

Democracy, Consultation, and the Paneling of Disputes under GATT

MARC L. BUSCH

Queen's School of Business

Studies of the General Agreement on Tariffs and Trade (GATT) stress the role of formal panels in adjudicating trade conflicts. Yet most cases are settled beforehand in informal consultations. This article tests two sets of hypotheses about the decision to escalate GATT cases, one concerning the significance of the right to a panel, the other concerning the effects of political regime type. Results show that the right to a panel did not inspire more early settlement, more escalation, or more resolution through concessions at the panel stage; however, highly democratic dyads are more likely to achieve concession, but only at the consultation stage. This suggests that a strategy of tying hands, rather than adherence to legal (and other) norms of conflict resolution, is likely to shed light on the way democracies use formal third-party adjudication at GATT.

States have long sought to have their conflicts adjudicated by institutions. Nowhere is this more evident than in international trade, and nowhere more puzzling than in the case of dispute settlement under the General Agreement on Tariffs and Trade (GATT). Often dismissed as a quasi-judicial system held together by countless loopholes, GATT dispute settlement has nonetheless enjoyed marked success. Indeed, against all expectations, this institution has not only resolved an impressive number and variety of trade conflicts, but has helped anchor an increasingly rules-based global economy. In the search for clues to this puzzle, scholars have been quick to look at the formal side of dispute settlement, focusing on the role played by GATT panels in particular. Although few would disagree that these ad hoc tribunals are important, the fact is that most cases are never brought before a panel. Instead, the majority of cases are either withdrawn or resolved in consultations, an informal and required first stage in the GATT dispute settlement process. The decision to panel a case is thus an escalation that needs to be explained, one that raises questions about the design and efficacy of dispute settlement institutions more generally. This article takes up these questions

AUTHOR'S NOTE: For comments, I thank Ken Abbott, Alan Alexandroff, Lawrence Broz, Jeremy Busch, Jeff Frieden, Geoffrey Garrett, Rob Howse, Robert Hudec, Robert Keohane, Gary King, David Lazer, Lisa Martin, Petros Mavroidis, James McCall Smith, James Perry, Ernst-Ulrich Petersmann, Eric Reinhardt, Dani Rodrik, Ken Scheve, Beth Simmons, Anne-Marie Slaughter, Duncan Snidal, Mike Tomz, Joel Trachtman, Richard Tucker, David Welch, and two anonymous referees. Larry Lee, Sarah Matthews, and James Perry provided exceptional research assistance. Financial support was generously provided by the Weatherhead Center for International Affairs at Harvard. All shortcomings are, of course, my own.



JOURNAL OF CONFLICT RESOLUTION, Vol. 44 No. 4, August 2000 425-446
© 2000 Sage Publications, Inc.

and examines why some cases end in consultations, why others go to a panel, and how escalation shapes the prospects for resolving trade disputes at GATT.

Two variables are widely believed to help explain the paneling of cases under GATT: legal reform and the disputants' political regime types. First, scholars focus considerable attention on the right to a panel, a legal reform that was ushered in by the 1989 Dispute Settlement Procedures Improvements ("Improvements").¹ As a result of this legal reform, a defendant could no longer threaten to delay or block the formation of a panel, thus closing one of GATT's most legendary loopholes. Some observers hypothesize that with this loophole closed, complainants should have been expected to panel more of their cases, looking to escape the power politics of the consultation stage (Castel 1989; Pescatore 1997). Others disagree, hypothesizing that the Improvements should have resulted in more early settlements at the consultation stage. Indeed, under the "shadow of the law" (Mnookin and Wilson 1998), defendants would be expected to concede "strong" cases—that is, make concessions, by which I mean (possibly mutual) steps to liberalize trade to the satisfaction of the complainant—and complainants to withdraw "weak" ones. Ironically, the Improvements may also have encouraged concessions at the panel stage, since by removing the main obstacle to escalation, the right to a panel made the threat of retaliation more credible, perhaps underpinning a strategy of reciprocity (Axelrod 1984; Rhodes 1993). Still others (Canal-Forgues and Ostrihansky 1990) suggest that the right to a panel likely had very little effect on GATT dispute settlement, given the strength of implicit norms favoring access to a panel that were codified by the 1979 Understanding on Dispute Settlement ("Understanding") and its annex on customary practice in particular. This article provides some of the first empirical evidence bearing on this debate.

Second, many observers contend that pairs of democracies make greater use of dispute settlement institutions, with clear implications for studying GATT. One well-known argument along these lines is that democracies are more likely to adhere to legal (and other) norms of conflict resolution in their dealings with each other, given a mutual commitment to these norms domestically (see Dixon 1993; Raymond 1994). Along these same lines, democratic dyads may well prefer the greater formality of a panel—and its grounding in GATT jurisprudence more specifically—to the informality of consultations, motivating them to escalate more of their disputes. The question, of course, is how this preference might shape the prospects for successful dispute settlement. At least implicitly, much of the literature on international politics presumes that third-party adjudication helps democracies realize favorable outcomes in crisis management. In escalating from consultations to a panel, however, there is reason to suspect that democracies may encounter difficulty in this respect. More specifically, James Fearon (1997) argues not only that democracies are more likely to "tie their hands" by raising the domestic (and foreign) costs of backing down in a dispute, but that they rarely "bluff" in this respect, placing them at greater risk of conflict as a result.² In the context of GATT, this would suggest that democratic dyads, which are more capable of

1. The right to a panel had already been recognized in several of the Tokyo Round Codes (i.e., the antidumping code) but not more generally until the 1989 Improvements (see Vermulst and Driessen 1995, 146).

2. Fearon (1997) frames his argument largely in monadic terms, although he also sets out the logic of the dyadic hypothesis (pp. 81-82) tested here.

generating large “audience costs,” might be less likely to make concessions at the panel stage, owing to what Fearon calls the problem of lock in. If so, then escalating a case from consultations to a panel may have deleterious consequences for highly democratic dyads, notwithstanding their preference for more formal dispute settlement. This article sheds light on the merits of these claims.

I test these two sets of hypotheses against the population of cases filed for dispute settlement under GATT 1947.³ The empirical analysis is necessarily limited to these cases because there is insufficient data on consultations held under the auspices of the World Trade Organization (WTO).⁴ That said, the article’s results are at least as relevant to dispute settlement under the WTO for two reasons: first, the main dispute settlement provisions of GATT 1947—Articles XXII and XXIII—remain central to GATT 1994; and second, the WTO’s Dispute Settlement Understanding places Articles XXII and XXIII at the center of a more integrated process that now extends to all the covered agreements.⁵ With this in mind, the results challenge the conventional wisdom across the board. First, the Improvements did not result in more early settlement prior to a panel, more escalation, or more concessions at the panel stage. In short, the right to a panel did little to change the way in which those disputes brought to GATT were prosecuted or resolved.⁶ Interestingly, the Understanding did make concessions more likely at the panel stage, suggesting that this codification of GATT dispute settlement, rather than the right to a panel per se, helped encourage dispute resolution by making the threat of retaliation more credible.

Second, highly democratic dyads are indeed more likely than other dyads to successfully resolve their disputes through concessions, but only at the consultation stage. In fact, although highly democratic dyads are also more likely to escalate their disputes, they are no more likely than other dyads to settle through concessions at the panel stage. This would suggest that as highly democratic dyads escalate from consultations to a panel, the sizable audience costs that each side generates in signaling resolve make it increasingly difficult for them to settle disputes by offering concessions.

