THE COST OF WIGGLE-ROOM: ON THE USE OF FLEXIBILITY IN INTERNATIONAL TRADE AGREEMENTS

A Dissertation
submitted to the Faculty of the
Graduate School of Arts and Sciences
of Georgetown University
in partial fulfillment of the requirements for the
degree of
Doctor of Philosophy
in Government

By

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Washington, DC
August 7, 2009

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ABSTRACT

States join international institutions because they derive benefits from making binding commitments to each other. Concurrently, all states have an interest in breaching these commitments, especially following exogenous shocks not provided for by the designers of the treaty. Flexibility mechanisms thus function as "safety valves" to allow for temporary loosening of the ties that bind. This dissertation addresses a number of puzzles surrounding the provision and use of flexibility in international trade agreements such as the General Agreement on Tariffs and Trade/ World Trade Organization (GATT/WTO): First, if some flexibility is beneficial, but too much renders an agreement prone to abuse, how is equilibrium attained? Secondly, what explains why some countries value flexibility more than others? And thirdly, what are the welfare costs of flexibility? I find that executives in states with diffuse domestic power set aside less flexibility for themselves, as a way of limiting the likelihood of its abuse by powerful sub-state actors. Conversely, highly autonomous governments can afford to derive the full benefits of flexibility with little of the associated costs. I also show how some types of permanent flexibility—as exhibited by "binding overhang"—lead to high welfare costs as evidenced by their dampening effect on world trade. One conclusion permeates this study: some policy space in international agreements may be necessary, but it comes at a cost, and tends to reinsert power politics into institutions whose objective is often precisely the opposite.

ACKNOWLEDGEMENTS

This work has benefited from the input of many. I gained a great deal from the comments and contrasting perspectives of Leonardo Baccini, Philipp Bleek, Luis Felipe Mantilla, and Adam Mount. I also owe much to the Tuesday lunch group on trade organized by Marc L. Busch at Georgetown's Mortara Center. Many of the ideas in these pages were first floated at the lunch group, and many more were inspired in part by other participants floating theirs. Raj Desai was immensely helpful in talking through parts of the statistical analysis. For financial support, I thank the Social Science and Human Research Council of Canada. The Department of Government at Georgetown showed much generosity in funding the summer that I took to complete this dissertation. My biggest thanks go to my committee. I could not have asked for a better trio of advisers: Marc L. Busch, who introduced me to political economy to begin with, and to whom I owe an insurmountable intellectual debt, and the two best Vs in the field: Erik Voeten and James R. Vreeland. Thank you.

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INTRODUCTION

In July 2008, Doha Round trade talks between Members of the World Trade Organization (WTO) collapsed due to a disagreement over a special safeguard mechanism for developing countries. Along the same lines, it is notable that half of WTO disputes since the institution's inception in 1995 have occurred over safeguards, antidumping, or countervailing duties. Strikingly, these disagreements and disputes concern not countries' trade obligations *per se*, but rather the extent and circumstances under which countries can get away from these obligations. The concept of flexibility, or the set of mechanisms through which members of an institution can derogate from their initial commitments while remaining in *de jure* compliance, is the subject of this dissertation.

Specifically, I examine three separate puzzles surrounding the topic of institutional flexibility in trade. The first of these considers the evolution of the rules surrounding WTO safeguards, the formal WTO escape clause. There, I address what this year's WTO World Trade Report calls the institution's "architectural challenge".[1] I ask: if some flexibility is beneficial to trade agreements, but too much renders these agreements prone to abuse, how is an equilibrium level of flexibility attained? The hypothesis I present and the evidence brought forth to support it defy the consensus in the literature, according to which the only means of preventing abuse of flexibility is to render it costly.

The second part of the dissertation looks at variation in state behavior over flexibility measures. In this section, I ask: why do some countries seem to value policy space more than others? In other words, does flexibility have distributional effects, and if

[1] WTO 2009 World Trade Report, xi.

so, along what lines are these benefits distributed? The empirical puzzle underlying this question is the observation that countries vary dramatically in the extent of policy space they set aside for themselves over tariff concessions, and that such variation cannot be reduced, as if often maintained, to country characteristics such as development status or legal capacity.

The third puzzle considers the welfare costs of a specific type of contingency measure from the point of view of the institution as a whole. Here I examine whether the widespread gap between applied and bound rates, referred to as "binding overhang", has an observable effect on trade. Specifically, I am interested in seeing whether the uncertainty resulting from binding overhang—rather than its direct effect on average duties levied—imposes a cost on traders and investors that translates into an observable decrease in trade flows. This analysis speaks to a widespread concern that flexibility measures may limit the benefits of state commitments not only by increasing protectionism overall, but also by negatively affecting one of the main goals of trade institutions: the provision of stability.

One of the constants running through these three studies is the importance of domestic politics. In all three papers, the domestic side appears to be not only a major motivation behind the delegation of power to international institutions, but also a source of constraints put on these international commitments. The result of this tension is constant vacillation between state actions to increase their commitments and their binding nature, and state actions to limit these commitments. As I show, one observable impact of such vacillation on the design of rules is to render them ever more targeted, and thus increasingly complex. One look at changes in countries' tariff schedules through time, and the increasing tariff disparity within them, aptly illustrates this evolution.

There is broad consensus over the fact that one of the chief reasons for which countries enter international trade agreements is as a means of dealing with domestic pressure for protection which state leaders know to be socially inefficient. Indeed, executives have a long-term interest in abating barriers to trade across the board, yet they may face periodic domestic pressure to reinstate targeted trade barriers to protect powerful special interest groups. In such cases, credible commitments made at the international level act as hand-tying devices that can reduce the domestic political costs of denying protection.

Yet the presence of interest groups that leads states to delegate power to institutions also makes overly rigid agreements unstable. Especially following exogenous shocks, that is, unexpected changes in market conditions, the pressure for import relief may grow to the point where compliance within the institution is rendered politically unfeasible. It is as a means of facing such pressure, and as a way of allowing states to react to contingencies that cannot be planned for by the designers of the agreement, that all trade agreements offer their members some degree of flexibility.

The most clear-cut and transparent flexibility measures within the WTO are escape clauses, or safeguards. And just as expectations from the incomplete contract literature would have us believe, most, if not all, trade agreements in the post-war era include some form of safeguard. Since reasons behind the existence of escape clauses also lead to the possibility of its abuse, the institutional architecture put in place to deal with unforeseeable circumstances must include a means of preventing abuse of escape. Scholars have argued that to prevent such abuse, the use of escape clauses must be accompanied by some form of cost, to be paid by the escapee to other members. This cost acts as a form of compensation, from the steel importer putting up an emergency tariff,

for example, to the affected steel exporter. However, the empirical evidence belies this widespread notion. Indeed, the very institutions examined by the literature, the WTO chiefly among them, are not bargaining over optimal levels of compensation: they are avoiding compensation in the first place.

In Part I, I thus show how an alternative means of allowing for flexibility while preventing its abuse consists of appeals to exception. States are said to appeal to exception whenever they suspend their obligations under an agreement by using an escape clause, without providing any compensation or paying any penalty, but by insisting instead on the justificatory circumstances motivating escape. Indeed, the GATT/WTO's escape mechanism has shifted from a compensation scheme, on which it relied early in its history, to appeals to exception. I demonstrate how Members consciously pursued reforms that allowed for this shift: they clarified the criteria of escape, increased the level of information required of potential escapees, and provided means for other Members to challenge escapees' claims.

Hence, domestic politics provide the motivation behind both delegation of power to the institution, and the inclusion of mechanisms that can limit such delegation under specified circumstances. But the interplay between the international level and the domestic level does not end there. Indeed, in Part II, I explore a further layer of this interaction, by showing that variation in states' interests over the degree of flexibility they set aside for themselves can also be traced back to the nature of their domestic institutions. In this way, I use Part II to account for the considerable variation among states in the amount of flexibility over tariff concessions they emerge out of multilateral negotiations with.

The type of flexibility that is built into tariff concessions is called binding overhang. Since overhang is not considered one of the three traditional trade remedies that provide WTO members with policy space, it is worth briefly going over what is meant by it, why it should be considered alongside other flexibility mechanisms, and what students of trade institutions gain from examining overhang as a subset of contingency measures.

While WTO members have negotiated bound tariffs on the vast majority of traded goods, the rates actually levied at the border, the applied tariffs, are often substantially lower. The difference between the two differs dramatically across states: Jordan's current overhang is 5%, while Norway's is 23%. Yet in both cases, since states are free to raise the level of applied tariffs up to the bound level, the sheer existence of overhang, constituting as it does "unused protection", is striking. The puzzle over the existence of overhang, and its variation among states, is addressed in Part II, while the welfare costs of overhang are examined in Part III.

The task of identifying binding overhang with institutional flexibility is rendered easier by the fact that the WTO's 2009 World Trade Report, as well as Pascal Lamy, the WTO's Director General, consistently reference binding overhang as a form of contingency measure offering policy space to the institution's Members. The reasons for making this link are straightforward. Just as traditional trade remedies, binding overhang offers a mechanism allowing for targeted protection that does not breach the terms of an agreement on limiting such protection. In the example above, Norway can costlessly increase its average protection by 23% while remaining in compliance, while Jordan cannot.

Two characteristics of overhang set it apart from trade remedies, however, and offer an opportunity to examine state decisions over flexibility that are not otherwise observable. First, binding overhang is cheap and fast to exploit, since it does not require costly investigations; and secondly, it does not rely on proof of injury.

The first and main difference between trade remedies such as antidumping and overhang is the low cost of exploiting the latter. Because tariff increases within bound limits are not liable of being challenged in dispute settlement, and because no formal criteria exist to differentiate between legitimate and illegitimate increases within the bound, no internal investigation need be completed for overhang to be translated into protection. In Part III, I examine how states may incur some reputational costs from exploiting overhang, but I argue that any such costs are necessarily small, and likely do not serve as much of an impediment to making use of tariff flexibility. For reasons related to its low cost, overhang can be rapidly exploited, whereas the length of antidumping investigations, for example, means that there is a delay between the need for import relief and associated trade remedy action, which makes the analyst's task harder. However, the main benefit flowing from the cheap nature of overhang, from the point of view of scholars, is that it allows for the observation of the use of flexibility by countries that otherwise never make it into the sample. Since most countries do not have an anti-dumping regime, for example, the most popular WTO trade remedy is out of their reach. As a result, scholars are unable to observe private industries in these countries asking for import relief, and political actors granting or denying protection. Because overhang is a cheap flexibility mechanism, considering it effectively lets these countries enter the sample of observation.

Secondly, and related, the exploitation of binding overhang does not rely on proof of injury, import surges, or unforeseen circumstances, as do all traditional remedies. While this, among other aspects, is what renders it undesirable from the point of view of some Members, it has the analytical advantage of not requiring scholars to differentiate between legitimate and illegitimate cases. Since there are no criteria for its use, Members do not internalize the likelihood of success or failure (the likelihood of a measure being challenged in dispute settlement), which is usually thought to truncate the sample of measures, and lead to an unobservable negative universe of cases. Since overhang and its exploitation are not constrained by rules, only state interests affect them.

But if it is cheap, what, then, explains why some countries seem to value overhang more than others, and what, in other words, really curbs its use? The answer, as I show in Part II, has to do with cross-country variation in the diffusion of political power across domestic institutions. I demonstrate how greater dispersion of veto authority increases the likelihood of a domestic actor having both protectionist preferences and the power to act on them by pushing for higher applied rates. Compounded with the dynamic of logrolling, greater dispersion of power thus increases the unpredictability of trade policy after an agreement is struck, since sub-state actors have the ability to "capture" flexibility and exploit it to push for their preferred level of protection. And just as executives internalize the preferences of veto players at home when designing international agreements that subsequently need to be ratified, they also seek to guard themselves against subsequent pressure from these same actors by making agreements less flexible, if they are vulnerable to such pressure. One way of achieving this is by limiting overhang: binding tariff lines closer to their applied levels.

Not only do I show that executives indeed anticipate the increased unpredictability borne from powerful sub-state actors pushing for their preferred levels of protection after the agreement is struck; I also demonstrate that executives are correct in doing so. Indeed, in domestic systems that have more dispersed veto authority, tariff rates tend to vary more, and increase more over time, than in those countries with centralized power. And this, *in spite* of the anticipatory behavior of executives—and the resulting decreased overhang, and therefore smaller wiggle-room—in these very countries.

The first constant running through this dissertation is therefore that of domestic politics. The domestic level partly accounts for why states join international institutions in the first place, but it also shapes the content of the resulting agreements. Flexibility mechanisms are included to offer temporary relief to domestic industries if circumstances call for it, but the nature of domestic institutions also accounts for the costs of flexibility, and thus for cross-country variation in the extent to which states set aside tariff flexibility for themselves.

The second recurring issue is the notion of norms, as opposed to formal rules, and their importance in the international trade regime. What motivated Members' choice between compensation and appeals to exception as the mechanism undergirding the escape clause, as demonstrated in Part I, was not a concern over efficiency alone. Rather, Members behaved in keeping with a norm according to which the onus of balancing injury (through retaliation *and* compensation) rests on the injured party. The alternative produces a two-tiered system, where some countries can afford to be a shirker state and compensate others at their will for their violations, and others cannot. As I show, a debate over this very issue took place within the WTO membership regarding reform to the admittedly inefficient retaliation mechanism. The reasoning of country-members can

therefore be readily observed. Broadly speaking, the economic concept of efficient breach seems to have little hold over the WTO membership.

Norms are also observed at work in the case of binding overhang. As frequently occurs in cases where socially undesirable behavior is not formally sanctionable, we observe the emergence of an informal system of enforcement. Norms of behavior can be observed taking over where rules fall short. Led in no small measure by the Secretariat, WTO Members have been seen reprimanding countries for not only raising their tariffs within *allowable* bounds, but also for merely holding onto this option by maintaining a high level of binding overhang. This, by itself, constitutes a remarkable phenomenon: reputational costs are being incurred by states that remain *de jure* compliant, as in the repeated condemnations of Norway's WTO tariff schedule that I point to in Part III.

The condemnations of Norway and other countries over their tariff schedule emerge from a prevalent belief among some WTO Members that overhang, while providing countries with flexibility, does so in a particularly costly fashion. In Part III, I push the comparison of binding overhang against traditional trade remedies by assessing these beliefs about the consequences on welfare of flexibility in tariff levels. I show that the wiggle-room countries obtain for themselves by negotiating bound tariffs far above applied rates significantly decreases imports. Indeed, investors and exporters value stability in market access. Through the uncertainty it entails, overhang acts as a tax on imports, over and above applied duties. Crucially, I seek to isolate the effect of overhang bearing on expectations alone, by controlling both for the average level of applied duties, and the degree of volatility in the level of applied duties over time. The findings lead me to suggest that widespread overhang leads to disproportionately high negative externalities, and that any conditional flexibility device, such as safeguards, whatever the

rules surrounding its use, might lead to a more efficient trading system. This belief has implications for the aforementioned collapse of Doha Round talks over the inability to agree on a special safeguard mechanism (SSM): it appears that whatever the levels of tariff increases it would have allowed for, any form of the SSM would have been preferable to continued, unconstrained overhang. The greater conclusion is not only that binding overhang is particularly taxing on the institution, but also that decisions over the design of rules have an observable impact on the welfare costs of flexibility.

Finally, it is worth noting that the study of flexibility in international institutions is an examination of second-best options. The debate over policy space represents recognition by state actors, and increasingly, by scholars, that "first-best" international arrangements will not be achieved if they do not come packaged with a means of confronting unforeseeable circumstances and the domestic political costs entailed. As such, this dissertation is faithful to political economy's role as a discipline. If economists are in the business of identifying first-best options based on their respective welfare costs and benefits, then the role of political economists is to clarify their political feasibility. Overly rigid agreements can be shown to be politically unfeasible, and in practice, unstable. This dissertation deals with the ways that the designers of international agreements and the states that make up their membership get around this issue.

PART I: SEEKING ESCAPE: THE USE OF ESCAPE CLAUSES IN INTERNATIONAL TRADE AGREEMENTS

Escape clauses are a regular feature of international agreements. They provide a degree of "flexibility" as a means of dealing with the unpredictable events that sometimes face an institution's members. This paper asks, how do institutions realize the benefits of flexibility while preventing its abuse? In other words, if an agreement's flexibility increases its effectiveness up to a point, and negatively affects it past that point, how is this equilibrium attained?

Escape clauses, or "pressure valves", allow members of an agreement to temporarily suspend their obligations under that agreement following an exogenous shock, while assuring other state members a return to compliance in the following period. A sudden surge in imports that threatens a domestic industry, for instance, might make it politically unfeasible for a country to keep its borders fully open to trade as dictated by the terms of a trade agreement. By containing the breach within a single period, escape clauses allow members to address domestic-level exigencies without forsaking the future benefits derived from international cooperation.

The possibility of escape clauses introduces a trade-off that goes to the center of the institutional design question. On the one hand, an overly rigid agreement sets high barriers to entry for new members, and risks the abrogation of the agreement at the first exogenous shock. On the other hand, an overly flexible agreement, while immune to exogenous shocks, is prone to abuse by its members, to the point where it loses its credibility and becomes irrelevant. In both cases, whether through the abrogation of the

agreement or through abuse of escape, any benefits from cooperation are lost. This trade-off motivates the paper's puzzle, which I address in the issue-area of trade, where escape clauses are most prevalent. How do trade institutions manage the use of escape while preventing its abuse?

The conventional answer is that "for escape clauses to be useful and efficient they must impose some kind of a cost", to be paid by the escapee to other members.[2] This cost acts as a form of compensation, from the steel importer putting up an emergency tariff, for example, to the affected steel exporter. There exists an equilibrium, achieved through bargaining among members, at which the cost of escape is counterbalanced by the prospect of future cooperation.[3] Moreover, compensation mechanisms are said to be self-enforcing, since costs are paid voluntarily by members eager to signal their intent to comply in the next period. Institutions, then, need only confirm the payment of compensation. The literature's claims, however, come up short against the empirical evidence. Indeed, the very institutions examined by the literature are not bargaining over optimal levels of compensation: they are avoiding compensation in the first place.

This article makes two sets of claims. First, an alternative institutional means of providing flexibility without leading to its abuse is through "appeals to exception". Institutions cannot prescribe behavior for all possible states of the world, but they can create criteria that capture the type of circumstances that should warrant temporary breach. States appeal to exception by demonstrating how the domestic circumstances they face meet those criteria. Other members can challenge these appeals, which raises the informational standard for valid escape. Under such a scheme, gate-keeping no longer

[2] Rosendorff and Milner 2001, 831
[3] ibid

occurs through cost and the escapee's willingness to pay it, but through the nature of circumstances leading to escape, and the institution's ability to verify them. Secondly, I argue that the GATT/WTO's escape mechanism has shifted from a compensation scheme, on which it relied early in its history, to appeals to exception. I show that GATT/WTO members consciously pursued reforms that allowed for this shift: they clarified the criteria of escape, increased the level of information required of potential escapees, and provided means for other members to challenge escapees' claims. The reasoning for these reforms can be traced to discussions occurring 20 years prior to the Uruguay Round, and further observed in a series of pivotal Appellate Body rulings in the wake of the WTO's inception. Moreover, the institution's success in restraining abuse of the escape clause under appeals to exception is apparent when one compares the record of relevant disputes in the GATT to that of the WTO. In sum, when GATT/WTO members had the choice of one mechanism or the other, they opted for appeals to exception. I outline some of the reasons for this choice, and suggest how it may also apply to other institutions.

I begin in Part I by defining and listing some characteristics of escape clauses. Part II argues that the literature's claims come up short against available evidence. Part III presents the logic of the argument. Part IV tests my claims against the evolution of the GATT/WTO. Here I rely heavily on recently declassified GATT archives to trace the shift from compensation and retaliation to appeals to exception. In Part IV, the reasoning I lay out allows me to explain a well-known "anomalous case" under GATT: in the wake of the 1968 strikes, France escaped the agreement for six months, yet the remaining contracting parties did not retaliate, compensation was neither sought nor offered, and the agreement survived unscathed, all of which runs counter to the literature's predictions.

Characteristics of Escape Clauses

The term 'escape-clause' is used loosely to refer to a wide range of different institutional devices. Here, I narrow down the definition for the purposes of this article. In their seminal paper on the subject, Peter Rosendorff and Helen Milner define an escape clause as "any provision of an international agreement that allows a country to suspend the concession it previously negotiated without violating or abrogating the terms of the agreement."[4] Implicit in this definition is the notion that escape clauses must be temporary, a point which warrants emphasis.

Another characteristic of escape clauses is that they are indiscriminate: their effect is felt across the agreement as a whole.[5] The same goes for all provisions that allow for the renegotiation of completed agreements, so called sunset clauses, or duration provisions.[6] Escape clauses rely precisely on the high cost of renegotiation of the terms of an agreement, as they serve to *preserve* the legitimacy of those terms. In this way, not only do they benefit states facing exigency, but they also serve as insulation of the agreement as a whole against exogenous shocks affecting individual members.

Escape clauses straddle the delimitation between soft law and hard law.[7] On the one hand, they lower an agreement's entry barriers by lowering sovereignty costs, a typical characteristic of soft law instruments. On the other hand, they further the degree of "legalization" of an agreement.[8] An internal limit suggests an outer one: escape clauses

[4] Rosendorff and Milner 2001, 830. The first comprehensive treatment of escape clauses is found in Downs and Rocke, 1995.
[5] For this reason, The use of anti-dumping within the WTO, which is targeted towards exports of a given country member, cannot be considered an escape clause.
[6] For a discussion of sunset clauses, see Koremenos 2001 and Koremenos 2005.
[7] For a discussion of soft law and hard law, see Abbott and Snidal 2000.
[8] I use the term 'legalization' in accordance with Goldstein and Martin, 2000.

have little meaning within a vague informal agreement; they only gain meaning within "hard law" type institutions. Inclusion of escape clauses also suggests significant costs of (re)negotiation. An ad-hoc agreement, or one that is (re)negotiated at no cost, has less use for an escape clause; it can be iteratively adjusted to suit changing circumstances.[9] Ironically, if escape clauses serve their purpose, an agreement gains in stability and credibility the more precisely it can define the set of circumstances under which it can be violated. When actors avail themselves of an escape clause, they fall into *de facto* non-compliance, yet are still under the agreement's rules, and thus remain *de jure* compliant. In this sense, the exception really does confirm the rule: an escape clause says something {covered, not covered} about all states of the world. As a result, the inclusion of escape clauses does not necessarily decrease obligation, as some scholars have claimed.[10] Reduced obligation within the area under exception might be balanced out by an increased degree of obligation in the areas *not* covered by exception.[11]

Escape clauses matter, because they lead us to examine the behavior of players in circumstances that constitute a 'hardest test' for international agreements. An institution's ability to weather 'involuntary defection'[12] by its members (when the pressure to forgo an agreement's obligations reaches a peak level) while retaining its credibility is a good indicator of its effectiveness in ensuring cooperation.

The Conventional Wisdom

Escape clauses are not new. As Irving Kravis observed in 1954, "some kind of

[9] On the simultaneous inclusion of escape clauses and renegotiation clauses, see Koremenos 2005.
[10] Koremenos, Lispon, and Snidal, 2001, and Koremenos, 2004, forthcoming, 37.
[11] This trade-off is also apparent in human rights treaties, where escape clauses based on exceptional circumstances may prevent the inclusion of a greater number of specific limitations of individual rights. Gross 1998, fn. 45.
[12] See Putnam, 1988.

escape provision is, therefore, almost an inevitable feature of any durable international agreement to reduce trade barriers."[13] And flexibility-enhancing devices have existed alongside political and economic agreements for a much longer time. In the *Discourses on Livy*, Machiavelli praised the Roman Senate for temporarily going against custom and law in allowing people to take arms and defend themselves during an attack. The Senate understood that given this necessity, legislation had to be adapted to circumstance, since the reverse could not be done. It determined that "what they [the citizens] had to do, they should do with its consent, in order that they should not, by disobeying through necessity, get accustomed to disobeying through choice."[14] The Senate was effectively insulating the legitimacy of its law from the negative effects of a temporary crisis.

