outcome is likely to ignite voluntary compliance, regardless of punishment mechanisms of any kind. Equitability works similarly. Equitable outcomes are likely to be perceived differently by the parties, because they provide satisfaction through the idea that a just resolution was reached. Most individuals will relate to the notion of fulfillment and contentment that is associated with just allocations. In the end, the property of equitability may help bureaucrats justify a position that is not completely aligned with an interest group ideal resolution, but that nevertheless meets this threshold of rightness. Of all three properties, equitability plays a prominent role in the successful recourse to ADR, and AW in particular, in the context of GATT/WTO disputes. In fact, efficiency is often present in adjudication outcomes, and envy-freeness may be understood subjectively in certain cases, whereby an outcome that is inherently unfair may not cause envy, if the criteria for happiness are not quantitative. Therefore, the parties may find efficiency and (subjective) envy-freeness in an adjudication outcome, but very rarely will they encounter equitability. Equitability shifts the balance in favor of AW and ultimately corroborates the argument I make – ADR is likely to lead to higher levels of compliance in these disputes.

Friendly Settlement in the WTO Dispute Settlement Understanding

The DSU is the result of a process of hard legalization that, a) established an obligation to comply with the covered agreements, b) delegated prerogatives of interpretation and adjudication to a third party, either a panel or the appellate body, and c) institutionalized precision in the form of content of the obligation as well as the timeline for resolving uncertainty in regards to the content of the obligation. Therefore, the Uruguay Round can be characterized as a negotiation that increased the levels of obligation,

precision, and delegation prevalent in the GATT regime.¹⁰ It is in this context of highly legalized institutions that the individuals I interviewed operate.

This environment presents the parties with new constraints, when compared to the former dispute settlement framework regulated by the GATT. There are higher thresholds embedded in the levels of obligation, precision, and delegation the new regime incorporated. These higher thresholds could have worked to promote settlement, since the rigidity of the adjudication mechanisms could be seen as encroachments on the sovereignty of states. Rather, states' approach to settlement seems to be influenced by other factors, such as: a) who is in charge of the negotiation – if policymakers or lawyers; b) the locus of decision-making in a given bureaucracy – if in the hands of principals or agents; and c) differences in states' capabilities. Moreover, these factors play a distinct role depending on what phase of the dispute we focus on, as I will explain next.

For practitioners and government officials, the system is organized into three very distinct, almost independent, phases: consultations, adjudication, and implementation (also referred to as compliance). The outcome of a dispute is likely to be significantly impacted by the characteristics of a particular phase, *i.e.* the outcome of a dispute resolved during the adjudication phase is distinguishable from the outcome that would ensue had the dispute gone through the implementation phase. This is so because the strategic interests of the parties are phase-specific; moreover, the individuals involved with the dispute in a given phase do not necessarily follow the case to the next phase (Weiler 2001). It is not uncommon to see negotiators involved in the consultation phase be replaced by teams of lawyers after attempts to reach a friendly settlement have failed.¹¹ This is the case within the legal affairs division of the European Commission.

According to Nikolaos Zaimis, working at the European Commission's representation in Washington, D.C. when interviewed, within the European bureaucracy, the Directorate General for Trade (DG Trade) handles WTO affairs in the following manner: during the consultation stage, the trade division is in charge; if no friendly

¹⁰ Abbott and Snidal are among the proponents of this three-fold criteria to assess the process of legalization: obligation, precision, and delegation (2000).

¹¹ Throughout this dissertation "friendly settlement" has the same meaning discussed in the introduction, and further discussed in footnote 8.

settlement is reached, the legal affairs division will take the case up during the adjudication stage.¹² This division of responsibilities has important consequences for the chances of a friendly settlement. If lawyers are involved, the configuration of the dispute is likely to change.¹³

This impression also prevails among trade negotiators in developing countries, as it surfaced during a conversation with Pakistani government officials commenting about the shrimp-turtles case that, “After a case goes to court, it becomes a lawyer’s case.”¹⁴ A WTO official who is very familiar with the beef hormones case also revealed that the lead legal counsel representing the European Union had firm pre-conceived convictions about the case.¹⁵

The beef hormones case illustrates another aspect of dispute settlement and the prospects of a successful negotiation prior to a final ruling. Sometimes these cases are brought forward for signaling purposes, and if this is indeed the motivation behind the complainant’s actions, only a final ruling on appeal will fulfill that role. In these circumstances, efforts to broker a friendly settlement may reach an impasse, which leads the parties to escalate the dispute along the adjudication path at the first opportunity. An individual who worked at the United States Department of Agriculture (USDA) when the beef hormones case unfolded, commented on the signaling objectives of that case.¹⁶

¹² Interview with Nikolaos Zaimis (E.U. Commission). Washington, D.C. 2 August 2005.

¹³ The idea of promoting ADR is a good one. In order to make it work, the process has to be taken out of the hands of the lawyers. The policy people are better at negotiating and compromising. They should lead any ADR process. After the lawyers get involved, they convince themselves and everybody else (including the policy people) of their arguments and that they will win the case (Interview with Craig Thorn (DTB Associates). Washington, D.C. 2 August 2005.)

¹⁴ Interview with Zafar Qadir (Deputy Minister of the Mission of Pakistan), and with Mohammad Saeed (Trade and Environment Counselor – Mission of Pakistan). Geneva, 17 June 2005.

¹⁵ Interview with WTO official. Geneva, 17 June 2005.

¹⁶ These very difficult disputes sometimes fulfill secondary goals. For example, when the beef hormones case was filed, Japan and Mexico were considering the adoption of similar bans. The WTO ruling dissuaded them from doing that. In this context, the case had a positive preventive/signaling effect. When we are dealing with a “signaling” case there is no interest in an early settlement, because one of the parties needs a final ruling in order to

Instances of friendly settlement are therefore influenced by the objectives of the dispute, the individuals that are handling the dispute and their roles in the process, and finally, by the particular phase of the dispute when a specific attempt to settle takes place. Disputes brought to the system for signaling purposes are less likely to settle prior to a final ruling. If these disputes are handed over to lawyers, as opposed to policymakers, the chances of reaching a friendly settlement are even lower. Similarly, attempts to settle later in the process, during the adjudication or even the implementation phases, are likely to be unsuccessful. In view of this analysis, the most appropriate time to broker a non-adjudicatory outcome to the dispute, like AW, is at the end of the consultations phase – just before the panel rules.

Principals v. Agents

Another relevant aspect of the dynamics of dispute settlement in the WTO pertains to the relationship between principals and agents. This relationship is especially significant in regard to highly technical cases, which most T&E disputes are. The question arises as to who is making the final decisions – the higher level bureaucrats, sometimes the ministerial layer itself, or the technical experts on the issue. When principals are in control, one tends to observe that political objectives prevail; conversely, agents are inclined to follow the tenets of their technical expertise (Weiler 2001).

The roles of principals and agents are not only influenced by the nature of the issue at stake, but also by the bureaucratic structure of a particular country. Developing countries, because they lack the level of expertise their developed counterparts have, tend to pursue a more integrated decision-making process where principals consult with agents back and forth in order to identify the best political strategy.

A country's limited expertise influences its decision to join a dispute, despite the commercial interests this country may have in the case. When asked why no other country joined Brazil as a complainant in the upland cotton dispute (WT/DS267/AB/R, 3 March 2005), a case that was directly relevant to several cotton producers in Africa and South East Asia, the lead Brazilian negotiator in the case emphasized lack expertise and mentioned two

“send the signal” effectively (Interview with Craig Thorn (DTB Associates). Washington, D.C. 2 August 2005.)

other reasons: political interest and fear of retaliation.¹⁷ In this context, Thailand is said to have refrained from joining the dispute as a complainant, despite its economic interests on the outcome of the case. The Chad and Benin slightly complicate the scenario, because they hesitated but finally decided to retain a prominent international trade law counsel, who worked on the case pro bono, and joined the dispute, but only as a third parties.¹⁸

Perhaps a firm grasp on the relationship between principals, agents, and the likelihood of friendly settlements can only be assessed on a case-by-case basis. In any event, the strategic interests of these state officials are impacted by the timing of the proposed settlement. If negotiations toward a friendly settlement are launched during the later stages of adjudication, or even during the implementation phase, principals and agents alike will have updated their positions in regards to the case.

The opinions of practitioners and government experts discussed in this section recommend caution in estimating the impact that adjudication alone has on the resolution of T&E disputes. In fact, several cases entail compliance problems, and a subset of these cases end up being the subject of new adjudication under Art. 21.5, during the implementation phase. While compliance is pending, including when Art. 21.5 procedures are initiated, the winner's trade benefits are withheld, with no right to compensation or retaliation.