3. That is, all those cases brought under Articles XXII and XXIII of GATT’s dispute settlement procedures and not those filed under the Tokyo Round Codes, as recorded in the GATT Analytical Index (World Trade Organization [WTO] 1995). Even with the codes, antidumping, countervail, and subsidies cases were often brought up under Articles XXII and XXIII and are included in this population.

4. In particular, there is no data to trace WTO disputes back to the specific article under which consultations were held, nor to record the number of complainants taking part in these consultations. As is clear from the results, both variables shed considerable light on dispute settlement.

5. Differences in dispute settlement procedures across certain of the Tokyo Round Codes sometimes encouraged “forum shopping,” which is to say that complainants had incentive to choose among these procedures. The WTO’s Dispute Settlement Understanding curtails forum shopping and implies that the article’s findings about the dispute settlement procedures of GATT 1947 are more broadly applicable to the WTO. The other noteworthy difference between the two regimes, of course, is that the WTO has an appellate body. Whereas this innovation merits attention, the decision to proceed to the appellate body, much like the decision to request appellate review domestically, is of secondary importance in relation to the decision to litigate in the first place. In this sense, the escalation from consultations to a panel remains the most salient decision in WTO dispute settlement.

6. As I elaborate more fully below, the conclusions drawn in this article pertain only to the way legal reform and political regime type bear on those cases brought for GATT dispute settlement. More general conclusions concerning trade conflicts or the conditional employment of dispute settlement institutions are beyond the scope of this study.

In addition to what these findings say about GATT dispute settlement, they speak with equal conviction to the design and efficacy of international institutions. One key issue in this regard concerns the conditions under which informal mechanisms might be preferred to more formal ones (Feuerle 1985; Lipson 1991). GATT dispute settlement offers a useful window on this issue. On one hand, for example, member states have shown virtually no interest in arbitration as an alternative to seeking remedies under Articles XXII and XXIII (Montaña i Mora 1992). One reason for this may be that this process, in which the rules and procedures are left to the discretion of the disputants, is overly informal (see also Petersmann 1994, 1221). On the other hand, the extent to which democratic dyads are more likely than other dyads to make concessions at the consultation stage, but not at the panel stage, suggests that some informality in dispute settlement helps to facilitate negotiations, even under the threat of escalation (Reinhardt 1999b). Two implications follow. First, and more obvious, it may be more useful to examine the different ways in which informal and formal institutional mechanisms work in tandem rather than apart. This article provides insights along these lines, evaluating the factors that explain the likelihood of resolving disputes on each rung of GATT's escalatory ladder. Second, and less obvious, efforts to design or redesign institutions ought to focus as much on informal as on formal mechanisms. Indeed, the article's results make clear that for all the attention that panels have received in GATT legal reform the real action is likely to be found in consultations, where institutional investments may well yield greater dividends.

PUZZLE AND HYPOTHESES

The GATT dispute settlement process is straightforward. A case is first vetted in consultations in which the only requirement is that a defendant give "sympathetic consideration" to the complainant's grievances. If, within a set timetable, the case is not resolved to its satisfaction, the complainant can request the formation of a panel, an ad hoc tribunal that interprets the rights and obligations at stake and issues a ruling. Prior to the adoption of the Improvements, however, a defendant could threaten to delay or block the formation of a panel, leading observers to liken GATT to a court that could not deliberate (let alone rule) without the permission of the accused. Although, in practice, defendants did not make a habit of blocking panels (Van Bael 1988, 68; Vermulst and Driessen 1995, 134-35), the threat to do so, and the frequent use of delay tactics, were just as likely to deter a complainant from filing or escalating its case (Komura 1995; Petersmann 1997). By extending the right to a timely panel, the Improvements removed this threat, with clear-cut consequences (Petersmann 1994, 1209-11). As the defendant in a dispute over its various banana regimes (see Trachtman 1999), for example, the European Economic Community (EEC) openly conceded that the Improvements had, in fact, prevented it from delaying a panel and hoped that the panel would not adopt an accelerated timetable in hearing this complicated case (GATT code C/M/264).

This begs the question: at what stage in the dispute settlement process would the right to a panel be expected to make the greatest difference? Some observers hypothesize that the Improvements should have led complainants to panel more of their cases. To be sure, with power politics left largely unchecked in the consultation stage, complainants were at risk of having their day in court delayed or blocked. Not surprisingly, it has long been argued that automatic access to a panel should have revitalized dispute settlement (Castel 1989), given GATT “teeth” (Montañà i Mora 1993; Young 1995), and encouraged escalation to a panel in particular (Pescatore 1993, 29). This leads to the following hypothesis:

Hypothesis 1.1: Cases are more likely to have been paneled after the adoption of the 1989 Improvements.

Others hypothesize that rather than leading complainants to panel the bulk of their cases, the Improvements may instead have led to more early settlement—by which I mean concessions or the withdrawal of cases (the Findings section below distinguishes between these empirically)—at the consultation stage, and even to more concession at the panel stage. The argument is that with unfettered access to a panel there would be a stronger incentive for the disputants to carefully assess their chances of prevailing. Defendants would thus be expected to concede stronger cases filed against them, and complainants to withdraw weaker ones (Reinhardt 1999b). Put another way, the Improvements may have resulted in a dynamic similar to the one witnessed in civil litigation, where the vast majority of cases are settled in pretrial discovery under the shadow of the law (Mnookin and Wilson 1998). This suggests the following hypothesis:

Hypothesis 1.2: Cases are more likely to have been settled early after the adoption of the 1989 Improvements.

It might also be argued that the Improvements would lead to more concession at the panel stage because by removing the main hurdle to escalation, either disputant could more credibly threaten retaliation in a subsequent dispute (a threat that would be muted in the consultation stage prior to the request for a panel). Because retaliation has long been a staple of GATT power politics, the right to a panel would seem to make threats of this sort more credible. To the extent that threats of retaliation might underpin a strategy of reciprocity, the Improvements might thus have had the unintended effect of fostering more concession at the panel stage (Axelrod 1984; Rhodes 1993). This leads to the following hypothesis:

Hypothesis 1.3: Cases are more likely to have been resolved through concessions at the panel stage after the adoption of the 1989 Improvements.

For reasons related to this emphasis on legal procedures, regime type is also thought to shed light on the use of third-party adjudication in international politics. In particular, if democracies enjoy a “separate peace” because of their greater commitment to

legal (and other nonviolent) norms of conflict resolution (Owen 1994), then the propensity to panel disputes may vary with regime type as well. For example, Gregory Raymond (1994, 27-30) finds that pairs of democracies make more use of third-party adjudication than do other dyads, attributing this, in large measure, to their greater mutual trust in the law. Similarly, William Dixon (1993) finds that democratic dyads seek third-party mediation (including formal adjudication) of their disputes more often than do other pairings, owing to their mutual respect for conciliatory norms, including legal norms. Suggestive of this, for example, Costa Rica explained in its application for GATT membership that, "as a true democracy," the country placed a premium on "transparency and the rule of law in the trade policy field," and expressed its enthusiasm for interacting with like-minded democracies (GATT 1988-89). Indeed, to the extent that panels are formal, transparent, and guided by a body of case law (Van Bael 1988, 69; Petersmann 1994, 1175; Komuro 1995, 37; Davey 1998, 79; Jackson 1998, 83), they would appear to give democracies much of what they value in their domestic institutions and are thus more likely to be used where pairs of democracies can externalize these processes of conflict resolution. It follows that highly democratic dyads may therefore use dispute settlement institutions differently do other dyads, preferring the formality of panels to the informality of consultations.