More recently, Rosendorff and Milner found that trade agreements with escape clauses Pareto dominate rigid agreements under uncertainty.[15] Their second claim is that "for escape clauses to be useful and efficient they must impose some kind of a cost."[16] Just as all members have an incentive to cheat on their obligations under the agreement, all members equally have an incentive to abuse the escape clause. The 'cost of escape' must then be set by the architects of an agreement in such a way as to make it beneficial to escape temporarily when forced to do so, but costly enough to prevent abuse. States will resort to the escape clause whenever the domestic benefit from escaping rises above the cost of the escape clause.

The necessity of a penalty has been echoed by economists who have sought to derive "optimal levels of compensation" to ensure the possibility of recourse to escape

[13] Kravis 1954.
[14] Machiavelli, *Discourses on Livy,* 1.38
[15] Rosendorff and Milner 2001.
[16] ibid, 831.

while preventing its abuse.[17] Much of this research draws on Rosendorff and Milner's two-stage model, which separates the agreement bargaining phase from an infinitely repeated trade cooperation game between countries. Importantly, in Rosendorff and Milner and subsequent articles, the 'escape and compensate' scheme is entirely self-enforcing. Escaping members themselves have the strongest incentive to offer compensation, since they are looking to make their future return to compliance credible. As such, delegation of authority is minimal: the central institution need only record and publicize instances of escape and compensation.[18]

Where is the Compensation?

Comparing the findings of the literature on flexibility with existing institutions—the very trade and monetary institutions examined by this literature—we are left with a series of puzzles. Empirical observation does not match up with the implications of prevalent theory.

First, whereas the literature predicts that escape clauses must be costly to prevent abuse, and that states exercising escape clauses will therefore voluntarily offer compensation, we observe no such compensation – much less *voluntary* compensation – in trade agreements such as the WTO, or monetary institutions such as Bretton Woods.[19] In fact, the trend in the GATT-WTO is *away* from compensation: as I demonstrate in the

[17] See, for example, Herzing 2005.
[18] Rosendorff and Milner, 2001, 853.
[19] Rosendorff and Milner 2001 argue that the IMF did impose a cost on states that defected by devaluing the currency: "Devaluation was therefore frequently associated with fiscal and monetary contraction and policy liberalization and reform, all of which come at a domestic political price." (Rosendorff and Milner 845) While the link is correct, it is not a causal one: there is no stipulation within the 1944 IMF agreement—in the Article IV escape clause or otherwise—that would indicate that devaluation was to be followed by any type of readjustment. Adjustments that were imposed were introduced to avoid the balance-of-payments problems that led to escape in the first place, not so as to impose a cost on escape. When Canada breached in the 1950s by floating its currency, it faced no sanctions, reputational or otherwise, and was in fact met with accommodation. (Simmons 2000)

subsequent section, GATT members gradually abandoned compensation, and the WTO has formally proscribed it during the first three years of any safeguard, the maximum period of which is four years.[20]

Secondly, whatever the cause behind the absence of compensation, it is not having the predicted effect: member-states are not abusing the escape clause. In the case of the GATT-WTO, the escape clause is still thought to be underused, even as it was made much less "costly" following the Uruguay Round and the introduction of the Agreement on Safeguards, which limits the possibility of compensation.[21] We thus observe no compensation, and yet no resulting abuse: something else, then, must be causing the observed level of restraint in the exercise of escape.

Finally, the limited role of the institution predicted by the literature is at odds with the expanding role of existing institutions. Far from being limited to observing and publicizing the voluntary payment of compensation, institutions today are investing heavily in setting up sophisticated dispute settlement mechanisms and independent bodies that monitor the use of escape clauses and that play a far greater role in respect to escape clauses than predicted by the literature.

A subsequent article by Peter Rosendorff directly tackles this last point, and attempts to ground the 'escape and compensate scheme' in empirical observation by applying it to the WTO. Rosendorff construes the Dispute Settlement Procedure (DSP) of the WTO as a compensation mechanism in itself, which allows breaches, so long as they are compensated: "The use of the DSP therefore allows a contracting partner to violate the agreement, compensate the losers, and still remain within the community of

[20] AS, Article 7:1.An extension may be sought, however, in which case the safeguard measure, in principle, may be in place for up to eight years. Agreement on Safeguards, Article 7:1-3.
[21] Bown 2002.

cooperating nations."[22] It is not the threat of having to compensate, as much as the cost of compensation itself that leads to an equilibrium use of the escape clause: in Rosendorff's model, we expect compensation to occur every time the escape clause is used. The DSP becomes the device that sets the equilibrium penalty, as per the reciprocity principle of GATT. Implicitly, the possibility of escape resides not only in the escape clause *per se*, but in the very existence of the dispute settlement body.

Rosendorff's approach overlooks a number of key features of the DSP. First, the onus of retaliation is on the complainant, not the DSP.[23] As a result, retaliation is exceedingly rare, having been employed only three times in the history of the WTO. The DSP's effectiveness relies on the publicization of fault, not on retaliation.[24] Its objective is explicitly *settlement*, not the offer of equivalent suspension of concessions.[25] Moreover, the sophistication of the DSP does not support the self-enforcing nature of the compensation scheme as set out in Rosendorff and Milner. If countries were eager to signal their desire to comply in the next period, would they not simply offer compensation voluntarily?

Logic of the Argument

As presented in the previous section, the existing literature describes a model that allows for institutional flexibility and restrains abuse through the provision of an optimal level of compensation by the escapee. As I have shown, however, this is not what we observe in existing institutions. Here, I outline what I see as an alternative equilibrium—

[22] Rosendorff 2005.
[23] Proposals made to reverse this onus have been met with great opposition in the WTO membership and have all been rejected as a result. See fn 37.
[24] Busch and Reinhardt 2001.
[25] Jackson 2004.

one that I argue the GATT-WTO has shifted to—and I explain some of the reasons why I believe this shift has occurred.

An alternative means allowing for flexibility while preventing its abuse consists of appeals to exception. States are said to appeal to exception whenever they suspend their obligations under an agreement by using an escape clause, without providing any compensation or paying any penalty, but by insisting instead on the justificatory circumstances motivating escape.

International agreements inevitably take the form of incomplete contracts: members cannot prescribe behavior for all possible states of the world, but they *can* formulate criteria that capture the type of circumstances that should warrant temporary breach. Members may then appeal to the institution by conveying how the domestic circumstances they face correspond to these "criteria of escape". Such criteria are by no means arbitrary; in GATT as in other trade institutions, they aim to impose two key requirements on would-be escapees. First, they proxy for some measure of severity. Members are allowed to escape only if not doing so would result in some significant amount of injury. Secondly, and perhaps more importantly, the criteria of escape screen for the *exogeneity* of overwhelming domestic circumstances. Indeed, appeals to exception relate to events that are statistically independent—that is, equiprobable for all members, and the occurrence of which conveys no information about their re-occurrence.[26] Such events, by definition, cannot lead to a "spiral of defection", since they do not affect the

[26] Much as in insurance contracts, whatever makes an actor more or less likely to resort to escape will likely be expressed through higher or lower premiums, or in the case of international institutions, the distribution of gains from cooperation in the negotiated agreement. What is not included in the contract is expected to be equiprobable. If country A is more likely to violate an agreement than country B, this difference is not handled through the creation of an escape clause; rather, it is dealt with within the terms of the negotiated agreement. Foreign may insist on better terms to reflect its greater uncertainty about Home's ability to deliver, or on some guarantee to that effect.

probability of future similar events: appeals to exception specifically target one-offs, events that do not incite other members to defect in turn, and that belong to the circumstances "not planned" for by the agreement's designers. These two criteria—severity and exogeneity—are readily observable in the escape clauses of regional trade agreements and the GATT-WTO. While the level of enforcement and clarity of GATT's escape criteria have changed over time—and this change, as I argue below, was instrumental in allowing for a shift from compensation to appeals to exception—their content has remained much the same. I go into more detail in the next section. Under appeals to exception, then, gate-keeping no longer occurs through cost and a country's willingness to pay it, but through the nature of circumstances leading to escape, and the institution's ability to verify those circumstances.

The very same reasons that drive institutions to include escape clauses in the first place also impel members to recognize appeals to exception. Countries devise escape clauses behind a veil of ignorance, not knowing which country might need to exercise it in the future, but sharing a common interest in the availability of the option. Similarly, since all states are equally likely to encounter the need for escape, all members face symmetrical incentives to *withhold* countermeasures in those circumstances. These incentives form a separate game of cooperation: Foreign withholds countermeasures against (or demands no compensation from) Home, in view of Home's credible domestic exigency, with the expectation that when Foreign faces similar circumstances in the future, Home will withhold countermeasures in turn. Under a cooperative equilibrium, only the minimum trade barriers are raised to deal with domestic exigency, since countermeasures are withheld when a valid exception is communicated.

To illustrate through an analogy, there are at least two ways of "getting away" with speeding on the highway: with sufficient funds, one can pay the ticket (provide compensation) and speed off; or in the case of a husband driving his pregnant wife to the delivery room, one can appeal to exceptional circumstances to justify the violation. Cases such as these were not planned for by the designers of the traffic code, and benefit from the use of a tacit escape clause. Moreover, pregnant couples are exogenous: they do not affect the probability of another pregnant couple taking to the road. A pregnant couple that can credibly convey its exceptional circumstance will most likely face no sanctions resulting from the speeding violation, and need not offer to pay any cost.

It may be true that given the benefit of quickly getting one's pregnant wife to the hospital, one is ready to pay any penalty amount, but that is also a defining feature of the type of circumstances covered by escape clauses. A penalty under true exigency becomes largely meaningless, since it serves no deterrence function: the threat of a ticket would likely not dissuade a pregnant couple from speeding. The penalty is rendered superfluous. As in Machiavelli's account, when actors cannot be made to obey the law under some specific circumstances, then the law should be adjusted to fit those circumstances. And as per deterrence theory, not only need superfluous threats not be made, but they also *ought* not be made, as threats that go unheeded may result in a loss of credibility on the part of the threat's sender—in this case, the institution. Indeed, in designing an escape clause, states actors are pursuing not only their immediate interests, should they face domestic exigency; they are also acting to preserve the legitimacy of the *agreement* from inevitable temporary violations by other members.

But how do escape clauses that function through appeals to exception curb the risk of abuse? Indeed, criteria of escape can be manipulated, and thus are not sufficient

by themselves. All members have a strategic incentive to portray any instance where they face some domestic pressure for protection as constituting true exigency arising from severe and unforeseeable circumstances. Every state has as its dominant strategy to stretch the boundaries of exceptionality, to the detriment of every other state.

It is to forestall this incentive to misrepresent, and the ensuing reduction in overall cooperation, that institutions relying on appeals to exception must allow for the verification of the claims made by escapees. The credibility of appeals to exception—in other words, the degree to which they convey the severity and exogeneity of the circumstances that motivate them—is garnered by making them in a forum where they are open to verification by members. Any exercise of the escape clause in the WTO is liable to be challenged by the rest of the membership through the dispute settlement understanding (DSU). As I show in the next section, members can challenge either the severity of circumstances—whether increased imports caused or threatened to cause "serious injury" to domestic producers; or their exogeneity—whether increased imports resulted from "unforeseen developments". Because of the existence of such decentralized enforcement, it becomes in the interest of a valid escapee to provide as much information as possible to demonstrate that it meets the criteria of escape. The existence of such an incentive for valid escapees in turn makes it more difficult for non-valid escapees to misrepresent their domestic circumstances. The informational standard, in other words, is heightened by putting the onus on escaping states to justify their escape, and by providing other members with the means of challenging this account.

To be clear, appeals to exception do not entail a truly "costless" system of escape. The ability to verify states' claims implies considerable investments in monitoring mechanisms and the creation of legal bodies to settle disputes. Appeals to exception are

costless only in the sense that they do not rely on back and forth payments in the exercise of escape clauses as a guarantee between states.

This reliance on the ability to disseminate and verify information also suggests when an institution can have an escape clause that relies on appeals to exception, and when it cannot. In this way, one can formulate expectations about escape mechanism institutions will choose by looking at the level of information they can disseminate and verify. These expectations can be stated succinctly in the following hypothesis:
If an institution is able (unable) to gather and verify information about the domestic circumstances of escaping members, it is more likely to rely on (compensation) appeals to exception in allowing flexibility.

This hypothesis is further complicated by the fact that the ability to exchange information and verify it is endogenous, being itself the result of successful interaction among state actors. And while predicting when states will succeed in the creation of functioning monitoring mechanisms is somewhat outside the scope of this paper, I argue that in the case of the GATT, part of the incentive behind the creation of such a monitoring capacity was precisely to allow for escape that does not rely on compensation.

The assumption behind my main hypothesis is that if states have the monitoring capacity necessary for an appeals to exception scheme, then they will choose it over a compensation model. Here I identify some general reasons for such a preference, and then outline some further reasons why this preference existed specifically in the GATT.

First, the reliance on compensation to regulate escape re-inserts power into an institutional context that aims for the opposite. While institutions are created in part precisely to counterbalance power relations, compensation schemes provides countries enjoying greater relative economic power with a means to "breach and pay" to assuage

domestic pressure for protection by interest groups. WTO scholars have similarly argued that the goal of redressing asymmetries of power is a characteristic of dispute settlement, and one "essential to the credibility, and therefore to the efficiency of any DS [dispute settlement] system… To allow a "buy-out" possibility favors the rich countries in a way that undercuts some of these goals."[27]

Secondly, a breach and pay scheme goes against a primary goal of trade institutions in general, and the GATT-WTO in particular, namely that of assuring "security and predictability" to the institution's members.[28] Markets tend to react poorly to uncertainty, and disruptions caused by unpredictable escape by members who can afford it can have a lasting negative impact on trade growth.

Finally, in the specific context of the GATT-WTO, a significant factor for the preference of one mechanism over the other is that making escape costly for escapees is impractical. The preferred means of doing so, by having the escapee compensate aggrieved members through lowered barriers on other products, is often unfeasible, since finding products on which to further decrease tariffs has further domestic political consequences. [29] As a result, compensation is usually offered by allowing states affected by the escape clause to suspend equivalent concessions. This, however, turns out to be an economically disastrous solution. As Robert Hudec writes:

> In economic terms, the balancing rationale for retaliation is fiction. The aggrieved country does not gain anything by raising trade barriers. That act usually inflicts a net loss upon its own citizens…[30]

[27] Jackson, 2004, 118.
[28] See DSU Article 3.2. John Jackson argues that this objective is "the most important "central element" of the policy purposes of the [DSU]", Jackson, 2004, 112, 117.
[29] Bown 2003, 51.
[30] Hudec 2000, 22.

In other words, while compensation limits the abuse of flexibility, as per the literature, it does not in fact allow aggrieved members to recover their losses, since the process of recovery often imposes more costs on states than the total amount recovered. In the next section, I examine the evolution of the GATT-WTO to test the hypothesized link between institutions' ability to verify information and their choice of one escape mechanism over another.

Escape in the GATT-WTO

While the story told thus far is a generalizable one, it is no coincidence that the literature on escape clauses has focused almost exclusively on trade agreements, and specifically on the GATT-WTO. The latter is undoubtedly the institution with the most observable cases of formal escape of any international agreement today. In this section, I demonstrate GATT members' preference for moving away from compensation-based escape, and I link this preference to reforms allowing verification of the domestic circumstances faced by would-be escapees. Throughout this section I benefit from the recently declassified GATT archives at Stanford, that offer a wealth of information about early discussions among states on all issues faced by the membership, including the question of flexibility.[31]

Formal trade safeguards were originally an American initiative. In February 1947, the US president signed an executive order requiring that an escape clause be included in

[31] The GATT archives are digitized and fully searchable online, at http://gatt.stanford.edu/bin/search/simple. Last accessed: Tuesday, March 4, 2008

all future trade agreements.[32] The GATT was signed later that same year with the objective of lowering trade barriers globally, and accordingly contained a similar escape clause, chiefly at the insistence of the US, in the form of Article XIX.[33]

Article XIX indicated that members affected by "unforeseen developments" that led to "serious injury" as a result of their GATT obligations could suspend those obligations "to the extent and for such time as may be necessary to prevent or remedy such injury".[34] Article XIX had a compensation and retaliation clause, which allowed members affected by the escape clause to suspend the application of "substantially equivalent concessions".[35] From 1947 to 1994, the duration of GATT, members exercised Article XIX measures 150 times.[36]

Looking at the exercise of the escape clause, one notes that in the GATT's first years, compensation was provided in an almost automatic fashion following every Article XIX measure. Starting in the 1960s and early 1970s, however, there was a striking decrease in the popularity of compensation and retaliation following escape. Indeed, only in the first decade of the GATT was a majority of Article XIX measures (57.9%) met with some form of compensation. While the total number of Article XIX measures increased with time, the use of compensation and retaliation declined further. This trend continued through GATT's history, until compensation and retaliation came to play a trivial role, being relied on in only 5.3% of escape clauses during the 1980s.

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[32] Executive Order #9832, 624-625. Later, "[t]he Trade Agreements Extensions Act of 1951 made the inclusion of an escape clause in new trade agreements a statutory requirement." Kravis 1954. Previously, escape clauses had only been used in bilateral trade agreements. The first formal escape clause in a trade agreement was in the Reciprocal Trade Agreement between the United States and Mexico, in 1942. Article XIX of the GATT was modeled on that provision. (GATT 1987)
[33] WTO 1997.
[34] GATT Article XIX:1(a)
[35] GATT Article XIX:3(a)
[36] WTO Secretariat, GATT 1987.

(Insert Table I about here)

Many of the reasons for such a shift away from compensation can be surmised from GATT discussions of time. For instance, it appears that compensation was thought to increase the average period of escape: as the US representative observed in 1976, "compensatory withdrawal of concessions tends to encourage the permanence of safeguard actions."[37] Indeed, if paying compensation is perceived as "resolving" the imbalance caused by the escape clause, it may also alleviate the pressure on the escaping member to reintegrate compliance, thus increasing the average level of protection at any given time. Moreover, it was often difficult to find products on which a country could provide further compensatory concessions *or* foreign products on which to raise barriers as retaliation. As the French representative declared during the same discussion, "…it has become increasingly clear that for the majority of countries—even for the most powerful—retaliatory action is very often a possibility which is more theoretical than actual given the practical problems of finding measures that are appropriate."[38] These difficulties were exacerbated in the case of asymmetric trading partners, when it often proved impossible to balance the injury caused by raising tariffs on a single vital export product.[39] In short, escape through compensation was seen as problematic.

Notwithstanding the open abandonment of compensation and retaliation over time, members remained unable to rely on appeals to exception formally, since it proved

[37] GATT 1976, MTN/SG/W/14, 2. Though GATT escape periods may have been longer than under the WTO, GATT also had no formal limit on the maximum length of Article XIX measures, a want which was remedied in the WTO's Agreement on Safeguards. As I show, recent discussions over "easier compensation" showed similar fears over compensation undermining prompt compliance. See TN/DS/W/5.
[38] GATT 1976, MTN/SG/W/18.
[39] As the Greek representative noted during discussions over one of the very first Article XIX measures, in 1952, "The United States had been almost the only market for Greek exports and it was difficult to envisage any new concession which could compensate for the losses suffered by the producers and exporters of figs." (1952, SR. 7/7, p.5) Tellingly, only one developing country took part in either retaliation or compensation during GATT's history. (GATT, MTN.GNG/NG9/W/7, 5.)

difficult to credibly communicate the severity and exogeneity of domestic circumstances, given that states' claims could not be effectively verified by the membership. The reasons for this inability were twofold. First, the GATT's criteria of escape were overly vague: "The degree of loss, the list of acceptable causes of the loss… were purposefully left underdefined in the original legal text".[40] More generally, the weakness of GATT dispute settlement kept countries negatively affected by escape from effectively challenging it. Indeed, in what has been referred to as the GATT's "birth defects", respondents could block proceedings at any stage of a dispute, including the adoption of a panel report.[41]

GATT members' inability to strike down invalid measures can be gleaned from the results of dispute settlement. The first three Article XIX measures ever used, in the early 1950s, resulted in two disputes, *Fur Hats and Hat Bodies* in 1951, and *Dried Figs* in 1952. The first dispute became muddled in discussions over the criterion of "unforeseen developments", and was ruled in favor of the respondent.[42] The second dispute never made it to a formal ruling, but here again, the complainant, Turkey, was unable to prove that the US misused the escape clause, and the "unforeseen developments" clause again constituted a legal hurdle.[43] These two initial disputes set a precedent. During the remainder of GATT's 50 year history, *not a single* other dispute was launched in regards to the Article XIX escape clause. Moreover, it became common

[40] Barton, Goldstein, Josling and Steinberg, 2006, 110.
[41] That is, until 1989, when the general right to a panel was granted through the Dispute Settlement Procedures Improvements. (Castel, 1989)
[42] Report on the Withdrawal By the US of a Tariff Concession Under Article XIX of the GATT, 27 March 1951 - CP/106
[43] Increase in the US Duty on Dried Figs, Decision of 8 November 1952, (SR.7/15 - 1S/28)

knowledge that the "unforeseen developments" clause, the main criterion of escape, was left un-enforced.[44]

The situation in GATT contrasts markedly with that observed following the WTO's entrance in 1995. Article XIX was replaced by the current Agreement on Safeguards (AS) during the Uruguay Round reforms. Crucially, the AS does not allow compensation or countermeasures for the first three years of the safeguard,[45] the maximum duration of which is four years.[46] By limiting compensation, the AS made WTO escape clauses "more attractive than their predecessor".[47] As Rosendorff and Milner point out, the very procedure of filing an escape clause investigation may be costly in and of itself, and may serve as a barrier to the exercise of escape. In the case of safeguards, however, those costs are limited: safeguard investigations are easier than anti-dumping investigations, for example, since they do not require calculation of dumping.[48] As Chad Bown observes, it is difficult to imagine by what means the AS could make the escape clause any more attractive to WTO members, short of actually *paying* members for the exercise of safeguards.[49] Crucially, the AS features far better defined criteria of escape, as it explicitly clarifies the meaning of "serious injury", "threat of serious injury",

[44] "It would be unrealistic to assume that the practice of non-enforcement of the unforeseen developments condition was unknown when the new Safeguards Agreement was negotiated during the Uruguay Round." Argentina Footwear Panel Report, WT/DS121/R, para 8.66
[45] "The right of suspension [countermeasures] referred to in paragraph 2 *shall not be exercised for the first three years* that a safeguard measure is in effect, provided that the safeguard measure has been taken as a result of an absolute increase in imports *and that such a measure conforms to the provisions of this Agreement*." (AS, Article 8:3, emphasis added)
[46] An extension may be sought, however, in which case the safeguard measure may be in place for up to eight years. AS, Article 7:1-3.
[47] Bown 2002, 51
[48] *Global Trade Protection Report* 2004, 7.
[49] Bown 2002, 58

"domestic industry"; it provides clear criteria for identifying an increase in imports, and stipulates a required "causal link" between this increase and demonstrated injury.[50]

What of the ability to verify those circumstances? As per the expectations laid out above, the requirement to provide information has been drastically reformed in parallel with the escape clause. The AS spells out a requirement for would-be escapees to notify the WTO before the fact, as well as inform the Committee on Safeguards, present evidence satisfying AS criteria, and hold public notice for hearings.[51] None of these clauses were present in Article XIX. Most importantly, perhaps, the GATT's "unforeseen developments" clause has been called back into service—though it does not feature in the AS—and stringently enforced by the Appellate Body in a way that it never was under GATT. The way in which the shift from compensation-based escape to appeals to exception resulted in an institutional rebalancing with regards to the enforcement of escape criteria emerges most clearly from the examination of disputes over safeguards. Indeed, while in the GATT, the two only attempts at challenging a member's use of escape were thwarted in the institution's initial years and never again repeated, a very different picture emerges in the WTO.