Countries' limited resources when it comes to legal expertise, countered by the demands posed by a highly judicialized system, challenge developing countries capacity to effectively use the DSU to their advantage (Shaffer, Sanchez, and Rosenberg 2008). Furthermore, in line with Busch and Reinhardt's (2003) findings that developing countries remain at a disadvantage when considering the outcomes of trade disputes decided by the appellate body, relative power was raised by respondents as an important determinant of outcomes in all three phases the DSU comprises. While corroborating the problems respondents identified during the adjudication and implementation phases, Busch and Reinhardt reiterate that developing countries are better off when they negotiate a friendly settlement during the consultation phase (2003, 733). This finding questions the value of

¹⁷ Interview with Roberto Azevedo (then Deputy Minister, Brasilia DSU Desk). Paris, 21 June 2005.

¹⁸ Interview with Brendan McGivern (Whitecase LL.P.). Geneva, 14 June 2005.

the WTO adjudication mechanisms as a playing field for these countries and emphasizes the importance of shifting the focus of reform and assistance to the role of ADR, through Art. 5 and Art. 25 of the DSU.

V. Adjudication *versus* Alternative Dispute Resolution

This section analyzes three T&E disputes that were decided on second instance by the WTO Appellate Body and that display some of the characteristics that I argue are relevant to an investigation of the opportunities for friendly settlement and the challenges of timely compliance in these disputes. The cases are presented in light of the interviews that were conducted with government officials and experts on the cases, some of whom have worked directly on the disputes at the WTO. A brief summary of each case is offered and the disputed issues are identified. Subsequently, I offer an application of AW and present a comparison between the ADR and the adjudication outcomes.

Beef Hormones – Appellate Body Report # 26,48 – January 16, 1998
 [(WT/DS26/AB/R) and (WT/DS48/AB/R)]

The beef hormones case was brought by the United States and Canada against the European Union. It is analyzed here as an example of a trade dispute where we can observe the tension between trade liberalization and public health. The case challenged an import ban the European Union imposed on beef and beef products from cattle that were administered growth hormones. The United States and Canada, as complainants, argued that the European ban constituted a violation of the GATT/WTO agreements, because the ban represented a restriction on international trade that could not be justified under the SPS Agreement. The main argument in the European submission indicated that use of growth hormones represented a health hazard for consumers. Preliminary evidence suggested that use of these substances in such a manner could cause cancer. The United States and Canada countered that scientific evidence existed to support the safety of the use of the hormones in question in cattle raised for human consumption. The appellate body sided with the complainants and recommended that the European Union withdraw the ban.

The beef hormones dispute was the first case under the SPS Agreement, and the case that informed many aspects of the agreement, which entered into effect in 1995. It is important to note that it was not the first time the European ban on the importation of beef

derived from animals administered growth hormones was challenged. When the European Union regulation went into effect in 1985, the United States attempted to negotiate a resolution and later sought to establish a GATT panel to hear the dispute in 1987, but the European Union systematically vetoed the measure, a prerogative member countries had under the GATT prior to 1995 (McNiel 1998, 109).

The beef hormones case was decided against the European Union in February of 1998. It remains one of the most studied and written about cases in the history of the WTO, and it still awaits full compliance by the Europeans. The case has traveled the entire spectrum of the DSU adjudication procedures. The case study I conduct here focuses on the first phase of the litigation. It initiates with the request for consultations by the United States and Canada in January 1996, and ends with the circulation of the appellate body report on February 13, 1998.

The beef hormones case illustrates the dynamic that is likely to contaminate the development of a typical T&E dispute: distrust toward regulatory authorities because of prior incidents, scientific uncertainty in regards to health or environmental risks, high level of civil society awareness, and, although less common, national security and national pride concerns. As a result of these reasons, or some of them, governments are reluctant to comply with an adverse ruling, thus ultimately discrediting the WTO as an instance where T&E disputes can be successfully resolved.

When the appellate body reviewed the case, five issues were identified:

1. consistency of the ban with the GATT/WTO agreements;
2. status of the precautionary principle in GATT/WTO law;
3. allocation of the burden of proof in GATT/WTO law;
4. standard of review in GATT/WTO law; and
5. applicability of the SPS Agreement to the dispute.

The calculation of AW that I offer for the beef hormones case is based on data from interviews with government officials and experts. Table 2 presents the number of points each party allocated to the issues raised in the case. For the complainants, I took the average of the points allocated by respondents for each country individually. The fourth column in this table analyzes the outcome of the Appellate Body Decision with respect to

the preferences of the parties. Table 3 summarizes the AW outcome and the adjudication outcome in the beef hormones case.

Tables 2 and 3 here

In the next paragraphs, I offer a comparison between the adjudication and AW outcomes. I begin by highlighting the fact that the adjudication outcome is almost entirely in favor of the United States and Canada. In fact, the complainants win on all issues, except for the burden of proof issue, where the ruling is neutral. This legal resolution gives the complainants 83 points, whereas the defendant ends up with only 5 points in this arrangement. Moreover, these 5 points are a consequence of the fact that the neutral decision on burden of proof favors the European Union, given that it reaffirms prior jurisprudence which itself is closer to the Europeans most desired solution with respect to that issue.

In contrast, the AW outcome gives each party 56 points and proceeds to distribute the issues between complainants and defendant according to their order of preferences over these issues. More importantly, the AW outcome guarantees envy-freeness and equitability, two properties that are absent in the adjudication outcome. The AW outcome requires splitting issue 1, consistency of the ban, which in practical terms entails transforming the ban into a labeling policy. AW allocates each party the same number of points. This distribution of points corresponds to precisely the same amount of the parties' most preferred allocation. As a result, neither party would trade her share of the settlement for the other party's share, thereby guaranteeing two properties associated with AW: envy-freeness and equitability. Note that the adjudication outcome does not secure envy-freeness, nor can we say that it offers an equitable resolution because the European Union will envy the fact that the United States and Canada were awarded 83 percent of what they wanted, whereas the Europeans only received 5 percent of their preferences. This distribution also violates the basic principles of equitability.

EU Asbestos – Appellate Body Report # 135 – April 5, 2001 (WT/DS135/AB/R)

The next case analyzed is the asbestos case, where Canada challenged a ban the European Union imposed on asbestos and asbestos-containing products for public health reasons. According to the European Union, these products were known to cause cancer.

Canada submitted that the use of asbestos and asbestos containing products for the designated purposes was safe, thereby characterizing the European ban as a violation of GATT/WTO agreements. This was aggravated by the fact that a similar domestic product was exempt from the ban in Europe. The appellate body decided in favor of the European Union.

The Canadian government was reluctant to file the case. In fact, there was substantial scientific evidence of the carcinogenic properties of asbestos and asbestos products (Howse and Tuerk 2001, 290/320). The decision to move ahead with the cases appears to have been influenced by interest group pressure domestically.¹⁹ During one of the interviews related to the asbestos case, the political circumstances of the case were brought to life. Canada was in the middle of a referendum campaign, and there were powerful separatist movements in the Province of Quebec. Quebec also housed the majority of producers impacted by the European ban. In order to resolve this federalism crisis, the Canadian government decided to go ahead with the case and send a signal to Quebec that federal authorities were ready to act on its behalf.

The case is a classic example of a WTO dispute where the role and certainty regarding the science pertaining to the issue took the center stage of the litigation. As a result of lessons learned during the beef hormones case, which was one of the first T&E disputes to generate a thorough discussion about the role of science in these cases, Canada made a special effort to gather scientific evidence in support of the claim that asbestos and asbestos-containing products were not carcinogenic. In the words of the main legal counsel for the European Union in the case,

The Canadian government organized a workshop of experts outside Boston and called the proceedings from it the “Harvard Report;” this was an attempt to “forge” science relating to the risks involving asbestos. This workshop was paid by the industry. In eight out of ten disputes this is the case.²⁰

¹⁹ This finding corroborates the argument in Davis (2013).

²⁰ Interview with Theofanis Christoforou (European Commission Legal Affairs Division). New York, 23 September 2005.