Recent research showing that democracies tend to reach preferential trade agreements (PTAs) with other democracies taps this dynamic. The argument is that elected officials look to PTAs as a way to balance interest group demands for protectionism with voters' preferences for free trade by securing reciprocal market access with other countries (Mansfield, Milner, and Rosendorff 1998). As is increasingly clear from the design of many PTAs, dispute settlement institutions play a key role in this regard, even emerging as the deal maker in cases like the Canada-America Free Trade Agreement. Thus, a shared trust in third-party adjudication may further help explain why democracies tend to negotiate more PTAs with other democracies as opposed to negotiating less formal market access agreements. This lends itself to the following dyadic hypothesis:

Hypothesis 2.1: Cases are more likely to have been paneled the more democratic the dyad.

Much of the international politics literature hints that third-party adjudication is likely to help diffuse crises. In the GATT context, the question is whether the decision to escalate to a panel has implications for the settlement of disputes. One reason to suspect that it does is offered by Fearon (1997), who argues that democracies may fall victim to their own success at signaling resolve. More specifically, democracies are more likely to "tie hands," rather than "sink costs," as a way to raise the stakes of backing down before domestic constituents (i.e., generate audience costs), to which they are more accountable than nondemocracies. More interesting still, Fearon contends that this is rarely a bluff, because where leaders can generate sufficiently high audience costs, they are at a high risk of locking into a strategy of standing firm. Given that highly democratic states are likely to be able to generate large audience costs, highly democratic dyads may be especially vulnerable to this problem of lock in. Thus, where

these dyads do not settle early at the consultation stage, their preference for third-party adjudication may offer little hope for concessions at the panel stage, as in the following hypothesis:

Hypothesis 2.2: Cases paneled by more democratic dyads are less likely to have ended with concessions.

RESEARCH DESIGN

I conduct three tests of these hypotheses. The first looks at whether the Improvements resulted in more early settlement (i.e., the withdrawal of cases or resolution with concessions) at the consultation stage and whether pairs of democracies differ from other dyads in this regard. The second looks at whether the Improvements led to a greater propensity to escalate disputes to a panel and whether democratic dyads have a stronger preference for formal third-party adjudication (expressed by escalating to a panel) than do other dyads. The third looks at whether the Improvements facilitated concessions at the panel stage and whether pairs of democracies stand out in this respect.

Before proceeding to the tests, two issues merit attention. First, this study seeks to explain how legal reform and political regime type have shaped dispute settlement on each rung of GATT's escalatory ladder. This means that the article speaks only to the way in which those cases that were brought to GATT unfolded. It would be interesting, of course, to investigate whether legal reform and political regime type have had any bearing on the propensity to bring a case to GATT in the first place. Unfortunately, however, the data to test hypotheses of this sort are not available. That said, there is little reason to suspect that the probability of a case being filed at GATT is a function of some unobserved variable (or variables) that is highly correlated with the article's explanatory variables, in which case there would be a problem of selection bias. As far as the legal reform variable is concerned, for example, a candidate argument along these lines might be that only relatively straightforward (complicated) cases are brought to GATT, the logic being that the most (least) obvious trade violations are (not) subject to established disciplines, and that these concerns are highly correlated with the Improvements. This would seem to suggest that concessions ought (not) to be typical, yet the data belie these suspicions: concessions are evident in 68% of disputes filed for consultations and 66% of those disputes that escalate to a panel. More telling still, the majority of disputes (58%) in the data set center on agricultural products, an area in which GATT disciplines remain weak. Yet concessions are evident in 65% of those agricultural disputes that end in consultations and in 57% of those that go on to a panel. These data cast doubt on the suspicion that only the easiest (hardest) cases are brought to GATT to begin with.

As far as the variable for political regime type is concerned, one possible argument might be that (unobserved) pressures from industrial constituents motivate complainants to file for dispute settlement, and that these pressures are highly correlated with

democracy. If so, then one might expect democracies to prosecute their disputes in full public view, although I find instead that they disproportionately settle in the consultation stage, where there is little or no paper trail. Thus, whereas electoral concerns (through audience costs) appear to explain why highly democratic dyads are no more likely to make concessions at the panel stage, they are unlikely to predispose democracies to file at GATT in the first place, given the pattern of early settlement in consultations.⁷

Finally, another suspicion about selection bias concerns the way in which uncertainty about a ruling might influence the type of cases that are ultimately litigated. In particular, asymmetric information about the chances of prevailing at trial may serve to weed out the cases with the highest and lowest probability of success (where plea bargains would be expected), such that there would likely be an even distribution of complainant and defendant victories in those cases in which a ruling was issued. Where this were so, the population of observed cases would not be random (see Priest and Klein 1984). In stark contrast to this concern, however, a pro-plaintiff bias has long characterized GATT rulings, discounting the view that asymmetric information underpins a problem of selection bias in studying dispute settlement. Indeed, as Reinhardt (1998) shows, GATT panels find in favor of complainants in 66% of those cases in which a decision is handed down, a figure that jumps to 79% when excluding mixed rulings. It is still, of course, possible that other sources of selection bias may be at work; the point I want to emphasize here is that these sources are far from obvious. Nonetheless, it is worth repeating that the article is limited in scope to explaining the causes and consequences of escalating GATT disputes, a topic that merits much closer attention given that these factors fundamentally shape efforts to design or redesign dispute settlement institutions more broadly.⁸

Second, it is important to be clear on the definition of a dispute. A separate dispute is recorded for each country filing against a defendant, either by itself or with other complainants (see the variable MULTI below), as listed in the GATT Analytical Index (WTO 1995).⁹ The reason for separating out disputes this way is that not all of the complainants necessarily join together in the same consultations or in proceeding to a panel. For example, in a dispute with the United States over a customs user fee, Canada and the EEC filed as complainants, yet Canada consulted with the defendant on its own (WTO 1995, 780, case 126). Likewise, in a dispute over U.S. measures on the import and sale of tobacco, the EEC not only consulted with the defendant a month after most of the other nine complainants but, more interesting still, chose not to join them in paneling this dispute (WTO 1995, 787, case 193). These examples reveal why it is important to treat disputes as complainant-specific (e.g., Canada's user fee case) rather than as measure-specific (i.e., the user fee case).

7. One interesting and related possibility is that the Improvements may have changed the way in which democracies use GATT dispute settlement. However, the interaction term IMPROVE \times JDEM is insignificant in each of the models reported below.