(Insert Table 2 about here)

As can be seen in Table 2, the shift to compensation-less escape was accompanied by an institutional adjustment in the enforceability of criteria of escape. Indeed, the shift away from compensation in the AS is explicitly contingent on a fulfillment of the criteria of escape, as spelt out in Article 8; in the alternative, invalid use of the escape clause is

[50] WTO AS, Article 4.
[51] A good summary comparing the AS and Article XIX is contained in *The OAS Summary Description of the Uruguay Round,* 1996.

treated as any other violation of a country's obligations.[52] This adjustment was driven primarily by the WTO's Appellate Body (AB) in a series of pivotal rulings in the first safeguard cases brought to the WTO. When the panel in *Korea—Dairy*, the WTO's first safeguard dispute, ruled against the complainant, dismissing the latter's claim on "unforeseen developments", the AB forcefully overturned the panel's reasoning on appeal. It emphasized that safeguards are considered "emergency actions", and that such actions are to be invoked only in situations when, as a result of obligations incurred under the GATT 1994, an importing Member finds itself confronted with developments it had not "foreseen" or "expected" when it incurred that obligation."[53] The AB's reading of GATT's Article XIX effectively enforces the unforeseen developments clause, and with the exogeneity of domestic circumstances, more literally than it ever was under the GATT. The dispute was finally ruled against the escapee, Korea.

The situation is repeated in the very next dispute on safeguards, *Argentina—Footwear.* Here again, the panel provides a minimal reading of the "unforeseen circumstances" clause, and here again the AB forcefully overturns it, arguing: "the ... clause describes certain circumstances which must be demonstrated as a matter of fact in order for a safeguard measure to be applied consistently with the provisions of Article XIX of the GATT 1994."[54] The dispute is again ruled against the respondent, Argentina.

The panels in all six cases that followed *Argentina—Footwear* begin to apply the precedent set by the AB, and in all six cases, the ruling is against the escapee. More interestingly, in all cases but one, the unforeseen developments clause is pivotal in the

[52] See fn. 44, supra
[53] AB Report, Korea Dairy Safeguards, WT/DS98/AB, para 86.
[54] AB Report, Argentina Footwear, WT/DS121/AB/R, para 90-92.

panel's reasoning. In *US—Line Pipe*, the panel cites all four preceding safeguard cases and declares: "the requirement to demonstrate the existence of unforeseen developments in order to apply a safeguard measure under Article XIX is an issue that is well established in WTO law."[55] Further, "In this case, the ITC report does not contain any demonstration of the existence of unforeseen developments."[56]

The most notorious WTO dispute over safeguards, *US—Steel*, was also its most conclusive, resulting in a ruling against all safeguard measures at issue. Among other findings, the panel ruled that despite the US' mention of "extraordinary circumstances",[57] the measures "are inconsistent with the requirements" of GATT Article XIX:1(a) and AS Article 3.1 with regard to the demonstration of unforeseen developments. The US appealed, and the AB upheld the panel's findings with regards to unforeseen developments. The ruling seems to have a lasting effect on American use of safeguards: while it had initiated at least one safeguard investigation every year since the AS' inception in 1995, for a total of ten initiations over seven years, the US has not initiated a single safeguard investigation following the steel safeguards, from 2002 to 2006.

All eight WTO rulings on safeguards show a determination by the AB to enforce not only the new criteria of escape introduced by the AS, but also the existing Article XIX criteria that had gone un-enforced under the GATT, such as the unforeseen developments clause. The occurrence of disputes on safeguards that make it past consultations to a ruling (rather than end with early settlement, as a majority of disputes do) shows governments attempting to stretch the post-Uruguay Round rules in their

[55] Panel Report, US Line Pipe, WT/DS202/R, para 7.295.
[56] ibid, para 7.296
[57] Remarks by Robert Zoellick, United States Trade Representative Press Release, 12/04/2003

favor, before adjusting to the new level and scope of enforcement. The chronological record of these disputes displays an increasing internal coherence, as panels from *US Lamb* onwards reference the AB's literal reading of the unforeseen developments clause, and apply the criteria of escape with increasing consistency. In other words, in the WTO, the gate-keeping mechanism of the AS is not an optimal cost imposed on escapees; it is the *nature* of the domestic circumstances motivating escape. Accordingly, the institution's ability to verify those circumstances has been reformed alongside the shift away from compensation, and the product of this reform can be gleaned from the success that complainants have had in challenging invalid use of the escape clause.

One could argue, however, that the ability to disseminate and verify information and the resulting successful challenges to would-be escapees happened to coincide with the shift away from compensation, but that there was not causal link. Indeed, increased legalization is often observed in maturing institutions, and might have happened without a shift away from compensation. To account for this possibility, I take a closer look at discussions between GATT members two decades before the conclusion of the Uruguay Round. By consulting the GATT's archives, it is possible to trace the ideas underlying the reform of the escape clause back in time. In this way, I show that very early on, members of the GATT understood not only that appeals to exception and compensation were substitute means of allowing some flexibility while preventing its abuse, but that appeals to exception required a number of changes in the remainder of the agreement before being formally implemented.

The first important push for escape clause reform of the kind that occurred during the Uruguay Round took place in 1976. The US proposed a new escape clause

"international code" to remedy some of the "shortcomings in current practice" that were being voiced throughout the membership.[58] In particular, the US proposed increasing the specificity of criteria and conditions for escape, while retaliation and compensation would be waived: "…when governments apply safeguard measures that are in conformity with the agreed criteria and conditions of the [proposed] code, they would not be subject to retaliation, nor would there be any obligation for them to provide compensation. However, non-compliance with the agreed criteria and conditions could warrant retaliation."[59] Increasing the precision of the criteria of escape was already then seen as the starting point of escape clause reform. Other parties endorsed the proposal, and echoed this notion; there was no opposition to the proposed changes.[60] Members well understood that deterrence of abuse achieved by making escape costly, in situations of true involuntary defection (that satisfied the criteria of escape), was meaningless. As the EC commentary on the US proposal read, "[i]n particular, safeguard action which is based upon the application of well-defined criteria, of temporary duration, and clearly designed to ease the process of adjustment should not, we believe, lead to retaliation or to demands for compensation."[61]

Rather than a loosening of the escape clause by making it "cheaper", members foresaw that tightening its criteria would allow for a rethinking of its application: "the removal of the compensation/ retaliation burden in carefully defined situations should not be seen as a gift to would-be safeguarders, but rather as a new kind of contractual

[58] GATT 1976, MTN/SG/W/14, 1.
[59] ibid 2.
[60] The Canadian representative noted: "Because so much would hinge on determining whether or not a contracting party had met the criterion and conditions of the system, these elements would assume particular importance." GATT 1976, MTN/SG/W/17.
[61] GATT 1976, MTN/SG/W/18.

relationship."[62] This new contractual relationship, which would not depend on compensation or retaliation to limit abuse of the escape clause, was portrayed as relying on three changes to the institution: (i) better defined criteria of escape, (ii) the creation of an independent international body to monitor use of all safeguards, and (iii) the use of dispute settlement to consult with aggrieved parties and resolve perceived violations of the criteria and conditions of the escape clause.[63]

I emphasize that these discussions took place 20 years before the formal shift from the GATT Article XIX measures to the modern WTO safeguards. They not only show how early ideas about ways of remedying observed shortcomings of the Article XIX measures surfaced, but they also explain the decrease in popularity of compensation and retaliation following Article XIX measures in the later GATT years. The reforms of the Uruguay Round, rather than a drastic shift away from existing practice, simply served as the formalization of practice that had slowly set in, as ideas about the inadequacies of retaliation and compensation took hold.[64]

These early discussions suggest moreover that the popular claim that the safeguard reforms were meant to decrease the relative attractiveness of anti-dumping, the least economically efficient measure of the two, is only part of the story, at best.[65] Rather, reforms aimed for a tightening of the criteria and conditions for escape, as well as the means to enforce them.

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[62] GATT 1976, MTN/SG/W/14.
[63] ibid
[64] This perception of inadequacy may have been driven by more than the rules themselves. With the intensification of trade, and intra-industry trade in particular, the costs of imposing retaliation may have progressively increased, making any alternative seem more appealing.
[65] See Bown, 2002; Hoekman and Kostecki, 1995. Moreover, if the Agreement on Safeguards reforms only had the objective identified by the literature, they would have been hardly successful, since anti-dumping continues to be the more popular instrument by far. 2743 anti-dumping investigations have been launched since the introduction of the AS, compared with 139 safeguards for the same period. (WTO, from 01/01/95 to 30/06/05.)

The above evidence demonstrates that members foresaw the reforms that would be required before shifting to an appeals to exception scheme, but one might nonetheless counter that the diplomatic path taken by the GATT early on kept if from considering a scheme based purely on cost. As a result, a true compensation scheme, as illustrated by the literature on escape clauses, has never been fully envisaged for extraneous reasons, and it is impossible to foretell what might have happened if it had been.

As luck would have it, however, such a scheme was indeed suggested to the membership by the EC in 2002.[66] The proposal was not specifically aimed at the escape clause, but rather at providing a general solution for members' continued non-compliance past a DSU ruling. Despite this, it offers us a rare opportunity to observe members' preferences in regards to compensation in the WTO. Indeed the EC's proposal reflected much of the literature's recommendations by calling for "easier compensation".[67] Its premises were seemingly sound: if retaliation (suspension of concessions) is so costly for everyone involved (as per Hudec),[68] why not make it easier for non-complying states to compensate injured parties? The proposal allowed for the non-complying state to take the initiative in establishing the amount of nullification and impairment that would determine the level of concessions.[69]

Sensible though its premises may have been, the EC proposal was loudly criticized by the membership; it did not make it into the Chairman's Text (the product of

[66] Contribution of the European Communities and its Member States to the Improvement of the WTO Dispute Settlement Understanding, TN/DS/W/1. The discussions were "to carry out negotiations on improvements and clarifications" to the DSU.
[67] Specifically, it was an embodiment of the Rosendorff's view of the DSU as a compensation-setting mechanism. (Rosendorff 2005)
[68] See fn 30, supra.
[69] As it stands presently, "the main element for the negotiation of compensation can only be obtained in requesting the authorization to apply sanctions." (TN/DS/W/1, 5)

the 2002 reform discussions)[70] and was, in short, unequivocally rejected. India claimed : "In fact if EC's proposal on making trade compensation more realistic is accepted, it could serve as an inducement for the losing party not to comply promptly with the DSB decision."[71] Chile echoed a similar sentiment, by saying it "was not particularly attracted to the proposals on compensation, as there was the tendency to see it as a substitute for compliance."[72] Why such a negative reaction to a seemingly sound proposal? Because the EC's proposal would have gone against an important aspect of the WTO: the onus of balancing injury (through retaliation *and* compensation) rests on the injured party. The alternative produces a two-tiered system, where some countries can afford to be a shirker state and compensate others at their will for their violations, and others cannot. In the case of the WTO, the membership was so reticent about such a prospect that it blocked a change to the admittedly inefficient mechanism of retaliation: given the chance to change the norm, members staunchly refused. The dismissal of the European proposal provides further evidence for definite unease with compensation based schemes in the GATT-WTO, and goes some way in explaining members' incentives to shift away from compensation in the escape clause.

French Trade Measures of May-June 1968

The hypothesized substitution effect between verifiable information about domestic circumstances and compensation sheds light on a well-known anomalous case that runs counter to the literature's claims, that of French trade measures in 1968.

Both as a direct result of strikes, and as an indirect result of strikes in vital sectors

[70] see *Report by the Chairman*, Annex, TN/DS/9.
[71] TN/DS/W/5
[72] TN/DS/M/6

such as transportation, power production and maintenance, post services, and telecommunication, the French economy as a whole came to a standstill in May 1968. In the end, the country had been brought to a nearly complete halt of production for a period of five weeks.[73] The strikes resulted in overnight wage increases of up to 35% in certain sectors, and production costs witnessed drastic increases as a result. Infrastructure suffered considerable damage as the result of lack of maintenance; heightened costs of production led to a risk of inflationary tension; taxes needed to be raised significantly to cope with the damage incurred, and the government faced serious difficulties with "decline of stocks, budget difficulties, [and] future investments".[74]

The crisis left France and its industrial sector wide open to foreign competition. In an attempt to forestall the impending economic crisis, on June 27th 1968, the French government took unprecedented action on the foreign trade front. The French emergency measures imposed import quotas on private cars and industrial vehicles, electrical appliances, iron and steel products, as well as some textile products. Export subsidies were granted to exporting firms in order to offset the effects of drastic wage increases, heightened production costs, and higher taxes. All measures were temporary, designed for an average period of six months, from July 1st 1968, to December 31st 1969.[75] The measures met all the characteristics of escape: France temporarily violated GATT rules following a domestic exogenous shock that made full compliance unfeasible.

It is notable that while the GATT had an 'emergency action' escape clause in place in Article XIX, and an import restriction clause in Article XII contingent on

[73] GATT 1968, C/M/48.
[74] Ibid, 1.
[75] GATT 1968, L/3035.

"serious decline in its monetary reserves",[76] France did not avail itself of either of them. Instead, the trade measures were taken unilaterally, and France informed the GATT Director-General after the fact.[77]

Although the reaction within GATT has been portrayed in the international relations literature as amounting to "sympathy and understanding",[78] initial reactions were actually mixed at best. As is evident from the minutes of GATT meetings that occurred on July 4th 1968, shortly after the announcement of the French trade measures, members demonstrated "a definite uneasiness as to the repercussions that these measures could have on other contracting parties."[79]

In accordance with the tradeoff between allowing flexibility and restraining its abuse, GATT members were concerned that condoning the French trade measures might lead to a precedent that would increase flexibility to the point where it would undermine the institution.[80] In this period of reduction of tariffs following the Kennedy Round cuts, the danger of a snowball effect was felt by all members, and developing countries especially.[81] Members were concerned not about the economic consequences of the measures, but the *institutional* ones. In fact, the minutes of the first GATT meeting

[76] Article XII, GATT 1947.
[77] On the other hand, a formal escape clause was exercised within the European Community, by resorting to Article 37 of the Treaty establishing the European Coal and Steel Community (ECSC). The correct Article 37 procedure was initiated, and the measures on steel and iron products were put in place only following the decision of the ECSC Commission, on July 8th 1968. (GATT 1968, L/3042)
[78] Words used to describe the events by Ruggie, 1982. Cited in Lepgold and Shambaugh, 2002, and Kratochwil and Ruggie, 1986.
[79] Conclusion of the Chairman of GATT emergency meeting, Mr. Somerfelt (Norway), (GATT 1968, C/M/48)
[80] The representative of Canada said that members should cooperate closely so as "to ensure that the action with which they were confronted would not become a precedent." Most of the representatives subsequently echoed this same idea. Ibid.
[81] The May-June events coincided with a July 1st scheduled reduction both within the European Community, and the GATT. As a result, members in both agreements were sensitive to domestic pressure for protection, and were under considerable strain to meet the requirements for tariff abatement before the deadline.

following the French trade measures show that 12 out of the 16 country representatives to speak out repeated their concerns over the risk of escalation or precedent setting.[82]

The 1968 French trade measures demonstrate the great foresight of GATT members in their discussion of the fundamental questions of flexibility and stability within institutions. The US representative, for example, warned how interpreting the spirit of the Agreement too loosely could make GATT "infinitely flexible".[83] GATT members were effectively discussing the means of legislating necessity, the very same way the Roman Senate did in Machiavelli's account. Their concern was over how to allow France to temporarily violate GATT rules in order to recover from a dangerous exogenous shock, while maintaining the legitimacy of the agreement, and preventing the future abuse of flexibility.

According to the conventional wisdom, France could have offered to compensate affected GATT members for the effects of its emergency trade measures. Given the circumstances, compensatory concessions could have been moved forward in time to allow French industry to recover from the crisis. These concessions could have been exactly equivalent to the easily measurable losses incurred by France's trading partners. Such a cost would have impeded an escalation of escape by other members, and conveyed France's intent to return to compliance in the following period.

Yet, not once throughout the French declaration of actions taken, the GATT meetings held following the events, or the subsequent report of the Working Party was the notion of penalty or the need for compensation invoked. Instead of justifying its

[82] 12 of 16 country representative explicitly mentioned the risk of "precedent setting", "escalation", "[resulting] protectionist measures in other countries", "repercussions", "wave of restrictive actions", "a snowball effect", etc. (GATT 1968, C/M/48)
[83] GATT 1968, C/M/48, 9.

actions through compensation, the French representative appealed to exception: "France's situation was exceptional, *it was not among those that had been envisaged* by the General Agreement [on Tariffs and Trade]".[84] GATT representatives then echoed the exceptional nature of the events in turn. In a typical statement, the representative of Portugal "stressed the exceptional character of the circumstances that had led France to take certain measures. Because the crisis had been exceptional those measures should not constitute a precedent."[85] In the first meeting, 11 of 16 representatives reiterated the exceptional nature of the circumstances.[86] Rather than recommending countermeasures or compensation, GATT members accepted France's appeal to exception as valid; they attested to both its severity and its exogeneity.

The solution they proposed was to "record clearly that the measures had been accepted as an altogether exceptional response to a unique situation".[87] By presenting an appeal to exception, France was insulating the agreement from the effects of its non-compliance. The Working Group report,[88] in turn, stressed that any justification of the French measures resided not in the difficulties faced *per se*, but rather in their *uniqueness*.[89]. This restricted the escape area further: it was not the general strikes, nor the wage increases themselves that justified escape, but precisely their exceptional and unforeseeable character.

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[84] As voiced by the French representative, GATT 1968, C/M/48, 4. (emphasis added)
[85] GATT 1968, C/M/48, 10.
[86] Ibid.
[87] As voiced by the UK representative, GATT 1968, C/M/48, 8.
[88] The terms of the Working Group were: "to examine the trade measures taken by the Government of France and their implications, taking into account the discussion on the matter in the Council, to present a first report to the Council by 19 July 1968, and to continue to be available for consultations if necessary". Working Group Report, GATT 1968, L/3047.
[89] The Working Party report also stressed the "unprecedented combination of economic, social and political factors" and was of the view that "the present case cannot therefore constitute a precedent for the future". Working Group report GATT 1968, L/3047, par. 34. Adding that in the case of developing countries, "situations similar to this could not be regarded as unique; they had, on the contrary, a structural character." (From the second GATT meeting held on the subject of French Trade Measures, GATT 1968, C/M/49, 1)

Why did France not avail itself of one of the formal escape clause procedures, and instead proceeded in an ad hoc manner? The severity and exogeneity of France's circumstances were plainly visible to all members. Moreover, given the GATT's inability to verify domestic circumstances, proceeding through formal channels would have added little credibility to France's appeal. It is precisely this ad hoc character that allows us to peer into the rule-making process and to observe members' reasoning through their discussions. The extent to which the ad hoc proceedings mimicked the motions formally implemented in the WTO's AS 30 years later is striking. Members worked to brand the French circumstances as belonging to a class of exceptional events, as a means of allowing for flexibility while curtailing the risk of future abuse.

The 1968 French case thus serves a heuristic function, as it identifies the requirements for the circumvention of compensation in cases of escape. Because of the absence of clear criteria of escape in 1968, GATT members can be observed constructing and verifying the very criteria that were later formalized in the AS. While the literature would see it as an anomalous case, its handling by GATT meets the expectations of the hypothesized substitution effect between verifiable information and cost.

Conclusion

This paper challenges the existing literature by arguing that rendering escape costly is not the only means by which the use of escape clauses can be managed, and an equilibrium level of flexibility achieved. Another mechanism—one I argue the GATT-WTO has shifted to—allows members to appeal to exception, by justifying escape through the domestic circumstances they face. The possibility of appeals to exception

relies on an institution's ability to verify the severity and exogeneity of the domestic circumstances of states seeking temporary escape.

As the evidence shows, compensation following escape was only widespread during the first decade of the GATT's inception, from 1950 to 1959. It was then rapidly abandoned, in view of its many perceived shortcomings. With the passage to the WTO, in 1995, reliance on compensation was formally reduced, and members' ability to verify escapees' claims, conversely, was greatly improved. As I show by examining the record of disputes over safeguards through the GATT/WTO and a series of recent AB decisions, it was precisely this ability to recognize and strike down invalid use of the escape clause that allowed for the cancellation of compensation and retaliation, a causal link already identified by GATT members during discussions held in the 1970s.

Behavior amounting to "sympathy and understanding" is rarely associated with states interacting at the international level. What this paper suggests, however, is that states find it in their interest to take credible information about other members' domestic circumstances into account when analyzing those states' actions. In this case, states will withhold countermeasures when they observe the severe and unforeseeable circumstances faced by another country.

Finally, one may be tempted to interpret the WTO's move away from compensation and retaliation, both typical "hard law" mechanisms, as a sign of an increasingly "soft law" stance. Such a view is misguided: as GATT members foresaw in the 1970s, the abandonment of compensation in favor of appeals to exception is conditional on a tightening of the criteria and circumstances of escape, and effective legal means to strike down invalid safeguards. In the case of the WTO, the espousal of appeals to exception corresponds to an *increase* in the institution's degree of legalization.

Table 1.1 *Use of Compensation and Retaliation in GATT Following Article XIX Measures*

	1950-1959	1960-1969	1970-1979	1980-1989	Total
Number of Article XIX measures	19	35	47	38	139
Of which were compensated or retaliated	11	8	2	2	23
Percentage	57.9	22.9	4.3	5.3	16.5

Source: GATT Secretariat, GATT 1987.

Table 1.2 *Disputes over Exercise of Escape Clause in the GATT/WTO, 1947-2006*

Dispute Title	Year	Institution	Panel	Appellate Body
Fur Hats	1951	GATT	Pro-respondent, complainant's "unforeseen developments" claim dismissed by the panel.	NA
Dried Figs	1952	GATT	No ruling, no compliance	NA
Korea Dairy	1997	WTO	Claims under Article XIX rejected: minimal reading of "unforeseen developments" clause.	AB overturns panel's ruling on Article XIX. Rules pro-complainant.
Argentina Footwear	1999	WTO	Claims under Article XIX rejected: minimal reading of "unforeseen developments" clause.	AB overturns panel's ruling on Article XIX. Rules pro-complainant.
US Wheat Gluten	1999	WTO	"Judicial Economy" exercised with regards to "unforeseen developments", which the US ITC report makes no mention of. Pro-complainant ruling.	No Appeal
US Lamb	1999	WTO	Finds against the US on "unforeseen circumstances", specifying the need for a "logical connection" between conditions set forth in Article XIX; pro-complainant ruling.	AB upholds the finding, and emphasizes the need for "logical connection".
US Line Pipe	2000	WTO	Finds against the US on "unforeseen circumstances". Pro-complainant ruling	No Appeal
Chile Agricultural Products	2000	WTO	Finds against Chile on "unforeseen circumstances". Pro-complainant ruling	Panel's "unforeseen circumstances" finding not appealed, AB finds in favor of complainant.
Argentina Peaches	2001	WTO	Finds against Argentina on "unforeseen circumstances"; Specifies that injury and unforeseen developments must be logically connected, but distinct events. Pro-complainant ruling	No Appeal
US Steel	2001	WTO	Finds against the US on "unforeseen circumstances". Pro-complainant ruling	AB upholds all findings with regards to "unforeseen circumstances"; pro-complainant ruling

Source: GATT and WTO Secretariat

PART II: WHY THE OVERHANG? EXPLAINING THE GAP BETWEEN BOUND AND APPLIED TARIFF RATES

The international trade literature has typically explained trade policy by pointing to the role of domestic interest groups.[90] According to this view, powerful import competing industries offer political leaders campaign funds and the promise of votes in exchange for trade protection. This emphasis on the demand side of the equation has encountered remarkably little opposition in the field. Moreover, such beliefs about the sources of trade protection come packaged with a specific view of the function of international trade institutions: the World Trade Organization (WTO) and regional trade agreements are said to allow free-trade oriented state leaders to tie their hands via binding commitments towards liberalization.[91] These commitments then serve to reduce the political costs of subsequently denying domestic groups the protection they demand.