The asbestos case was also singled out for procedural reasons within the WTO litigation. Here, for the first time the appellate body decided to accept friends of the court briefs and issued instructions to that effect. This decision was an important step to address the lack of transparency critique. However, member states, developing countries for the most part, voiced their concern and suggested the appellate body was going beyond its mandate, thereby creating obligations that had not been agreed upon during the Uruguay Round. This reaction probably influenced the appellate body's decision not to take into consideration any arguments contained in the friends of the court briefs that had met the admissibility threshold.²¹

The case was decided in favor of the European Union, bringing much relief to environmentalists who were becoming extremely critical of the WTO's jurisprudence on T&E disputes. In a report written before the appellate body decision came out, Earthjustice stated,

Canada's challenge is still pending at the WTO. If the WTO accepts Canada's interpretation of the trade rules, the ability of governments to regulate toxic substances and encourage the development of non-toxic technologies could be severely restricted. The U.S. government sometimes forces the development of safer technologies by banning those known to present a health or environmental risk. ... Canada's interpretation of the international trade rules would remove the ability of governments to create such strong incentives for the development of non-toxic technologies by requiring them to prove the safety of all potential alternatives before banning toxic substances (Wagner 1999, 24).

The asbestos case shares characteristics with the other T&E disputes discussed here, while at the same time offering the appellate body an opportunity to take a more pro-

²¹ For a comprehensive discussion of mechanisms for NGO participation in the WTO, see Sanchez 2006.

environment position. The decision appeased environmental and public health groups, who saw the WTO rule in their favor for the first time.²²

Domestic constraints were unique to this case, given the particulars of the Canadian federalist crisis and its timing. Time also played a role from the WTO standpoint. The momentum for a pro-environment decision had come, after so much criticism over the rulings in the gasoline standards case, beef hormones case, apple varieties case, and shrimp-turtles case.

The complaint challenged the legality of a ban on asbestos and asbestos products imposed by France (the European Commission represented France in the case) for health reasons. In reaching its conclusion that the ban was consistent with the GATT/WTO agreements, the appellate body reviewed seven legal issues:

1. the consistency of the ban with the GATT/WTO agreements;
2. the status of the precautionary principle in GATT/WTO law;
3. the consideration of “likeness;”
4. the applicability of the Agreement on Technical Barriers to Trade (TBT Agreement) to the dispute;
5. the justification of the ban under Art. XX(b);
6. the issue of nullification or impairment under Art. XXIII:1(b); and
7. the admissibility of unsolicited information.

The AW outcome gives each party 83 points. It requires splitting issue 4, or in legal terms, devising an arrangement in regard to the application of the TBT Agreement that would satisfy the Canadian and European interests according to the share of issue 4 they end up with, i.e. an arrangement that is about 80 percent in favor of Canada and about 20 percent in favor of the European Union.

One possible legal arrangement that satisfies this proportional allocation would: a) declare that the TBT Agreement is applicable to the dispute because the French regulation is considered a technical barrier to trade; b) clarify France’s obligations under the TBT

²² The WTO institutions to settle disputes have been criticized for arguably stepping outside of their judicial mandate to invade the system’s competencies to legislate, which are the primary responsibility of the general council and the Committee on Trade and Environment (Iida 2004, 220).

Agreement, something that panels and the appellate body have refused to do in prior cases (Cone 2001, 12); c) declare that the French regulation is justified under Art. 2.2 of the TBT Agreement, which bears similarity in its objective to Art. XX of GATT.

With respect to the other five issues in the dispute, the ban would remain in place, since the AW outcome gives issue 1 to the European Union. Issue 2 (status of the precautionary principle) goes to Canada. The appellate body's actual ruling remained silent on this issue, and I argue that this outcome favors Canada inasmuch as it does not deviate from the traditional approach to scientific uncertainty embedded in the GATT. Therefore, by not ruling on this issue, as the appellate body in fact refused to do, the decision favors Canada. Table 4 presents the data that I use to calculate the Adjusted Winner outcome (all calculations in the appendix). The first two columns in Table 4 display how many points each party allocated to the disputed issues in the case. The fourth column analyzes the outcome of the Appellate Body Decision with respect to the preferences of the parties to the dispute. Table 5 summarizes the comparison between adjudication and AW.

Tables 4 and 5 here

The arrangement described is one of several possible outcomes that would obey the distribution of issues determined by the AW outcome. No matter the specific arrangement the parties settle for, the distribution of points generated by AW must hold. Based on this distribution of points, I evaluate the AW outcome in the next paragraphs.

The adjudication outcome disproportionately and overwhelmingly favors the European Union, the defendant in the case, granting it 96 out of 100 points. The adjudication outcome grants about 18 points to Canada, distributed over two issues where the ruling was mixed (issues 2 and 6). I argue the mixed ruling on issue 6 is 50 percent in favor of the defendant, whereas the outcome regarding issue 2 (non-ruling) favors the complainant. This is another instance where the litigation route did not achieve the equitability and envy-freeness properties guaranteed by AW.

The AW outcome grants the parties 83 points each, which is a very optimistic result. In part, this is due to the fact that the allocation of points by both parties was not as contentious. Canada placed a higher number of points on issues that for the European Union were worth relatively less. For illustration purposes, notice that issue number 1

(consistency of the ban) was worth 82 points to the European Union and only 15 points to Canada. Conversely, issue number 5 (justification under Art. XX(b)) was worth 40 points to Canada and only 4 points to the European Union. In such cases AW will produce a highly satisfactory resolution, if measured by how close both parties will be to their most preferred solution.

Aside from this high level of “quantitative satisfaction,” AW also guarantees efficiency, envy-freeness, and equitability. In order to reach equitability, AW completely reverses the appellate body’s decision on three of the six disputed issues. It maintains the appellate body decision on two other issues (issues 1 and 2), and partly reforms it in one last issue (nullification or impairment under Art. XXIII:1(b)). Therefore, the AW outcome differs substantially from the adjudication outcome, and confirms the shortcomings of the latter in terms of equitability and envy-freeness.

Even though this case may not be a good candidate for AW, because one of the parties placed so many points on one issue (for the European Union issue 1 is worth 82 points), AW still does significantly better than adjudication. The AW outcome gives each party 83 points, while at the same time guaranteeing efficiency, envy-freeness, and equitability. No adjudication system is likely to guarantee a similar resolution *ex ante*.

Apple Varieties I – Appellate Body Report # 76 – February 22, 1999
(WT/DS76/AB/R)

The apple varieties case between the United States and Japan relied heavily on the SPS Agreement and on the precautionary principle. This case also rested on the jurisprudence that had emerged from the beef hormones dispute. The trade barrier in question aimed at preventing the entry and spread of an agricultural pest called codling moth into Japan.

The complaint challenged the legality of a phytosanitary measure imposed by Japan that consisted of a testing-by-variety requirement, or varietal testing. According to Japan, protection against the entry of codling moth required that each variety of a group of agricultural products be tested, as opposed to a less stringent test-by-product alone.²³

²³ Under the varietal testing requirement, exporters were required to perform a separate battery of methyl bromide fumigation tests on every single variety of apples and prove that

The United States objected, arguing that the varietal testing requirement was more restrictive than necessary to provide Japan's desired level of protection and that it imposed a heavy burden on American exporters, thereby characterizing unjustifiable discrimination. Moreover, the United States considered that testing-by-product had been scientifically proven to detect codling moth contamination. In SPS language, the United States claimed that the testing-by-variety requirement was being imposed without sufficient scientific evidence; it was therefore a measure more restrictive than necessary to accomplish the desired level of protection. From Japan's point of view, there was not sufficient scientific evidence to support the safety of a testing-by-product-alone policy. The appellate body sided with the United States and recommended that Japan revise the phytosanitary measure at issue to bring it into conformity with the GATT/WTO agreements.

A little known fact at the time is that Japan had a small production of apples, relative to the size of the American apple industry, which officials from the Ministry of Agriculture, Forestry, and Fisheries (MAFF) were trying to shelter from foreign competition.²⁴ Later during the dispute it became clear that vested interests within MAFF presented an important hindrance for a friendly settlement and ultimately for compliance with the final ruling. When asked whether MAFF and the Japanese Ministry of Foreign Affairs (MOFA) sometimes have conflicting goals when dealing with SPS cases, an official with the government of Japan said: "every government deals with these issues. [In Japan] they are handled through day-to-day communication among agencies."²⁵ The United States has implemented a deputy-level committee to discuss inter-agency interests and concerns prior to taking a position internationally. The Trade Policy Review Group (TPRG) and the Trade Policy Staff Committee (TPSC) are the two that deal with WTO matters on a consensus basis.²⁶

a particular concentration of methyl bromide effectively killed all codling moths (Whitlock 2002, 750).

²⁴ Interview with Peter Bonner (US Department of Agriculture). Washington, D.C. 20 July 2005.