8. I thank Geoffrey Garrett and Gary King for very helpful discussions on this issue.

9. A similar tack is taken in Horn, Mavroidis, and Nordström (1999).

THE MODEL

There are three dependent variables: (1) concessions at the consultation stage, (2) the decision to panel a dispute (which also sheds light on the tendency to withdraw cases at the consultation stage more generally), and (3) concessions at the panel stage. The variable CONCESSIONS is a dummy, coded 1 if the alleged violations were partially or fully remedied and (or) the disputants took efforts to liberalize trade; it was coded 0 if the status quo largely prevailed. CONCESSIONS is therefore coded with the complainant's initial grievance in mind, but it further takes into account any mutual policy adjustments aimed at achieving a compromise, making this variable consistent across both the consultation and panel stages. This means that at the panel stage it is especially important not to conflate concessions with the more narrow concern for a defendant's compliance with a ruling. In particular, concessions at the panel stage are more common before a panel ruling than after (Reinhardt 1998, 6). Even once a panel rules, complainants and defendants often make mutual policy adjustments regardless of the verdict's leanings, outcomes that CONCESSIONS takes into account.¹⁰ The data on CONCESSIONS have primarily been compiled by Eric Reinhardt (1999a), who extends Robert Hudec's (1993) cases and coding rules, although I have coded 50 additional disputes in line with Reinhardt's procedures, most pertaining to cases listed in the GATT Analytical Index that concluded in the consultation stage.¹¹ Finally, PANEL is a dummy coded 1 if a panel was formed and 0 otherwise.¹²

The first of the article's two main explanatory variables is IMPROVE, a dummy that is coded 1 if the dispute in question was filed after the adoption of the Improvements and 0 otherwise. This variable is expected to be positively signed in each of the models. This is true in the first model because the Improvements may have led to more early settlement at the consultation stage, in the second model because the Improvements may have led complainants to panel more cases, and in the third model because the Improvements may have led to more concession at the panel stage. (A dummy for the 1979 Understanding is also substituted for the Improvements to see if this codification of GATT dispute settlement procedures, rather than the right to a panel per se, was influential.) The second of the article's two main explanatory variables is JDEM, the dyad's joint democracy score, which is the lesser of the complainant's and defendant's Polity III democracy minus autocracy scores. As Oneal and Russett (1997, 274) explain, this way of measuring a dyad's joint democracy taps the insight—often referred to as the weak-link assumption—that the way two states interact is likely to be a function of the behavior of the less democratically constrained state (see also Dixon 1994).¹³

10. For example, despite a favorable verdict from a panel and the appellate body, it is widely expected that the United States, as the complainant, will make concessions on labeling as a way to bring the dispute over beef hormones to a close.

11. Data are from Reinhardt (1999a) and GATT (1952-69, 1955-, 1981-94, 1989), with 50 additional disputes coded in accordance with Reinhardt's coding rules.

12. This data set includes three disputes in which a request for a panel was blocked. Data are from WTO (1995).

13. Data are from Jagers and Gurr (1996, 1999) and Reinhardt (1999a). The EEC score is calculated as its members' maximum Polity III democracy value minus its members' minimum Polity III autocracy score.

Other attributes of the dispute are gauged by six explanatory variables. First, MULTI is the number of complainants joining the dispute.¹⁴ The bargaining literature insists that this variable should be important in that the more complainants involved in a dispute, the less likely a defendant is to meet the many—and often conflicting—demands being made of it. This in turn should lower the prospects for concessions and lead complainants to ask a panel to sort through the many issues at stake (see Petersmann 1997, 222). Second, LDCVDME is a dummy coded 1 if the dispute was brought by a less-developed country (LDC) against a developed market economy and 0 otherwise.¹⁵ The argument here is that LDCs tend to lack the political influence or resources to make the most of dispute settlement with more developed countries, putting them at a distinct disadvantage in the consultation stage in particular, where power politics is seldom kept in check (see Jackson, Davey, and Sykes 1995, 346).

Third, the variable TRADE is the ratio of the complainant's to the defendant's bilateral trade dependence, calculated as the sum of imports from and exports to the other, divided by that state's gross domestic product.¹⁶ The hypothesis is that the greater this ratio, the less bargaining power the complainant has in relation to the defendant, whose costs to nonagreement will therefore be lower. Fourth and fifth are C_OPEN and D_OPEN, which measure the openness of the complainant's and defendant's economies, respectively.¹⁷ The more a complainant's or defendant's economy is open to trade, the more likely the complainant or defendant is to fear retaliation. This suggests that they should be especially keen to resolve a dispute and panel more cases, perhaps looking to set a precedent that will influence the outcome of future cases (Katzenstein 1985). Finally, A23 is a dummy coded 1 if consultations were held under Article XXIII:1 and 0 otherwise. The reason for including this variable is that, although Article XXII:1 also fulfills GATT's consultation requirement, the language of Article XXIII:1 more explicitly deals with the issue of violations (WTO 1995, 617). It might thus be argued that complainants that choose this text are likely to have grievances that are more contentious, but also better defined, with respect to GATT rights. If so, then these disputes may have a higher probability of being paneled but are perhaps also more likely to end with concessions, given GATT's stronger grasp of the underlying issues (see Von Bogdandy 1992; Petersmann 1994, 1171). Descriptive statistics on all the variables are reported in Table 1.

14. Data are from WTO (1995).

15. A country is coded as a less-developed country if it registered as such with GATT. Data are from Reinhardt (1999a).

16. TRADE is the log of this ratio. Data are from International Monetary Fund (1958-77, 1972-79, 1981-94, 1994-) Reinhardt (1999a), and United Nations Statistical Office (1950-63). Where data in the appropriate direction were missing but in the other direction were available, the available figures were adjusted by multiplying reported bilateral exports by 1.1 and dividing imports by 1.1, following standard International Monetary Fund practice. The International Monetary Fund reports aggregate, combined bilateral trade figures for Belgium and Luxembourg. Accordingly, the trade dependence figures for Belgium and Luxembourg are based on identical bilateral trade numbers as a proportion of each country's individual GDP. EEC data are calculated by weighting the bilateral trade figures for each individual member by GDP.

17. In particular, openness is total imports and exports divided by GDP. For most disputes between 1950 and 1992, data are taken directly from Heston and Summers (1995). In all other cases, data are from World Bank (1971, 1976-87, 1997), United Nations Statistical Division (1948-), and International Monetary Fund (1948-). Codings for the EEC were calculated using external trade and GDP figures for the five largest economies, from the same sources.

TABLE 1
Descriptive Statistics

<i>Variable</i>	<i>Observations</i>	<i>Mean</i>	<i>Standard Deviation</i>	<i>Minimum</i>	<i>Maximum</i>
CONCESSIONS	252	0.67	0.47	0	1
PANEL	369	0.39	0.49	0	1
IMPROVE	369	0.24	0.43	0	1
JDEM	368	19.19	3.55	6.48	21
MULTI	369	2.30	2.58	1	11
LDCVDME	369	0.29	0.46	0	1
TRADE	355	0.10	3.08	-7.09	8.25
C_OPEN	359	37.58	22.09	8.53	136.93
D_OPEN	361	37.32	21.66	8.53	199.85
A23	369	0.53	0.45	0	1

Given the dichotomous nature of the dependent variables, CONCESSIONS (at both the consultation and panel stages) and PANEL, and the limited number of observations on CONCESSIONS, I estimate a rare-events logit model. As is well known, logit coefficients and predicted probabilities tend to be biased in small or unbalanced samples (i.e., where one outcome is more frequently observed than the other). Because a rare-events logit model corrects these coefficients and predicted probabilities, it is the appropriate method to employ here (King and Zeng 1999).¹⁸

THE FINDINGS

The results strongly challenge the conventional wisdom on GATT dispute settlement. Most striking in this respect are the results concerning the Improvements. Indeed, this widely touted legal reform did not lead complainants to panel more of their disputes (or, by extension, to a greater tendency to withdraw weaker cases), nor did it result in greater concessions at either the consultation or panel stages. In short, these results suggest that one of GATT's most celebrated legal reforms had no discernable effect on the process of dispute settlement.