Yet a closer look at trade negotiations and the subsequent tariffs imposed by states belies much of this conventional wisdom. Indeed, while WTO members have negotiated *bound* tariffs on the vast majority of traded goods, the rates actually levied at the border, the *applied* tariffs, are often substantially lower. The difference between the two, called "binding overhang", differs dramatically across states: Jordan's current overhang is 5%, while Norway's is 23%.[92] Yet in both cases, since states are free to raise the level of applied tariffs up to the bound level, the sheer existence of overhang, constituting as it does "unused protection",[93] is puzzling. If the WTO functions as a hand-

[90] See Grossman and Helpman 1994, Milner 1997.
[91] Reinhardt 2001; Staiger and Tabellini 1999.
[92] To be sure, a number of countries have only negligible overhang: their tariff schedules are bound at applied rates. See infra.
[93] Walkenhorst and Dihel 2003.

tying mechanism through which state leaders can reduce trade protection to levels otherwise unfeasible under domestic politics,[94] one would expect the level of protection afforded by the institution's rules to get maxed out; this is not the case. Moreover, differences in the magnitude of overhang among countries are far greater than in the levied duties themselves. There remains, in short, much that we do not know about the domestic politics of trade.

Whereas WTO member states have shown growing concern over the issue of binding overhang, scholars have remained largely silent on both its causes and its effects. The little attention that has been paid to overhang has focused on its impact on different liberalization scenarios.[95] The consensus emerging from these studies is that given how it "cushions" applied rates, high levels of overhang can dampen, and even eliminate, the effects on actual trade barriers of further liberalization.[96]

This finding goes some way in explaining why countries would negotiate bound rates far in excess of the duties they subsequently levy. Not only does the resulting "policy space"[97] allow for rapid increases of protection in the event of an exogenous shock—without requiring recourse to costly trade remedies—but it also decreases the domestic cost resulting from future reforms. While this motive adequately explains the existence of overhang, it does not account for its considerable variation among states. The consensus explanation for this variation points to the differential treatment granted developing countries during the process of tariffication that took place under the Uruguay

[94] e.g. Grossman and Helpman (1994); Reinhardt 1999, 1; François 1999.
[95] See, e.g., Hedi Bchir, Jean and Laborde, 2006; Anderson, François, Hertel, Hoekman, Martin 2000; François and Martin 2004; Walkenhorst and Dihel 2004; Gibson, Wainio, Whitley and Bohman 2001.
[96] Walkenhorst and Dihel 2004; François, van Mejil, and van Tongeren 2003.
[97] This is the term commonly used within the WTO to denote flexibility. See Lamy 2006.

Round.[98] Yet considering the significant variation in overhang amongst developing countries suggests that this is only a partial explanation, at best.

The very existence of overhang indicates a lack of success on the part of import competing industries in pushing for extra protection after bound rates have been set. Protection, in this case, is either not "for sale",[99] or few industries can afford it. More likely, the explanation rests on the supply side of trade policy. This paper argues that the variation in overhang among states is largely determined by the distribution of veto power within the state. Specifically, a greater number of powerful veto players will lead to higher applied tariff rates, and lower average bound rates, all else equal.

Indeed, veto players are usually thought of in the context of ratification, making the signing of preferential trade agreements, for example, less likely on average.[100] But the role of independent branches of government such as legislatures and sub-federal entities is not limited to ratifying executive-sponsored agreements; they also influence state behavior within the confines of an agreement after it is struck. To be sure, veto players diminish the odds of any proposal being passed, but they also increase the number of such proposals being brought forth. Compounded with the dynamic of logrolling, greater dispersion of veto authority thus increases the likelihood of a domestic actor having both protectionist preferences and the power to act on them by pushing for higher applied rates. And just as executives internalize the preferences of veto players at home when designing international agreements that subsequently need to be ratified,[101] they will also seek to guard themselves against subsequent pressure from these same

[98] The Uruguay Round saw many developing countries convert their non-tariff barriers and quota tariffs into easily measurable tariffs, and many of these tariff lines were subsequently bound—many for the first time—though often at very high rates.
[99] See Grossman and Helpman's (1994) "Protection for Sale" model.
[100] Milner, Mansfield and Pevehouse 2007, 2008.
[101] Putnam 1988, ibid

actors by making agreements less flexible, if they are vulnerable to such pressure. One way to achieve this is by limiting overhang: binding tariff lines closer to their applied levels. Domestic institutions, in other words, not only affect the *likelihood* of international agreements being struck; they influence the very *design* of these agreements.

The admittedly technical nature of the binding overhang issue conceals a question of great consequence for the study of international rules. One of the fundamental questions of political economy asks: if there exists a trade-off between the costliness of commitments and the benefits they yield, what might explain how some countries choose to bind themselves more than others? Focusing on overhang allows for unprecedented empirical traction on this question, as it offers a glimpse into the varying *depths* of commitment among members of the same international organization.[102]

Finally, this study holds important implications for WTO reform. The type of flexibility afforded by high binding overhang is permanent, and arguably less efficient in providing a "safety valve" to governments under duress than more traditional trade remedies such as safeguards and antidumping duties.[103] This inefficiency is a consequence of the continuous uncertainty resulting from high overhang, the costs of which are borne by the trading system as a whole. Following the collapse of the latest trade round over the issue of special safeguards requested by the very countries exhibiting high binding overhang,[104] it is worth asking whether the current trade-off is a favorable one.

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[102] On the topic of depth of cooperation and its meaning for the study of international institutions, see Downs, Rocke and Barsoom 1995.
[103] On the costs and benefits of flexibility in the design of institutions, see Koremenos 2001.
[104] WTO Secretariat 2008.

Binding Overhang: What do we know?

One of the main objectives of the Uruguay Round was to bind all tariff lines for all Members, a goal which in large measure was successfully achieved. The level at which these tariff lines were bound, however, varies considerably among countries. When members exchanged reciprocal commitments during the Uruguay Round, they did not do so in a vacuum: they had complete information as to the duties that states had applied on specific products up until that point. In many cases, the newly bound rates were set at levels higher than a state had ever applied in the past, or has ever applied since, on the product in question. Crucially, the levels of applied duties are known *prior* to setting bound rates, though the applied rates can vary subsequently.

WTO member states are acutely aware of the existence and implications of binding overhang, which has been tied directly to the level of "predictability and transparency of the trading environment",[105] and they frequently flag the great disparities in overhang among states. The average magnitude of overhang across all WTO members was 18% in 2007, though for some countries it was as high as 89%. Such figures are enough to question the very meaning of the constraints on tariffs imposed by the WTO.

It is no exaggeration to say that the issue of overhang, while little talked about outside of trade circles, has been at the heart of Doha Round negotiations. Pascal Lamy, the Director General of the WTO, has repeatedly brought attention to the gap between applied and bound rates and its variation across members, recently going so far as to

[105] WTO document WT/COMTD/W/143/Rev.1. Henceforth, I identify all WTO sources by their document number, unless specified otherwise.

publicly compare the overhang of Egypt, Thailand and China.[106] The US delegation recently claimed to be "deeply concerned" over the issue, pointing out that the US schedule, for one, was "bound at applied rates" (i.e. corresponding to null overhang).[107] In a meeting of the Negotiating Group on Market Access, the EC declared that "[u]nderestimating the importance of binding overhang did the Group no service at all."[108] At the same meeting, the Australian representative added, speaking of all non-agricultural tariffs, that "[t]he whole issue of closing the gap between bound and applied rates was really the core of this negotiation".[109] In separate talks, the representative of Canada recently openly questioned Bahrain on its overhang of over 30%, arguing how "binding overhang… creates an element of uncertainty for traders."[110] To be sure, developing countries are not the only Members being criticized for excessive overhang: Norway was recently roundly disparaged for bound rates 23% in excess of its applied rates, which the WTO Secretariat and trading partners claimed reduced the predictability of its trade regime.[111]

The pervasiveness of binding overhang has led some states, the US and EC among them, to push for negotiations of further tariff reforms on the basis of applied, rather than bound, rates.[112] Not surprisingly, other Members have come out strongly against such proposals, claiming that the bound-applied gap affords them necessary flexibility.[113] On

[106] The respective figures were listed as 18%, 12% and 0%. See Pascal Lamy speech on 2006 UNCTAD Trade and Development Report.
[107] TN/MA/M/5
[108] Communication from EC, TN/MA/M/7, p.27, para 1.71
[109] Communication from Australia, TN/MA/M/7, p.20 para 1.52
[110] WT/TPR/M/185/Add.1
[111] WT/TPR/M/205, para 75. Norway's average applied rate in 2008 was 6.7%. The US formulated the same complaint during the 2000 and 2004 Trade Policy Review of Norway (ibid).
[112] TN/MA/W/31 (Egypt, India, Indonesia, Kenya, Malaysia, Mauritius, Nigeria, Tanzania, Uganda and Zimbabwe) and TN/MA/M/5 (Venezuela). WT/COMTD/W/143 for EC position.
[113] TN/MA/W/31. See also: WT/COMTD/W/143

the subject of overhang, a 2003 resolution by a group of 10 developing countries[114] claimed that "[t]his concept is extraneous to the mandate and to the tradition of GATT/WTO negotiations. Any move to address the issue would […] not be appropriate since the rights and obligations negotiated in the last round were with reference to the bound rates."[115] Separately, and restating the logic employed during the Uruguay Round talks, India declared that "developing countries should have the flexibility to bind [previously unbound rates] at levels generally above the higher of the bound rates prevailing for bound items in a country's tariff schedule."[116]

WTO Members themselves, whether they find it desirable or not, thus recognize overhang as another type of flexibility mechanism, alongside safeguards, antidumping, and countervailing duties.[117] This link, and the substitution effect that it implies, has explicitly been made by developing countries who argue that given how they lack the necessary institutional capacity to employ trade remedies such as antidumping, they require some other means of rapidly increasing their tariffs if need be.[118] Following strong criticisms—mostly from developed countries[119]—of this position, the proponents of "overhang as flexibility" have countered that the available protection in excess of their applied rates is rarely utilized.[120]

Recent studies suggest that even if this were the case, the unconstrained availability of protection may nonetheless come at a cost to the institution and its members. According to this view, the sheer possibility that a state *may* raise its barriers tomorrow with no ensuing consequence from the WTO likely exerts a cost on traders and investors who value the

[114] The communication, dated 14 March 2003, was received from Egypt, India, Indonesia, Kenya, Malaysia, Mauritius, Nigeria, Tanzania, Uganda and Zimbabwe. TN/MA/W/31
[115] ibid, 3.
[116] WT/COMTD/W/143
[117] see supra, 13. Also: Schott 2002. The WTO Secretariat played no small role in this, referring to the trade regime of countries with high overhang, such as Korea's as containing a "flexible tariff mechanism". WT/TPR/M/204/Add.1, p. 142.
[118] WT/COMTD/W/143, p.8, para 27.1
[119] See the positions of Singapore, Canada, the EC, Japan, and Switzerland in TN/MA/6, 18.
[120] WT/COMTD/W/143

predictability of trading conditions. These authors have argued that the WTO and institutions like it are equally concerned with locking in and "enhancing the predictability of" states' trade policies as they are with liberalizing those policies.[121]

It is too early to say with certainty whether high overhang has provided countries with an avenue for drastic (but WTO legal) increases of barriers in the ongoing economic crisis, but we do know that this took place during the Asian Financial Crisis in the late 1990s.[122] A number of commentators, moreover, have already voiced concern that it is occurring again.[123] It has been estimated that if countries raised their tariffs up to the allowable bound levels on all their products, it would result in a 7.7% drop in world trade.[124] More plausibly, if countries raised their tariffs to their historical applied maxima over the past decade (during which bound rates have varied little or not at all, and so constrain countries as much as they did a decade ago), world trade would drop by an estimated 3.2%.[125]

Given the way in which this debate is easily framed as a clash between developed and developing members of the WTO, it is no surprise that scholars have focused on developing country status as the chief explanation for variation in overhang among WTO members. And to be sure, negotiations under the Uruguay Round, during which quotas and non-tariff barriers were converted into tariffs and where some developing countries tariff

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[121] Mansfield and Reinhardt 2008, 623. As Rodrik put it with regards to the North American Free Trade Agreement, "[i]t is no secret that Carlos Salinas wanted NAFTA at least as badly for its potential role in cementing Mexico's institutional reforms since 1986 as for its market-access provisions." (Rodrik 1995, 110)

[122] Malaysia, among other countries, aggressively raised barriers within bound levels for import relief and additional government revenue in 1997-1998. TN/MA/M/7, 1.59.

[123] There is indeed some evidence that while developed countries have responded to the crisis exclusively through different forms of export subsidies, developing countries have preferred to rely on duty increases. Ecuador is said to have raised applied duties on over 600 items since the beginning of the financial crisis (World Bank 2009).

[124] Bouët et Laborde 2009. Another study, referenced at a 2008 meeting of the WTO Trade Negotiations Committee (TN/C/M/29, para 188-189) by the Mexican delegation, estimated at US $135 billion to US $350 billion the global welfare costs from members increasing tariff rates to their bound levels.

[125] ibid

lines were bound for the first time, offered developing countries much leeway to set unusually high bound rates. Observers at the time were quick to point to this as one of the "most costly decisions taken during the Uruguay Round."[126]

But what belies the convenient explanation focusing on development status is the considerable variation in overhang *between* developing country members. Similarly, overhang is by no means a phenomenon exclusive to less developed countries. The case of Norway is telling in this regard.[127] The tariffication process under the Uruguay Round and its differential treatment of developing countries is thus only a partial explanation, at best. As I show, Members' domestic political institutions offer a membership-wide explanation of which countries exhibit high overhang, and which do not, that cuts across countries' level of development.

In sum, WTO members often do not use up all their allowable trade protection. Nonetheless, they may value the gap between the applied rate and the (sometimes far higher) bound rate as providing "policy space" which can be called upon under economic duress to provide import relief. Moreover, it is likely that states value the way high overhang allows them to offer large tariff "cuts" in subsequent trade negotiations without sustaining equivalent pain domestically. In other words, high overhang acts as a buffer zone during multilateral bargaining. But the wiggle-room granted individual members comes at a social cost. Most directly, overhang reduces the security and predictability of the trading system, two principles enshrined in the WTO's texts as constituting the foremost objectives of the institution.[128]

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[126] Schott 2002, 193-194.
[127] supra 111
[128] See Article 3.2 of the DSU. See also: Author.

The corollary of overhang's effect on security and predictability is that it is costly to secure. If, as has been argued above, overhang reduces the benefits gained by trade partners making reciprocal commitments on trade barriers, all things equal, these partners will be reticent to allow countries to bind their tariffs at rates far higher than the rates previously applied, and will demand some benefit in turn. Support for the premise of overhang being costly to secure can be garnered by observing WTO accession negotiations, where the acceding state often disposes of less bargaining power than it does once it becomes a Member. Indeed, when acceding countries have made initial offers of concessions in recent years that displayed too wide a gap between bound and then-applied rates, the accession working party has simply refused to consider the offer, and has waited for an improved one.[129] This was notably the case with the accession negotiations of several post-Soviet republics.[130] The paper's central puzzle is thus reinforced: if overhang is indeed costly to secure, what explains why some countries appear to value it more than others?

Finally, from a methodological point of view, considering one type of tariff rate (bound or applied) without considering the other, as does a majority of trade studies, may lead to considerable misrepresentation of a country's trade regime, and introduce bias in the analysis. Applied rates taken in isolation tell us little about the WTO's impact on national trade policy, how constrained a trade regime is, and how fast it can be modified in the future. Bound rates by themselves, in turn, bear little relation to actual trade flows, since they may have only an indirect effect on applied duties, and prices faced by

[129] Michalopoulos 1997. As a result, "countries that recently joined the WTO tend to have small or no gaps" (WTO Secretariat 2008b).
[130] For example, the most notable recent entrant, China, was made to bind all its tariffs at applied rates, and thus exhibits close to zero overhang on all its products.

exporters.[131] This paper seeks to remedy this issue by considering both rates jointly. The benefit of doing becomes all the more clear considering that the paper's main independent variable of interest, the number and power of veto players in the domestic system, is expected to have opposite effects on a country's bound and applied tariff rates.

Veto Players and Trade Policy

The very existence of overhang is puzzling, since it challenges many of the assumptions of endogenous tariff theory, which looks to the relative power of domestic interest groups as the main shaper of trade policy. This traditional focus on the demand side of trade policy also dictates a specific view of the WTO's role, according to which state leaders seek to bind themselves through WTO rules as a means of tying their hands against pressure from overly powerful domestic industries.

Consistent binding overhang across states should lead us to question the universality of these assumptions. For a great number of products, institutional constraints are not as constraining as the literature has thus far assumed. This reasoning suggests that explanations for the variation in overhang among states cannot rest chiefly on demand-side factors—such as interest groups and their collective action costs—and should rather focus on supply-side considerations. This paper's argument turns to domestic political institutions, by examining the distribution of veto power in the domestic system, and the way in which it affects not only the content of international agreements, but also their design.

[131] This is not to say, by any means, that bound rates, no matter how high, are irrelevant (Francois and Martin 2004). The higher the bound rate, however, the lesser the constraint of the tariff binding on trade protection, and the lesser its impact on trade flows.

Veto players are defined as the independent governmental actors in the domestic realm—typically legislatures, sub-federal (e.g. state or provincial governments), and judicial entities—that have the power to block decisions by the executive. Even in ostensibly autocratic regimes, state leaders most often have to secure the support of a small "selectorate" within the central party, or among military elites. As such, regardless of regime type, executives do not have the luxury of negotiating international agreements based on their preferences alone. It has long been known that state negotiators must take into account the preferences of domestic actors when concluding agreements at the international level, which often results in a reduction of their "winset", or set of allowable outcomes.[132]

The presence of multiple competing state actors is said to make decision-making on the national scale more difficult.[133] Accordingly, greater dispersion of veto authority has been associated with "policy rigidity", a lower likelihood of signing international agreements, but also greater credibility of state commitments once these are made.[134] Studies of veto players can thus be seen as an extension of the literature on two-level games, where state leaders play the domestic and the international level against each other, and where constraints in one will affect outcomes in the other.[135] Veto player measures complexify the domestic level, by counting the number of sub-state actors that hold authority over the decisions made by the executive.

Measures of veto players are based on a spatial model of preferences where an executive-sponsored proposal will be chosen over the status quo only if it is within the

[132] Putnam 1988.
[133] Henisz 2002, Tsebelis 1995.
[134] MacIntyre, Milner, Mansfield and Pevehouse 2007, third.
[135] Putnam 1988.

allowable set of outcomes of every actor with veto power over the decision. Additionally, the measure I employ here qualifies the number of veto players by taking into account the alignment of preferences between them and the executive. If an opposition party controls the legislature, this results in a greater number of veto players in the domestic system than if the same party controls the executive and the legislature.

The veto player literature has traditionally focused on the influence of state actors over executive-sponsored change. Scholars have shown that veto players lessen the likelihood of such change, as well as its extent, conditional on its occurrence.[136] Importantly, this view overlooks the role of state actors as *initiators* of change. Specifically, most applications of veto player theory to international relations see policymaking as a series of ratification games; they fail to endogenize the number of such proposals being brought up for (formal or informal) ratification. Treating the number of proposals as exogenous is problematic, since we know that veto players themselves are often the very actors generating them. The existence of a legislature that holds veto authority is a good indicator of its power to affect policymaking. In other words—and the literature in large measure recognizes this caveat[137]—the "veto players as stability" paradigm is better adapted to studying major policy events, such as the ratification (or not) of international agreements—the number of which is unlikely to change with variation in domestic institutions—than subsequent state behavior within the confines of such agreements. Similarly, veto player theory has traditionally looked at the swiftness of policy change in reaction to exogenous shocks,[138] the occurrence of which cannot, by

[136] Milner, Mansfield and Pevehouse 2007
[137] Students of veto players are careful to note that veto players reduce the likelihood of "major policy shifts" O'Reilly 2005, 7-8; Tsebelis 2005, Mansfield and Henisz 2009.
[138] See Henisz and Mansfield 2006; Tsebelis 1995.

definition, be influenced by domestic institutions. Meanwhile, students of both comparative and American politics have long remarked that veto players do not only exert influence as gatekeepers; they are also likely to push for change themselves.[139] This, it turns out, is especially true of trade.

Indeed, the story of protectionism is in great measure that of legislators successfully overcoming the resistance of executives, that of concentrated local concerns trumping national ones. More dispersed veto authority leads to an increase in the number of "access points" through which sub-state actors can enter the policy-making process.[140] The likelihood of protectionist demands grows with the number of players able to formulate such demands. And executives are not always able to resist such pressure, even when it goes against national interests. Indeed, the frequency with which legislatures have been able to "prevail against the preferences of central decision makers" over trade policy is indicative of their influence.[141] Tellingly, the most infamous tariff in American history, the Smoot Hawley tariff, is named after the two Republican Senators that initiated it. Indeed, trade policy is particularly prone, by virtue of how it benefits narrow industry groups, to logrolling and vote trading. The Smoot Hawley tariff, to offer but one example, was amended over a thousand times.[142] These dynamics only exacerbate the push on applied rates, turning isolated demands for protection into general ones. In the American case, "legislative dynamics practically guarantee that any effort to protect a single industry [from imports] will be transformed into legislation that protects a lot of industries."[143] The US Congress thus not only influences trade policy by vetoing

[139] infra
[140] O'Reilly 2005, 656-657. More recently, see: Ehrlich 2007.
[141] Krasner 1977, 669.
[142] Oatley 85
[143] Oatley 85.

participation in regional trade agreements and US concessions during multilateral talks:[144] it also advocates raising applied duties or offering tariff exemptions on specific products;[145] it exerts pressure for the United States Trade Representative (USTR) to increase enforcement efforts against specific trading partners;[146] and goes as far as to push the executive to implement or not specific rulings by WTO panels and the Appellate Body.[147] The number of possible sources of policy change is thus increased by virtue of having a strong and independent legislature. The same intuition applies in parliamentary systems: a non-majoritarian party not only fears blocked ratification by opposition parties within the legislature, but also subsequent pressure from the opposition over the implementation and interpretation of ratified treaties.[148]

Increasing the number and power of sub-state actors thus decreases the likelihood of ratifying any given proposal (or strictly speaking, it never increases it),[149] but it dramatically raises the number of such proposals. This belief is not unrelated to the concept of state strength, where decentralized government was seen as particularly vulnerable to local protectionist pressure.[150] I argue that in the case of trade, the increase in access points to policymaking resulting from a greater number of veto players will more than offset the potentially heightened likelihood of any given proposal being blocked. This expectation is not left to assumption, however. I go on to test for it separately in the analysis.