²⁵ Phone interview with a Japanese government official familiar with SPS cases, 18 July 2005.

²⁶ Interview with United States State Department official. Washington, D.C. 26 May 2005.

Following the appellate body's decision, compliance had to wait for yet another panel – an implementation panel under Art. 21.5 of the DSU. This provision assesses whether the measures taken by the defendant to reach compliance, pursuant to an adverse ruling, are consistent with the DSU. After the appellate body decision, Japan reformed its phytosanitary measure in ways the United States claimed still violated the WTO and SPS agreements.

This is the first of two disputes between the United States and Japan involving agricultural products and the potential spread of agricultural pests. Here I deal with the first case only. Although the disputes are somewhat similar, the first case concerns codling moth and the second involves a different agricultural pest called fire blight. From now on I will refer to the first case simply as the apple varieties case. This is the way the dispute is referred to in the literature, even though it involved seven other fruits: cherries, nectarines, walnuts, pears, quince, plums, and apricots.

I preface the following paragraphs of this case study by calling attention to the role of cultural differences in the choice for approaches to settle disputes. This issue was raised several times during the interviews, particularly during conversations with individuals who had direct experience with cultural clashes similar to those that played a role in the apple varieties case. One of these individuals had the following comments about the perception of ADR versus adjudication among Asian countries,

I am not sure going through ADR necessarily helps. I think going through ADR can help in a small subset of disputes. I think that there are WTO governments, and again this is somewhat foreign to my thinking, but some countries view going to WTO dispute settlement is this contentious political act, that somehow it is very hostile. Whereas, particularly for the Anglo-Saxon legal culture, you bring claims all the time and you expect people to bring claims against you. Whereas for some other countries, say Japan or other Asian countries, it is a big deal. They see it as a

semi-hostile act, the recipient, if it is an Asian country, ... and in that sense you could channel it into ADR and perhaps deal with it quietly.²⁷

If from a cultural stand-point recourse to AW could have been the best possible route, from another perspective – one shared by an individual very familiar with the case and the interests of the parties in the dispute – a negotiated solution would not have met the needs of the Japanese government. Here, it is important to remember that there were protectionist interests behind the decision to conceive and implement the strict phytosanitary regulations; these interests were heard through MAFF, while MOFA was the Japanese agency in charge of the international proceedings at the WTO. An individual familiar with the negotiation commented that,

An extended negotiation failed in part because the resolution of the dispute required a legal decision.²⁸

The apparent need for a legal decision in the apple varieties case contradicts the cultural preference for ADR articulated above. In this context, the legal decision would allow the agency – MOFA or MAFF – to come to the affected Japanese apple producers and present the outcome as the result of an international (legally) binding process, thereby mitigating the political costs associated with withdrawing the protective measures. A skilled facilitator could accomplish a similar result and still seize ADR, because as elaborated to me by another respondent, in Japan there is also a long-standing tradition to delegate to a highly qualified individual in order to anticipate what the outcome of litigation would be, and act upon it,

For example, ... in Japan, companies that have commercial disputes, rather than suing each other, they hire somebody like a retired judge or a lawyer or something, they quietly meet, no publicity, and then the lawyer or the judge at the end of the

²⁷ Interview with an individual familiar with the apple varieties case. Date and location withheld at the respondent's request.

²⁸ Interview with an individual familiar with the apple varieties case. Washington, D.C. 6 July 2005. Davis (2013) analyzes the domestic reasons for international adjudication, and precedent setting can be seen as a prominent one.

day say, right, if you were to go to court, the outcome would be this, and then the two sides are happy to comply and structure their entire commercial relationship around what the judge said would be, “would be”, the result if they went [to court]. Everybody saves their position, everybody saves faces to keep it out of the court. To WTO governments that feel more comfortable with that model, there may be a role for ADR.²⁹

In an ideal scenario, AW would be proposed after the parties have had a chance to assess the prospects of a resolution in court. Coupled with the desire to keep the dispute out of the public eye, there is an interest in balancing the negative consequences of a possible judicial ruling, which is something AW inherently guarantees. Rather than a trade-off between the cultural preferences and the requirements of a politically charged situation, recourse to AW would afford a conciliatory compromise between the two parties.

From a Western perspective, the jurisprudential implications of bringing a case forward often take precedent. This is the case especially when T&E disputes are considered, given the fact that there are several loopholes in the GATT/WTO regime in terms of the roles of science, the precautionary principle, the standards for scientific assessment, and the like. Here, even countries familiar with the Anglo-Saxon litigious tradition may chose to stay away from litigation, given that the outcome of a (final) court ruling may be worse than a compromise on the substance of the dispute reached through ADR. An individual familiar with the dispute confirmed this preoccupation with the jurisprudence,

Part of the risk of going with a case is that some of the legal issues will not come out right. The trade issues that could benefit from arbitration have more to do with the scientific aspects of it. ... SPS cases require solid science to be brought forward.³⁰

²⁹ Interview with an individual familiar with the apple varieties case. Date and location withheld at the respondent's request.

³⁰ Interview with an individual familiar with the apple varieties case. Washington, D.C. 6 July 2005.

Three issues were at stake in the apple varieties case:

1. the consistency of the SPS measure with the GATT/WTO agreements;
2. the precautionary approach; and
3. the fact-finding prerogative of the panel.

The AW outcome gives each party 67 points and requires splitting issue 1 (one of two smallest ratio issues) through an arrangement that will give the United States about 5 percent of what it wants with respect to issue 1, and Japan about 95 percent of what it wants regarding the same issue. The AW outcome also reverses the appellate body position on issue 3.

Table 6 presents the data that I use to calculate the Adjusted Winner outcome (all calculations in the appendix). Columns two and three of table 6 display the number of points each party allocated to each issue raised in the case. The fourth column summarizes the outcome of the Appellate Body decision. Table 7 summarizes the AW and adjudication outcomes.

Tables 6 and 7 here

In the next paragraphs I offer a comparison between the adjudication and AW outcomes, based on the data presented in Table 7. The adjudication outcome favors the United States disproportionately, since it grants the complaining party 80 percent of its preferences. On an issue-by-issue basis, the United States wins on issue 1, which is worth 35 points in the American allocation, and on issue 2, which is worth 45 points. The same adjudication outcome favors Japan only on issue 3, which is worth 10 points for the defendant. The arrangement embedded in the appellate body ruling is unfair because the United States received 4/5 of what it wanted, while Japan received only 1/10. For similar reasons, this arrangement also creates envy. Japan envies the fact that the United States was awarded 80 percent of their preferences, against 10 percent awarded to Japan. The AW outcome promotes fairness by reallocating issue 1 between the United States and Japan in a manner that will give each country 67 percent of their respective preferences. After AW is applied, the United States wins on issues 2 and 3, which are worth 65 points jointly. Issue 1 goes almost entirely to Japan, because this is the issue that Japan values the most. This is also one of the two smallest ratio issues of winner to loser, which makes it the candidate for

the equitability adjustment. In respect to issue 1, the AW outcome grants 5 percent of that issue to the United States, and the remaining 95 percent to Japan. More importantly, AW guarantees envy-freeness and equitability. It is worth pointing to the fact that AW grants the two systemic issues the dispute involves to the United States (issues 2 and 3).

I argue that the AW outcome is more likely to generate prompt compliance due to the incentives associated with the properties of envy-freeness and equitability guaranteed by the procedure. This is particularly important in the context of the apple varieties case because the SPS (trade restrictive) measure had been in place for so many years at the time the appellate body decision came out. In reality, the final ruling was not sufficient to bring about compliance. The United States had to initiate another DSU procedure – this time an Art. 21.5 compliance procedure – before Japan finally brought its measure into conformity with the SPS Agreement.

In his description of the compliance process in the aftermath of the apple varieties dispute Whitlock (2002) highlights the slow paced development,

Japan retracted the varietal testing requirement on December 31, 1999. However, no new methodology permitting importation of new apple varieties had been agreed upon, and the parties did not announce their resolution of the dispute for another eighteen months. ... In many ways, the compromise [reached] simply preserved the status quo. U.S. producers were still obliged to comply with strict quarantine procedures that ensured the Japanese environment would be protected from the codling moth that also had the effect of raising their costs. Japanese producers would be faced with a gradual increase in competition as more and more varieties of imported apples were approved (753-755).