The results concerning political regime type are no less intriguing. Highly democratic dyads are, indeed, more likely than other dyads to settle their disputes through concessions, but only at the consultation stage. Interestingly, these highly democratic dyads are also more likely to escalate their disputes, and yet once at the panel stage they are no more likely than other dyads to settle through concessions. In other words, whereas highly democratic dyads do express a greater preference for formal

18. It should be noted that for larger and more balanced samples, a rare-events logit model gives the same coefficients and predicted probabilities as an uncorrected logit model. In this sense, a rare-events logit model can be used more generally.

third-party adjudication at GATT, this does not translate into a greater tendency to make concessions at the panel stage.

THE CONSULTATION STAGE

The first test concerns concessions at the consultation stage. The findings are shown in Table 2. Overall, the model correctly predicts 85% of the cases.¹⁹ The main variables of interest tell an intriguing story. First, IMPROVE is insignificant, indicating that the right to a panel did not make concessions more likely at the consultation stage. Below, I consider whether the Improvements led to a greater propensity to withdraw cases. Here, the message is simple: dispute-resolving concessions were no more likely after the Improvements than before.

On the other hand, there is evidence that highly democratic dyads are in fact more likely to make concessions than are other dyads, at least at the consultation stage. In particular, JDEM is positively signed and statistically significant ($p < .05$). This variable is also substantively interesting: holding all other variables at their means, JDEM makes concessions 35% more likely when allowed to vary from its minimum to its maximum values, but given its skewed distribution it makes concessions only 4% more likely when varying from its mean to its maximum values. To better interpret this result, consider three hypothetical GATT disputes: the first between the United States and the EEC, in which JDEM takes on its maximum value; the second between India and the EEC, in which JDEM takes on its 25th percentile value; and the third between Brazil and the EEC, in which JDEM takes on its 10th percentile value. The finding for JDEM indicates that the probability of concessions is only 3% greater in the U.S.-EEC dispute than in the India-EEC dispute, but fully 21% greater in the U.S.-EEC dispute than in the Brazil-EEC dispute, holding the other variables at their means, including LDCVDME.

The most intriguing finding concerns D_OPEN, which is negatively signed and highly statistically significant ($p < .001$), revealing that defendants with more open economies are less likely to achieve resolution through concessions at the consultation stage. In fact, allowing D_OPEN to range from its 25th percentile value to its 75th percentile value decreases the probability of concessions by 31%, holding the others at their means. One explanation for this might be that because more open economies are surrounded by fewer protectionist walls, cases brought against them are likely to be less clear-cut (i.e., protection at the margin is more difficult to evaluate), and defendants at a greater loss to make further concessions. Although this runs counter to the hypothesis that more open economies work diligently to avoid retaliation (Katzenstein 1985), this finding is no less apparent at the panel stage, thus warranting a closer look.

The variable MULTI is also negatively signed and marginally statistically significant ($p < .1$), offering modest support for the hypothesis that concessions are less likely if several complainants besiege a defendant with many—and often conflicting—

19. There is moderate collinearity in several of the variables, although no auxiliary r -square exceeds 0.65 in models 1 or 3 or 0.7 in model 2. Robust standard errors are reported.

TABLE 2
Estimates of a Rare-Events Logit Model of Concession at the Consultation Stage

<i>Probability (CONCESSIONS = 1)</i>	<i>Coefficient</i>	<i>Robust Standard Error</i>
Constant	2.811***	0.95
IMPROVE	0.385	0.60
JDEM	0.087**	0.05
MULTI	-0.143*	0.11
LDCVDME	-0.089	1.11
TRADE	-0.090	0.11
C_OPEN	-0.017	0.02
D_OPEN	-0.056***	0.02
A23	0.580	0.54
Number of observations	103	
Percentage correctly predicted	85	

* $p < .1$. ** $p < .05$. *** $p < .001$. One-tailed p for all variables.

demands. Specifically, varying MULTI between its 25th and 75th percentile values makes concessions 2% less likely, holding all other variables at their means.

To check the robustness of these findings, the model was rerun with additional controls. First, the per capita gross domestic product (GDP) of both the complainant and defendant was included. In no case did the sign or significance of any variable change as a result of this, most importantly JDEM, thereby guarding against the competing argument that wealth, and not political regime type, is driving this result. Second, dummies were included to see if these results might be unduly influenced by the way the United States and the EEC prosecute disputes against each other, given their considerable use of GATT dispute settlement. The results hold up here as well. Third, dummies were included for whether the dispute centered around a tariff and whether the product in question was agricultural. Once again, these controls did not change the sign or significance of any other variable in the model. Fourth, the model was rerun using a measure of joint democracy that Richard Tucker (1997) has proposed, whereby JDEM equals the square root of the product of the complainant's and defendant's democracy scores, minus their autocracy scores. There is no change in the sign or significance of any variable as a result of doing so, including the sign and significance of JDEM.

One concern with respect to the results reported in Table 2 is that there is a high proportion of missing data for the variable CONCESSIONS. Because these parameters are estimated after listwise deletion of cases, they are clearly inefficient and potentially biased if this listwise deletion of cases is not random. I thus re-estimated the model with all of the controls, using multiple imputation, which more than doubled the number of observations.²⁰ Here, IMPROVE remains insignificant, whereas JDEM and D_OPEN are correctly signed and achieve the same level of statistical significance as

20. More specifically, the multiple imputed data sets include 224 observations versus 103 observations in Table 2. The algorithm is EMis, run using the software program *Amelia* (King et al. 1999). The results are based on estimates across 10 multiple imputed data sets.

reported in Table 2. Finally, I included a dummy for cases filed after the adoption of the Understanding, substituting this for IMPROVE. The hypothesis was that the codification of dispute settlement norms, rather than the right to a panel per se, may have been influential. Like IMPROVE, however, this variable turns out to be insignificant.

ESCALATION

The second test concerns the determinants of escalation. The findings are presented in Table 3. A Wald test for a selection effect linking this to the previous model is insignificant, allowing for interpretation of each on its own.²¹ The model fits the data well, correctly predicting 72% of the cases. Several of the variables are influential in explaining the paneling of disputes, though here as well, IMPROVE is insignificant and, if anything, has the wrong sign. This result should be interpreted in two ways. First, it makes clear that the right to a panel did not inspire escalation. Second, it also shows that the right to a panel did not result in more early settlement where early settlement means withdrawal of the case for whatever reason (i.e., not just as a result of having made concessions). Of course, this variable would change signs but not significance if the dependent variable were reversed or coded 1 for “no panel” rather than for “panel.” This finding, and the finding that the Improvements did not foster more concessions at the consultation stage, runs counter to the rational-expectations hypothesis about bargaining in the shadow of the law.

The results bear out the hypothesis that highly democratic dyads do prefer third-party adjudication, that is, they prefer a panel. Indeed, JDEM is positively signed and is statistically significant ($p < .001$), in line with other research showing that pairs of democracies make greater use of third-party adjudication (see Dixon 1996). Given the variable's skewed distribution, its substantive effect may best be illustrated by returning to the above example of hypothetical U.S.-EEC, India-EEC, and Brazil-EEC GATT disputes. The result here indicates that whereas a U.S.-EEC dispute is only 3% more likely to go to a panel than an India-EEC dispute, it is fully 18% more likely than a Brazil-EEC dispute to go to a panel, holding all other variables at their means, including LDCVDME.