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[144] Milner, Mansfield and Pevehouse 2007.
[145] Ludema, Mayda and Mishra 2009.
[146] See Section 301 and subsequent incarnations of the 1974 US Trade Act. More recently, see: US Congress bill H.R. 496. The US International Trade Commission, the main information gathering agency in the US, was established by Congress in 1916, and is funded and annually re-authorized by Congress (Hansen 1990).
[147] e.g. Congressional pressure to flout an AB decision on *US-Zeroing* (H.R. 496).
[148] Within the EU, in turn, the European Commission is similarly constrained. See infra …
[149] Tsebelis 1995, Mansfield, Milner and Pevehouse 2007.
[150] Krasner 1976.

In sum, veto players' power, irrespective of the type of domestic political system, does not end at ratification: they also subsequently exert pressure for change within the confines set by ratified agreements. A rationally behaving executive will take this subsequent power into account when negotiating agreements with foreign states. Hence, the strategic two-level game framework in which the executive internalizes the preferences of domestic veto players in negotiating international agreements can also explain the very design of these agreements. One of these design features is the amount of flexibility executives set aside for themselves, as measured by the magnitude of binding overhang.

Fear of Backsliding and Binding Overhang

Executives rarely get to impose decisions on the state without some sort of domestic check. More often, they face one or many state actors with potentially divergent preferences who have the power to block executive decisions. Since non-ratification imposes costs on the executive,[151] veto players exert influence on negotiated outcomes prior to their decision to ratify: executives internalize the preferences of the domestic opposition while negotiating international agreements.[152]

The role of veto players does not end at ratification. Veto players, as noted above, exert pressure on the content of trade policy subsequent to an agreement being signed. Importantly, their influence grows with the amount of wiggle-room an agreement contains. They are unlikely to succeed in pushing the executive to breach an agreement (and as per conventional wisdom, the ability of any veto player to do so diminishes with

[151] Mansfield Milner and Pevehouse 2007.
[152] Putnam 1988; Tsebelis 2002.

greater dispersion of power in the system),[153] but they can influence state behavior within the confines of that agreement. As a result, state leaders not only count with the immediate authority of veto players over an agreement's ratification, they also internalize the power of those same actors over the future content of policy. In particular, if negotiators fear backsliding, or abuse of flexibility, they will conclude tighter agreements with less flexibility provisions. As such, the distribution of power among domestic actors will affect not only the amount of real concessions offered, but also the degree of wiggle-room attached to these concessions. These expectations lead to the following hypothesis:

1. As the number of veto players within the state increases, the magnitude of binding overhang exhibited by that state will tend to decrease, all else equal.

As noted above, bound rates are set in full knowledge of the applied rates that have been applied on a given product in the past. This explains why, while overhang could plausibly be portrayed in a *positive* light—if it were caused, for instance, by the decrease of applied rates given fixed bound levels—it is usually seen as having purely negative consequences, since it set *ex post*, and thus corresponds to the headroom granted over and above known applied rates. Hence the American delegation's claim of having bound its entire schedule "at applied rates".[154] Nonetheless, in this case it is not sufficient to consider overhang as a monolithic category. While bound rates vary more widely among countries than do applied rates,[155] one must ensure that the impact veto players exert on binding overhang is not simply the result of their effect on applied rates. Accordingly, I split the above hypothesis into its two logical components:

[153] Tsebelis 1995.
[154] Supra fn 107
[155] Bound rates vary more cross-sectionally, but tend to vary less over time than do applied rates.

1a: As the number of veto players within the state increases, the level of duties applied by that state will tend to increase, all else equal.

1b: As the number of veto players within the state increases, the level of bound tariff rates in a country's tariff schedule will tend to decrease, all else equal.

Hypothesis 1a points to the increase in the number of "access points" to policy-making resulting from greater dispersion of veto authority. State actors with narrow constituencies will push applied rates upward as a means of offering protection to the domestic industries they rely on for political support. It is likely, moreover, that the existence of powerful veto players will not only push applied rates upward over time, but also result in higher initial applied rates, as the executive must internalize the preferences of sub-state actors in seeking ratification of an agreement. The latter expectation corresponds to the conventional wisdom on two-level games and ratification.[156] Hypothesis 1a also functions as a necessary assumption for, and is thus causally prior to, Hypothesis 1b. Indeed, the looser the terms of an agreement, the more room state actors have to operate in, and the more likely backsliding from the initial terms of the agreement becomes. As a result, greater flexibility, which is known to be valued by executives—all else equal—as a means of reacting to exogenous shocks not predicted by the designers of the agreement,[157] increases the influence of domestic actors. In other words, flexibility itself is vulnerable to capture by legislatures and other powerful state actors.[158]

[156] Similarly, Mansfield, Milner and Pevehouse (2008) show that the likelihood of ratifying a PTA is, all else equal, reduced when the number and power of domestic actors is increased. The link between domestic institutions and trade policy has been most extensively tested in the American context. See e.g., Lohmann and O'Halloran 1994.

[157] Milner and Rosendorff, Downs and Rocke, Author.

[158] The view according to which flexibility has distributional effects is by no means novel. The possibility of "outside options" has been shown to disproportionately favor powerful states. Similarly, the discretion WTO panels have in exerting judicial economy has been demonstrated to be liable to capture by the

The following game thus plays out between the executive and the state's independent branches of government. Veto players' preferences over the optimal level of flexibility are reducible to their preferences over the effective rate of protection. Flexibility by itself serves no purpose to them; it is only useful insofar as it lets veto players push for applied rates closer to their ideal point subsequent to the agreement's conclusion. If state actors have influence over policy, then the likelihood of there being pressure exerted on applied rates increases. The executive's preferences over flexibility, therefore, are driven by the dispersion of authority in the domestic system, and the anticipated pressure on applied rates subsequent to an agreement being signed that results from this dispersion. An entirely autonomous executive would seek high overhang as a means of responding to exogenous shocks. As the power of veto players grows and their preferences become more extreme, however, the executive's preferred level of flexibility drops; it becomes growingly wary that veto players will use such flexibility to push for their preferred level of protection after the agreement is signed. Hence, as veto authority grows more dispersed, executives trade-off their ability to respond to exogenous shocks against greater predictability of trade policy after the agreement is concluded. Effectively, this process of self-binding amounts to a reduction of autonomy at the international level (greater delegation to the institution) as a means of reducing the influence of domestic actors over trade policy.

The notion of state leaders seeking to tie their hands in reaction to anticipated policy volatility is by no means novel, starting with the literature on time inconsistent preferences, which attributes an important role to institutions as hand-tying devices.

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system's superpowers. Flexibility is necessary, but as argued elsewhere, it tends to reinsert power in institutions whose primary objective is often precisely to diminish power differences among their members.

Along these lines, Rodrik claims that "deep integration presents an opportunity for reformist governments in developing countries to "lock in" their reforms and render them irreversible."[159] Moravcsik, in turn, explains variation in state participation in human rights agreements by the need of political leaders to enforce "the policy preferences of a particular government at a particular point in time against future domestic political alternatives."[160] Grabbe shows how policy instability in Central and Eastern European countries pushes them to use EU commitments as hand-tying mechanisms.[161]

A parallel trade-off occurs between the executive and veto players. The latter should prefer more flexibility to less flexibility, strictly as a means of maximizing their subsequent influence. But they also prefer the initial terms to be as close as possible to their ideal point. Accordingly, domestic actors will accept a smaller degree of flexibility in an agreement's terms, and the lessened subsequent influence this entails, in exchange for initial terms closer to their ideal. Hence, the presence of veto players, by virtue of its effect on the executive's preferred degree of flexibility, will tend to bring bound rates down, and initial applied rates up.

To sum up, while state leaders prefer to have some policy space to deal with "unforeseen circumstances",[162] such flexibility comes at a greater cost if it increases the likelihood of backsliding in the future. Rational executives can anticipate the behavior of state actors: they weigh the benefits of flexibility against the associated costs resulting from the nature of political institutions they face at home, and elect an optimal amount of

[159] Rodrik 110.
[160] Moravcsik 220. Similarly: "International commitments may shift domestic political power in such ways as to 'lock in' new policies against the pressure from specific national interest groups or future governments of a different party" (Moravcsik 1994, 59).
[161] Grabbe 29.
[162] Common WTO parlance for "exogenous shocks", used, among other WTO texts, in the Agreement on Safeguards (AS).

flexibility. Applied to the variation in overhang among Members, those state leaders that face powerful checks at home will choose to reduce the amount of policy space they set aside for themselves with regards to tariff rates, by binding tariff lines at levels relatively closer to applied rates, all else equal.

The above-mentioned case of Norway, and its unusually high overhang, fits the argument nicely. It appears striking at first glance that Norway, a highly developed country with much to gain from stable trade relations, and traditionally associated with high trade openness, would consistently resist appeals by its trading partners to lower its bound rates closer to its applied rates.[163] Yet its domestic political system, based on a one party government, may account for the apparent discrepancy. Indeed, Norway is usually, together with Sweden, offered as the paradigmatic case study of a government with "extraordinary agenda setting powers",[164] a "decisive political system",[165] and in short, a highly autonomous executive. Huber, Ragin and Stevens, for example, explicitly state that Norway's party system "minimizes the opportunities for special-interest lobbying".[166] It follows that Norway can afford to derive the full benefits of flexibility, with little of the associated costs, since its highly autonomous government is not prone to pressure from protectionist sub-state actors.

I have been referring throughout the argument to both the number and the preferences of veto players. Veto player models, however, effectively reduce the latter to the former. Given the uni-dimensional policy space that is assumed in these models,[167] no additional assumption need be made about the ideal points of veto players relative to the

[163] supra
[164] Tsebelis 1995, 304.
[165] Tsebelis 1995, 308.
[166] Huber, Ragin and Stevens 1993.
[167] Henisz 2002; Mansfield, Milner and Pevehouse 2007.

executive. Indeed, as the number of veto players rises, so does the likelihood that one of them will have a constituency that is hurt by trade concessions, and thus have an ideal point more protectionist than the executive. Most importantly, the paper's hypotheses are not reversed as a result of varying the trade ideology of any of the actors. It follows that when veto players are *less* protectionist than the executive, they exert no influence over outcomes. Since there is no reason for foreign governments to accept one-way net increases in barriers, any abatement in barriers that is satisfactory to a relatively more protectionist executive will also by definition be satisfactory to a relatively less protectionist veto player.[168] In these cases, the preferences of the executive will be its own sole constraint. Only in the (empirically more plausible) scenario,[169] when veto players are more protectionist than the executive, do they begin to exert influence over outcomes. In this sense, the effect of veto players in a ratification game is unidirectional. And since the flexibility afforded both by traditional trade remedies (safeguards and antidumping) and that afforded by binding overhang is designed to allow for *increases* in the level of trade protection, the same holds true for the post-agreement phase. Flexibility is only at risk of being exploited in the post-agreement phase if veto players are more protectionist than the executive. Trade agreements rarely, if ever, put a barrier on subsequent unilateral abatement of barriers, and so neither their design nor their content will affect outcomes in the (again, unlikely) case that veto players are more pro-free trade than the executive. As a result, no assumption need be added to the argument in regards to the relative position of the executive's and domestic veto players' ideal points.

[168] For a formal illustration, see Milner, Mansfield and Pevehouse 2007, 2008; Milner and Rosendorff 1997.

[169] This is due to the size of the constituencies of the branches of government relative to the executive. In the American context, a truism of free trade dictates that the Senate will be more protectionist than the executive, and Congress more protectionist than the Senate.

Accordingly, the specific preferences of state actors on free trade are not included in the measure of veto players employed in the analysis.[170]

Hence, assumptions about the way different state actors aggregate preferences in accordance with the size of their constituency are not vital to the argument. If the consensus view on the topic (the narrower the constituency, the higher the likelihood of trade protectionism)[171] is correct, however, this only strengthens the argument's expectations. Indeed, the existence of powerful state actors, if those state actors are on average more protectionist than the executive, only renders the predicted upward push on applied rates more likely. This, in turn, provides added incentives for the executive to tie its hands further, and reduce the flexibility in the terms of international trade agreements.

Data and Operationalization

My dependent variable of interest is the gap between the applied and bound tariff rates of WTO members. Since the theory relies on national-level variables, I look at averages of the rates countries impose on all products they import, weighted by the level at which those products are imported. Intuitively, a high barrier on a product that a country has never imported in great quantities will have a lesser overall impact as a barrier to trade than a somewhat lower tariff on a product imported in high quantities. Hence, the unit of observation is an aggregated country tariff rate, and the process of

[170] It would be an unfeasible task to offer a measure of veto player preferences over a specific issue in a way that would be consistent across many countries. What is included, however, is a measure of political alignment (Henisz 2002). There is a consensus over the fact that veto players controlled by a different coalition than that controlling the executive result in greater constraint on executive power. It also follows that veto players controlled by the opposition are more likely to have preferences further away from the executive, and they are more likely to forcefully act on those preferences. The measure of alignment thus works especially well with the way the veto measure is used in the paper.

[171] Lohmann and O'Halloran 1994; O'Reilly 2005.

aggregation weighs tariff lines by the quantity at which different products are being imported.

My measure of overhang thus corresponds to weighted average of the bound rate for all products a country imports, minus the weighed average of the applied rates that the country actually imposes on those products. I only calculate the overhang figure for the bound tariff lines of countries, or for those tariff lines where a bound rate exists. This biases my data slightly—and only slightly, given that during the Uruguay Round, member states bound 97% of traded goods[172]—but does so in a conservative direction, since as I demonstrate below, the same countries that exhibit high overhang are also the countries with the lowest number of bound tariff lines, or those countries that bound all their tariff lines most recently. Along the same lines, in coming up with country average rates of protection I also remove those country tariff lines that *are* bound, but whose binding implementation is not yet in force for a given year. For example, Korea's schedule for *Fireworks* indicates that the implementation year is 2009, and so I do not include it in any calculation of overhang in the data, which ends at 2008. The great majority of tariff lines, however, have their bound levels implemented by 1999, if not 1995. In sum, I take the average difference between a country's bound and applied rates for a given year, considering only those tariff lines that are bound for that year. I take into consideration all WTO members, and the rates I use correspond to those that WTO members impose on other WTO members.[173] In other words, I ignore countries that are not members, both as reporters and partners.

[172] Specifically, the proportion of bound tariff lines in 1995 was 99% for developed countries, 73% for developing countries, and 98% for transition economies (WTO 2009).
[173] A number of WTO members extend MFN WTO rates to non-members (Goldstein, Rivers and Tomz 2007).

My main independent variable is the number of veto players in a country's domestic political system. Following the lead of previous studies of domestic institutions and trade policy,[174] I use the measure developed by Witold Henisz, which suits my purposes for a number of reasons.[175] In brief, a veto point is added to a given country year for every additional constitutionally effective branch of government, and the measure is modified to reflect whether these branches are controlled by a party other than the executive's party, and the heterogeneity of preferences across the different branches. This measure echoes much of the seminal work on veto players produced by Tsebelis.[176]

Importantly, whether a state actor is "effective" or not (whether its influence over the executive is tangible) is coded by looking at whether that actor "has a substantive (not merely delaying) role in the implementation of fiscal policy".[177] This is a fortuitous (albeit standard in veto player measures) coding rule for the purposes of this paper, since power over fiscal and trade issues are often found in the same governmental entities. While there is no explicit allowance for interest groups in Henisz' measure, the running assumption—employed in other studies of veto players and trade policy-—is that the strength and preferences of interest groups are factored into the ideal points of veto players who count those interest groups among their constituents. The veto player data cover the WTO period up to 2004, for a total of 519 country year observations. It varies from 0 to 1, where 0 indicates unfettered executive authority,[178] and values closer to 1

[174] Mansfield, Milner and Pevehouse 2007, Mansfield and Henisz 2006.
[175] Henisz 2002.
[176] Tsebelis 1995, 1999.
[177] Henisz 2002.
[178] While the executive itself constitutes a veto player, here the measure is coded from the point of view of the executive, where 0 represents full autonomy. Most of the variation is made up by the presence of a lower and upper legislature, and the heterogeneity of preferences.

indicate growing levels of domestic constraint on executive sponsored policy change. In the data used, the measure varies from 0 to 0.88.[179]

Measures of veto power dispersion are used to convey the "feasibility of policy change".[180] Yet the paper's claim is that these measures, and Henisz' in particular, are also ideally suited as a measure of the risk of backtracking, and "flexibility capture" by state actors other than the executive. Independent branches of government with effective power over the final outcome of executive sponsored proposals are also likely to have the power to influence subsequent policy within the confines of thee agreements. Even in parliamentary systems where legislatures have more limited means of initiating policy

[179] The most important omission in Henisz's veto player data is, from this paper's point of view, that of the EC. As it is not a country, Henisz does not include it in the dataset, examining the domestic institutions of all its members instead. However, since the EC has a common external tariff, and officially conducts multilateral negotiations with "a single voice" (Meunier and Nikolaidis 1999), the analysis must reflect this by counting it as a single actor. Accordingly, I code a measure of the dispersion of veto authority in the EC, for use in my analysis. Rather than use Henisz's usual proxy for effective veto power—"a substantive (not merely delaying) role in the implementation of fiscal policy", which translates poorly to a supra-state organization that plays a small role in the fiscal matters of its national members—I code a trade-specific measure. This proves to be a delicate matter. While the European Commission arguably has more autonomy in trade than in any other sector, it is truly autonomous neither in treaty negotiations, nor in setting subsequent trade policy. The Commission "almost always follows the advice" of the Article 133 Committee (previously numbered 113), which represents Members' national ministries (Meunier 2005, 35; Woll 2006). Indeed, observers quip that the Commission must spend more time negotiating over some trade policy issues with the 133 Committee than with EU trade partners (Woll 2004). Even the much maligned European Parliament has some agenda-setting and proposal making power (Tsebelis 1995b, 50). Hence, despite the "single voice" ideal, European states still retain a powerful veto through voting in the Council and ratification by national parliaments (Meunier and Nicolaïdis 1999). As a result, I code the EC's veto measure as being constituted by one "executive" (the Commission), a single "legislative chamber" (the Council, represented by the 133 Committee), and "sub-federal" entities (national parliaments). I choose to ignore the role of the European Parliament, which has historically remained weak. National parliaments play an especially significant role since an important European Court of Justice (ECJ) ruling in April 1994 rolled back supra-national authority and reduced the Commission' trade competence, thus giving more control to EC member governments. Given the demonstrated significance of the ECJ in this matter, I also add a separate veto point for the independent judiciary. Importantly, I make no further assumptions about alignment of preferences, and treat all these state actors as independent. This seems especially appropriate in view of the ECJ's 1994 verdict. The resulting measure, which I code as fixed from 1995 to 2008, given the lack of change in terms of "party coalitions" or representation of these parties, is 13/15, as per Henisz's coding rules (refer to Henisz 2002 for calculations). This agrees with the prevalent wisdom in the literature that the European Commission is significantly constrained by the Council and national parliaments in setting trade policy (Meunier and Nikolaidis 1999, Woll 2004, Meunier 2005). Importantly, however, *none* of the results in the paper are dependent on my coding of the EC's veto measure. Taking the EC entirely out of the data in no way changes any of the substance of the findings.

[180] Henisz, see also Tsebelis 1995.

proposals, these state actors nonetheless exert independent pressure on political outcomes over and above their ratification functions.[181] As such, the measure of veto authority used here is well suited for testing not only the effect of the domestic realm on the level of effective protection, but also its effect on the degree of associated flexibility.

I also control for a number of country specific characteristics that change through time, starting with the number of PTAs a country is party to. This variable is a count of all PTAs a country is a member of, and that are in force for a given year. PTAs are likely to have a direct downwards effect on applied rates, as they extend preferential treatment to PTA partners, but they may also affect bound rates. Indeed, given that overhang is thought to be costly to secure, and given that PTAs are thought to increase a country's bargaining position in the multilateral realm,[182] one might expect them to help countries that value extra wiggle-room a heightened ability to secure it. I employ a comprehensive measure of states' PTA links, which comes from Baccini and Dür.[183] It counts all bilateral preferential agreement ties a country is party to, including customs unions, regardless of whether or not they have been notified to the WTO or whether the partner is a WTO member, and makes no distinction in the scope of these agreements. These data cover all Member countries from the WTO's inception to present day, for a total 3432 bilateral distinct PTA links in 2008.

I control for a number of other economic and country-specific variables, both in my main analysis and in the sensitivity section. These include the log of gross domestic product (GDP), foreign direct investment (FDI) levels for that year, and the proportion of

[181] Tsebelis 1995.
[182] Mansfield and Reinhardt 2003; WTO Krueger volume
[183] Baccini and Dür 2009.

a country's land devoted to agriculture, since there is some indication in the literature that agricultural tariffs are especially liable to high overhang.[184]

Importantly, to control for existing explanations of overhang, I control for members that hold developing country or least developed country (LDC) status. Together with developed countries, these are the only categories that officially differentiate WTO members' level of development. This being so, the term "developing country" is commonly employed in GATT-WTO discussions to designate all non-developed countries, comprising both LDCs and developing countries.[185] Since much of the literature looks to developing country status as being the main, if not the only, explanation behind the magnitude of overhang, it is worth considering these variables with care. LDC status is assigned by the United Nations. To date, 32 of the 49 LDCs identified by the United Nations have become WTO members, and they are identified as such in the data. Developing country status, in turn, is granted through a process of self-identification, rather than some objective metrics of development. As a result, some countries—e.g. Ghana, Cuba, Sri Lanka, among others—are considered neither LDCs, nor developing countries, and thus fall into the (default) developed country category. As an alternative to the official developing country list, then, I add to this list the eight countries whose development level would justify developing country status, as identified by WITS. A list of all countries concerned can be found in the Appendix. Together, these variables identify those countries benefiting from "special and differential treatment" by virtue of their WTO status, as well as those countries whose economic situation might

[184] Walkenhorst and Dihel 2004.
[185] All developing countries and least developed countries in the WTO are listed in the Appendix.

lead to behavior and interests similar to the countries with official developing country status.[186]

I also control for the number of years since a country's accession, since there is some indication that later entrants have been under greater pressure to bind their tariffs more tightly.[187] To convey the difference between founding members and later entrants, I code this as the number of years past 1995, the date of the WTO's inception, a given country joined. Accordingly, founding members are coded as 0, whereas China, for instance, which joined in 2001, is coded as 6. Summary statistics of all main variables are presented in Table 1.

Finally, I control for a country's level of democracy. Regime type is known to be positively correlated with the presence of domestic political constraints, since democracy is often identified with constraints on executive power. Nonetheless, democracies vary considerably in their levels of veto authority, particularly when preference alignments between the different branches of government are considered, and autocratic regimes also feature domestic veto players. In either case, it is important to control for regime type to ensure that the effect imputed to veto players cannot be reduced to regime type. It is thus common practice to include them both as a way of differentiating their effects.[188] Notably, democracy scores and veto player measures are often expected to have opposite effects with regards to trade institutions, despite their positive correlation. In terms of the likelihood of joining PTAs, for example, democratic countries are thought to be more likely to join, whereas the presence of multiple veto players is thought to decrease the

[186] While I use the latter list of countries in the analysis, using the primary list leads to no substantive changes in the findings.
[187] This is explicitly the case for China. See Anderson 2006, 13.
[188] See, e.g. Milner, Mansfield and Pevehouse 2007.

likelihood of signing PTAs.[189] The data on regime type are taken from the Polity IV database, which is an indicator of regime type along a 21 point scale, where higher scores indicate higher level of democracy.