Whitlock continues his analysis to assess how the DSU performed in this prominent agricultural dispute,

One critical view of the compliance process in this case holds that the Appellate Body's ruling was ineffectual and largely left the parties in roughly the same position they had been prior to invocation of WTO dispute resolution procedures in 1997. ... The WTO dispute resolution system is vindicated by the very fact that the

parties were able to reach an agreement despite the DSB's inability to find clearly in favor of either party's proposed scientific method (2002, 775/776).

The apple varieties case illustrates the influence distinct cultural and legal traditions have on the inclination to seize litigation, as opposed to ADR. It is argued that Japan would have preferred the ADR route, despite the fact that the government needed an authoritative position to justify revising the SPS measure to Japanese apple growers. AW could potentially have offered the alter authority within an ADR context, while at the same time providing both parties with a superior outcome.

VI. Final Remarks

The challenges of compliance in the realm of the WTO dispute settlement mechanisms are comparable to those within other areas of international law. The literature has looked into the nature of the disputes, the reputation of states, the level of legalization, as important aspects motivating higher levels of compliance. Nevertheless, in the case of T&E disputes, timely compliance remains a problem. I have argued and demonstrated that AW can increase the probability of early settlement. In fact, T&E disputes are more likely to benefit from this ADR procedure, given the problems these disputes present to the traditional adjudication mechanisms currently available at the WTO. Three T&E disputes were analyzed, and based on data from interviews with government officials and policy experts, an application of AW was offered to each dispute.

Following the calculation of the respective ADR outcomes, a comparison between each AW outcome and the corresponding adjudication outcome was presented. The results reveal that AW does significantly better than the adjudication alternative, for both parties, simultaneously. This is a direct consequence of the three properties AW guarantees: efficiency, envy-freeness, and equitability. Moreover, recourse to ADR through AW avoids a legal precedent on systemic issues the opposing parties are often sensitive about; it also prevents further involvement of strategic actors that may have a vested interest in escalating the dispute, such as legal counsels and the WTO quasi-judicial institutions.

Data from the interviews I conducted suggest that the involvement of trade lawyers in a case reduces the chances of a friendly settlement. This is in juxtaposition to the early

phase of a case, where policymakers lead the negotiation. Along with this finding, several respondents spoke about their perception of the WTO dispute settlement institutions as agents invested in their own strategic interests. For example, the appellate body is sometimes seen as reluctant and skeptical when deciding cases that involve public health standards, as the majority of T&E disputes do. As a result, we tend to observe final rulings on T&E disputes that are too obscure in terms of their prescriptions, what ultimately has the effect of delaying or even preventing compliance.³¹

The study of courts as strategic actors has become a prominent field of research. Scholarly work dealing with the WTO and the European Union judicial institutions reveals that these institutions pursue legitimacy through legal and political efficiency by carefully designing their jurisprudence (Kelemen 2001). My analysis of the three case studies confirms the predictions of this research agenda and suggests that support for ADR counters some of the negative consequences of myopic judicial activism.

This form of judicial activism is observable in several other international judicial bodies, such as the International Court of Justice, the Special Criminal Tribunal for the Former Yugoslavia, and more recently the International Criminal Court (ICC). Some argue that the Court is behaving strategically in its choice of situations to investigate when, for example, it targeted prominent political figures in Uganda, the Democratic Republic of the Congo, and the Sudan for crimes against humanity – issuing indictments in some of these cases, and chose not to pursue highly sensitive cases such as an alleged instance of war crimes involving British forces in Iraq (Burke-White 2006).

Because most international disputes take place in the shadow of the law, the parties should be able to assess the AW outcome against the prospects of several possible adjudication outcomes in order to decide for themselves whether recourse to AW is the best choice. When comparing the AW outcome to a hypothetical adjudication outcome, the parties confront two types of uncertainty: a) uncertainty relating to each possible adjudication outcome; and b) uncertainty relating to the likelihood that each possible adjudication outcome will be implemented. In most mature judicial systems, this information will surface from a thorough analysis of a decision-making body's

³¹ Incidentally, this was the case with the apple varieties dispute I analyze in chapter five.

jurisprudence on the disputed issue.

The underlying question is: what are the political determinants of adjudicatory procedures? My analysis suggests that both the parties and the adjudicatory institutions have strategic interests that will inform their decisions and the outcome of adjudication. Therefore, instead of a linear process with somewhat predictable consequences, the outcome of each phase in an adjudicatory procedure is influenced by decisions made by the relevant actors. These decisions are contingent upon what the other actors will do. Therefore, uncertainty regarding the outcome of adjudication is much higher than the expectation of a linear process would predict. In this context, informed access to a structured ADR procedure, such as AW, may reduce this uncertainty and offer a superior outcome. In particular, the three properties AW guarantees – efficiency, envy-freeness, and equitability – reinforce the value of this procedure as a preferred alternative to adjudication.

It is important to follow the developments of current deviations from trade liberalization commitments negotiated under GATT and the WTO in order to assess the impact these developments are likely to have on the emergence of protracted T&E disputes. This process of deviation and increased disputatious behavior is also impacted by the ongoing negotiations within the Doha Round and states' strategic interests regarding issues in Doha.

The following conjectures are important for future theorizing in WTO dispute settlement, especially in the area of T&E disputes:

1. *High levels of domestic legalization decrease the attractiveness of AW to the parties.*
2. *High levels of international legalization decrease the attractiveness of AW to the parties.*

Domestic and international legalization are identified through the levels of obligation, precision, and delegation evident in a given issue area. This is in keeping with the framework proposed by Abbott and Snidal (2000). High levels of obligation, precision, or delegation have the effect of constraining the state party in its prerogative to negotiate a final arrangement in regards to the disputed issue. In particular, when both the levels of obligation and precision are high, there is little room for compromise outside the sphere of

hard law embedded in a given commitment. As a consequence, when states are dealing with hard law – domestically as well as internationally – the probability of a friendly settlement is lower, as are the chances of successful recourse to AW.

The asbestos case illustrates the role of hard law domestically. When Canada brought the case to the WTO, a French decree was already in place, banning asbestos and asbestos containing products. The existence of this piece of legislation corroborates the high levels of obligation, precision, and delegation surrounding the issue, and ultimately had the effect of limiting the options available to the European Union in the context of a negotiated solution through ADR.

3. *Involvement of the SPS Agreement decreases the probability of early settlement and of successful recourse to AW.*
4. *In comparison to cases that involve the SPS Agreement, cases that deal with Art. XX of GATT should be more likely to settle early; these cases should also be more receptive of AW.*

The SPS Agreement and GATT Art. XX regulate the imposition of trade restrictions based on public health and environmental protection standards. While Art. XX dates back to the original 1947 text of GATT, the SPS Agreement was a product of the Uruguay Round. The degree of precision and delegation in the SPS Agreement is also much higher than that embedded in GATT Art. XX; for this reason, I argue that disputes brought under the former face more hurdles to settle early than disputes raised under Art. XX.

The logic behind this conjecture follows the one derived for the level of legalization discussed above. The differences between the SPS Agreement and GATT Art. XX can be analyzed as variations in the level of legalization – where SPS is closer to hard law, while Art. XX is closer to soft law. As a consequence, disputes involving Art. XX offer more room to compromise, because the levels of obligation and precision are relatively less stringent.

The apple varieties case illustrates this dynamic. The violation of the SPS Agreement was the center of the dispute and there was little room for compromise. Even after the appellate body ruling, compliance was not forthcoming and ultimately the United States had to seize the system once more with an Art. 21.5 compliance procedure.

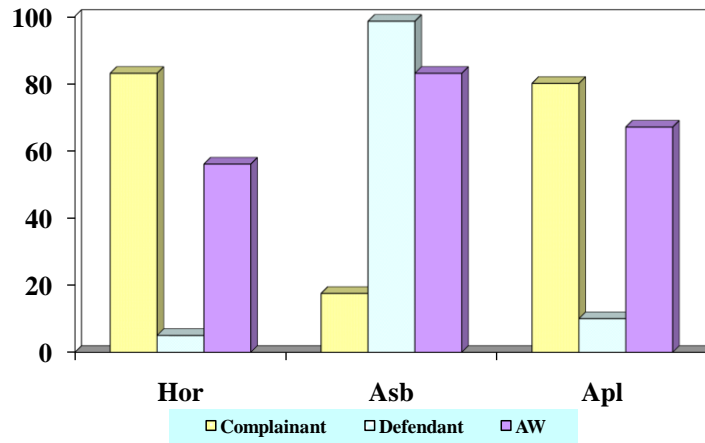
5. *Low levels of issue continuity decrease the probability of early settlement and of successful recourse to AW.*

Issue specificity, through levels of continuity, is identified by Guzman and Simmons (2002) as an important determinant of the probability of early settlement in WTO disputes. Continuous issues, of which tariffs are the best example, facilitate the negotiation because they offer endogenous alternatives for compromise. For instance, a contested tariff can be lowered without altering the substantive nature of the regulation. Conversely, non-continuous issues – of which bans are the best example – lack this intrinsic alternative, resulting in a more difficult and complex negotiation.

