Ubi Remedium, Ibi Ius at the WTO

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Abstract

The WTO law of remedies for violation appears incoherent. States that fail to comply with their obligations are subject to WTO-authorized retaliation. First, this retaliation takes the inefficient form of blocked trade by the complaining state. This remedy is unlikely to be useful to developing countries. Second, the amount of trade blocked by the violation is often used as the measure of authorized retaliation. This measure is not necessarily incentive compatible, as it is not necessarily linked to welfare. Thus, its use may result in inefficient breach, or inefficient compliance, with WTO law. Third, only states that engage in dispute resolution proceedings are authorized to retaliate, artificially reducing the possible incentives to comply. Fourth, authorization to retaliate is granted only prospectively, and there are generally no formal remedies for damages accruing before adjudication and the passage of permitted time for compliance. This also artificially reduces incentives to comply. This paper analyzes the rationale for, and structure of, welfare-based remedies that could form the basis for cash compensation in WTO law.

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The only universal consequence of a legally binding promise is that the law makes the promisor pay damages if the promised event does not come to pass.\footnote{OLIVER WENDELL HOLMES, THE COMMON LAW 236 (Mark D. Howe ed., 1963) (1881). While Holmes’ comment must be understood in the context of a particular perspective within the common law system, and while it seems to be contradicted to some extent in some civil law systems and indeed, in the international legal system, it is important to draw attention to the question of the results of non-compliance in any legal system. On efficient breach in the civil law system, see Aristides Hatzis, Civil Contract Law and Economic Reasoning: An Unlikely Pair?, working paper dated February, 2005, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=661661.}

According to conventional wisdom, it is a waste of time and money for developing countries to invoke the WTO’s dispute settlement procedure against industrial countries.\footnote{Robert E. Hudec, The Adequacy of WTO Dispute Settlement Remedies for Developing Country Complainants, in DEVELOPMENT, TRADE AND THE WTO: A HANDBOOK 81, 81 (Bernard Hoekman et al., eds. 2002). While Hudec concedes that this conventional wisdom has “a great deal of truth to it,” his paper is devoted to showing the complexity of the issues involved. \textit{Id.} See also Marc L. Busch & Eric Reinhardt, Developing Countries and General Agreement on Tariffs and Trade/World Trade Organization Dispute Settlement, 37 J. WORLD TRADE 719 (2003); Gregory Shaffer, How to Make the WTO Dispute Settlement System Work for Developing Countries: Some Proactive Developing Country Strategies, ICTSD Resource Paper No. 5, March 2003, available at http://www.ictsd.org/pubs/ictsd_series/resource_papers/DSU_2003.pdf.}

1. Introduction

Developing countries that win a lawsuit at the WTO may find that the remedies available to them are ineffective or inadequate.\footnote{In the \textit{Bananas} case, the WTO arbitrators stated that “Given the difficulties and the specific circumstances of this case which involves a developing country Member, it could be that Ecuador may find itself in a situation where it is not realistic or possible for it to implement the suspension authorized by the DSB for the full amount of the level of nullification and impairment estimated by us in all of the sectors and/or under all agreements mentioned above combined.” Decision by the Arbitrators, EC—Regime for the Importation, Sale and Distribution of Bananas—Recourse to Arbitration by the EC under Article 22.6 DSU, WT/DS27/ARB/ECU, March 24, 2000, para. 177.} The latin maxim \textit{ubi ius ibi remedium} (“where there is a right, there is a remedy”)\footnote{Attributed to Lord Holt in Ashby v. White (1703) 2 Ld. Raym. 955. This maxim, of course, begs the analytical question asked by this paper. In fact, this paper, following modern legal realism, argues that the right is largely defined by the remedy.} is appositive converse form: without an effective remedy, developing countries are denied rights (\textit{ubi remedium ibi ius}). Today,
nearly 40 years since developing countries first proposed monetary compensation for violations of GATT law,\textsuperscript{5} it seems appropriate to reconsider the utility and potential structure of monetary compensation.

