

CHAPTER 6

Dispute Settlement, Compliance and Domestic Politics

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Abstract

Many functionalist models of international cooperation rely on punishment by states to enforce cooperation. However, the empirical record suggests that such state-based accounts offer an incomplete explanation of international trade cooperation. We argue that when theoretical approaches are adjusted to incorporate aspects of domestic politics and institutions, two key insights emerge. First, political pressure from domestic industries can be key in creating demand for violations of trade agreements. Since such pressure is affected by stochastic shocks, the temptation of leaders to commit trade violations can vary over time. The presence of a dispute settlement procedure (DSP) provides flexibility that allows leaders to respond to such pressure by occasionally committing violations and then compensating their trading partners, if the DSP finds that the violation was not subject to exceptions in the trading agreement. This flexibility enhances the willingness of leaders to sign cooperative agreements in the first place. Second, domestic politics can function as an enforcement mechanism for ensuring compliance with international trade agreements and DSP rulings. Voters can condition their electoral decisions on whether their leader complies with socially beneficial trade agreements. The DSP plays an important role in this account as an information-provider. For voters to hold their leaders accountable, they need information about what choices their leader has made and whether his actions constitute compliance with an international agreement. The DSP provides transparency and reduces uncertainty about these factors.

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1. Introduction

The world trading system has become significantly more “legalized” in recent times (Goldstein and Martin, 2000), with the adoption of the Dispute Settlement Understanding (DSU) as part of the agreements forming the World Trade Organization (WTO). However, the WTO has no enforcement powers, “no jailhouse, no bail bondsmen, no blue helmets, no truncheons, no tear gas” (Bello, 1996), to induce compliance. In the absence of any explicit and institutionally specific power of enforcement, what role does international adjudication play in facilitating cooperation and how might we think we about enforcement mechanisms that lie outside the institutional structure?

The standard view of the WTO is that institutions must be “capable of identifying and sanctioning (or at least authorizing sanctions against) cheating on the cooperative equilibrium” (Trebilcock and Howse, 1999, p. 54). Implicit in this notion is that cooperation can be sustained by repeated cooperative interactions if there is a threat of punitive retaliation for noncooperation. In this standard account, findings by the DSU panels or the Appellate board are complied with and offending measures are removed because of fear of punishment and retaliation, authorized or otherwise, from the plaintiff state. This intuition emerges from viewing the international trading system through the lens of the standard infinitely repeated prisoners’ dilemma (PD). In this framework, the Pareto-superior condition of mutually low tariffs is sustained by the threat of punishment should one player unilaterally defect by raising trade barriers. Many of our functionalist models of international cooperation also rely more broadly, at some level, on punishment by states in order to enforce cooperation.

However, in the arena of international trade disputes, the empirical record provides many examples of states that fail to comply with their obligation to maintain low-trade barriers. Moreover, international punishment for such violations is almost nonexistent. Finally, empirical research on the relationship between the regime type of states and their willingness to join trade agreements and participate in the DSU contradict the theoretical implications of standard PD accounts on the relationship between patience and cooperation. These facts suggest that accounts of international trade that rely upon state-based punishments and retaliation (authorized by the DSU or not) in order to enforce cooperation offer an incomplete explanation. In this chapter, we argue that when our theoretical approaches are adjusted to incorporate aspects of domestic politics and institutions, two key insights emerge.

First, domestic politics can create demand for trade violations. If stochastic shocks such as changes in the state of the economy or the lobbying power of affected industries are possible, then the temptation of

leaders to defect from cooperative trading and commit trading violations can vary over time. Adjudicatory mechanisms such as the dispute settlement procedure (DSP) can be key to sustaining trade agreements in such a world because the adjudicatory process injects flexibility into trading regimes: the existence of the DSP ensures that agreements can sometimes be violated and compensation granted. This allows cooperation to resume when the relative temptation to defect subsides. The flexibility provided by the DSP enhances the overall stability of trade agreements and institutions since it ensures that greater cooperation will take place in equilibrium and allows for cooperative arrangements to survive even after violations have occurred.

Second, domestic politics can be the mechanism by which leaders are punished for committing violations. If we abandon the heuristic of the unitary actor state and focus on the incentives of the leaders who are accountable to citizens, we can see that electoral incentives are one way by which leaders can be induced to engage in cooperation, rather than committing trading violations that only provide short-run benefits. The DSP is central to this account because it can both clarify uncertainty about whether a trading violation has occurred and provide transparency about the policy decisions of the leaders.

The DSP can facilitate punishment and enforcement mechanisms that are essentially *domestic* in nature, rather than state-based. Domestic, rather than international, punishments of policymakers more successfully explain observed evidence of compliance with international obligations and the findings of the DSU in particular.

We proceed as follows. First, we provide a brief overview of standard PD accounts of international cooperation and their empirical implications. Next, we show that the empirical record on international trade disputes directly contradicts many implications of these theoretical models. We then move on to a discussion of the relationship between domestic politics and trade disputes. We examine the role of domestic politics in generating demand for trade violations, and the role of the DSP in enhancing both the flexibility and stability of trading agreements. Then we discuss the use of domestic electoral incentives to enforce cooperative trading agreements and compliance with DSP rulings. Finally, we conclude.

2. Punishment and patience in the standard PD framework

Within the international-relations literature, Oye (1986) exemplifies the use of a 2×2 normal form structure where variation across issue areas is captured by varying the payoffs associated with each pair of actions. Games that address “collaboration” issues – such as international trade – are described as having a PD structure. While states would jointly benefit

from cooperatively lowering their trade barriers and stimulating international trade, each state has the temptation to defect from such cooperation by unilaterally raising its own trade barriers. In the canonical form of the infinitely repeated PD in which two countries simultaneously set trade barriers over time, a number of models have examined how variation in the nature of punishment actions affects state behavior.