The findings also reveal that escalation is more typical of LDCs filing against developed countries, complainants with more open economies, and complainants seeking consultations under Article XXIII:1. First, LDCVDME is positively signed and highly statistically significant ($p < .001$), raising the likelihood of a panel by 25% when compared to a dispute involving two advanced industrial states, holding all other variables at their means. This bears out the hypothesis that LDCs typically lack the political influence or resources to make the most of consultations with more developed countries, preferring instead to seek a ruling from a panel. Second, C_OPEN carries the predicted sign, is significant at the .1 level, and increases the probability of a panel by 7% when allowed to vary between its 25th and 75th percentile values, holding all other variables at their means. One reason that complainants with more open economies

21. Specifically, a Wald test run on a probit model with sample selection is insignificant in this case.

TABLE 3
Estimates of a Rare-Events Logit Model of Paneling

<i>Probability (PANEL = 1)</i>	<i>Coefficient</i>	<i>Robust Standard Error</i>
Constant	-2.656***	0.49
IMPROVE	-0.230	0.28
JDEM	0.065***	0.02
MULTI	-0.052	0.06
LDCVDME	1.034***	0.38
TRADE	0.007	0.06
C_OPEN	0.009*	0.01
D_OPEN	0.006	0.01
A23	1.813***	0.26
Number of observations	352	
Percentage correctly predicted	72	

* $p < .1$. *** $p < .001$. One-tailed p for all variables.

may prefer to request a panel is that given their dependence on trade they might derive greater utility from a ruling that sets a precedent, constraining their trade partner's future actions. Notice that TRADE, which is a measure of bilateral trade dependence, is not significant here.

Third, A23 is positively signed and highly statistically significant, indicating that those cases filed for consultations under this text, as opposed to Article XXII:1, are more likely to be paneled. This finding suggests that the more specific language of Article XXIII:1 about violations does, indeed, attract more contentious cases. More specifically, a case brought for consultations under Article XXIII:1 is 40% more likely to go to a panel than one that is not, holding the other variables at their means.

Finally, the inclusion of the controls for the complainant's and defendant's per capita GDP, U.S.-EEC disputes, tariffs, and agricultural products does not change the sign or significance of any variable in the model. Using Tucker's (1997) joint democracy measure also shows the strength of JDEM and the robustness of all the other findings. Finally, the dummy for the Understanding is insignificant in this analysis, as it is in the analysis above. Although there are relatively few missing data for the variable PANEL, multiple imputed parameter estimates are identical to those reported in Table 3, with and without the controls.

THE PANEL STAGE

The third test concerns concessions at the panel stage. The results are in Table 4. The model correctly predicts 79% of the cases. Importantly, testing for a selection effect indicates that this model can be interpreted separately from the paneling model above.²²

22. Specifically, a Wald test run on a probit model with sample selection is insignificant in this case.

TABLE 4
Estimates of a Rare-Events Logit Model of Concession at the Panel Stage

<i>Probability (CONCESSIONS = 1)</i>	<i>Coefficient</i>	<i>Robust Standard Error</i>
Constant	1.031	0.77
IMPROVE	0.131	0.76
JDEM	-0.010	0.04
MULTI	0.077	0.11
LDCVDME	0.214	0.64
TRADE	-0.350***	0.14
C_OPEN	0.006	0.01
D_OPEN	-0.024***	0.01
A23	0.901**	0.41
Number of observations	133	
Percentage correctly predicted	79	

* $p < .1$. ** $p < .05$. *** $p < .001$. One-tailed p for all variables.

Neither of the two main variables of interest sheds any light on the prospects for concessions at the panel stage. First, IMPROVE is correctly signed but insignificant, revealing that the right to a panel did not bolster concessions at the panel stage by making reciprocity more viable (i.e., the threat of retaliation more credible). The bigger picture, of course, is that this variable is insignificant in all three models, making clear that the Improvements did little to influence the workings of GATT dispute settlement. That said, the dummy for the Understanding is positively signed and marginally statistically significant in the model with all of the controls ($p < .05$), suggesting that this codification of GATT dispute settlement procedures, rather than the right to a panel per se, encouraged concessions at the panel stage, most likely by making the threat of retaliation more credible.²³ Indeed, cases filed after the adoption of the Understanding were 21% more likely to be resolved through concession at the panel stage than those cases that were filed before 1979. Together with the findings concerning dispute settlement at the consultation stage, this result begs a closer look at GATT's informal side.

Second, JDEM is incorrectly signed and insignificant. In other words, whereas highly democratic dyads are more likely to offer concessions at the consultation stage, they are no more likely to do so at the panel stage, giving some weight to Fearon's (1997) argument about the risks of lock in where tying hands is the preferred bargaining strategy. Indeed, to the extent that highly democratic dyads can generate large audience costs on both sides, this result suggests that they may well fall victim to their own success in signaling resolve. With democracies composing an ever greater share of the WTO's membership, moreover, this finding is not encouraging with respect to the use of formal third-party adjudication in dispute settlement.²⁴

23. The multiple imputed parameter estimate for this variable is also significant at the .05 level.

24. The finding is not that highly democratic dyads are less likely to cooperate but rather that they are no more likely to cooperate. When framed against the finding that these dyads have a higher probability of reaching early settlement and a higher probability of paneling their disputes, their lack of greater concession at the panel stage would seem to resonate with the central point of Fearon's (1997) argument.

The results also reveal that concessions are less likely when the complainant is more dependent on trade with the defendant than vice-versa and when the defendant's economy is more open, but that concessions are more likely when consultations are held under Article XXIII:1. First, TRADE is both negatively signed and highly statistically significant ($p < .01$), bearing out the hypothesis that the greater the ratio of the complainant's to the defendant's bilateral trade dependence, the less bargaining power the former wields in relation to the latter. This variable also exerts a rather sizable influence on concessions: TRADE makes concession 26% less likely when allowed to vary from its 25th to its 75th percentile value, with all other variables at their means. Second, D_OPEN is also negatively signed and statistically significant ($p < .001$), revealing that, just like at the consultation stage, the more open the defendant's economy, the less likely it is to make concessions at the panel stage. In fact, D_OPEN decreases the probability of concession by 13% when allowed to vary between its 25th and 75th percentile values, holding the others at their means. This finding is robust, moreover, to the inclusion of the U.S.-EEC dummies. In contrast to the expectation that more open economies will go to great lengths to avoid retaliation, they instead appear to stand firm at GATT as often before as after the Improvements. Taken together, these findings speak to the importance of power politics at the panel stage, notwithstanding legal reform.

Third, A23 is positively signed and significant ($p < .05$), making concessions at the panel stage fully 21% more likely than in those cases not originating in Article XXIII, holding all other variables at their means. This supports the hypothesis that cases brought under this text are better defined with respect to GATT rights, in contrast to those brought under Article XXII:1, the text of which is less specifically focused on violations per se.²⁵ This finding, however, is not robust to the inclusion of the U.S.-EEC dummies, although it is to the inclusion of the per capita GDP controls, implying that experience, and not just wealth (i.e., resources), may help complainants to articulate grievances in a way that gets results at GATT. Aside from this, the multiple imputed parameter estimates for the independent variables and all of the controls are entirely consistent with those reported in Table 4, including when Tucker's (1997) measure of joint democracy is used.