Imagine a legal system where the remedy imposed for violation consisted largely of authorization of the aggrieved party to boycott certain products of the wrongdoer. This would be a legal system in which the legal rights of the poor could be violated with relative impunity, as their boycott would often not be as meaningful as that of the wealthy. Several developing countries have argued that “[t]he economic cost of withdrawal of concessions in the goods sector would have a greater adverse impact on the complaining developing country Member than on the defaulting developed country Member and would only further deepen the imbalance in their trade relations already seriously injured by the nullification and impairment of benefits.”\textsuperscript{6} The recent example of Antigua’s claim against the U.S. in connection with cross-border gambling services is an example.\textsuperscript{7} Is there any producer in Antigua that would benefit from protection against U.S. goods or services?\textsuperscript{8}

This would be a legal system in which there could be little assurance that the punishment would “fit” the crime in any meaningful terms, and so there would be little assurance that states would have appropriate (\textit{i.e.}, welfare maximizing) incentives to comply. In a private law setting in which there might be circumstances where welfare maximization calls for violation, as in efficient breach of contract or efficient lack of precaution in tort, remedies that are not calibrated in welfare terms would have no necessary connection with welfare maximization.

\textsuperscript{5} For a description of the negotiations, see ROBERT E. HUDEC, THE GATT LEGAL SYSTEM AND WORLD TRADE DIPLOMACY, 242-243 (2d ed. 1990).

\textsuperscript{6} World Trade Organization, Dispute Settlement Body, Special Session, Proposals on DSU by Cuba, Honduras, India, Indonesia, Malaysia, Pakistan, Sri Lanka, Tanzania and Zimbabwe, TN/DS/W/19, 9 October 2002. Bown uses a bargaining model of a trade dispute to show that when countries are large, a complainant’s ability to affect the terms of trade will greatly increase its ability to threaten retaliation. Thus, a tariff response by a large complainant can both increase the complainant’s welfare and decrease the respondent’s welfare, yielding twice the effect. Chad P. Bown, \textit{The Economics of Trade Disputes, the GATT’s Article XXIII, and the WTO’s Dispute Settlement Understanding}, 14 ECON. & POL. 283 (2002).


\textsuperscript{8} This is a different, and more appealing, argument than that of scale. The scale argument—to the effect that small countries should have as much “say” and as much dispute settlement “clout” as large countries—is a corollary of sovereign equality. As such, it suffers from the same defects, including its implicit preference of sovereign equality over individual equality.
Furthermore, the greatest effect of law comes not from formal litigation, but from compliance in the shadow of the law. Without appropriate remedies, states may not have appropriate incentives to comply. With remedies that exert too great an influence, states may have incentives to comply where they should not. After all, WTO law is not like the international law proscription of genocide or torture: it does not normatively demand compliance at all costs. It seems attractive to allow states the flexibility to “buy” their way out of at least some kinds of obligations by providing compensation to other states. Efficient breach is an attractive concept in at least some areas of trade law.

This is more than a developing country problem. To the extent that WTO remedies are incoherent, the legal system is incoherent. This paper seeks to advance discussion of reform of the structure of remedies in WTO law, with a focus on the concerns of developing countries. In a proposal made by 50 members of the Least

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10 There are those who would argue that the laws against torture should be subject to exception where the cost of compliance is too great. [Dershowitz]


Developed Country Group in 2002, these countries proposed “monetary compensation equal to the loss or injury suffered” commencing from the date of adoption of the illegal measure. They also proposed that collective retaliation be made available in cases of complaints by least developed countries.13 This paper articulates some of the rationales for these proposals.

Some have suggested an understanding of the WTO legal system that does not allow for states to breach and provide compensation for their breach: a strong rule of pacta sunt servanda.14 Such a system is comparable to a legal system in which the only remedy for breach of contract is specific performance: obligors have no option to breach. Under such a system, potential complainants wield an option to impose inefficiently costly performance on the potential respondent. And in fact, the formal legal obligation under WTO law seems to be simply to comply: to withdraw measures that violate WTO law, regardless of their efficiency. However, we must distinguish between doctrine and practice, and between authority and power: we must examine the law in action.

Even if the WTO legal system is in theory and text a system of mandatory law, which is at least contestable, its mandatory nature does not extend to the power of its

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13 Proposal by the LDC Group, TN/DS/W/17, October 9, 2002.
formal remedies: the “right” is undermined, or is less than may initially be thought, by virtue of the remedy. Again, without a compelling remedy, there is no effective “right” to specific performance even if the obligation is simply to comply. This is illustrated by the cases, such as *Hormones*, where WTO law, definitively declared, has not met compliance.