2.1. Standard PD theories of international cooperation

In the international trade literature, (Johnson, 1953–54) is an early work that characterizes the behavior of social welfare-maximizing governments when countries have monopoly power in trade. He shows that the Nash equilibrium in tariff setting yields Pareto-inefficient protectionism. With the popularization of the Folk theorem (Rubenstein, 1979), it became clear that payoffs on the Pareto frontier were supportable in equilibrium, and one manner by which such payoffs can be achieved is by the repetition of the one-shot game under the threat of grim trigger punishments for noncooperation and sufficiently large discount factors.¹

In most approaches, the punishment applied along the equilibrium path is severe. Equilibria often rely on the grim trigger strategy, the most severe sequentially rational punishment that is possible, in which there is infinite reversion to the worst possible Nash equilibrium if players fail to act cooperatively. In other approaches, these punishments are limited in various ways. For example, the number of punishment periods can be limited (as in “tit-for-tat” or “tit-for- n -tats” where n is some finite number as in Downs and Rocke, 1995) or the magnitude of the punishment can be fixed (Ethier, 2001). In all of these accounts, for cooperation under the threat of a punishment strategy to be a Nash equilibrium to the repeated trade-barrier-setting game, the players need to be sufficiently patient. That is, in order for the fear of the punishment to be sufficiently dissuasive, the value that the players put on their returns in the future punishment periods must be sufficiently large in present-value terms.

These two theoretical elements of punishment and patience yield several key empirical implications. First, in this complete information environment, when there are violations of international trade agreements – “nullification or impairment of rights” in the language of the WTO – we should expect to see punishment or retaliation authorized and implemented without failure. Second, since punishment is key to sustaining cooperation, we should expect to observe severe punishments in order to increase the overall level of cooperation. Finally, if there is some mapping

¹ Fearon (1998) provides a recent example where, after a bargaining phase, enforcement of a PD game relies on the grim trigger strategy, in which if either player is observed to defect, then both defect forever afterwards.

from patience to polity type, we should see only the more patient polities joining trade agreements, abiding by their international obligations, and complying with rulings of the DSU. Democracies are often described as being less patient than autocracies: executives rarely look beyond the next election or at most the one after that, giving democracies shorter time-horizons relative to other polities (Olson, 2003; Schmidt, 2002). Hence the requirement of patience for sustaining cooperation in an infinitely repeated PD would suggest that democracies are less likely to join international trade agreements than other polity types.

2.2. Empirical contradictions of the standard PD theory

All these predictions are grossly contradicted by the empirical record. When violations of international trade agreements occur, they are rarely (if ever) followed by punishment and retaliation. Even when retaliations take place, they are rarely punitive in nature, which means that the severity of punishments is very limited. Finally, democracies are systematically more likely to join trade agreements and comply with DSU rulings than non-democracies. We consider each of these empirical regularities in turn.

2.2.1. Retaliation is rare following non-compliance

It is generally asserted that countries comply with the findings of the DSU. Hudec (2002), for example, describes compliance with dispute panel rulings as “good, although it has not always been rapid.” Of course, compliance is a tricky thing to measure – the absence of the counterfactual makes for difficult measurement issues. That is, we do not know how states that have agreed to participate in an international regime, such as the DSU of the WTO, would have behaved in the absence of participation in the regime. The difficulty associated with attempting to measure how effective international organizations and agreements are in facilitating cooperation lies in dealing with this endogeneity problem. Have the signatories significantly changed their behavior in the presence of the obligation, relative to how they would have behaved in the absence of the international organization?² A number of empirical scholars have made serious attempts to address this question using the Heckman selection models (von Stein, 2005), examining duration effects rather than selection effects (Przeworski and Vreeland, 2000), or using propensity-score matching to control for selection bias (Simmons and Hopkins, 2005).

However, noncompliance does occur and is more easily measured. From the implementation of the revised DSU in 1995 to the end of 2007, the WTO

² Similarly, the relative frequency of compliance does not necessarily imply deep cooperation (Downs *et al.*, 1996; cf. Gilligan, 2004).

reports 369 DSU complaints. The appellate body has issued 78 reports over this period (Leitner and Lester, 2008). However, only a few countries (the United States, EU, Canada, Brazil, and Ecuador) have requested authorization to “suspend concessions” (the WTO term for retaliation) in a handful of cases. As for the actual implementation of retaliation, the United States (together with Ecuador in the Bananas case, and with Canada in the Hormones case) has retaliated against the EU, the EU has retaliated against the United States in the Foreign Services Corporation case, and Canada imposed retaliatory measures against the United States in the Byrd Amendment case. These three cases seem to be the only situations in which noncompliance has resulted in actual, implemented retaliation. While a credible international punishment mechanism is necessary to sustain cooperation in the standard PD account of trade policy, in practice states do not appear to be punished for violating their trade commitments.

2.2.2. Retaliation after non-compliance is not punitive

Moreover, when punishments are authorized by the DSU they are specifically limited in scope and duration. The WTO applies “the proportionality principle,” which limits retaliation to a level that restores “balance” to the previously negotiated concessions. This is described as “compensation” – it is specifically not intended to be punitive and merely attempts to restore any harm done by the violation. Mavroidis (2000) states, “there is no room for punitive damages in the WTO context.” This limit in the level of compensation following a violation is consistent with the WTO’s “reciprocity” norm.³

Maggi (1999) shows that a system of unlimited punishments from multiple countries is superior to a bilateral punishment regime, especially when there are power-in-trade imbalances. Increasing the number of punishers is more likely to make retaliation more punitive, which in turn reduces the incentive of states to engage in non-compliance. Similarly, in the theory of international courts provided by Johns (2008), the central utility of the international court lies in transforming a bilateral dispute into a multilateral dispute since court rulings serve to coordinate endogenous costly enforcement by disinterested states. However, the WTO specifically limits standing and restricts any authority to retaliate only to those member states whose concessions have been nullified and impaired by the offending state’s actions. An unharmed country is not entitled to compensation and cannot lawfully engage in retaliation (Trebilcock and Howse, 1999).

A key empirical implication of the theoretically repeated PD framework is that we should expect to observe severe punishments for noncompliance with DSU findings in order to increase the overall level of cooperation.

However, the WTO texts explicitly limit compensation following a violation, which lowers the expected punishment from non-compliance.