T&E disputes often involve non-continuous trade barriers as a result of the environmental or public health objectives targeted by the related policies. For example, a higher tariff on imported beef that contained growth hormones may not accomplish the goal of preventing the alleged carcinogenic effects on the population. It may reduce its likelihood, through an induced reduction in consumption, but perhaps this is not sufficient from the public health authorities' point of view. Despite the prevalence of issue-discontinuity in T&E disputes, I argue that there are important differences in the level of continuity among these disputes. Some disputes are significantly more discontinuous than others. The beef hormones case also supports this claim. The case involved a ban, which is the best example of a non-continuous issue.

These five conjectures offer useful guidance for further theory development and testing in the area of T&E disputes. Additionally, they offer a pragmatic tool to member states that are considering the ADR path, especially through recourse to AW. The Doha mandate launched a number of studies and discussions on DSU reform, of which only a few address an increased role for ADR. Nonetheless, once I presented Brams and Taylor's adjusted winner procedure to the 33 interviewees, these individuals expressed vital interest in how ADR can be applied to resolve trade disputes in the WTO.

Figure 1
Adjudication v. Adjusted Winner
(Based on interview data)



References

- Abbott, Kenneth W., Robert O. Keohane, Andrew Moravcsik, Anne-Marie Slaughter, Duncan Snidal. 2000. The concept of legalization. *International Organization* 54, (3): 401-419.
- Abbott, Kenneth W. and Duncan Snidal. 2000. Hard and soft law in international governance. *International Organization* 54, (3): 421-456.
- Alter, Karen J. 2003. Resolving or exacerbating disputes? The WTO's new dispute resolution system. *International Affairs* 79, (4): 783-800.
- Appleton, Arthur E. 2000. Amicus curiae submissions in the carbon steel case: Another rabbit from the appellate body's hat? *Journal of International Economic Law* (2000): 691-699.
- . 1999. Shrimp/turtle: Untangling the nets. *Journal of International Economic Law* (1999): 477-496.
- Bhagwati, Jagdish. 2001. After Seattle: free trade and the WTO. In *Efficiency, equity, and legitimacy: The multilateral trading system at the millennium*. Roger B. Porter et al. eds., Washington, DC: Brookings Institution Press. P. 50-62.
- Bennett, Andrew. 2004. Case study methods: Design, use, and comparative advantages. In *Models, numbers & cases. Methods for studying international relations*. Detlef F. Sprinz and Yael Wolinsky-Namias, eds. 19-55. Ann Arbor, MI: University of Michigan Press.
- Bobick, Talya and Alastair Smith. 2013. "The impact of leader turnover on the onset and the resolution of WTO disputes." *Review of International Organizations* (June).
- Bown, Chad P. 2004. On the economic success of GATT/WTO dispute settlement. *The Review of Economics and Statistics* 86, (3): 811-823.
- Brams, Steven J., and Alan D. Taylor. 1999. *The win-win solution: Guaranteeing fair shares to everybody*. New York, NY: W.W. Norton & Company.
- . 1996. *Fair division: From cake-cutting to dispute resolution*. New York, NY: Cambridge University Press.
- Brams, Steven J. and Jeffrey M. Togman. 1996/1998. Camp David: Was the agreement fair? *Conflict Management and Peace Science* 13, (3): 99-112; revised and expanded version in *New directions in the study of conflict, crisis, and war*. Frank P. Harvey and Ben D. Mor, eds. London: Macmillan, 1998, p. 306-323.
- Brimeyer, Benjamin L. 2001. Bananas, beef, and compliance in the World Trade Organization: The inability of the WTO dispute settlement process to achieve compliance from superpower nations. *Minnesota Journal of Global Trade* 10, (Winter): 133.
- Burke-White, William W. 2006. Multilevel global governance in the enforcement of international criminal law. Unpublished manuscript.
- Busch, Marc L. and Eric Reinhardt. 2004. *Fixing what "ain't broke"? Third party rights, consultations, and the DSU*. In *WTO dispute settlement reform*. Kim Van der Borght and Dencho Georgiev, eds. London: Cameron May, Forthcoming.

- . 2003. Developing countries and the General Agreement on Tariffs and Trade/World Trade Organization Dispute Settlement. *Journal of World Trade* 37, (4): 719-735.
- . 2000. Bargaining in the shadow of the law: Early settlement in GATT/WTO disputes. *Fordham International Law Journal* 24, (1-2): 158.
- Chayes, Abram and Antonia Chayes. 1995. *The new sovereignty: Compliance with international regulatory agreements*. Cambridge, MA: Harvard University Press.
- Choinski, Alexander Stewart. 2002. Anatomy of a controversy: The balance of political forces behind implementation of the WTO's gasoline decision. *Law and Policy in International Business* 33, (4): 569-613.
- Christoforou, Theofanis. 2004. The precautionary principle, risk assessment, and the comparative role of science in the European Community and the US legal systems. In *Green giants? environmental policies of the United States and the European Union*. Vig, Norman J. and Michael G. Faure, eds. Cambridge, MA: Massachusetts Institute of Technology.
- . 2000. WTO panels in the face of scientific uncertainty. In *Improving WTO dispute settlement procedures Issues and lessons from the practice of other international courts and tribunals*. Friedl Weiss, ed. London: Cameron May Ltd.
- Collier, David. Henry E. Brady. Jason Seawright. 2004. Sources of leverage in causal inference: Toward an alternative view of methodology. In *Rethinking social inquiry. Diverse tools, shared standards*. Henry E. Brady and David Collier, eds. New York, NY: Rowman & Littlefield Publishers, Inc.
- Cone, III. Sydney M. 2001. The asbestos case and dispute settlement in the world trade organization: The uneasy relationship between panels and the appellate body. *Michigan Journal of International Law* 23, (Fall): 1-35.
- Cottier, Thomas. 2004. Proposals for moving from *ad hoc* panels to permanent WTO panelists. In *The WTO Dispute Settlement System 1995-2003*. Federico Ortino and Ernst-Ulrich Petersmann, eds. The Hague, London, New York: Kluwer Law.
- Davis, Christina L. 2012. *Why adjudicate? Enforcing trade rules in the WTO*. Princeton, N.J.: Princeton University Press.
- 2007. "The evolution of the trade regime: Politics, law, and economics of the GATT and the WTO." *Political Science Quarterly* Vol. 122(2), pp. 354-355
- Davis, Christina L. and Sarah B. Bermeo. 2009. "Who files? Developing country participation in GATT/WTO adjudication." *Journal of Politics* Vol. 71(3), pp. 1033-1049.
- Davey, William J. 2005a. Evaluating WTO dispute settlement: what results have been achieved through consultations and implementation of panel reports? *Illinois Public Law and Legal Theory Research Papers Series*. Research Paper No. 05-19, 30 November 2005.
- . 2005b. The WTO dispute settlement system: The first ten years. *Journal of International Economic Law* 8, (1): 17-50.
- Denoon, David B. H. and Steven J. Brams. 1997. Fair division: A new approach to the Spratly Islands controversy. *International Negotiation* 2, (2): 303.
- Downs, George W. and Michael Jones. 2004. Reputation, compliance and development. In *The impact of international law on international cooperation. Theoretical*