(Table 1 about here)

The data on trade barriers come from the World Integrated Trade Services (WIT) software developed by the World Bank. Through WITS, I access data from the WTO; Comtrade, the UN trade agency; and the TRAINS database from the United Nations Conference on Trade and Development (UNCTAD). For all data on country GDP, agricultural land proportions, and FDI, I rely on the World Bank's *World Development Indicators*. The data on developing country and least developed country status comes from the WTO Secretariat. Using this cross-sectional time-series data, I run fixed effects models, with both country fixed effects and time fixed effects, and clustering of the robust standard errors around the development level of countries. Alternatively, I substitute country fixed effects for the country-specific variables described above, to isolate the precise Member characteristics which account for most of the variation in overhang among countries.

Analysis

I begin by testing the impact of veto players on binding overhang with minimal control variables, while including country fixed effects. I control for the log of GDP, the number of PTA ties among those notified to the WTO, and regime type. The results, presented in the first column of Table 2, are convincing: overhang decreases

[189] See Mansfield, Milner and Rosendorff (2003) for evidence of the first, and Milner, Mansfield and Pevehouse (2007) for evidence of the second hypothesis.

substantively as the number of effective veto players rises, and this effect is highly statistically significant, offering initial support for the first hypothesis. Yet as I mention above, it is important to check that the effect of veto players on overhang is not reducible to its effect on the applied rates. To verify this, I run the same specification, this time substituting applied and bound rates for the dependent variable, as shown in columns 2 and 3, respectively. The results are telling. While veto players increase the level of the applied rate, they have the opposite effect on bound rates. Both of these effects are highly significant. To convey the substantive impact of these findings, raising political constraint from its minimum level to the mean, keeping all other variables constant at their mean, decreases bound rates by 6%, on average.[190] The positive effect on applied rates is slightly greater by comparison. The sum of those two effects corresponds to the coefficient on overhang in the first column: a one standard deviation increase in the dispersion of veto power corresponds to 9.6% drop in overhang. The other variables behave as expected. The number of PTA links has a significant downward effect on applied rates, and a less significant, though still negative, effect on bound rates. Its effect on overhang thus acts mostly by depressing applied tariff rates. Regime type appears to have a negative effect on applied rates, yet no impact over bound rates. Perhaps most interestingly, GDP pushes bound rates upwards, providing some further support for the running assumption that overhang is costly to secure, and thus requires bargaining leverage. It is worth adding that although I include regime type as a control in order to differentiate between regime and veto players, taking it out altogether in no way affects any of the results; this hold for all of other specifications presented in the paper.

(Table 2 about here)

[190] To be clear, this refers not to the AVE absolute rate change, but the percentage difference in this rate.

I go on to add a number of control variables to my initial model, as shown in Table 3. In particular, I drop the country fixed effects in order to run a few time-invariant country-specific variables, principally as a means of testing the conventional wisdom according to which LDCs and developing countries have higher overhang than developed countries, and to test the effect of later entrants.

Fixed effects models such as the one shown in Table 2 do not make use of cross-sectional variation between countries, and are considered somewhat inefficient as a result. Their main strength, however, is that they remain consistent under certain specification errors in a way that random effects models do not. To ensure that the random effects model presented in Table 3 is unbiased, I run a Hausman test, which confirms that the estimates obtained are consistent with the equivalent fixed effects model. To be sure, adding back the country fixed effects simply keeps me from including the time invariant variables, with no further effect on the size of the remaining coefficients or their significance.

(Table 3 about here)

Once again, the aggregate effect of political constraint on overhang offers strong support for the theory. Similarly, the opposite effects on applied and bound rates hold, as shown again in columns 2 and 3. More interestingly, the conventional wisdom on the impact of country development status finds strong support as well. Using developed countries as the base category, developing countries exhibit 18% lower bound rates, on average, while the equivalent figure for LDCs is 37%, suggesting a linear, negative effect of country development level on overhang. This effect is somewhat less significant for developing countries than for LDCs, at a p value of 0.05, while the effect of LDC is significant to 0.001. Importantly, the number of years since accession shows strong effect

in the expected direction. For newly acceded members, bound rates tend to be considerably lower, while applied rates remain unchanged. This reflects the view according to which accession working parties do not accept offer from entrant countries that exhibit too high an overhang.[191] The proportion of exports, in turn, impacts both applied and bound rates downwards, while the proportion of agricultural land and FDI levels have no effect on either.

I go on to account for the potential of autocorrelation in the data in two ways. It is important to remember that even in the presence of autocorrelation, estimators remain unbiased, consistent, and asymptotically normally distributed, but they become inefficient.[192] Given the relatively small size of the sample, such inefficiency is of some import. I first fit the same random effects model with a first-order AR(1) autoregressive disturbance term. Then I separately rerun all the specifications of Table 3, while including the dependent variable lagged by one year on the right hand side of the equation. In both cases, the effect of political constraint on overhang remains negative, significant and substantive. Decomposing the effect on overhang into its logical components, however, reveals how the effect on applied rates loses significance, while the effect on bound rates actually marginally increases substantively, and remains highly significant. Importantly, the aggregate effect on overhang is still strongly significant, at less than 0.01.

Finally, in Table 4, I test the robustness of the above findings to two-way fixed effects, by including time fixed effects on top of country fixed effects. I keep only the controls for which I have strong theoretical grounds for expecting an effect on import

[191] Supra
[192] Woolridge 2008, 376-377.

barriers: logged GDP, regime type, and PTA ties. Since I run two-way fixed effects, I include neither development status, nor number of years since accession among the controls, since both are time-invariant. To remedy somewhat for this, I cluster all robust errors around the three categories of development—LDCs, developing, and developed countries.

(Table 4 about here)

Here too, the effect of political constraint on overhang is unambiguous. Once again, however, disaggregating the effect on overhang into its two parts reveals that it is driven by the effect of political constraint on bound rates. Indeed, the effect on applied rates is no longer significant, albeit while remaining positive. In substantive terms, varying the level of domestic political constraint from its minimum to its mean level, and keeping all controls at their means, decreases bound rates by 9%, on average.[193]

As a further sensitivity test, and speaking to the fact that applied rates are known when countries determine set rates, I include the applied rate as an explanatory variable for the bound level (not shown). Importantly, I use the un-weighted applied rate as the control, since bound and applied rates in a given year are weighed by the same import levels, thus artificially inflating their correlation. The coefficient for the applied rate is positive but insignificant, and the effect of political constraint is rendered only *more* significant. Other results remain unchanged.

In addition, it is plausible that given the way in which applied rates and bound rates are set, where one depends at least in part on the other—similar factors are posited to influence them both—the equations for bound and applied tariffs may exhibit correlated errors. Such a correlation cannot lead to either biased or inconsistent estimates,

[193] I am speaking here of proportional differences from the mean, not absolute points of overhang.

but a considerable efficiency gain can be garnered from running the two equations simultaneously. I do so by rerunning the basic model of Table 2, but with both country *and* year fixed effects, using a seemingly unrelated equations estimator. The results are consistent with the remainder of the analysis. The effect of political constraint on applied rates is positive but not significant (p=0.2), while the effect of political constraint on bound rates is strengthened, both statistically and substantively, as compared against the results of Table 2.

Finally, I check whether my findings are robust to variation in foreign exchange regimes. It may be that, along the lines of the classic open economy trilemma, when a state is constrained in its control of foreign exchange rates, a possible avenue for adjusting balance of payments issues or import surges is cut off, thus putting additional pressure on trade policy. Since this could bear on both applied rates through time and negotiated bound rates, I add a control for states' foreign exchange regime to the analysis. As recent scholarship indicates that countries' self-declared foreign exchange system classifications tend to be misleading, I use Reinhart and Rogoff's classification of historical exchange rate regimes, which is said to improve on the IMF's classification in its *Annual Report on Exchange Rate Arrangements and Exchange Restrictions.*[194] Using their "coarse classification" data, recently updated to 2007, which subdivides all exchange regimes into 6 categories,[195] I construct five dummy variables corresponding to categories 1-5 of the Reinhardt Rogoff classification, and add these to every specification in the analysis. The only consistent statistically significant effect is a negative

[194] Reinhart and Rogoff 2004.
[195] Broadly, these categories correspond to pegs (1); crawling pegs (2); crawling or moving bands, or managed floating (3); freely floating (4); freely falling, corresponding to high inflation rates (5); and dual markets where the parallel market data is missing (6). See Reinhardt and Rogoff 2004.

relationship between freely floating and managed floating regimes and applied rates. Interestingly, all exchange regime dummy variables have opposite signs for applied versus bound rates as the dependent variable, though most of them are not significant. Most importantly, however, the inclusion of these foreign exchange controls has no effect on either the significance or the substantive effect of any of the variables of interest.

Overall, the evidence presented offers strong support for the posited effect of domestic political constraint on binding overhang. Moreover, this effect can be observed separately for bound and applied rates. Whereas the effect on bound rates is strong and robust to all controls and fixed effects presented, the effect of political constraint on applied rates is somewhat less robust, losing significance with the inclusion of time effects in the fixed effects models (see Table 4 and the seemingly unrelated equations estimator, not shown), or the inclusion of a first order autoregressive disturbance term in the random effects model (see Table 3). In all these specifications, however, the effect of veto power dispersion on bound rates remains just as significant, as does the aggregate impact on overhang.

The analysis thus far has examined the level of protection at specific points in time, rather than its variation through time. This is because bound rates, especially, do not vary much over time. Indeed, in the period covered by the analysis, most bound rates were set at the WTO's inception, and have only varied marginally since then, following sectoral agreements, rare unilateral moves, or phased-in implementation dates. Applied rates, however, do vary considerably through time. Indeed, that is the central assumption underlying the argument. It is precisely because applied rates can be modified after bound levels are set through an agreement that there is a risk associated to having excess flexibility, since that flexibility is prone to capture by powerful domestic actors.

Hence, another testable implication of the argument is that the presence of powerful veto players with divergent preferences[196] will lead to observable increases in applied rates over time. As a final test, then, I use a modified differences-in-differences model to test this implication by considering the determinants of change in applied rates over a period of 5 years. I then progressively increase this period of time to 6, 7, and 8 years, to test the results' robustness.

My main independent variable of interest is the mean level of political constraint across the relevant period. Since changes in levels of political constraint over time are negligible, I use the average level of political constraint for a given country over the period of interest. This is equivalent to asking: do domestic systems with dispersed veto authority observe greater changes in applied rates over time? By taking the first difference of applied rates, I effectively control for most time invariant factors. I do, however, include controls both for mean GDP and the change in GDP over the relevant period. Similarly, I include a control for the mean number of PTAs and the change in PTAs over the period of interest, as both the existing number of regional trade agreements and their increase over time should decrease average rates of protection. Conventional wisdom suggests that market size and international agreements should be the two foremost drivers of change in rates of protection through time.

The results are telling, and provide support for the assumptions made in the argument about the incentives of the executive. As shown in Table 5, the presence of powerful veto players has the effect of significantly increasing applied rates, whatever the period of time examined. As assumed throughout the analysis, powerful veto players result in greater average increases of protection after the agreement, and thus greater

[196] As captured by political alignment.

unpredictability in trade policy from the point of view of executives. Moreover, changes in market power have little effect, but average market power over the period of interest decreases the average rate of protection over time. And following intuition, the average number of PTAs has little effect on changes over time, but joining more PTAs does, by reducing average applied duties, though this effect only becomes highly significant in the longer periods of 7 and 8 years.

Veto players are usually associated with policy stability, since they increase the number of checks on any proposal for change. Yet as demonstrated here, the net effect of increasing the number of "access points" to trade policymaking, despite the greater likelihood of any given proposal being blocked, is an increase in the likelihood of movement within the confines of an agreement. The greater the number of effective state actors, and the more dispersed their preferences, the more likely one of these actors will successfully push for her preferred level of applied protection on a specific product. And owing to the dynamics of logrolling and vote trading, such moves tend to have unpredictable, wide-ranging effects. The upshot is that despite being veto players themselves, executives are demonstrably prone to pressure from legislatures and other state actors.

The sample is considerably reduced by virtue of taking the difference of applied rates, and gets progressively smaller as the relevant period of time is increased. This should be read as a qualification to the findings. Nonetheless, the consistent, highly statistically significant, positive effect of powerful veto players on the level of applied rates over time, looking at a period of 5, 6, 7, and 8 years, suggests that powerful state actors with divergent preferences are able and willing to use that power to push for their

preferred level of protection after an agreement is signed. This effect remains unchanged with any combination of the included controls.

Of course, if the story presented in this paper holds true, then these results are biased in a conservative fashion. Indeed, the very domestic systems with strong legislatures that are seen pushing the applied rates toward the bound are the same systems where the executive is likely to have anticipated such behavior by binding tariff rates more tightly. If anything, then, these findings only confirm the grounds on which executives fear backsliding of their initial commitments if they negotiate excessive wiggle-room. Despite powerful state actors with divergent preferences being more constrained by lower bound rates, they are nonetheless observed subsequently pushing protection levels upward.

Conclusion

This paper seeks to explain the considerable variation in the binding overhang of WTO members. I argue that a state leaders' willingness to set aside flexibility for dealing with future exigency through high overhang varies in accordance with domestic political institutions. As veto authority is more dispersed in the political system, the risk of flexibility being "captured" by state actors increases, and the risk of backsliding from the agreement's initial terms increases along with it. In the classic trade-off between autonomy and self-binding, executives facing strong independent political institutions will favor relatively higher levels of self-binding, foregoing the flexibility afforded by a wide gap between applied and bound rates. The evidence presented provides strong support for both the downwards effect on bound rates and the upwards effect on applied rates, though the latter is less robust to the inclusion of fixed time effects and controls for

autocorrelation. Moreover, the findings on changes in applied rates over time offer support for the assumption guiding executive behavior in the first place.

It should also be added that while the analysis is pitched at the country-level, this does not rule out explanations at the product or industry level. I take average country tariff rates because the argument considers the supply side of trade policy and country level factors, but naturally, tariff rates vary a great deal between products. Such variation remains unaccounted for. Future work would gain from considering industry specific explanations for the variation in applied duties, and the amount of flexibility negotiators set aside for different products.[197]

The function of the GATT/WTO remains, as it is often argued, in providing a solution to a problem of countries' time-inconsistent preferences. As posited by Mansfield and Reinhardt, the institution is as much concerned with locking in existing commitments as it is with reducing barriers to trade.[198] This view of the WTO resolving time-inconsistent preferences[199] is consistent with the observed variation in overhang, and its suggested explanation. When state leaders share authority over trade policy with a number of domestic actors, they have added incentives to reduce the policy space they dispose of after an agreement is signed. Negotiators respond to the added risk of backsliding by reducing the wiggle-room they demand during trade talks.

The story presented here does detract somewhat from the classic view of all-powerful domestic industries. Indeed, the sheer existence of binding overhang remains puzzling in this respect. Most likely, it is a sign of governments' own recognition that high barriers to trade are not to their long-term advantage. In this respect, the existence of

[197] For a first step toward product level analyses of overhang, see Author.
[198] Mansfield and Reinhardt 2008.
[199] Staiger and Tabellini 1987, 1999, in: Goldstein, Rivers and Tomz 2007, 40.

overhang supports the view that most "tariff reductions in the world took place because governments decided it was in their own interests to lower import duties",[200] rather than solely through the exchange of reciprocal commitments made during multilateral negotiations, as is often assumed. This is not to say that the demand side of trade policy is irrelevant; far from it. But variation in the power of interest groups cannot by itself account for variation in the amount of overhang countries set aside for themselves. Political institutions condition the influence of domestic groups, and executives strategically choose optimal levels of flexibility based on the likelihood that it may be abused by legislators and sub-state actors. In exchange, they must offer higher levels of average applied duties to render international agreements palatable to these domestic actors. In other words, the demand side, in this case, can be usefully exogenized: variation in the supply side can account both for changes in rates through time, and among countries.

The debate among WTO members over the desirability and social cost of binding overhang continues. Some countries remain insistent that they require a high level of flexibility to respond to exogenous events such as food shortages or balance of payment troubles that require rapid import relief. The recognition of overhang as a flexibility mechanism is problematic, since it goes against the way in which the WTO has traditionally allowed countries to respond to exigency, namely through trade remedies such as safeguards, antidumping and countervailing duties. Indeed, the direction in which these latter mechanisms have evolved, namely towards progressively clearer specified conditions, shorter allowable periods, and narrower targeted groups of products, is in

[200] Naím 2007.

direct opposition to the type of flexibility provided by binding overhang.[201] Bound rates far in excess of applied rates provide a type of permanent—as opposed to conditional—flexibility. Whether it is exploited or not, excess available protection muddles the expectations of traders and investors, who have to count with the possibility that this extra protection *could* be used at any time. The resulting uncertainty imposes costs on the system as a whole.[202]

This discussion takes on greater urgency in the wake of the collapse of the Doha Round, which observers claim was caused in part by disagreement over a special safeguard measure for precisely those countries that are shown to exhibit high levels of overhang. This paper's analysis suggests that *any* conditional flexibility mechanism may be preferable to the constant uncertainty resulting from a permanent buffer, whether or not this buffer is utilized.

This paper's implications, moreover, are not limited to the field of international trade. Overhang provides a valuable means of differentiating the depth of commitments of individual member states. An examination of overhang may well fulfill the promise of earlier studies that tried to measure the benefits of membership against the costs of accession, and institutional records of compliance against the costs of complying.[203] As such, it has important implications for the study of institutions broadly understood. If highway speed limits are set in such a way that most cars never come within 30 miles an hour of reaching the limit, one has to wonder about the significance of this limit in the first place. One might also wonder what a high record of compliance would mean on such

[201] Author
[202] For an estimation of these costs, see Author.
[203] On this topic, see Downs, Rocke and Barsoom 1996.

a highway, and how such a record should be compared against that of other highways with lesser "speeding overhang".

The greater story being told should be a familiar one. Institutional evolution is a struggle between state actors seeking to bind themselves to achieve the benefits of reciprocal commitments, and those same actors seeking to have those bounds loosened as a way of extracting short-term rents. States will always search for available wiggle-room; as observers, we must bear in mind that such wiggle-room always comes at a cost.

Table 2.1 *Descriptive Statistics*

Variable	Mean	Std. Dev.	Min	Max
Year	2001.48	3.10	1996	2008
Applied rate	8.15	5.87	0	32.80
Bound rate	29.81	28.19	0	164.81
Log GDP	24.31	2.24	19.37	30.26
Developing Country	0.50	0.50	0	1
Least Developed Country	0.09	0.28	0	1
Regime Type	5.69	5.43	-10	10
PTAs	16.83	15.07	0	83
Agricultural Land	40.13	21.59	1.16	91.32
Exports / GDP	42.64	32.37	0.42	246.15
% Roads Paved	51.73	32.66	3.50	100
Log FDI	20.59	2.49	6.91	27.18

Notes: N = 695, corresponding to 104 countries with an average of 5.8 observation years per country.

Table 2.2 *Country Fixed Effects Model of Political Institutions' Impact on Binding Overhang*

	Binding Overhang	**Applied Tariff Rates**	**Bound Tariff Rates**
Political Constraint	-7.48***	3.69***	-3.61***
	(1.55)	(1.24)	(1.39)
PTA	0.06**	-0.14***	-0.07***
	(0.03)	(0.02)	(0.03)
GDP	2.03**	-0.32	2.40***
	(0.94)	(0.74)	(0.84)
Regime type	0.18	-0.22**	-0.06
	(0.13)	(0.11)	(0.12)
N	416	418	416

Standard Errors in Parentheses. * denotes 2-tailed $p < 0.10$; **, $p < 0.5$; ***, $p < 0.01$

Table 2.3 *Random Effects Model of Political Institutions' Impact on Binding Overhang*

	Binding Overhang	**Applied Tariff Rates**	**Bound Tariff Rates**
Political Constraint	-8.08***	2.85***	-4.12***
	(1.52)	(1.12)	(1.34)
PTA	0.10***	-0.09***	-0.01
	(0.03)	(0.02)	(0.03)
Export Proportion	-0.01	-0.09***	-0.12***
	(0.03)	(0.02)	(0.03)
Agricultural Land Proportion	-0.03	0.02	0.00
	(0.09)	(0.03)	(0.08)
FDI	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)
LDCs	41.98***	1.68	44.07***
	(10.61)	(2.62)	(10.84)
Developing Countries	19.98**	4.05***	24.26***
	(8.79)	(1.89)	(9.11)
Recent Entrants	-4.66***	-0.87**	-5.47***
	(1.84)	(0.38)	(1.92)
Regime Type	0.15	-0.41***	-0.12
	(0.13)	(0.08)	(0.11)
GDP	0.94	-0.38	0.62
	(0.86)	(0.34)	(0.78)
N	407	409	407

Standard errors in Parentheses. * denotes 2-tailed $p < 0.10$; **, $p < 0.5$; ***, $p < 0.01$

Table 2.4 *Two-way Fixed Effects Model of Political Institutions' Impact on Binding Overhang*

	Binding Overhang	**Applied Tariff Rates**	**Bound Tariff Rates**
Political Constraint	-7.16**	1.19	-5.62***
	(1.21)	(1.98)	(0.65)
PTA	0.03	-0.07**	-0.04**
	(0.01)	(0.01)	(0.01)
Regime Type	0.17	-0.14	0.01
	(0.09)	(0.06)	(0.07)
GDP	1.28	1.64	3.67*
	(0.48)	(0.68)	(1.24)
Agricultural Land Proportion	-0.27	0.13	-0.11
	(0.13)	(0.11)	(0.09)
N	416	418	416

Robust Standard errors in Parentheses. Country and year fixed effects coefficients not shown. Clustering of errors around country development status (LDC, developing, and developed countries). * denotes 2-tailed $p < 0.10$; **, $p < 0.5$; ***, $p < 0.01$.

Table 2.5 *The Effect of Veto Players on Changes in Applied Rates Over Time*

	Time Period of Change			
Variable	**5 years**	**6 years**	**7 years**	**8 years**
Δ *log GDP*	0.79	1.08	0.60	1.53
	(0.88)	(1.15)	(1.32)	(1.27)
Δ *PTAs*	-0.06*	-0.08**	-0.13***	-0.25***
	(0.03)	(0.04)	(0.05)	(0.04)
Mean log GDP	-0.10***	-0.14***	-0.28***	-0.10***
	(0.14)	(0.19)	(0.22)	(0.21)
Mean Political Constraint	3.36***	5.73***	6.67***	5.97***
	(1.30)	(1.86)	(2.12)	(1.99)
Mean PTAs	-0.03	-0.03	-0.04	0.01
	(0.02)	(0.03)	(0.04)	(0.04)
Constant	-0.89	-1.80	1.88	-2.53
	(3.24)	(4.44)	(5.28)	(5.07)
N	214	166	124	86

OLS regression. Standard errors in parentheses. * denotes 2-tailed $p < 0.10$; **, $p < 0.5$; ***, $p < 0.01$
Δ corresponds to the change in the variable over the relevant period (5, 6, 7, or 8 years), as indicated by the column.