2.2.3. Patient polities

Recall that in order for cooperation to be sustained in a repeated PD framework, states must be sufficiently patient by placing a high value on future cooperative payoffs relative to the short-term benefit from defecting from an international trade agreement. The electoral accountability mechanism in democracies ensures that democratic leaders are under more pressure than autocratic leaders to provide short-term public benefits for their constituents. Hence, as policy-makers are more accountable to their electorate, their time horizons are shorter since electoral accountability shortens tenure in office, *ceteris paribus*. Therefore, we would expect democratic polities to be less patient than autocracies, and an empirical implication of the repeated PD framework is that democracies will be less willing to comply with their international trade obligations or join these agreements than non-democracies. Similarly, democracies should be less willing than autocracies to comply with DSP ruling.

Much scholarship has shown that these expectations are false. For example, Russett and Oneal (2001) and Mansfield *et al.* (2000, 2002) have demonstrated the propensity of democracies to be more frequent joiners of regional and multilateral trading arrangements. Mansfield *et al.* additionally find that democratic countries are about twice as likely to form a preferential trading agreement as autocratic countries, and that pairs of democracies are roughly four times as likely to do so as autocratic pairs. This poses a substantial challenge to the canonical finding that patient players are more likely to cooperate than impatient players.

With respect to dispute settlement at the General Agreement on Tariffs and Trade (GATT), Busch (2000) establishes that cases are more likely to be paneled when the disputants are democracies. He additionally finds that these cases paneled by democratic dyads are more likely to end with concessions by the defendant state. Democracies are also more likely to be named in petitions filed by the United States in antidumping (AD) cases (Busch *et al.*, 2007). Since 1995, 44% of the total complaints have involved either the United States or the EU as the complainant, while 43% have the United States or the EU as the responding party, with 48 disputes between them (Leitner and Lester, 2008). Clearly democracies are willing to participate in the adjudicatory mechanism of the DSU and comply with its rulings.

In sum, the significant mismatch between the empirical record and theoretical implications of the standard repeated PD framework suggests that the use of this model as a basis for understanding compliance with international trade agreements and DSU rulings in particular is significantly flawed. More precisely, theoretical accounts of international trade that require punishment by other states and patience as the basis of

³ Bagwell and Staiger (1999) argue that this norm serves a crucial function in limiting the use of tariffs to influence the terms-of-trade in the protecting country’s favor.

international cooperation are insufficiently substantiated by the empirical facts. This leads us to consider the ways in which domestic politics can affect trading violations and the enforcement of DSP ruling.

3. Domestic politics: driver of compliance and enforcement?

What domestic factors might substitute for punishment at the international level after observed non-compliance with a state's obligations? A number of normative explanations have been offered. Perhaps countries comply with international law and rulings of the DSP because there is a pervasive belief that the law and courts should be obeyed. Such a norm is internalized within democracies, with independent judicial institutions and societal adherence to the concept of the rule of law, and can then be extended across borders (Chayes and Chayes, 1993). Even most interest-group accounts of the impact of civil society in enforcing international commitments, such as human rights agreements, rely upon the assumption that the normative value of adherence to an international commitment can change over time as societies grow to embrace the objectives of the law (Hafner-Burton and Tsutsui, 2005, 2007). In the realm of security studies, scholars commonly argue that democratic polities use law and institutions to settle conflicts rather than power (e.g. Doyle, 1986). As such, normative beliefs internalized at the domestic level can have an influence on international behavior.

Alternatively, a number of functionalist arguments that rely on domestic politics as enforcement devices have emerged and these approaches yield predictions that accord more closely with the observed empirical regularities in the area of international trade. It has been well understood since Putnam (1988) that decisions made at the international level – for example whether to join an international institution and whether to comply with the attendant obligations of these regimes – are substantially affected by domestic politics. A leader's willingness to comply with the rulings of an international court may be affected by the domestic political consequences of the treaty violations. Moreover, these domestic political concerns are heightened within democracies, providing an explanation for the empirical fact that democracies are more likely than autocracies to cooperate within international trade regimes, and participate more frequently in international dispute resolutions. We provide an overview of two different ways in which domestic politics can affect the willingness of a leader to commit trade violations and comply with DSP rulings. First, we examine the role of domestic politics in generating demand for trade violations and the role of the DSP in enhancing both the flexibility and stability of trading agreements. Then, we discuss the use of domestic electoral incentives to enforce cooperative trading agreements and compliance with DSP rulings.

3.1. Tolerated defection and the DSU: the flexibility theory

3.1.1. Overview

Recent work suggests that the international trade regime is designed not merely to facilitate cooperation on trade barriers internationally, but also to deal with domestic political problems faced by policymakers. Sometimes policymakers are faced with unanticipated but acute political pressure to protect particular industries. Rather than simply having their hands tied by an international obligation, the policymakers prefer to have the option to temporarily appease the domestic political constituency without excessively violating the terms of the international agreement or suffering international punishment. Policymakers who are accountable to domestic political interests need to know that the international system permits a degree of flexibility for the system to be functional. This has been labeled as the "Flexibility Theory" (Rosendorff, 2005; Kucik and Reinhardt, 2008).

A number of recent papers have picked up on this theme of international agreements that permit tolerated defection without excessive (or even any) punishment. The idea is traced to the legal concept of "efficient breach," where under unanticipated circumstances a violation of a contract's obligations may be more Pareto-efficient than fully abiding by the contract. If a court is able to ensure that *ex post* transfers compensate the injured party for the violator's failure to abide by the terms of the initial contract, political support for the international agreement can be enhanced by the tolerated breach of legally binding agreements.

Allowing for efficient breach in multilateral agreement accomplishes three ends that are well described by Kucik and Reinhardt (2008): (1) it defines legal standards that can constrain the abuse of such provisions; (2) it legitimizes the use of such provisions insofar as it meets those standards, which in turn can prevent excessive retaliation from other parties; and (3) it provides a mechanism to assess, and limit demands on, the compensation due to the adversely affected parties. Consider a period in which the political pressure to protect a particular industry is intense. The political leader experiencing this pressure may rescind the previous concessions made by his state or undertake some rebalancing of those concessions, leaving both countries no worse off than performing under the contract (Setear, 1997). Schwartz and Sykes (2002) have similarly claimed that the dispute settlement mechanism permits "rebalancing" by assessing the degree of infractions and authorizing capped levels of retaliation as a form of compensation.