- perspectives*. Eyal Benvenisti and Moshe Hirsch, eds. New York, NY: Cambridge University Press.
- . 2002. Reputation, compliance, and international law. *The Journal of Legal Studies* 31, (1): 95-112.
- Downs, George W. Kyle Danish, Peter Barsoom. 2000. The transformation model of international regime design: triumph of hope or experience? *Columbia Journal of Transnational Law* 38, (3): 465-514.
- Downs, George W. 1998. Enforcement and the evolution of cooperation. *Michigan Journal of International Law* 19, (2): 319-344.
- Downs, George W.; David M. Rocke; Peter N. Barsoom. 1996. Is the good news about compliance good news about cooperation? *International Organization* 30, (3): 379-406.
- Dunoff, Jeffrey L. and Mark Pollack. 2013. "International Law and International Relations: Introducing an Interdisciplinary Dialogue." In Dunoff, Jeffrey L. and Mark A. Pollack, Eds. *Interdisciplinary Perspectives on International Law and International Relations. The State of the Art*. Cambridge, M.A.: Cambridge University Press.
- Dunoff, Jeffrey L. 1998. The misguided debate over NGO participation at the WTO. *Journal of International Economic Law* 1, (September): 433-456.
- . 1994a. Institutional misfits: The GATT, the ICJ & trade-environment disputes. *Michigan Journal of International Law* 15, (Summer): 1043.
- . 1994b. Symposium: Resolving trade-environment conflicts: The case for trading institutions. *Cornell International Law Journal* 27, (Summer).
- Fontagne, Lionel. Friedrich von Kirchbach, and Mondher Mimouni. 2005. An assessment of environmentally-related non-tariff measures. *The World Economy*. Forthcoming.
- Goldstein, Judith. Miles Kahler, Robert O. Keohane, Anne-Marie Slaughter. 2000. Introduction: Legalization and world politics. *International Organization* 54, (3): 385-399.
- Guzman, Andrew T. 2005. The design of international agreements. *European Journal of International Law* 16, (4): 579-612.
- Guzman, Andrew T. and Beth A. Simmons. 2005. "Power plays and capacity constraints: the selection of defendants in WTO disputes." *The Journal of Legal Studies* Vol. 34(2), pp. 557-598.
- Guzman, Andrew T. and Beth A. Simmons. 2002. To settle or empanel? An empirical analysis of litigation and settlement at the World Trade Organization. *Journal of Legal Studies* 31, (1): 205-235.
- Helfer, Laurence R. and Anne-Marie Slaughter. 2005. Why states create international tribunals? A response to professors Posner and Yoo. *California Law Review* 93, (May): 899-925.
- Hirsch, Moshe. 2004. Fair division, adjusted winner and the future of East Jerusalem? Paper presented at International Law Weekend, New York.
- Horn, Henrik and Joseph H. Weiler. 2004. EC-Asbestos. European Communities – Measures affecting asbestos and asbestos-containing products. *World Trade Review* 3, (1): 129-151.

- Howse, Robert. 2002. The appellate body ruling in the *shrimp/turtle* case: a new legal baseline for the trade and environment debate. *Columbia Journal of Environmental Law* 27, (2): 489-519.
- Howse, Robert and Elizabeth Tuerk. 2001. The WTO impact on internal regulations: A case study of the Canada-EC asbestos dispute. In *The EU and the WTO: Legal and Constitutional Issues*. G. de Burca and J. Scott, eds. Hart Publishing.
- Howse, Robert. 2000. Democracy, science, and free trade: risk regulation on trial at the World Trade Organization. *Michigan Law Review* 98, (June): 2329-2356.
- Iida, Keisuke. 2004. Is WTO dispute settlement effective? *Global Governance* 10, (2): 207.
- Jackson, John H. 2000. *The Jurisprudence of GATT and the WTO*. New York, NY: Cambridge University Press.
- Kelemen, Daniel R. 2001. The limits of judicial power. Trade-environment disputes in the GATT/WTO and the EU. *Comparative Political Studies* 34, (6): 622-650.
- King, Gary. Robert O. Keohane, Sidney Verba. 1994. *Designing social inquiry: scientific inference in qualitative research*. Princeton, NJ: Princeton University Press.
- Koremenos, Barbara. 2007. "If only half of international agreements have dispute resolution provisions, which half needs explaining?" *Journal of Legal Studies* 36(January), pp. 189-212.
- Koremenos, Barbara. Charles Lipson, Duncan Snidal. 2001. The rational design of international institutions. *International Organization* 55, (4): 761-799.
- Krasner, Stephen. 1982. Structural causes and regimes consequences: Regimes as intervening variables. *International Organization* 36, (2): 185-205.
- Krist, William K. 2001. Neither friends nor foes, but neighbors. An introduction to the relationship between the WTO and MEAs. In *Trade and Environment, the WTO, and MEAs. Facets of a complex relationship*. Washington, DC: The Heinrich Boll Foundation.
- Leiter, Kara and Simon Lester. 2013. "WTO dispute settlement 1995-2012 – A statistical analysis. *Journal of International Economic Law* Vol. 16(1), pp. 257-267.
- Marceau, Gabrielle. 2002. WTO dispute settlement and human rights. *European Journal of International Law* 13, (4): 753.
- Martin, Claude. 2001. The relationship between trade and environment regimes: What needs to change? In *The role of the World Trade Organization in global governance*. Gary P. Sampson, ed. New York, NY: The United Nations University Press.
- Massoud, Tansa George. 2000. Fair division, adjusted winner procedure (AW), and the Israeli-Palestinian conflict. *Journal of Conflict Resolution* 44, (3) (Jun.): 333-358.
- McNiel, Dale E. 1998. The first case under the WTO's sanitary and phytosanitary agreement: The European Union's hormone ban. *Virginia Journal of International Law* 39, (1): 89.
- Munck, Gerardo L. 2004. Tools for qualitative research. In *Rethinking social inquiry. Diverse tools, shared standards*. Henry E. Brady and David Collier, eds. New York, NY: Rowman & Littlefield Publishers, Inc.
- Parker, Richard W. 1999. The use and abuse of trade leverage to protect the global commons: What can we learn from the tuna-dolphin conflict. *Georgetown International Environmental Law Review* 12, (Fall): 1-113.

- Pauwelyn, Joost. 2004. Proposals for reforms of Article 21 of the DSU. In *The WTO Dispute Settlement System 1995-2003*. Federico Ortino and Ernst-Ulrich Petersmann, eds. The Hague, London, New York: Kluwer Law.
- Petersmann, Ernst-Ulrich. 2000. Alternative dispute resolution-lessons for the WTO? In *Improving WTO dispute settlement procedures. Issues and lessons from the practice of other international courts and tribunals*. Friedl Weiss, ed. London: Cameron May Ltd.
- Putnam, Robert. 1993. "Diplomacy and Domestic Politics: The Logic of Two-Level Games." In Peter Evans, Harold Jacobson and Robert Putnam, eds. *Double-Edged Diplomacy: International Bargaining and Domestic Politics*. Los Angeles, C.A.: University of California Press.
- Reinhardt, Eric and Marc Busch. 2002. Testing international trade law: Empirical studies of GATT/WTO dispute settlement. In *The political economy of international trade law: Essays in honor of Robert E. Hudec*. Daniel L. M. Kennedy and James D. Southwick, eds. New York, NY: Cambridge University Press.
- Reinhardt, Eric. 2001. Adjudication without enforcement in GATT disputes. *Journal of Conflict Resolution* 45, (2) (Apr.): 174-195.
- Rosendorff, B. Peter. 2005. Stability and rigidity: Politics and design of the WTO's dispute settlement procedure. *American Political Science Review* 99, (3): 389-400.
- Sanchez, Michelle Ratton. 2006. "Brief observations on the mechanisms for NGO participation in the WTO." *Sur – Revista Internacional de Direitos Humanos* Vol. 3(4), pp. 102-125.
- Shaffer, Gregory. Michelle R. Sanchez and B. Rosenberg. 2008. "The trials of winning at the WTO: What lies behind Brazil's success." *Cornell International Law Journal* Vol. 41(2), pp. 383-501.
- Sprinz, Detlef F. and Yael Wolinsky-Nahmias, eds. 2004. *Models, numbers & cases. Methods for studying international relations*. Ann Arbor: The University of Michigan Press.
- Steger, Debra P. 2004. *Peace through trade: Building the World Trade Organization*. London: Cameron May Ltd.
- Tellnes, Jostein F. 2004. Application of the Adjusted Winner procedure to the negotiations on wealth sharing in Sudan. M.A. thesis, Department of Political Science, University of Oslo. Unpublished manuscript.
- Tomz, Michael. 2008. *Reputation and international cooperation. Sovereign debt across three centuries*. Princeton, N.J.: Princeton University Press.
- Vazquez, Carlos M. and John H. Jackson. 2002. Some reflections on compliance with WTO dispute settlement decisions. *Law and Policy in International Business* 33, (4): 555-568.
- Wagner, Martin and Patti Goldman. 1999. *The case for rethinking the WTO. The full story behind the WTO's environment and health cases*. Earthjustice Legal Defense Fund.
- Weiler, Joseph H. H. 2001. "The rule of lawyers and the ethos of diplomats: Reflections on the internal and external legitimacy of WTO dispute settlement." *Journal of World Trade* 35(2), pp. 191-207.
- Whitlock, Joseph P. 2002. Japan-measures affecting agricultural products: Lessons for future SPS and agricultural trade disputes. *Law and Policy in International Business* 33, (4): 741.