Table 2.6 *List of Countries Covered*

Developing Countries

Albania
Argentina
Armenia
Barbados
Belize
Bolivia
Botswana
Brazil
Bulgaria
Cameroon*
Chile
China
Colombia
Costa Rica
Croatia
Cuba*
Dominica
Dominican Republic
Ecuador
Egypt, Arab Rep.
El Salvador
Fiji
Gabon
Georgia
Ghana*
Grenada
Guatemala
Guyana
Honduras
India
Indonesia
Jamaica
Jordan
Kenya*
Kyrgyz Republic
Macedonia, FYR
Malaysia
Mexico
Mongolia
Morocco
Myanmar*
Namibia
Nicaragua
Nigeria*
Oman
Pakistan
Panama
Papua New Guinea
Paraguay
Peru
Philippines
Saint Kitts and Nevis
Saint Lucia
South Africa
Sri Lanka*
Swaziland
Thailand
Trinidad and Tobago
Tunisia
Turkey
Uruguay
Venezuela
Zimbabwe*

Least Developed Countries

Angola
Bangladesh
Benin
Burkina Faso
Burundi
Congo, Rep.
Côte d'Ivoire
Djibouti
Gambia, The
Guinea
Madagascar
Malawi
Maldives
Mali
Mauritania
Niger
Rwanda
Senegal
Sierra Leone
Tanzania
Togo
Uganda
Zambia

* Indicates states not having self-declared developing country status within the WTO, but whose economic situation would warrant the status (World Integrated Trade Service, WTO Secretariat).

PART III: THE COST OF WIGGLE-ROOM: LOOKING AT THE EFFECTS OF FLEXIBILITY IN TARIFF RATES AT THE WTO

Guided by the widely shared assumption that "institutions matter", scholars have spent much time trying to measure the net effect of membership in international institutions. A recent debate has emerged in this way over the impact of the General Agreement on Tariff and Trade and its successor, the World Trade Organization: some argue that the organization observably increases world trade, and others disagree.[204] In examining this and other institutions, however, the literature has overly simplified the notion of membership, representing it as a clear-cut, unambiguous concept. According to this view, states are either members, or they are not.[205] Such an approach overlooks tremendous variation in the degree of commitment among members of the same institution. The omission is all the more striking given that international relations theory has long ago brought attention to this fact, and warned scholars of the risk of overlooking it.[206] Empirical studies, however, have not delivered on the promise of theory, most likely because of the inherent difficulty in measuring "depth of commitment",[207] and comparing members of the same organization along its lines.

One notable exception is a recent study by Goldstein, Rivers and Tomz. The authors attempt to measure the impact on trade flows of the decision by WTO Members to exercise an opt-out clause, under which states can limit the degree of concessions

[204] Rose 2004, Gowa and Kim 2005, Subramanian and Wei 2007, Goldstein Rivers and Tomz 2007.
[205] Goldstein, Rivers and Tomz do introduce the concept of "standing" as a way of problematizing membership, which allows them first to differentiate among non-members, and secondly among members. I address the latter possibility below.
[206] See the seminal work of Downs, Rocke and Barsoom 1996, 1998.
[207] ibid

granted to new entrants.[208] Opt-out clauses allow states to limit their commitment within the institution, which should have observable effects. But while such reservations involve about half a percent of country dyads over the institution's 60-year history, many more states limit their WTO commitments in a far more direct and pervasive manner. Indeed, while GATT-WTO members apply tariffs on imports at roughly comparable levels, the maximum level allowed on each of these tariff lines varies dramatically. Whereas both Armenia and Pakistan levy 10% applied tariffs on tomatoes, Pakistan could raise that tariff overnight to its *bound* rate of 100% and remain compliant, while Armenia can only raise its tariff to 15% before falling foul of its WTO commitments.[209]

Hence, while the effective import barrier on tomatoes does not vary between Pakistan and Armenia, the same cannot be said of the *predictability* of each barrier. This discrepancy leads to the following puzzle: do countries "loosening the ties that bind",[210] by setting aside policy space to handle unexpected conditions, while remaining in compliance all along, affect the expected benefits wrought by the institution in the first place? In other words, does variation in the gap between applied and bound rates matter?

The answer is far from clear. Goldstein, Rivers and Tomz found the exercise of opt-out clauses to have *no* conclusive effect on trade-flows, though the authors attributed the null finding in part to the rare occurrence of such reservations.[211] In the case of tariff rates, the matter is no clearer. Within the WTO Membership itself, there is a growing debate over the effect of what has come to be called "binding overhang"—the gap

[208] Goldstein, Rivers and Tomz 2007
[209] These rates correspond to 2006 *ad valorem* import barriers on "Tomatoes, Fresh or Chilled", HS 0702.
[210] See the Koremenos on institutional flexibility (Koremenos 2001).
[211] The authors do find a significant effect for two-sided invocations, which are not only extremely rare, but a clear sign of fundamental political differences. For one-sided invocations, they find an *increase* in trade, a result they "do not regard as plausible" (Goldstein, Rivers and Tomz 2007, 59).

between bound and applied tariff rates. A number of countries—the US and Canada among them—have argued that binding overhang significantly increases uncertainty for traders and investors.[212] Others, such as India, claim that overhang has little impact if it is not used, while providing countries with much needed flexibility in the event of an exogenous shock.[213] With a view of contributing to this debate, I conduct what is to my knowledge the first empirical examination of the effect of binding overhang on trade flows.

The results are unambiguous. I find support for the view that overhang has a strong negative effect on trade. Specifically, looking at the 4-digit product level, and controlling for the rate of applied tariffs, as well as a host of other country-specific variables, I show that the wiggle-room countries obtain for themselves by negotiating bound tariffs far above applied rates significantly decreases imports. This should come as no surprise. Investors and traders value stability in market access. Through the uncertainty it entails, overhang acts as a tax on imports, over and above applied duties.

The paper's findings hold numerous implications for the study of trade and international institutions. First, the results bolster the belief that ensuring "security and predictability" —an objective enshrined in the WTO texts—is as important a goal for trade institutions as is reducing average imports barriers.[214] The now 20-year-old definition of regimes as leading to the "convergence of expectations" proves to have been

[212] TN/MA/M/5; WT/TPR/M/185/Add.1.
[213] WT/COMTD/W/143
[214] See WTO DSU Article 3.2. John Jackson claims that the stated WTO objective of "security and predictability" is "the most important 'central element' of the policy purposes of the [DSU]" (Jackson 2004, 112, 117).

farsighted.[215] In sum, trade institutions are concerned not only with improving the status quo, but also with locking in existing commitments.[216]

Secondly, and related, *de jure* membership in the GATT/WTO is, by itself, no panacea. Just as states can derive rights and obligations from an institution they are not party to,[217] so too can official signatories water down their commitments during negotiations to the point of irrelevance, and reduce the ensuing expected benefits. The GATT/WTO allows states to achieve gains from trade through reciprocal commitments and credible sanctions that make it easier for state leaders to confront domestic industries, but membership by itself is no guarantee of success.

Finally, the findings hold considerable policy implications for ongoing WTO negotiations. Following the collapse of the Doha trade round over the issue of special safeguards requested by the very countries exhibiting high binding overhang,[218] it is worth asking whether the current trade-off is a favorable one. The likely conclusion is that any form of conditional and temporary trade remedy may be preferable to high, permanent, binding overhang.

Binding Overhang and Uncertainty

The function of the WTO, and the purported reasons for its success, are well established. The goal of the WTO is explicitly to expand "the production of and trade in goods and services".[219] The way in which it achieves this objective is by allowing countries to exchange reciprocal commitments, harnessing export oriented interests at

[215] Krasner 1982.
[216] Mansfield and Reinhardt 2008.
[217] Goldstein, Rivers and Tomz 2007.
[218] See the concept of "standing", as opposed to membership, in Goldstein, Rivers and Tomz 2007.
[219] Preamble to the *Marrakesh Agreement Establishing the World Trade Organization*.

home to balance pressure from import competing domestic groups, as a means of reducing barriers to trade worldwide. Moreover, by virtue of establishing enforceable, binding constraints, the WTO serves as a solution to the problem of time-inconsistent preferences. State leaders have a long-term interest in abating barriers to trade across the board, yet they may face periodic domestic pressure to reinstate targeted trade barriers to protect special interest groups.[220] In such cases, credible commitments made at the international level can reduce the domestic political costs of denying protection.

A more recent line of argument, moreover, notes that regional and multilateral institutions expand trade not only by increasing market access, but also by reducing the *volatility* of market conditions. This emphasis on stability recalls the early literature on institutions, when scholars still spoke in terms of "regimes", which granted much importance to regimes' role in leading to a convergence of expectations.[221] In this way, Mansfield and Reinhardt have recently shown that international agreements reduce export volatility. This reduction in volatility, in turn, is shown to have an independent effect on the expansion of trade flows.[222] The same has been advanced in respect to variance in trade *policy*, though these findings, limited to the economics literature, rely for the most part on theoretical models, rather than empirical tests.[223] More broadly, scholars have argued that the objective of international trade institutions is not only to expand market access, but also to lock it in. Along those lines, Rodrik claims, with regards to the North American Free Trade Agreement, that "[i]t is no secret that Carlos Salinas wanted

[220] There is general agreement that the domestic pressure for protection waxes and wanes with market conditions and unemployment. See Mansfield and Henisz, Takacs.
[221] The oft-quoted definition of regimes is of "principles, norms, rules, and decision-making procedures around which actor expectations converge in a given issue-area." (Young 1980, Krasner 1982, Ruggie 1982).
[222] Mansfield and Reinhardt 2003.
[223] See, e.g., Francois and Martin 2004.

NAFTA at least as badly for its potential role in cementing Mexico's institutional reforms since 1986 as for its market-access provisions."[224] This recent focus on institutions and their role in reducing uncertainty and stabilizing expectations constitutes an important stepping-stone to understanding the significance of binding overhang, and the way in which it modulates the impact of the WTO. In sum, if one of the purported benefits of institutions is locking in existing commitments, then any provisions that loosen such commitments would be expected to concurrently limit the benefits flowing from the institution.

The issue of overhang emerges at the time of the WTO's inception in 1995. The Uruguay Round was in great measure successful in its goal to bind all tariff lines for all Members. And yet, ever since 1995, the level at which these bindings were set has varied dramatically across the membership. In many cases, the newly bound rates were set at levels higher than a state had ever applied in the past, or has ever applied since, on the product in question. Indeed, states had considerable discretion in the way they converted non-tariff barriers to *ad valorem* equivalents,[225] especially in sectors such as agriculture, resulting in high bound ceilings. Crucially, the levels of applied duties are known prior to setting bound rates, though those applied rates can vary subsequently. Binding overhang, then, is driven mostly by high bound rates, rather than low applied rates.[226] On average, overhang across all WTO members was 18% in 2007, though for some countries it was as high as 89%.

[224] Rodrik 1995, 110.
[225] Francois and Martin 2004.
[226] Bound rates also vary considerably more than do applied rates. Though the latter vary more across time, while bound rates are modified following further agreements or trade rounds.

It is not hard to understand why countries would value some "headroom" over and above the tariffs they apply. They may value binding overhang as providing policy space that can be called upon in times of economic duress to provide import relief. Also, it is likely that states value the way high overhang allows them to offer large tariff "cuts" in subsequent trade negotiations without sustaining equivalent pain domestically. In other words, high overhang acts as a buffer zone during multilateral bargaining.

While the incentives of individual states in setting aside wiggle-room for themselves are easy to grasp, there is considerable debate around the associated welfare costs. The WTO Secretariat, for one, has been unusually vocal in explicitly linking high overhang to ensuing uncertainty in a country's trade regime. In a typically formulated instance of criticism, the Secretariat recently complained about South Korea's trade regime, claiming that "[a]lthough 90.8% of tariff rates are bound, the predictability of the tariff is eroded by the leeway to raise applied tariffs provided by the average gap of 4.3 percentage points (9 percentage points for agricultural items) between applied and bound MFN rates."[227] This focus on the costs of unpredictability finds most support from claims within the private sector, where producers complain that the lack of transparency and instability of the barriers they face abroad is, in itself, an additional barrier to trade. To give but one example, US wine manufacturers recently complained to the US International Trade Commission (ITC) that they do not know what the actual rate of protection imposed on wine imports by Israel is at any given time, and that "the result is

[227] WT/TPR/S/204/Rev.1

confusion and unpredictability about any pricing of product, a very effective deterrent to selling in the Israel wine market."[228]

A number of WTO members have made similar arguments. The US routinely criticizes states with high overhang, while noting that the US schedule, by contrast, is "bound at applied rates".[229] In this way, WTO members exhibiting high overhang are routinely warned by their trade partners that their tariff schedule contributes to higher uncertainty in the global trading system. The US has gone as far as to suggest basing further liberalization efforts on applied, rather than bound rates, a proposal that has received support from Members such as the EC and Canada, but met considerable resistance from others. Indeed, a 2003 resolution by a group of 10 developing countries[230] claimed that the gap between applied and bound rates is "extraneous to the mandate and to the tradition of GATT/WTO negotiations. Any move to address the issue would […] not be appropriate since the rights and obligations negotiated in the last round were with reference to the bound rates."[231]

Despite the evident cleavage in the negotiations between developing and developed countries, it would be a mistake to reduce, as conventional wisdom does,[232] the issue of overhang to development status. Overhang remains a policy choice, rather than the result of structural differences. This belief is borne out by the considerable variation in overhang *among* developing countries. The aforementioned comparison between Armenia and Pakistan is telling in this regard. A number of developed countries,

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[228] Hearing Testimony by the Wine Institute and the California Association of Winegrape Growers before the U.S. International Trade Commission, investigation number 332-494, 4.
[229] Meaning that overhang is close to null. TN/MA/M/5
[230] The communication, dated 14 March 2003, was received from Egypt, India, Indonesia, Kenya, Malaysia, Mauritius, Nigeria, Tanzania, Uganda and Zimbabwe. TN/MA/W/31
[231] ibid, 3.
[232] See, for example, Subramanian and Wei 2007.

moreover, also exhibit high overhang. Norway has been roundly criticized by trading partners in its last three trade policy reviews (which take place at 4 year intervals) for bound rates 23% in excess of its applied rates, far higher than the membership's average.[233] As in all other similar discussions, states complained that such a wide gap reduced the predictability of Norway's trade regime.[234] It has been argued elsewhere that domestic institutions, as well as the time of WTO accession, account for much of the variation in overhang among states.[235]

Members claim, further, that overhang provides necessary flexibility for countries that lack the capacity to employ traditional trade remedies such as antidumping and countervailing duties. The WTO Secretariat itself has given currency to the view of overhang as a form of flexibility, referring to, for instance, the "flexible tariff mechanism" of countries, like South Korea, that quickly modify their rates within the bound. Indeed, the South Korean trade regime allows for rapid changes in applied duties (as high as 40% increases or decreases), with announcements of the new rates only a month prior to their taking effect.[236] The justification provided by Korea has pointed to the necessity of responding to sudden import surges, a need usually addressed by antidumping and safeguards.[237] In sum, a large gap between bound and applied rates represents a "loosening of the ties that bind", or an increase in the flexibility afforded members to deal with variation in domestic demand for trade protection. Whether

[233] This figure from 2008 (WT/TPR/M/205, para 75). Norway's average applied rate in 2008 was 6.7%.
[234] The US formulated the same complaint during the 2000 and 2004 Trade Policy Review of Norway (ibid).
[235] Author. China is an example of a recent entrant that was made to accept a tariff schedule bound at applied rates. See WTO Secretariat 2008.
[236] WT/TPR/M/204/Add.1, p. 142. There is little to differentiate so-called 'flexible tariffs' from general tariffs, save for the fact that the terms indicates a recent change. Indeed, in the case of Korea, when flexible tariffs outlast their usual one year limit, they are converted to regular tariffs (ibid, p. 198, 205)
[237] ibid 198.

members agree or not over its desirability, there is a prevalent consensus that binding overhang serves to provide "policy space".[238]

The question remains, however, whether flexibility that is provided through binding overhang leads to observable welfare costs.[239] One of the leading studies to have looked at the significance of the GATT/WTO asks this question with regards to another flexibility provision. Goldstein, Rivers and Tomz examine the possibility that the reservations WTO members exercise vis-à-vis certain states have the effect of diluting the level of self-constraint Members engage in, and the expected benefits of membership along with it. Specifically, they test whether use of the opt-out clause (Article XXXV under the GATT, and the corresponding Article XIII under the WTO) which allowed members to restrict the amount of concessions offered to newly entering countries, had an observable effect on trade. Using a standard gravity model, and looking at GATT/WTO history up to 2004, the authors test for the impact of the opt-outs on dyadic imports, yet they find no conclusive effect.

This should come as no surprise. The opt-out clause at the GATT/WTO has been only very rarely relied on. It only applied to half a percent of the dyad-year observations in the authors' data. Moreover, opt-outs usually concern new entrant states, with which there was no preferred relationship previously, limiting the amount of observable variation through time. And, as recognized by the authors,[240] opt-outs are targeted at strong exporters, Japan and China being prime examples. These are also precisely the

[238] The commonly used term to denote flexibility within the WTO. See Pascal Lamy's speech on 2006 UNCTAD Trade and Development Report.
[239] From the point of view of WTO reform, the natural question to ask then becomes whether other forms of flexibility provision may not be more efficient.
[240] Goldstein, Rivers and Tomz 2007, 59.

countries that are most likely to expand their exports despite facing barriers abroad. All of which in large measure accounts for the non-result.

Both opt-outs and overhang represent different ways of limiting the constraints imposed by the institution on a country's freedom of action. Countries exercising their right under Article XXXV limited the real total concessions they made, and similarly, countries that reserve large amounts of overhang for themselves are less limited in the protection they levy. The way in which their effect is felt, however, should be very different: the existence of overhang is not targeted at a given state. Whatever cost is has is incurred by the membership as a whole. It is permanent, in a way that opt-out clauses usually are not. Importantly, binding overhang does not necessarily represent effective increased barriers; only the *possibility* that such barriers will be unexpectedly raised. Nonetheless, our knowledge of the considerable value that investors put on stable market conditions should lead us to suspect that such a muddling of expectations will have an observable effect on trade flows.

Differentiating Among The Effects of Overhang on Trade

One of the functions of the GATT/WTO is to reduce the degree of uncertainty around market conditions faced by traders. This role, which is emphasized in WTO law, most prominently in Article 3.2 of the Dispute Settlement Understanding,[241] has until recently been largely ignored by the literature. Yet states entering the institution voluntarily restrict their range of policy action as a means of reassuring their trading partners that the terms they face will not change overnight. To render this delegation of

[241] Specifically, WTO Dispute Settlement Understanding Article 3.2 speaks of "security and predictability". John Jackson has argued that the stated WTO objective of "security and predictability" is "the most important 'central element' of the policy purposes of the [DSU]" (Jackson 2004, 112, 117).

power credible, Members make such commitments enforceable, by setting up a dispute settlement system under which breaches are sanctionable.

There exists a significant literature dealing with business uncertainty, and the costs it imposes on investors.[242] The reasoning underlying the claims of this literature is straightforward. If firms cannot costlessly reallocate resources from one market to another, or one product to another, if investments are sticky in the sense that they cannot easily be unwound, then unexpected changes in market conditions can lead to operating losses. Uncertainty in trade thus arises, among other factors, from the lack of predictability in fluctuating exchange rates;[243] variation in the costs of transportation and the risks it entails;[244] and uncertainty in trade policies faced abroad.[245]

If we accept that trade institutions have a role to play in reducing this last source of uncertainty, then large gaps between bound and applied rates represent a reduction in the stability provided by these institutions. Indeed, overhang offers a costless avenue for countries to raise their applied duties. And while the spirit of WTO rules is such that increases of duties should only be resorted to in reaction to exogenous shocks,[246] the lack of criteria for differentiating legitimate from illegitimate exploitation of overhang, and the costless fashion in which such increases can be relied on are bound to make investors wary. Simply put, the easier resorting to wiggle-room is, the more likely it will be resorted to.

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[242] See, among others, Anderson and Marcouiller 2001; Frieden 2002; Aizenmann 2000; Mansfield and Reinhardt 2008.
[243] Frieden 2002.
[244] "…contracts may not be enforceable across jurisdictional boundaries, bribes may be extorted by customs officials, and shipments may even be hijacked" (Anderson and Marcouiller 2001).
[245] François and Martin 2004.
[246] Author. See also the Agreement on Safeguards.

Interestingly, and as noted above, manipulation of duties within bound levels is not entirely costless. As frequently occurs in cases where socially undesirable behavior is not formally sanctionable, we observe the emergence of an informal system of enforcement. Norms of behavior take over where rules fall short.[247] Led in no small measure by the Secretariat, WTO Members have been seen reprimanding countries not only for raising their tariffs within *allowable* bounds, but also for merely holding on to this option by maintaining a high level of binding overhang. This, by itself, constitutes a remarkable phenomenon: reputational costs are being incurred by states that remain *de jure* compliant, as in the repeated condemnations of Norway's commitments during its trade policy reviews. Yet such denouncements have at most a limited effect, especially if they are levied at a great number of countries, and if they are limited to discussions within the institution (rather than communicated to domestic audiences). Movement within high bound levels remain sufficiently costless, even after accounting for normative pressure, that members are right to fear that those states among their trading partners that dispose of much wiggle-room will make use of that flexibility when domestic politics call for it. In other words, the Secretariat is justified in denouncing overhang as decreasing predictability. Overhang functions as a proviso on the constraints imposed by WTO membership, and as such, it reduces the expected gains flowing from these constraints.

In analyzing the impact of overhang, it is possible to distinguish between three different types of effects, all of which can be operationalized separately. First, the plainest effect of overhang is that it allows for real changes in the rates levied, over and above initial applied rates. Thus overhang may have a direct effect on trade by raising average applied rates over time. That is why countries value wiggle-room in the first

[247] Author

place. Indeed, overhang *is* at times relied on as a means of raising tariff revenue or providing import relief to beleaguered domestic industry. It is too early to assess whether this is taking place during the present economic crisis, though some observers speculate it already has.[248] Past history, moreover, indicates that this is a definite possibility. The Asian Financial Crisis saw countries like Malaysia raising rates of tariff lines with high overhang as a means of recouping lost government revenue.[249] This first, direct effect of overhang is the cost observers allude to when they estimate that if all states were to raise import barriers to bound levels, the estimated welfare costs would amount to between US $135 billion and US $350 billion.[250] Such an event remains improbable. But importantly, as I go on to show, binding overhang exerts a negative effect even if countries never increase their mean tariffs anywhere close to the bound levels.

The way applied rates are calculated in the analysis, by averaging across the rates over a given period, takes this first effect into consideration in coming up with a mean level for the specific product over the year. In other words, tariff increases allowed by virtue of a high bound rate are included in the measure of the applied rate used in the analysis. This expected effect of overhang on applied rates is not, however, left to assumption. I test for it in the analysis, by looking at whether applied rates on products with higher overhang, controlling for other possible causes, display a greater tendency to rise over time.

Secondly, overhang has unintended consequences by muddling expectations over the rates an exporter will face in the future. Here, we can distinguish between two

[248] See, e.g. Gamberoni and Newfarmer 2009.
[249] Malaysia, among other countries, aggressively raised barriers within bound levels for import relief and additional government revenue in 1997-1998. TN/MA/M/7, 1.59.
[250] The findings of the study (by Patrick Messerlin) were cited by the Mexican WTO delegation in 2008 discussions. TN/C/M/29, para 188-189. See also Bouët et Laborde 2009.

additional types of effects, corresponding to volatility and expectations. These two concepts are related, and both can be regarded as *indirect* effects on trade, but the former relies on actual movement in rates, while the latter does not.