Recent theorizing regarding the design of international organizations has posited that flexibility provisions – opportunities for signatories to temporarily deviate from their obligations under the treaty, perhaps at some cost – can act both to increase the willingness of states to join these agreements and permit them to commit to greater degrees of cooperation (at least in most periods). This allows the international regime to be more stable than would be the case in the absence of these provisions. Of course, too much flexibility leads to less

cooperation. Therefore, the key design question is to choose the degree of flexibility that optimizes both stability and depth of cooperation.

3.1.2. Theoretical framework and results

Rosendorff (2005) models this as a game in which a country experiencing extreme but unforeseen domestic political pressure can choose to temporarily deviate from its low tariff obligations, pay some expected penalty as determined by the adjudication process at the DSU, and then return to the community of cooperating nations in the next period when political pressure subsides and returns to more "normal levels." In this model, two governments (a "home" government and a "foreign" government) must decide whether to abide by a trade agreement. Each government's one-period utility depends on the sum of consumer and producer surpluses, and tariff revenues.⁴ Moreover, domestic political pressure that import-competing firms bring to bear is added to the objective function by weighting the firms' profit term. Let $a > 0$ denote the weight that the home government attaches to the profits of its import-competing firms. Similarly, let $\alpha > 0$ denote the weight that the foreign government attaches to the profits of its own import-competing firms. The stochastic political pressure parameters a and α are private information; each government knows the domestic political consequences that it will experience for its own compliance decision, but is uncertain about the level of political pressure that its trading partner is experiencing. Additionally, governments are uncertain about what levels of political pressure they will face in future time periods.

Each government simultaneously chooses a tariff level, where t denotes the tariff chosen by the home government and τ denotes the tariff chosen by the foreign government. If both governments agree to abide by a previously negotiated cooperative agreement, then tariff levels (t^C, τ^C) are implemented and each player receives a payoff that is a function of its domestic political pressure, ($C(a), C^*(\alpha)$). In contrast, if the home country decides to unilaterally deviate from the cooperative agreement, then his optimal deviation will be a function of his domestic political pressure, $t^D(a)$. So the foreign country's payoff from being the "sucker" and choosing the cooperative tariff rate, τ^C , while the home country deviates is a function of both domestic political pressure parameters a and α .⁵ This yields payoffs of ($D(a), S^*(a, \alpha)$). Analogously, unilateral deviation by the foreign government yields payoffs of ($S(a, \alpha), D^*(\alpha)$). Finally, if neither player abides by the cooperative agreement, then the Nash equilibrium tariffs are chosen,

(t^N, τ^N), which yields payoffs of ($N(a, \alpha), N^*(a, \alpha)$). So the reduced-form stage game for a given period t when there is no DSP is as follows:

	C^*	D^*
C	$C(a), C^*(\alpha)$	$S(a, \alpha), D^*(\alpha)$
D	$D(a), S^*(a, \alpha)$	$N(a, \alpha), N^*(a, \alpha)$

where (in accordance with the PD nature of the game):

$$D(a) > C(a) > N(a, \alpha) > S(a, \alpha) \quad \text{for any pair } (a, \alpha).$$

This one-shot game is infinitely repeated and the players choose strategies to maximize the expected sum of their discounted one-period utility. In this adjusted form of the standard prisoner's dilemma, patience makes long-term cooperation more likely. However, there will always occur a domestic political shock in one or both states. This shock will sometimes be sufficiently large such that the leader may prefer to abrogate the agreement, maintain the political support of the affected industry, and exit the trading regime. The addition of some simple domestic politics brings the stability of the regime into question, even with the most patient of polities.

Suppose, instead, that if a violation of the cooperative agreement is committed in any given period, the violator's trading partner can file the dispute (i.e. request a panel) within the DSU. The panel hears the case and makes a decision. If the panel finds that an illegitimate violation has occurred, it then decides on a penalty.⁶ Finally, the defendant decides whether to pay the penalty or not.

	C^*	DS^*	D^*
C	$C(a), C^*(\alpha)$	$S(a, \hat{\alpha}) + \theta L(\hat{\alpha}), D^*(\hat{\alpha}) - \theta L(\hat{\alpha})$	$S(a, \hat{\alpha}), D^*(\hat{\alpha})$
DS	$D(\hat{a}) - \theta L^*(\hat{a}),$ $S^*(\hat{a}, \alpha) + \theta L^*(\hat{a})$	$N(\hat{a}, \hat{\alpha}) + \theta L(\hat{\alpha}) - \theta L^*(\hat{a}),$ $N^*(\hat{a}, \hat{\alpha}) + \theta L^*(\hat{a}) - \theta L(\hat{\alpha})$	$N(\hat{a}, \hat{\alpha}) - \theta L^*(\hat{a}),$ $N^*(\hat{a}, \hat{\alpha}) + \theta L^*(\hat{a})$
D	$D(\hat{a}), S^*(\hat{a}, \alpha)$	$N(\hat{a}, \hat{\alpha}) + \theta L(\hat{\alpha}), N^*(\hat{a}, \hat{\alpha}) - \theta L(\hat{\alpha})$	$N(\hat{a}, \hat{\alpha}), N^*(\hat{a}, \hat{\alpha})$

The reduced normal form of the one-period game can be described in the matrix shown above. If dispute settlement is availed by either player, the DS action is taken. The court finds with probability θ that the defendant has violated the agreement, and authorizes retaliation in an amount commensurate with the loss incurred in expected value, L , by the

⁴ Economic foundations for the model are explained in depth in Rosendorff (2005).

⁵ The parameter α directly affects the foreign government's utility since it reflects the weight given to the profits of the import-competing firms within the foreign country, while the parameter a influences the foreign government's utility indirectly since it affects the choice of $t^D(a)$.