IMPLICATIONS

The article began by asking why some GATT disputes end in consultations, why others go to a panel, and how this decision to escalate, in turn, shapes the prospects for resolving trade disputes. The findings strongly challenge the conventional wisdom with respect to both the effects of legal reform and political regime type. More broadly, the article's findings suggest that, for all the attention that formal panels receive in the literature, the real action at GATT is in the consultation stage. Here, I consider the

25. A dummy coded 1 for Article XXII: 1 consultations (0 otherwise) is negatively signed but insignificant when included in this model.

implications of these findings for the WTO and the design and efficacy of dispute settlement institutions more generally.

First, the most striking finding is that the Improvements did not lead to more paneling, more early settlement (including the withdrawal of cases) at the consultation stage, or more concession at the panel stage. Some observers may respond to this by arguing that it bears out the efficacy of GATT dispute settlement prior to the Improvements. Indeed, the claim could be made that, because defendants did not block cases as often as might have been expected, the right to a panel was a modest legal reform. The problem with this argument is that delay tactics were common, even if blocking was less so, and the demand for this legal reform was not surprisingly widespread. In addition, the right to a panel has been touted as one of the pillars of the greater legalism of GATT dispute settlement, not only at the panel stage but at the consultation stage as well. To be sure, if there is something to the hypothesis that concessions were more likely under the shadow of the law, as in civil litigation, then the evidence should bear this out at the consultation stage. It does not. Similarly, the Understanding did not facilitate concessions at the consultation stage, nor did it lead to more paneling. Rather, it seems that this informal codification of GATT dispute settlement encouraged concessions at the panel stage, a result that would seem to bear out the hypothesis that credible threats of retaliation, rather than greater legalism per se, helped underwrite conflict resolution. In sum, the article's findings cast considerable doubt on one of GATT's most important legal reforms, thereby calling into question the likely benefits of the GATT's or WTO's greater legalism as well.

Second, the most interesting results concern dispute settlement among democratic dyads. Specifically, highly democratic dyads are more likely to achieve resolution through concessions only at the consultation stage. Interestingly, these dyads are also more likely to escalate to a panel, yet at this stage they are no more willing to make concessions than other dyads. How are these results to be interpreted? Pairs of democracies realize greater concessions in the consultation stage where there is less of a paper trail, facilitating deals that might otherwise be politically costly with respect to domestic and foreign audiences. Where early settlement proves difficult, these dyads are especially likely to escalate, but they are no more likely than other dyads to make concessions at the panel stage. This finding lends some support to Fearon's (1997) concern about lock in, where tying hands is the preferred bargaining strategy. Because highly democratic dyads are likely to be able to generate large audience costs, the lack of concessions made by these dyads at the panel stage would seem to bear this out.

Two implications follow. First, research on GATT dispute settlement should be careful to distinguish between cases that play out in the consultation stage and those that go on to the panel stage. Most studies code disputes without attention to this distinction, and in doing so gloss over important differences in the dispute settlement process. The findings reported here make this clear, substantially qualifying the result reported elsewhere that democracies, for example, are no more cooperative at GATT (Sherman 1999). Along the same lines, greater attention needs to be paid to the decision to escalate disputes. Indeed, patterns of escalation are important in gauging the

prospects for settling trade conflicts and in assessing how reforms of the dispute settlement process might help in this respect.

This raises a much broader implication for the design and redesign of institutions. Specifically, the article's findings endorse the view that informal mechanisms are more than just preamble to formal ones. Although GATT legal reform has largely shone the spotlight on the panel stage, most cases never make it beyond the consultation stage. And while the two stages are, of course, linked, I find no evidence that the Improvements altered the way in which consultations have proceeded. One implication of this is that institutional resources are likely to yield greater dividends when they are invested directly in the consultation stage, as opposed to further indirect investment in the panel stage. At least on the dispute settlement front, much of GATT legal reform has taken a trickle-down approach to firming up the consultation stage, though this article suggests that direct investments would yield far greater returns, especially for LDCs.

In a related vein, another implication is that efforts to increase transparency at the consultation stage may be counterproductive, particularly as more measures become "actionable" at the WTO. The greater propensity for democratic dyads to achieve concessions at the consultation stage would seem to suggest that the lack of a paper trail is helpful in this regard, offering the disputants some cover from audiences at home and abroad. Calls for greater transparency in dispute settlement are very much in vogue, yet the article's results suggest the need to preserve the room that states have to negotiate away from the public's view, notably at the consultation stage. This is not a plea for greater secrecy at the WTO but rather a word of caution about the rush toward greater legalism. In short, although informal and formal mechanisms no doubt work in tandem, both require institutional investments tailored to their differences.

CONCLUSION

The success of GATT dispute settlement is an enduring puzzle in the study of international law and politics. In the search for clues to this puzzle, scholars have been quick to look at the workings of formal panels, even though most disputes are resolved in consultations. This article empirically examines the escalation of GATT disputes and focuses on the role of legal reform and political regime type in particular. On both counts, the evidence strongly challenges the conventional wisdom. First, the right to a panel, which by many accounts was one of GATT's most important legal reforms, did not result in more early settlement at the consultation stage, more escalation to a panel, or greater concession at the panel stage. Second, highly democratic dyads are indeed more likely to make concessions, but only in the consultation stage. This is surprising in light of other findings in the literature that democracies make greater use of formal third-party adjudication, presumably with an eye to resolving conflict. The twist here is that, although these dyads do prefer third-party adjudication (i.e., a panel), they are no more likely than other dyads to make concessions as a result, probably because of the audience costs that they generate in signaling resolve. The article concludes that proponents of GATT legal reform, and the institutions literature more gen-

erally, would do well to take a closer look at the role played by informal mechanisms in dispute settlement.