In the first place, volatility of trade policy is the result of frequent changes in the terms faced by exporters. When Californian wine growers complain of the confusion resulting from frequent modifications in Israeli import rules, they are referring to this effect. Volatility is easily distinguishable from the first direct effect on trade described above, since it need not result in heightened average rates of protection. To return to the initial example, the mean annual tariff on tomatoes could be the same for Armenia and Pakistan, with Pakistan increasing and lowering its tariff continually, and Armenia's remaining fixed. This effect of trade policy movement is closest to what has been focused on in the literature. Mansfield and Reinhardt examine the effects of the movement in the rate of exports, and institutions' role in lowering such volatility; François and Martin focus on movement in tariff rates across time, and the resulting costs of protection.[251] In both cases, scholars are looking at the absolute values of real changes, and the impact of such observable instability on behavior among traders. I operationalize this second effect by taking the absolute value of the difference in applied tariff rates between a given year and the previous year.[252]

On the other hand, overhang has a third effect that is restricted entirely to expectations, and that is not dependent on *any* movement in rates. The mean applied rate could be historically low, and volatility within the past years at a minimum, yet an exporter may still fear that the rate will increase tomorrow—since a state can do so

[251] François and Martin 2004.
[252] This corresponds to the first, and most straightforward means of measuring export volatility in Mansfield and Reinhardt 2008.

(almost) costlessly—and be reticent to make any investment as a result. The result is closest to the uncertainty in a country's trade regime that the Secretariat refers to when rebuking individual members for exhibiting too high an overhang. I isolate this effect—which I am interested in most, since it conveys the impact of overhang even when it is not being "used" at all, as per the argument of developing countries[253]—by looking at the impact of the difference between bound and applied rates, controlling both for the level of applied tariffs, and the level of volatility as described above. In other words, we should expect that even if a country has never dipped into its binding overhang to raise trade barriers, the possibility it has of doing so costlessly (in terms of formal sanctions imposed through the institution for falling foul of its obligations) should still affect imports.

The effects of volatility and expectations are naturally related, and the way I distinguish between them in the analysis likely oversimplifies their relationship. Indeed, if there is much real movement in the magnitude of rates, and variance in the mean rate over time, traders grow uncertain about what the rates they will face tomorrow could be. Such simplification should not be too great a concern, however, since I expect both the increase in volatility and the decrease in certainty resulting from overhang to have a parallel, dampening effect on imports. The main reason for distinguishing between the two is to convey the point that the effect of overhang does not rely on any real change in trade policy. This reasoning leads to the two following hypotheses:

H1. Overhang leads to increases in average applied rates over time.

H2. Controlling for volatility in trade barriers, overhang has an independent negative effect on trade flows.

[253] WT/COMTD/W/143

In sum, the wiggle-room countries set aside for themselves by negotiating high bound rates reduces their commitments under the institution. Since the expectations of Members are said to "converge" around these commitments, high overhang effectively muddles these expectations and thus raises the uncertainty faced by exporters. Such uncertainty acts as a tax on trade, and should thus lead to an observable reduction in imports.

Data and Methods

The dependent variable of interest is the amount of total imports (from all trading partners) of a given product, by a given country, in a given year. Importantly, while the use of imports as a measure of the benefits provided by the WTO is standard in the literature, my analysis is not dyadic, as is common practice, but monadic, since tariff rates vary little for different WTO partners of a given reporter country. Moreover, using a monadic approach allows me to disaggregate further among products, across which tariff rates do vary considerably. I use data on traded goods at the 4-digit product level of the Harmonized System (HS), a standard classification of products used by all Members. I consider the 4-digit level, since it is the highest level of disaggregation that allows for complete consistency across different versions of the HS nomenclature, thus minimizing the likelihood of mistakes in converting HS codes and reducing the amount of missing data. Moreover, given that I use all the available data from 1995 to 2008, for all WTO members, the sheer amount of data becomes prohibitively high past 4 digits. As it is, the data cover 577 751 country-product-years, albeit with some missing data for imports. The data on imports come from Comtrade, the UN trade agency, and is accessed through the

World Bank's World Trade Integrated Service (WITS). As per common practice, the import figures I use are recorded cif: they include costs of insurance and freight.

My main independent variable of interest is the gap between bound and applied rates among WTO members. I use simple averages (as opposed to averages weighted by import levels, since my dependent variable is imports) of all tariff lines within a 4-digit product category. Importantly, rather than use the MFN rates set out in country schedules, I average across the "effectively applied rates" for every partner. This allows me to get at some of the (limited) variation due to preferential trade agreements and one-way trade concessions (such as the Generalized System of Preferences and the Lomé Convention) that I overlook by virtue of employing monadic rather than dyadic data. That being so, rerunning the analysis using MFN tariff rates instead of effectively applied rates in no way changes any of my findings. All data on tariff rates are obtained through the World Trade Integrated Service.

The key control variable is the applied rate for every given product. Its inclusion is crucial, since it is important to ensure that the variation in overhang among countries and products is due mostly to the variation in the bound, rather than the applied rate. Hence, the question I effectively ask is: taking the level of applied duties into account, what is the net effect on imports of the wiggle-room countries dispose of over and above these applied duties?

Additionally, I control for a number of country specific variables. The first one is a country's market power, which I code as the log of GDP. As per the theory behind gravity models, this is the main monadic determinant of trade. Large countries exhibit

higher import demand, and so one would expect logged GDP to have a strong positive effect on imports.

Additionally, I control for the number of preferential trade agreements (PTAs) a country is party to. This variable is a count of all PTAs a country is a member of, and that are in force, in a given year. The greatest effect of PTAs is likely to be seen in the way it lowers applied rates, which are already included in the model, but PTAs may have an effect over and above the sheer level of protection, by promoting trade relations on good terms with PTA partners. Rather than relying on the WTO's very limited set of agreements notified to the organization, I employ a comprehensive measure of states' PTA links, which comes from Baccini and Dür.[254] It counts all bilateral preferential agreement ties a country is party to, including customs unions, regardless of whether or not they have been notified to the WTO or whether the partner is a WTO member, and makes no distinction in the scope of these agreements. These data cover all Member countries from the WTO's inception to present day, for a total 3432 PTA links in 2008.

(Table 1 about here)

Since I want to subsequently control for the volatility in trade policy as a means of isolating the "expectations" effect of overhang to test the second hypothesis, I code a simple measure of volatility, which corresponds to the absolute value of the difference in the applied rate for a given product between two consecutive years. This follows the plainest way the literature codes for volatility in trade. It is far from an ideal measure, however, since it relies on annual data, while countries have the flexibility, as in the case of Korea,[255] to change their applied tariffs at a much greater frequency. Nonetheless, this

[254] Baccini and Dür 2009.
[255] Supra

measure usefully approximates the degree of movement in a country's trade policy for a given product.

As is standard in analyses of trade flows, I also control for GDP growth, corresponding to the difference between a country's GDP in a given year and the previous year. Business cycle movements are thought to have an effect both on trade flows and, more indirectly, on trade policy. The expectation is that as GDP grows, so does the demand for imports, and the benefit a country derives from entering into trade liberalizing arrangements.[256] I later add a number of additional control variables as robustness checks.

Finally, I control for the dispersion of tariffs within a given product category as a way of capturing otherwise unmeasurable trade policy characteristics. Though the paper's theory leaves me agnostic about the sign of the coefficient on this variable, tariff dispersion has long been seen as an indicator of trade policy overlooked when focusing solely on average tariff rates. Some scholars claim that "an uneven tariff code is one of the hallmarks of protectionism,"[257] which would lead us to expect it to have a downward effect on trade, while others dispute this belief.[258] Importantly, however, it is a common control included alongside tariff rates when using aggregated product level data to give a sense of the tariff structure further down the "aggregation tree".

Analysis

[256] e.g. Mansfield, Milner and Pevehouse 2007, 419.
[257] Nielson 2003.
[258] Anderson and Neary 2003; Anderson 1998. Anderson actually finds an inverse relationship between restrictiveness and tariff dispersion, though he claims that the use of the measure is "without theoretical foundation" (Anderson 1998, 1111).

As a preliminary test, I begin by verifying whether in fact states with binding overhang exercise their ability to increase applied duties in an observable way. The results hold both theoretical and empirical implications. First, this test serves to check whether the claims of some countries—that overhang is rarely, if ever, used—are correct. Secondly, since conventional wisdom dictates that applied duties have a negative effect on trade, a belief that I go on to verify below, this test serves to check whether part of the effect attributed to applied duties is actually indirectly caused by overhang.

I use a differences-in-differences model which allows me to test whether high average overhang leads to increases in applied duties over a given time period. I begin by running the model on a period of 3 years, and then increase it to 5 and 8 years. For obvious reasons, the sample decreases as the relevant period of time decreases. The average change in applied rates over a 5 year period is -1.4%, but it varies a great deal, with a standard deviation of 6%. In other words, some countries increased rates on some products, while others decreased them, and the net average effect was a 1.4% decrease. Since overhang tends to vary little across time, my main independent variable is the average rate of overhang over the relevant period. I control for the change in a country's GDP and I add country fixed effects to get at some omitted or unmeasurable factors that do not vary over time, such as a country's geographic position or its history, which may impact trade policy or changes in trade policy. Similarly, I include year fixed effects to control for unmeasured shocks occurring in time that would have affected all countries.

(Table 2 about here)

The results allow us to reject the null for Hypothesis 1. The average level of overhang has a positive, highly statistically significant effect on applied rates through

time. Not only do high bound rates provide countries with wiggle-room, but this wiggle-room is demonstrably utilized across the membership. Changes in market power, as measured through GDP, also result in increased applied rates over time. Adding controls for change in PTA links, both mean levels and changes through time, in no way changes the effect of overhang. Since applied duties are included as a control in the subsequent tests, it is worth remembering that part of the variation in these applied duties is due to overhang.

Next, I test the paper's main hypothesis: does overhang have any effect on world trade flows? The dependent variable is the log of imports of a given product by a given country in a given year. I control for the level of effectively applied tariffs on that product, and a number of country specific variables: the log of GDP, the number of PTAs a country is party to, and GDP growth over the preceding year, all of which are expected to show a positive effect on imports. I also control for trade dispersion within each product category, the effect of which I remain agnostic about. Importantly, I include both year and country fixed effects, as a means of accounting for country-specific or time-specific factors, though the coefficients for fixed effects are not reported in the tables to save space.

The results are shown in the first column of Table 3. In the second column, I add a control for volatility of trade policy, which is absent from the first column. Note that the sample drops as a result of the inclusion of the volatility variable, since this measure relies on the existence of two consecutive years of data. In both cases, the results are unambiguous. Given that the independent variables of interest are tariff rates, and the dependent variable is the log of imports, the coefficients are necessarily small, and Table

3 reports them to the fourth decimal. Indeed, the substantive effect cannot be read right off the table. Given the logged dependent variable, the coefficient -0.0080 on overhang corresponds to the semi-elasticity of imports with respect to overhang. The associated substantive effect is obtained by calculating (100 * [exp (-0.0080)-1]), which tells us that a one point increase in overhang, holding all other variables constant, corresponds to a 0.802% drop in imports on the product in question, on average.[259] Hence, an increase of one standard deviation from the mean level of overhang in the data will lead to an average 17.6% drop in imports for that product, all else equal. More radically, a difference of 85 points of overhang, corresponding to the difference in overhang between Armenia and Pakistan on tomatoes, should lead, controlling for all other variables, to a 68.2% decrease in imports of tomatoes.

(Table 3 about here)

The second column of Table 3, where I add a control for volatility of applied duties, supports the hypothesis that volatility has a statistically significant downward effect on imports.[260] More importantly, however, it shows that controlling for volatility of trade policy, overhang retains a strong negative effect on imports. The magnitude of this effect changes little from Column 1, now corresponding to 0.786% drop in imports for every additional point of overhang.[261]

[259] Given the small size of the coefficient, the substantive effect can be also usefully approximated by multiplying the coefficient by 100.

[260] I also test for the effect of overhang on volatility of trade terms (not shown), though again, the measure of volatility is far from ideal, since data on trade barriers are only available on an annual basis. Nonetheless, controlling for GDP levels and PTA ties, overhang lagged by a year is found to have a positive, highly statistically significant effect on the measure of volatility used in as a control in the main analysis.

[261] As it turns out, however, even this small difference in the effect of overhang between the two columns is due in large measure to the drop in the sample size resulting from the inclusion of the volatility measure, the coding of which requires two consecutive years of data. Indeed, when I rerun the first model, without the volatility term, on the sample used for the second model, I obtain an identical substantive effect.

Both with and without the volatility term, the controls behave as expected. The applied rate, most intuitively, has a strong significant negative effect on trade flows, corresponding to almost exactly twice the effect of overhang. While comparisons of the magnitude of applied rates and overhang may be problematic, given that overhang varies much more among products and countries than do applied rates,[262] it follows intuition that overhang would have a smaller impact on trade than applied rates. Indeed, the welfare costs resulting from overhang come from the fear traders have that it will be transformed into applied duties.

Each additional PTA link (the average number of PTAs in the data is 16; the maximum is 83) raises imports by 0.7% in the first specification, which employs the bigger sample. Once again, this likely understates the impact of PTAs on trade, since their biggest effect is to reduce applied duties, which are controlled for separately. Hence, if anything, this constitutes evidence for the belief that the benefits of PTAs are not limited to lower duties, but improve trade relations more broadly. GDP, as the reasoning behind gravity models would lead us to expect, considerably increases imports. Strikingly, trade dispersion within a product category has a positive, highly significant effect on imports. Available theory offers little explanation for this result, though it is consistent with recent empirical findings in the literature.[263] Taken together, these findings raise a puzzle worthy of further exploration.

In column 3, I run a very parsimonious model as a means of maximizing the size of the sample, and as a way of speaking to the growing literature on the risks of overly

[262] Compare the means and standard deviations of applied rates and bound rates in Table 1.
[263] Anderson 1998.

complex models.[264] My variable of interest remains the magnitude of overhang, and I control only for logged GDP, but once again include two-way, country and time fixed effects. As a result, the sample is increased by more than 100 000 observations, but the finding remains the same: the effect of overhang is substantively similar to the first two specifications, and it remains very highly significant.

I go on to test and correct for the possibility of autocorrelation. It is worth remembering that even in the presence of autocorrelation, estimators remain unbiased, consistent, and asymptotically normally distributed, but they become inefficient.[265] Among the recent studies of WTO effects, Goldstein, Rivers and Tomz do not take autocorrelation into account, while Gowa and Kim include it in their main model, and Rose tests for it separately in his sensitivity analysis.[266] There is some reason to believe that the argument presented here requires particular attention to the possibility of autocorrelation, since the emphasis on the costs of uncertainty resulting from binding overhang is founded on the belief that traders and investors cannot turn their production around on a dime. This, indeed, is the broad assumption behind the value of stability in trade relations, and it suggests, in turn, that the decisions traders make have consequences over a long period, and should thus lead to observable dynamic effects.

A plot of residuals from the main model in Table 3 against residuals lagged by a year does suggest the presence of autocorrelation in the data. It is thus worth verifying how big a role the presence of autocorrelation plays in the analysis, and whether taking account of it modifies the findings. I do so in three ways. I first rerun the first specification, this time with Newey-West standard errors, which are robust to both

[264] See the criticism of the "garbage can approach" to statistical inference in Achen 2005.
[265] Woolridge 2008, 376-377.
[266] Goldstein Rivers and Tomz 2007; Gowa and Kim 2005; Rose 2004.

heteroscedasticity and autocorrelation. The results are presented in column 4 of Table 3: the effect of overhang is unchanged, neither substantively, nor statistically. Secondly, I include logged imports, the dependent variable, lagged by one year, on the right hand side of the equation for the specifications shown in the first three columns of Table 3. The coefficient on overhang (not reported) remains negative and highly significant, at 0.0001. Also, the gap between the effect of applied rates—which also remains significant—and that of overhang, decreases. Since the inclusion of lagged dependent variables can affect the estimated effect of independent variables in unexpected ways, however,[267] I go on to fit all the above specifications with first order autoregressive disturbance terms, and once again, the results are the same. In other words, we can be quite confident that autocorrelation is not affecting the analysis in any substantive way.

Next, I verify the sensitivity of the results to the inclusion of a number of variables. I check for the significance of two indicators of development level over and above GDP: I add a control for proportion of agricultural land, and one for the number of paved roads in the country. I also control for FDI inflows for a given year, since there is some indication in the literature that foreign investment is correlated both with trade barriers and with imports. As trade barriers go up, investors may relocate their production within the country, and this may lead to a substitution effect with imports. I also include a measure of regime type, combining the autocracy and democracy measures in Polity to come up with a 21-point measure of regime. None of these indicators is significant at the 10% level, and their inclusion, in whatever combination, has strictly no effect on the results.

[267] Achen 2000.

Overall, these findings demonstrate the importance of expectations in trade. Controlling for both the level of actual duties, and the movement of those duties through time, the flexibility that some countries prize as a means of adjusting their tariffs to market conditions significantly dampens trade flows, as investors and traders grow wary that countries will exercise this flexibility and raise barriers.

Implications for the Doha Round

July 2008 saw the collapse of the Doha Round talks at the WTO Ministerial in Cancun. Although there were many reasons behind the failure to reach an agreement, the main cause cited by the WTO Secretariat and observers was a deadlock over the issue of the special safeguard mechanism (SSM).[268] The SSM was designed to allow developing countries to raise agricultural tariffs following an exogenous shock. Interestingly, the most disputed aspect of the SSM concerned bound rates. Specifically, Members disagreed over whether the SSM could allow countries to temporarily set their tariffs above the pre-Doha bound rate when faced with a domestic exigency. Developing countries, led in great measure by India, asked that they be allowed a ceiling of 15% over pre-Doha bound rates, which, for many developing countries, were the rates at which they had joined the WTO.[269] Other Members forcefully disagreed. There was less debate over the necessary triggering events that would allow for exercise of the SSM. As with GATT safeguards, and the already existing special agricultural safeguard, the trigger for the SSM would have been an observable import surge or a price drop. [270]

[268] WTO 2008a.
[269] ibid
[270] See the WTO Agreement on Safeguards

Though it was not explicitly stated, the SSM represented a tradeoff: developing countries agreed to cut their bound rates further below Uruguay Round levels, but demanded a special safeguard to allow for raising these tariffs back under specified circumstances. In this way, the SSM replaced the permanent flexibility flowing from binding overhang that some countries valued with a conditional mechanism. Whether the benefit from lowered bound rates would have offset the costs of the SSM is ultimately an empirical question. The findings presented here, however, suggest that the welfare costs of overhang are sufficiently high that any form of temporary safeguard, no matter the terms of its use, might be preferable to the permanent unpredictability of tariff rates. Just as tariffication allows for the subsequent standardized liberalization of comparable trade barriers, the passage from flexibility through high bound rates to flexibility through more traditional trade remedies, such as safeguards, would allow more transparency in states' trade policy, and greater control over the use of flexibility.

Conclusion

High bound rates, and the resulting binding overhang, act to dampen some of the purported benefits of institutional commitments, by increasing the amount of uncertainty faced by traders and exporters. The evidence first points to the fact that binding overhang does appear to be exploited: products with high bound rates do see a greater increase in applied duties over time. Further, the findings point to not only a direct negative effect on trade resulting from the real increases in protection that overhang allows for, but also a remarkable indirect effect operating through the muddling of expectations that results from overhang.

A notable limitation of the analysis comes from the way it averages the effect of overhang over different industries. In other words, while I employ 4-digit product level data, I do not account for the possibility that the effect of flexibility obtained through high bound rates has a more dampening effect on certain imports than on others. Indeed, the existence and exploitation of overhang is thought to be much less concentrated at the sectoral level than traditional trade remedies are.[271] That being so, it is likely that some characteristics of industries, such as how fixed factors of production are, or the speed with which assets can be reallocated, would account for their greater exposure to business uncertainty. The paper's analysis may thus be overestimating the effect for some industries, and underestimating it for others. Scholars have recently proxied for exposure to uncertainty by looking at employment turnover, where industries with higher turnover are said to be more adaptable to changing circumstances.[272] Just as the research program on exchange rate volatility went from considering aggregate effects to sector specific ones,[273] future work looking at the effects of tariff flexibility would do well to explore such sectoral effects in trade.

This paper remains agnostic about the net effect of the WTO on international trade flows. It does suggest, however, that the current research program analyzing the impact of this and other institutions may be missing a piece of the puzzle. Perhaps the question should not be whether states are members or not, but what membership pushes individual states to do, and whether that behavior, in turn, has an observable impact on trade. Membership by itself, in other words, is no panacea. Analyses of the WTO's impact on world trade might thus gain from distinguishing not only between members

[271] WTO World Trade Report 2009, xxi.
[272] e.g. Magee, Davidson and Matusz 2005.
[273] Cho, Sheldon and McCorriston 2002.

and non-members, but also among members themselves, on the basis of their level of commitment within the institution. Of course, the degree to which an institution compels its member states to make tightly bound commitments is itself an indication of its success. But as the paper demonstrates, just as an institution's effects can reach beyond its membership,[274] so too can members water down their commitments within it, and thus reduce its observable impact.

[274] Goldstein, Tomz, and Rivers 2007.

Table 3.1 *Descriptive Statistics*

Variable	Observations	Mean	Std. Dev.	Min	Max
Applied Rate	563183	8.39	12.28	0.00	634.13
Bound Rate	478154	25.50	25.88	0.00	597.00
ln GDP	545062	24.71	2.20	19.40	30.26
PTAs	577751	16.56	14.82	0.00	83.00
GDP Growth	549798	3.90	3.86	-13.13	28.39
Tariff Dispersion	563181	1.33	6.37	0	422.85
Polity	542017	6.49	4.72	-10	10
ln Imports	577717	13.66	3.32	0.00	26.09
Volatility Applied Rates	404656	0.80	3.25	0.00	363.00
Agricultural Land	461554	39.87	21.17	1.16	91.32
Roads Paved	277430	52.41	32.93	3.50	100.10
ln FDI	491197	20.94	2.34	8.43	26.50

Table 3.2 *Two-Way FE Model of The Effect of Overhang on Changes in Applied Rates Over Time*

	3 years	5 years	8 years
Δ *Log of GDP*	0.929***	0.885***	-0.968***
	(0.049)	(0.071)	(0.225)
Mean Overhang	0.010***	0.028***	0.034***
	(0.001)	(0.001)	(0.002)
Mean GDP	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)
Constant	-0.811**	-2.204***	-1.194
	(0.331)	(0.580)	(1.550)
R^2	0.08	0.26	0.21
N	240057	169245	67793

OLS with country and year fixed effects (coefficients not shown). Standard errors in parentheses.
Δ corresponds to the change in the variable over the relevant period (3, 5, or 8 years), as indicated by the column. * denotes 2-tailed $p < 0.10$; **, $p < 0.5$; ***, $p < 0.01$

Table 3.3 *Country and Year FE Model of The Effect of Overhang on Trade*

	1	2	3	4
Applied Rate	-0.0163***	-0.0151***		-0.0163***
	(0.0005)	(0.0005)		(0.0009)
Overhang	-0.0080***	-0.0078***	-0.0065***	-0.0080***
	(0.0003)	(0.0003)	(0.0003)	(0.0005)
GDP	0.6400***	0.6115***	0.7467***	0.6400***
	(0.0415)	(0.0415)	(0.0303)	(0.0497)
PTAs	0.0039***	0.0034***		0.0039***
	(0.0010)	(0.0010)		(0.0012)
GDP Growth	0.1154**	0.1214**		0.1154**
	(0.0516)	(0.0516)		(0.0547)
Volatility of Applied Rates		-0.0243***		
		(0.0016)		
Tariff Dispersion	0.0359***	0.0384***		0.0359***
	(0.0007)	(0.0007)		(0.0025)
Constant	-1.7915*	-1.0623	-4.7474***	-2.8737***
	(1.0347)	(1.0357)	(0.7485)	(1.0966)
R^2	0.38	0.38	0.38	0.38
N	338059	337577	451575	338059

OLS with country and year fixed effects (FE coefficients not reported). Standard errors in parentheses for Columns 1-3; Newey-West standard errors in parentheses for Column 4. * denotes 2-tailed $p < 0.10$; **, $p < 0.5$; ***, $p < 0.01$

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