⁶ Clearly, it will be common knowledge whether a violation has been committed. However, the panel only probabilistically finds the violator guilty (i.e. rules the violation illegitimate) because the panel may rule that the violation fell within the class of permissible exemptions (e.g. health, safety, or environmental measures).

plaintiff.⁷ No external enforcement exists. If the defendant pays, it does so voluntarily.

Two key results emerge from this model. First, there exist equilibria in which a state under intense domestic political pressure sometimes commits violations, its trading partner files a case with the DSU, and the violator pays its penalty in order to return to cooperation. Moreover, equilibria can be supported with a wider range of discount parameters, significantly reducing the importance of patience in securing cooperative, compliant behavior. So, clearly the existence and use of the DSU is consistent with a theoretical account of domestic politics and international trade.

There is an additional implication regarding the willingness of states to enter cooperative trade agreements. If we compare a regime with and without the opportunity to bring a violation before the DSU panel, initial cooperative agreements can be reached for a larger set of parameters than if compliance was supported by a grim trigger strategy in which violators are forever excluded from cooperative trade agreements. If states know that they can commit violations when they are under intense political pressure, pay the penalty handed down by the court, and return to the cooperative regime, then they will be more willing to join the international regime in the first place. The flexibility provided by the ability to sometimes violate agreements ensures greater participation and stability of the institution than if a rigid punishment regime, such as the grim trigger, was in place.

This reverses a severe limitation of PD and patience-based models identified by Fearon (1998). He points out that "as the shadow of the future lengthens, both states choose tougher and tougher bargaining strategies on average, implying longer and longer delay till cooperation begins." That is, as the possibility of durable cooperation grows in the second-stage PD, the possibility of stalemate in the first-stage bargaining game rises. This leads Fearon to conclude that making agreements easier to enforce may make them harder to initially conclude, since the distribution of gains set initially will be so important and fixed throughout the future. The availability of the DSU may reduce this dynamic. That is, if in future periods, players can deviate, pay a penalty, and return to cooperation, this may mean that their initial distributional bargaining is not so important. The pattern of distributive gains agreed upon today may be altered in the future through the use of the panel procedure. Therefore, inclusion of dispute settlement may have another benefit: it may make agreements easier to conclude initially!

Fischer and Osorio (2006) expand this analytical approach to show that these results hold even in the absence of any actual compensation (but with

verifiable political pressure). Countries will permit or tolerate the violation without punishment because they value the opportunity to renege temporarily in periods of intense political pressure that they might experience in the future. As such, there can exist a system of reciprocal nonenforcement of international obligations when domestic political pressure is intense. In return for the ability to occasionally violate an international agreement, a state will be willing to tolerate occasional violations by its trading partner. Bagwell and Staiger (2005) also explore this idea but let the compensation vary with the announcement made of the intensity of the political pressure faced by the incumbent government.

3.1.3. Empirical evidence

There is ample evidence to support the general dynamics of state behavior in the model above: domestic politics leads to deviation from a state's obligations, a panel ruling to cease the offending measure occurs, the defendant refuses to comply because the political costs of doing so are too high, and retaliation is authorized. For example, in 1996, the United States requested a DSU panel, arguing that the EU's prohibition on the imports of beef treated with hormones was inconsistent with its obligations under the WTO. The panel found that the EU ban was unjustified on a number of grounds, and the decision was upheld by the appellate body. Arbitration resulted in an agreement that the ban would be removed within 15 months. The EU did not comply with the finding and failed to remove the offending measure within that time-period. The panel authorized retaliation/compensation of \$116.8 million.⁸ Hoekman and Kostecki (2001) remark that the EU was politically unable to comply with the initial ruling: "Political constraints reflecting a strong lobby in the EU that opposed the use of hormones in meat production made it (compliance) impossible" (p. 84). In addition, any increase in the productivity of European beef farmers would actually increase the costs of the common agricultural policy, something the EU could ill afford. Similarly, in 2002 the United States applied 30% steel tariffs under the "safeguard" provisions in order to protect steel workers in electorally pivotal states like West Virginia, Ohio, and Pennsylvania. The appellate body of the DSU ruled the tariffs illegal, and authorized compensation to the plaintiffs (the EU, China, South Korea, Brazil, Switzerland, Japan, New Zealand, and Norway) of \$2.2 billion.

A key element in the model above is that authorized retaliation is limited in magnitude to an estimate of the losses incurred. As discussed above, this is one of the key ways in which the practices of the DSU process diverge from the implications of standard PD accounts of international trading

⁷ While the shocks α and a are private information, the court (and the plaintiff) can infer something about the nature of the shock by virtue of the DS play – a deviation has been observed. Hence the court updates its beliefs about the domestic political shock and these updated beliefs are summarized by \hat{a} and $\hat{\alpha}$.

⁸ The panel also authorized retaliation/compensation of C\$11.3 million in a similar case filed by the Canadians.

regimes. Anecdotal evidence as to the EU's bargaining position during the Uruguay Round lends support to the argument that limits on retaliation are necessary for cooperation in the presence of political uncertainty. Section 301 of the US Trade Act of 1974 gave the US president the authority to unilaterally retaliate against the US's trading partners if their practices were deemed by the president to restrict US exports. This law was rendered more ominous by changes in 1988 (Super 301) that required the US Trade Representative to identify targets and set dates for retaliation. There was no limit to the number of countries or the value of the punishments. During the Uruguay Round negotiations, the EU Commission frequently expressed its concern about these provisions in US law for unilateral retaliation and saw the revised DSU as a measure to bind the United States to the same legal standard as other members. Under the DSU, all WTO members are precluded from making unilateral determinations as to violations; members must appeal to the DSU for such determinations. The EU was clearly more inclined to sign on to the new WTO as a result of the removal of the possibility of highly punitive, unilateral trade sanctioning measures (Bhagwati and Patrick, 1990).

The use of escape clauses in the WTO agreements also lends support to the flexibility theory. Temporary defection, either with or without compensation, is permitted under the WTO's business exceptions; for example, the safeguard provisions, its anti-dumping (AD) and countervailing duty codes (Rosendorff and Milner, 2001; Bagwell and Staiger, 2005). Additionally, Article XX exceptions are allowed to protect the health of people, animals and the environment, provided that they are applied in a nondiscriminatory manner. These exceptions are written into the agreements in order to add flexibility: governments do not fear retaliation because their trading partners tolerate their defection in these areas.