REFERENCES

- Axelrod, Robert. 1984. *Evolution of cooperation*. New York: Basic Books.
- Canal-Forgues, Eric, and Rudolf Ostrihansky. 1990. New developments in the GATT dispute settlement process. *Journal of World Trade* 24 (2): 67-89.
- Castel, Jean-Gabriel. 1989. The Uruguay Round and the improvements to the GATT dispute settlement rules and procedures. *International and Comparative Law Quarterly* 38 (October): 834-49.
- Davey, William J. 1998. The WTO/GATT world trading system: An overview. In *Handbook of WTO/GATT Dispute Settlement*, vol. 1, edited by Pierre Pescatore, William J. Davey, and Andreas F. Lowenfeld. Ardsley, NY: Transnational.
- Dixon, William J. 1993. Democracy and the management of international conflict. *Journal of Conflict Resolution* 37 (1): 42-68.
- . 1994. Democracy and the peaceful settlement of international conflict. *American Political Science Review* 88 (1): 14-32.
- . 1996. Third-party techniques for preventing conflict escalation and promoting peaceful settlement. *International Organization* 50 (4): 653-81.
- Fearon, James. 1997. Signaling foreign policy interests: Tying hands versus sinking costs. *Journal of Conflict Resolution* 41 (1): 68-90.
- Feuerle, Loie. 1985. Informal consultation: A mechanism in security council decision-making. *New York University Journal of International Law and Politics* 18 (1): 267-308.
- General Agreement on Tariffs and Trade. 1952-69. *Basic instruments and selected documents*. Geneva: General Agreement on Tariffs and Trade.
- . 1955-. *Basic instruments and selected documents supplement*. Geneva: General Agreement on Tariffs and Trade.
- . 1981-94. *GATT focus*. Geneva: General Agreement on Tariffs and Trade.
- . 1988-89. *Basic instruments and selected documents supplement*. Geneva: General Agreement on Tariffs and Trade.
- . 1989. *GATT focus*, vol. 66 (November). Geneva: General Agreement on Tariffs and Trade.
- Heston, Alan, and Robert Summers. 1995. Penn World Tables 5.6. Available at <http://pwt.econ.upenn.edu/>.
- Horn, Henrik, Petros C. Mavroidis, and Hakan Nordström. 1999. *Equity in the WTO dispute settlement system: Participation*. Geneva: Center for Economic Policy Research, WTO.
- Hudec, Robert E. 1993. *The GATT legal system and world trade diplomacy*. 2d ed. Salem, NH: Butterworth Legal Publishers.
- International Monetary Fund. 1948-. *International financial statistics*. Washington, DC: International Monetary Fund.
- . 1958-77. *Direction of trade*. Washington, DC: International Monetary Fund.
- . 1972-79. *Direction of trade yearbook*. Washington, DC: International Monetary Fund.
- . 1981-94. *Direction of trade statistics*. Washington, DC: International Monetary Fund.
- . 1994-. *Direction of trade statistics quarterly*. Washington, DC: International Monetary Fund.
- Jackson, John H. 1998. Designing and implementing effective dispute settlement procedures: WTO dispute settlement, appraisal and prospects. In *The WTO as an international organization*, edited by Anne O. Krueger. Chicago: University of Chicago Press.
- Jackson, John H., William J. Davey, and Alan O. Sykes. 1995. *Legal problems of international economic relations*. 3rd ed. St. Paul, MN: West Group.
- Jagers, Keith, and Ted Robert Gurr. 1996. *Polity III: regime change and political authority, 1800-1994*. Ann Arbor, MI: Inter-University Consortium for Political and Social Research.

- . 1999. Polity 98: Regime characteristics, 1800-1998. Available at <http://www.bsos.umd.edu/cidcm/polity/>.
- Katzenstein, Peter J. 1985. *Small states in world markets: Industrial policy in Europe*. Ithaca, NY: Cornell University Press.
- King, Gary, James Honaker, Anne Joseph, and Kenneth Scheve. 1999. Analyzing incomplete political science data: An alternative algorithm for multiple imputation. Unpublished manuscript, Harvard University.
- King, Gary, and Langche Zeng. 1999. Logistic regression in rare events data. Unpublished manuscript, Harvard University.
- Komuro, Norio. 1995. The WTO dispute settlement mechanism: Coverage and procedures of the WTO understanding. *Journal of World Trade* 29 (4): 5-95.
- Lipson, Charles. 1991. Why are some international agreements informal? *International Organization* 45 (4): 495-538.
- Mansfield, Edward D., Helen V. Milner, and B. Peter Rosendorff. 1998. Why democracies cooperate more: Electoral control and international trade agreements. Paper presented at the annual meeting of the American Political Science Association, Boston, MA.
- Mnookin, Robert, and Robert Wilson. 1998. A model of efficiency discovery. *Games and Economic Behavior* 25:219-50.
- Montaña i Mora, Miquel. 1992. A GATT with teeth: Law wins over politics in the resolution of international trade disputes. LLM thesis, Harvard Law School.
- . 1993. A GATT with teeth: Law wins over politics in the resolution of international trade disputes. *Columbia Journal of Transnational Law* 31 (1): 103-80.
- Oneal, John R., and Bruce M. Russett. 1997. The classical liberals were right: Democracy, interdependence, and conflict, 1950-1985. *International Studies Quarterly* 41 (2): 267-93.
- Owen, John M. 1994. How liberalism produces democratic peace. *International Security* 19 (2): 87-125.
- Pescatore, Pierre. 1993. The GATT dispute settlement mechanism: Its present situation and its prospects. *Journal of International Arbitration* 10 (1): 27-42.
- . 1997. *WTO/GATT dispute settlement: Digest with key words and summaries*. Irvington-on-Hudson, NY: Transnational.
- Pescatore, Pierre, William J. Davey, and Andreas F. Lowenfeld. 1991-. *Handbook of GATT dispute settlement*. Ardsley-on-Hudson, NY: Transnational Juris.
- Petersmann, Ernst-Urlich. 1994. The dispute settlement system of the World Trade Organization and the evolution of the GATT disputes settlement system since 1948. *Common Market Law Review* 31 (6): 1157-244.
- . 1997. *The GATT/WTO dispute settlement system*. London: Kluwer.
- Priest, George L., and Benjamin Klein. 1984. The selection of disputes for litigation. *Journal of Legal Studies* 13 (January): 1-55.
- Raymond, Gregory A. 1994. Democracies, disputes, and third-party intermediaries. *Journal of Conflict Resolution* 38 (1): 24-42.
- Reinhardt, Eric R. 1998. Adjudication without enforcement can be influential. Unpublished manuscript, Emory University.
- . 1999a. Aggressive multilateralism: The determinants of GATT/WTO dispute initiation, 1948-1998. Unpublished manuscript, Emory University.
- . 1999b. Tying hands without a rope: Rational domestic response to international institutional constraints. Unpublished manuscript, Emory University.
- Rhodes, Carolyn. 1993. *Reciprocity, U.S. trade policy, and the GATT regime*. Ithaca, NY: Cornell University Press.
- Sherman, Richard S. 1999. Democracy and trade conflict. Paper presented at the annual meeting of the American Political Science Association, Atlanta, GA.
- Trachtman, Joel P. 1999. The domain of WTO dispute resolution. Paper presented at the Conference on WTO Dispute Resolution, Harvard Law School, Cambridge, MA.
- Tucker, Richard. 1997. Are democratic dyads more peaceful? Paper presented at the annual meeting of the Peace Science Society International, Indianapolis, IN.

- United Nations Statistical Division. 1948-. *Statistical yearbook*. New York: United Nations.
- United Nations Statistical Office. 1950-63. *Direction of international trade*. Lake Success, NY: United Nations Statistical Office.
- Van Bael, Ivo. 1988. The GATT dispute settlement procedure. *Journal of World Trade* 22 (4): 67-77.
- Vermulst, Edwin, and Bart Driessen. 1995. An overview of the WTO dispute settlement system and its relationship with the Uruguay Round agreements—Nice on paper but too much stress for the system? *Journal of World Trade* 29 (2): 131-61.
- Von Bogdandy, Armin. 1992. The non-violation procedure of Article XXIII:2 GATT—Its operational rationale. *Journal of World Trade* 26 (4) 1992: 95-111.
- World Bank. 1971. *World tables*. Washington, DC: International Bank for Reconstruction and Development.
- . 1976-87. *World tables*. Baltimore: Johns Hopkins University Press.
- . 1993. *World tables of economic and social indicators, 1950-1992*. Washington, DC: World Bank.
- . 1997. *The world development indicators 1997*. CD-ROM. Washington, DC: World Bank.
- World Trade Organization. 1995. *Guide to GATT law and practice (analytical index)*. Vol. 2. Geneva: World Trade Organization and Bernan.
- Young, Michael K. 1995. Dispute resolution in the Uruguay Round: Lawyers triumph over diplomats. *International Lawyer* 29 (5): 389-409.