Wilson, James Q. 1980. The origins of regulation. In *The politics of regulation*. James Q. Wilson, ed. New York, NY: Basic Books, Inc.

Dispute Settlement in Trade & Environment Disputes: How Does the WTO Mechanism Perform?

Cristiane Lucena Carneiro, University of Sao Paulo

cristiane.lucena@usp.br

Prepared for the 2014 Conference on the Political Economy of International Organizations

Princeton, N.J.

Table 2
Revised Point Allocation and Adjudication Outcome in the Beef Hormones Case

Issue	US/Canada Average Allocation	EU Allocation	Appellate Body Decision
1. Consistency of the ban**	67	<u>85</u> *	For the complainants
2. Status of the precautionary principle	<u>10</u>	2	For the complainants
3. Allocation of the burden of proof	<u>17</u>	5	Neutral
4. Standard of review under Art. 3.3 of SPS	3	<u>5</u>	For the complainants
5. Applicability of SPS to the dispute	3	<u>3</u>	For the complainants

* Underlined numbers indicate that the party initially wins on this issue when AW is applied.

** Smallest ratio issue before the numbers were rounded up.

Table 3

Comparison of AW and Adjudication Outcomes in the Beef Hormones Case

Legal Issue	Appellate Body Ruling	AW Outcome
1. Consistency of the ban	-Declares the ban inconsistent with GATT/WTO rules	-Replaces the ban for a temporary labeling policy while conclusive scientific recommendations emerge
2. Status of the precautionary principle	-Declares that the precautionary principle, as advocated by the European Union, has not been incorporated into the GATT/WTO regime	-Maintains the appellate body ruling
3. Allocation of burden of proof	-Declares that the complainant must make a prima facie case after what the defendant bears the burden of proof	-Shifts the burden of proof in SPS cases involving scientific uncertainty to the defendant
4. Standard of review under Art. 3.3 of SPS	-Declares that panels have the prerogative to seek information and to conduct their own investigation in respect to the facts of the case	-Maintains the appellate body ruling
5. Applicability of SPS to the dispute	-Declares that the SPS Agreement applies to the dispute	-Maintains the appellate body ruling

Table 4

Point Allocation v. Ruling Outcome in the Asbestos Case

Issue	EU Allocation	Canada Allocation	Appellate Body Decision
1. Consistency of the ban	<u>82</u> *	15	For the defendant
2. Status of the precautionary principle	1	<u>15</u>	Silent (for the complainant)**
3. Consideration of “likeness”	5	<u>15</u>	For the defendant
4. Application of TBT***	5	<u>10</u>	For the defendant
5. Justification under Art. XX(b)	4	<u>40</u>	For the defendant
6. Nullification or impairment under Art. XXIII:1(b)	3	<u>5</u>	Mixed (50% for each party)

* The party initially wins on this issue when AW is applied. ** Silence here favors Canada. *** Smallest ratio issue before the numbers were rounded up.

Table 5 - Comparison of AW and Adjudication Outcomes in the Asbestos Case

Legal Issue	Appellate Body Ruling	AW Outcome
1. Consistency of the ban	-Decides that the ban is consistent with the GATT/WTO agreements	-Declares that the ban is consistent with the GATT/WTO agreements
2. Status of the precautionary principle	-Silent	-Upholds the restrictive GATT jurisprudence on the precautionary principle, which favors Canada
3. Consideration of “likeness”	-Decides that chrysotile asbestos fibers and the two sets of fibers under analysis are not like products	-Declares that chrysotile asbestos fibers and the two sets of fibers under analysis are like products, pursuant to a less restrictive test of likeness
4. Application of TBT	-Silent	-Declares that TBT is applicable to the case -Clarifies France’s obligations under TBT -Declares that the French regulation is justified under Art. 2.2 of TBT
5. Justification under Art. XX(b)	-Decides that the French regulation is justified under Art. XX(b), because it is “necessary for the preservation of human life”	-Remains silent on Art. XX(b), since the French measure was already justified under Art. 2.2 of TBT
6. Nullification or impairment under Art. XXIII:1(b)	-Mixed ruling -Fails to uphold the French position that nullification and impairment do not apply to Art. XX disputes -Decides that Canada incurred no nullification or impairment	-Agrees that Art. XX disputes are subject to a claim of nullification or impairment -Agrees that the French measure caused some impairment of Canadian producer’s expected share of the French market -Grants Canada preferential access to specified sectors of the relevant markets for a limited period of time

Table 6

Point Allocation v. Ruling Outcome in the Apple Varieties Case

Issue	US Allocation	Japan Allocation	Appellate Body Decision
1. Consistency of the SPS measure**	35	<u>70</u> *	For the complainants
2. Precautionary approach	<u>45</u>	20	For the complainants
3. Fact-finding prerogative	<u>20</u>	10	For the defendant

* Underlined numbers indicate that the party initially wins on this issue when AW is applied.

** Smallest ratio issue.

Table 7

Comparison of AW and Adjudication Outcomes in the Apple Varieties Case

Legal Issue	Appellate Body Ruling	AW Outcome
1. Consistency of the SPS measure	-Decides that the SPS measure is not consistent with the GATT/WTO agreements	-Decides that a less trade-restrictive measure proposed by the panel accomplishes Japan's desired level of protection and should be applied -Requires publication of this measure -Requires that Japan seek scientific information to justify the testing by variety requirement within a certain period of time
2. Admissibility of a precautionary approach	-Declares that the precautionary principle, as advocated by Japan, has not been incorporated into the GATT/WTO regime	- Maintains the appellate body decision
3. Fact-finding prerogative of the panel	-Declares that the panel acted beyond its mandate when it made factual findings in the case -Recognizes that in doing so, the panel indirectly favored the United States by relieving the US of its obligation to discharge the burden of proof in regards to these facts	-Remains silent on the issue -Reserves an opportunity to revisit the issue when the ongoing negotiations to reform the DSU arrive at a decision as to whether WTO panels will be composed of permanent, as opposed to ad hoc, members

Cristiane Lucena Carneiro 2013

Asbestos

Smallest ratio	Original allocation		
	E.U.	Canada	
5,47			
14,5631068	1	80	15
2,92397661	2	1	15
1,94931774	3	5	15
9,75609756	4	5	10
1,953125	5	4	40
	6	2,5	5
	7	2,5	0
	Revised allocation		
	1	<u>82,05</u>	15
	2	1,03	<u>15</u>
	3	5,13	<u>15</u>
	4	5,13	<u>10</u>
	5	4,1	<u>40</u>
	6	2,56	<u>5</u>
EU total	82,05		
Canada total	85		

Adjustment

$$82.05 + 5.13(x) = 85 - 10(x)$$

$$15.13(x) = 85 - 82.05$$

$$15.13(x) = 2.95$$

$$x = .1949768$$

EU adjusted total	83,05023	83,05
Canada adjusted total	83,050232	83,05

Beef Hormones

Smallest ratio	Original allocation			
	U.S.	Canada	E.U.	
1,26075349	1	40	80	85
5,055	2	15	3	2
3,37	3	25	5	5
1,77935943	4	0	5	5
1,06761566	5	5	0	3
	other	15	n/a	n/a
	other	n/a	7	n/a

First revised allocation			
	Average U.S. & CA		E.U.
1	60		85
2	9		2
3	15		5
4	2,5		5
5	2,5		3
other	7,5		n/a
other	3,5		n/a

Second revised allocation		
	U.S. & CA	E.U.
1	67,42	<u>85</u>
2	<u>10,11</u>	2
3	<u>16,85</u>	5
4	2,81	<u>5</u>
5	2,81	<u>3</u>

U.S. & CA total 32,58
 E.U. total 85

Adjustment

$$32.58 + 67.42(x) = 85 - 85(x)$$

$$152.42(x) = 52.42$$

$$x = .3439181$$

U.S. & CA adjusted total 55,767
 E.U. adjusted total 55,767

Apple Varieties

Smallest ratio	Poing allocation		U.S.	Japan
	U.S.	Japan		
2	1	35	<u>70</u>	
2,25	2	<u>45</u>	20	
2	3	<u>20</u>	10	
U.S. total	65			
Japan total	70			

Adjustment

$$65 + 35(x) = 70 - 70(x)$$

$$105(x) = 5$$

$$x = .047619$$

Adjusted U.S. total	66,66
Adjusted Japan total	66,66