In addition to the evidence provided by the WTO DSU, there is also a large amount of evidence to support the flexibility theory in the areas of AD agreements and preferential trade agreements (PTAs). Kucik and Reinhardt (2008) empirically test the key idea that the decision to join an agreement and the level of cooperation are co-determined or endogenous. While they do not study the WTO DSU in particular, they investigate whether the availability of a similar flexibility-enhancing device in AD disputes increases the tendency of a country to join the international agreement, and whether its compliance is deeper than it would be otherwise. The WTO texts permit a state to apply an AD tariff – a temporary abrogation of its obligations – if a foreign firm is selling an item in the home market at “less than fair value” and causing “material injury.” The WTO requires a state to adopt a specific institutional procedure before it may apply an AD tariff. This procedure is costly to establish and requires skills and capacity. As such, countries have varied across time in their adoption of an AD procedure. Viewing the adoption of an AD

procedure as a signal of a state's intent to make use of the flexibility provisions of the WTO agreement, the authors use this variation to test the hypotheses of the flexibility theory of trading agreements. They show convincingly that countries joining the WTO are more likely to adopt an AD procedure than states that do not join the agreement. Additionally, countries with an AD code in place are more likely, *ceteris paribus*, to join the WTO, to agree to more tightly binding tariff commitments, and to actually implement lower tariffs.

While the theory above has focused on the institutions of the WTO, a similar logic applies to any PTA with a DSP with the characteristics described above. There is great variation in the design of these DSPs, with mechanisms varying from “soft” (e.g. ad hoc negotiations among the parties) to “hard” (e.g. standing independent tribunals whose determinations are legally binding). Smith (2000) constructs a measure of the degree of “legalization” of 63 post-1957 PTAs on a five-point scale. A higher measure indicates a DSP with stronger adjudicatory powers.⁹ While this measure maps incompletely to the question at hand (i.e. is a DSP present and does it embody the proportionality principle?) the correlation is likely to be very close. Pevehouse *et al.* (2002) estimate a duration model of PTA survival and find that those that embody a DSP have a lower failure rate. Using a sample of 85 agreements, they show that the presence of a DSP is positively and significantly related to the duration of the PTA. They additionally use Smith's (2000) ranking of the degree of “legalization” of various PTA DSPs and find that more legalism results in longer-lasting agreements. Similarly, Rosendorff (2005) uses the Smith (2000) data to investigate whether the number of signatories rises with a DSP. The correlation between the number of members in an agreement and the Smith (2000) measure of legalism for the agreement is positive (0.27) and significantly different from zero at the 5% level ($p = 0.034$). Higher levels of legalism are associated with a larger numbers of signatories. Of course, this correlation is merely suggestive, but does lend some support to the hypothesis.

Overall, the flexibility theory establishes the insights of Sykes (1991), who argues that “without the safety valve [of some kind of formal flexibility provision], greater protection would arise *ex post*” (273).¹⁰ A key element driving the optimality of the DSP in the arguments above is that

⁹ A PTA gets a rating of 0 if a third-party review in the instance of disputes is unavailable. If a review is available, but the determination of the review panel is not binding, the PTA receives a coding of 1. If the ruling is binding but there is no standing tribunal of judges, the PTA is coded as 2. Finally, if a standing panel is present and only states have standing before it, the PTA is coded as a 3; but if treaty organs and individuals can also bring complaints, the PTA is then coded as 4.

¹⁰ Similarly, Finger and Nogues (2005) argue that many Latin American countries used flexibility provisions in GATT/WTO as a quid pro quo to convince protectionist groups to accept broader trade liberalization.

any compensation or punishment that is actually applied cannot be too severe. Excessive demands for compensation, such as punitive awards, discourage the use of this temporary escape. While higher penalties may make for more per period cooperation, they risk making the entire system less stable. This is because the unexpected but intense political pressure to protect an affected industry, in the absence of any tolerated escape, may induce the executive to abrogate the agreement entirely. This, in turn, challenges the long-term stability of the multilateral system. Tolerated escape solves a domestic political problem and makes the international system more stable in the long run – at the cost of some per period failures to cooperate. This idea runs counter to the notion of “bindingness” – that tighter constraints lead to more cooperation and less defection (Goldstein and Martin, 2000) – and the more traditional notion that states sign these international agreements to credibly insulate themselves from domestic political pressure, especially when they are vulnerable to capture (Maggi and Rodriguez-Clare, 1998).

3.2. Domestic politics and punishment for trade violations

3.2.1. Overview

Another way in which domestic politics affects international trade disputes is by providing domestic enforcement for international commitments. All leaders must be concerned to some extent by the welfare of their constituents. Even highly repressive autocrats are subject to the threat of removal from office by their domestic supporters (Bueno de Mesquita *et al.*, 2003). While short-run violations of international trade agreements may provide a temporary benefit to leaders and their citizens, it can also compromise the ability of citizens to benefit from long-run cooperation in international trade. Although standard PD accounts of trading agreements treat states as unitary actors, it is important to recognize that foreign policy choices are in fact made by leaders, not states. The ability of citizens to remove office-seeking leaders from power allows for an alternative source of compliance of international agreements: domestic enforcement via electoral incentives.

3.2.2. Theoretical framework and results

This mechanism of domestic enforcement of international agreements has been most prominently and systematically promoted by the work on leader-specific punishments by McGillivray and Smith (2000, 2004, 2006). In their theoretical model, two leaders (rather than unitary-actor states) play the standard PD game. It is assumed that leaders derive inherent utility from remaining in power and the utility of domestic citizens is affected directly by the behavior of their leader. If leader x of state X defects in his interactions with leader y of state Y , then leader y punishes

leader x by refusing to cooperate with him in any future periods. However, leader y credibly pledges that if the citizens of state X remove their leader, then leader y will cooperate with x 's successor. As such, punishment at the international level is a grim trigger conditioned on the identity of leaders, not of states. Since citizens have the ability to remove leaders from power, this means that international punishments are endogenous to the actions of domestic citizens.

Of course, states vary with regard to the costliness of enacting a leadership change; it is less costly for leaders to be removed from office when there are electoral mechanisms in place than if citizens must launch a bloody revolution to enact a leadership change.¹¹ As such, when the costs of removing a leader from office are low, citizens are more likely to remove their leader from power in order to induce leader y to engage in cooperative behavior once again. Since leaders derive utility from remaining in office, leaders who are easily replaceable – such as leaders in democracies – have the greatest incentive to abide by their international commitments and engage in cooperative behavior. The promise to cooperate is most credible when it comes from a leader who is accountable to an electorate. While McGillivray and Smith (2004) focus on trade volumes rather than on accession to or compliance with international trade agreements, a similar logic suggests we would expect to see more democracies credibly comply with their obligations under international law.

A key assumption in the leader-specific punishment paradigm is that the citizens, who have incentives to remove leaders when they violate international obligations, are able to observe the behavior of the leader with some degree of accuracy. That is, voters must be able to observe, directly or indirectly, the policy choices and actions of their leaders in the international trading environment. Trade policies are sometimes obscure or their effects are difficult to estimate *ex ante*. Quotas will restrict imports, but voters may be unsure as to the degree to which the domestic economy will actually be affected. Nontariff barriers will redistribute income at some social cost; but there may be *ex ante* uncertainty as to who will bear the cost. Governments have an inclination to obscure rather than clarify any policy that redistributes income, especially when there are dead-weight losses attendant to the policy choice. In the context of the leader-specific punishment model, if citizens do not know whether their leader has committed a trade violation and refused to comply with a DSU ruling, their decision about whether to punish the leader by removing him from

¹¹ It is important to emphasize that in the leader specific punishment framework, the punishment imposed by the international trading partner – via the refusal to cooperate (i.e. return to the suboptimal Nash equilibrium) as long as the violating leader is in power – is key to supporting the willingness of citizens to engage in the costly action of punishing their leader by removing him from power. In the absence of such international punishment, citizens would be perfectly willing to accept the benefits of trade violations.

office will be made under uncertainty: sometimes leaders will be removed from office despite having made decisions that were expected to benefit the voter, and vice versa (Johns, 2006).

A crucial aspect of the WTO's DSP is that it publicizes information about whether a violation of an international agreement has occurred. This can ease the ability of domestic constituencies to punish leaders for violating agreements. While it is surely not the case that the average voter closely monitors DSU panel rulings, the transparency provided by the rulings can be beneficial to pro-trade constituencies and interest groups when they attempt to apply pressure to their domestic leader. As such, the transparency provided by a trade institution like the WTO DSU is key to supporting the leader-specific punishments discussed above.

The view of the WTO's trade court as an information-enhancing institution is at the center of the approach taken by Mansfield *et al.* (2002). Rather than having other states impose punishments until a leader is removed from power, the international system plays an informational role. In Mansfield *et al.* (2002), voters are unable to perfectly observe the policies chosen by their leaders. In a model where the political support minimizing tariff is larger than the social welfare maximizing tariff, the government attempts to increase political support from import-competing sectors without severely adversely affecting the social welfare on which the voters at large base their reelection decisions. Low tariffs and compliance with an international agreement signal to the electorate that the government is well behaved, less extractive, and responsible. Should a leader violate his obligations under a treaty, the international system does not punish; it merely signals to the domestic polity that the leader has violated its obligations and behaved in an extractive manner. Voters will condition their reelection rule on this information and punish agreement violators by removing them from elected office. Thus the international institution plays an important information-enhancing role.

This of course begs the question as to why a government would want to tie its hands in this way and be more bound to policies that benefit social welfare. Long-run social welfare is enhanced by the improved informational environment; but intuition would suggest that governments dislike having their hands tied once in office. However, the added information provided by the institution permits governments to survive re-election challenges in bad aggregate economic conditions. Consider an obscure informational environment: if the voters see poor performance at election time, then they cannot be sure whether the low incomes they experience are due to high tariffs or exogenous supply shocks. Voters may want to evict the incumbent even in periods in which the incumbent has been relatively well behaved. By acceding to the WTO and demonstrating its willingness to have its policies scrutinized by a credible third party (i.e. the court), the government ensures that the voters can condition their reelection rules on the information provided by the institution and not just merely on

aggregate economic conditions. In periods where the government experiences a bad exogenous shock, it can rely on the absence of a finding of violation by the DSU panel to assure the voters that high prices are not due to extractive behavior by the state. This allows governments to survive in office during "tough times." Membership in the institution ensures that the leader is returned to office in bad periods (subject to good behavior) instead of being removed from power. The leader signs on to the WTO and trades away opportunities for rent extraction in return for not being "unfairly evicted" from office in bad times. The institution therefore solves a crucial signal extraction problem facing the voters while also rewarding leaders for compliance with international legal obligations.

The international institution as an information-enhancing device is also explored in the models of Rosendorff and Vreeland (2007a, 2007b). They construct a model of monetary policy in which voters must decide whether to keep or replace their leader based on the performance of the economy. In the baseline nontransparent environment, voters cannot observe the policies chosen by their leader. Since the strategic environment is noisy and policies translate into outcomes stochastically, voters sometimes replace leaders who chose a low-inflation rate and keep leaders who chose a high-inflation rate. However, leaders vary in the extent to which they are accountable to voters; for highly democratic societies, the decision of the median voter is decisive in determining whether the leader remains in office, while in less accountable governance systems, the leader is able to remain in power with some probability even if the median voter wishes to replace him. Rosendorff and Vreeland contrast the nontransparency case with a transparent environment in which there exists an international organization, such as the IMF or the World Bank, that provides reports on the policies chosen by leaders. The key theoretical finding provided by Rosendorff and Vreeland (2007a) is that a leader's preference for the transparent environment (as opposed to nontransparency) grows stronger as the leader is more accountable to the voter.

Additionally, Rosendorff and Vreeland (2007b) finds that in majoritarian systems of government, in which slight differences in vote-share translate into large differences in the allocation of legislative seats, leaders who are in power are less likely to prefer transparent environments because small changes in levels of electoral support have little impact on the allocation of legislative power. If majoritarianism is described as a political system in which votes are turned into seats in the legislature in a more "decisive" fashion, then majoritarian systems are characterized (on average) by a larger number of seats for the ruling party for any given share of the total votes. For instance, in a majoritarian system with single-member districts, 50% of the votes in 50% of the districts yields a majority in the legislature. So 25% of the total votes can lead to unconstrained policy-making. In contrast, in a purely proportional system, 25% of the total votes would lead to 25% of the seats, and hence a need to

collaborate and compromise in the formation of economic policy. Therefore, we describe majoritarian systems as converting votes to seats in a more "decisive" fashion.

If policymakers are concerned both about seats and the opportunities for rent extraction (i.e. if these are substitutes in the policymaker's objective function), the marginal utility of the last seat is lower in the majoritarian system. In an economy in which there are stochastic shocks to the voters' pocketbooks, incumbents may be penalized if voters are unable to differentiate between bad aggregate economic conditions and extractive behavior by the policymaker. In a more transparent environment, voters are better able to assign responsibility for bad outcomes. If the loss associated with the last seat is low, policymakers might be willing to endure the risk of losing seats in bad aggregate conditions so that they might extract again in the future when conditions are better. Hence they will preserve a less transparent informational environment. The opacity of policy-making allows for greater extraction when conditions are good, and bearing the risk of eviction when conditions are bad is worthwhile because of the relative trade-offs between losing seats and rent extraction. On the other hand, if the loss associated with the marginal seat is high – as is the case in a less majoritarian system (e.g. a system with proportional representation) – then the incumbent might not be willing to bear the same risk of eviction when bad economic shocks materialize as in a more majoritarian system. Instead, such a policymaker can enhance the informational environment by providing opportunities for revelation of credible information about the incumbent's policies. Then the voters can better allocate blame for bad outcomes and are less likely to punish the policymaker. Of course, more information means that the policymaker has reduced ability to engage in extractive behavior. So when the loss associated with the marginal seat is high, the incumbent has an incentive to trade away future opportunities for rent extraction in exchange for reducing the likelihood of losing the marginal seat in the next election. Therefore, Rosendorff and Vreeland predict that majoritarian democratic polities (such as countries with single-member districts) will be less transparent than less majoritarian systems (such as countries with proportional representation).

Their empirical findings support claims from both models. First, democracies are more likely than autocracies to report (or report more accurately) their economic performance to international organizations like the IMF and World Bank. Second, democracies are more likely to report their economic performance in less majoritarian systems. This suggests that leaders will derive more benefit from the transparency provided by the institution – and hence be more likely to join trade agreements with such adjudicatory mechanisms – if they are more accountable to their domestic citizens and if the vote-seat share elasticity in their domestic legislature increases. As such, we believe that the implications of transparency on

international cooperation – be it provided by international organizations like the DSU process at the WTO or domestic institutions – constitutes an important and exciting opportunity for further research.

In sum, electoral accountability is one manner in which compliance with international trading agreements can be induced. However, such a domestic enforcement system can only be effective if voters are able to observe the policy choices of their leader and know whether an illegitimate violation has occurred. As such, the DSU is key to supporting domestic enforcement of international trade agreements since it provides transparency by making policy choices observable to voters and provides information about whether a violation has in fact occurred.

4. Conclusions

Much of the theoretical literature on the study of international trade has been dominated by standard PD accounts of cooperation in lowering tariff barriers. These accounts generally assume that states are unitary actors and ignore the impact of domestic politics on international behavior. While these accounts of the impact of punishment and patience have given us valuable insight into strategic considerations that affect long-run cooperative behavior, they have also generated implications that are grossly contradicted by the empirical record on trade disputes. Incorporating elements of domestic politics into these accounts can help us to move away from the assumption of states as unitary actors and allow us to develop a more nuanced understanding of international trade cooperation and disputes.

Clearly, domestic politics plays an important role in the realm of international trade. First, political pressure from domestic industries can be key in creating demand for violations of existing trade agreements. Since such pressure is affected by stochastic shocks, the temptation of leaders to defect from cooperative trading and commit trade violations can vary over time. The presence of the DSP provides flexibility that allows leaders to respond to such pressure by occasionally committing violations and then compensating their trading partners if the DSP finds that the violation was not subject to exceptions in the trading agreement. This flexibility enhances that willingness of leaders to sign cooperative agreements in the first place.

Second, domestic politics can be a key enforcement mechanism for ensuring compliance with international trade agreements and DSP rulings. Since low tariff barriers enhance social welfare, voters can condition their electoral decisions on whether their leader complies with socially beneficial trade agreements. The DSP plays a key role in this account as an information-provider. In order for voters to hold their leaders accountable for their policy choices, they need information about what choices their

leader has made and whether his actions constitute compliance with a pre-existing international agreement. The DSP provides transparency and reduces uncertainty about these factors.

While the analytical approaches considered here focus on the demand for trade violations and domestic enforcement of international agreements, there is also a considerable literature that focuses on the role of domestic politics at the negotiation stage. For instance, Martin (2000) argues that institutionalized participation by the domestic legislature at the negotiation stage ensures more cooperation once an agreement is reached. Similarly, Milner and Rosendorff (1996) show how domestic ratification in the presence of incomplete information and divided government can significantly affect both the likelihood that an agreement is reached and the nature of the agreement.

Overall, the resurrection of the PD paradigm depends on appealing to domestic political considerations for both flexibility and enforcement rather than severe international punishment for trade violations. This result is perhaps surprising. Yet the predictions derived from models with domestic political components are more consistent with the observed regularities than are those drawn from models that rely solely on international punishment for enforcement. These models also serve as a response to those who would toughen WTO penalties, make punishment more stringent, and increase the power of the DSP. Emerging results suggests that these may not be necessary and even perhaps be counter-productive in promoting international trade.

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