Another alternative that has been recommended allows states to auction the right to boycott to the highest bidder.\(^{15}\) This alternative may solve the problem that the right to boycott as a remedy disenfranchises the poor, but it does not necessarily solve the problem of fit in welfare terms: of welfare maximization.

A third alternative is to make the possibility of compensation for violations more plausible, by pre-negotiating “contingent liberalization commitments” that would be implemented by the breaching party in exchange for a breach.\(^{16}\) While this approach seems also to address the problem of asymmetry of power by providing the possibility of a real remedy for developing countries, it also does not address the problem of fit in welfare terms. It has the important advantage of avoiding a welfare-reducing boycott.

While many commentators and states have suggested the possibility of cash remedies, none have analyzed systematically the problem of calculation and implementation of cash remedies in the WTO legal system. Bhagwati argues that cash compensation “would amount to only a small fraction of the value of trade affected if estimated (as it should be) as the gains from trade lost rather than the total value of lost trade.”\(^ {17}\)

This paper briefly describes the existing system of remedies in general international law in part 2. In part 3, it describes the existing WTO treaty law and jurisprudence of remedies. In part 4, it analyzes this system utilizing the law and economics analysis of contract remedies, examining the conditions for efficient breach. In part 5, it examines the possibility of developing a welfare-based remedy in the WTO legal system. Part 6 evaluates the arguments for and against a system of cash remedies. Part 7 concludes.

2. The Existing International Law System of Remedies

In connection with remedies, as in other areas, the WTO legal system is a part of the international legal system. But this does not mean necessarily that the general


\(^{16}\) Lawrence, *supra* note 12.

\(^{17}\) Jagdish Bhagwati, *After Seattle: Free Trade and the WTO*, 77 INT’L AFF. 15, 28 (2001). Bhagwati continues to suggest that “compensation in turn could be directed to the industry whose market access has been lost...”
international legal system forms part of the internal WTO legal system. Rather, under international law, the WTO legal system is a treaty regime with special characteristics and rules. One area of specialty is the system of remedies in WTO law. This system is simply different from the system of remedies found in general international law. This section describes the WTO system of remedies within the general international legal context.

a. A Taxonomy of Remedies in International Law

Remedies for violation of law or contract serve a number of functions in society. Remedies may be designed (i) to compel compliance, (ii) to promote compliance, (iii) to promote efficient compliance while avoiding inefficient compliance, and (iv) to punish transgressors separately from the effects on compliance.

At general international law, formal legal remedies against states are rarely punitive. It is important to define “punitive” in our context. In this paper, we will distinguish among four quantitative approaches to remedies: (i) less than proportionate, (ii) proportionate, (iii) compelling, and (iv) punitive. Proportionate remedies are those that are equivalent to some measure of damage. Compelling remedies are those set at a level sufficient to compel compliance. In theory, compelling remedies need not be greater than proportionate, but they are often used as a step up from proportionate remedies. Punitive remedies go beyond proportionate, and beyond compelling, to add a measure of remedy that is designed to punish. The reader will immediately perceive that it is not clear that any of these measures would necessarily result in efficiency. This paper explores the conditions of efficiency.

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19 See N. Jørgensen, A Reappraisal of Punitive Damages in International Law, 68 BRIT. Y.B. INT’L L. 247 (1997); S. Wittich, Awe of the Gods and Fear of the Priests: Punitive Damages in the Law of State Responsibility, 3AUSTRIAN REV. INT’L & EUR. L. 31 (1998). In the Rules on State Responsibility, for example, “the approach taken to countermeasures is an instrumental rather than a punitive one. Countermeasures are measures taken not with a view to the punishment of the state which committed the internationally wrongful act, but with a view to ensuring that the state ceases the internationally wrongful act (if it is a continuing act) and provides reparation. Countermeasures are seen as instrumental to obtaining reparation in the broad sense.” James Crawford, The Relationship Between Sanctions and Countermeasures, a contribution to the Colloquium of the Graduate Institute of International Studies (Geneva) on United Nations Sanctions and International Law (June 1999), available at http://lcil.law.cam.ac.uk/ILCSR/Statresp.htm. Punishment is separated from the permissible measures seeking reparation or cessation of violation. See also Case concerning the Gabcikovo-Nagymaros Project, ICJ Reports 1997 p. 3 at 55 (para. 83).
At general international law, as reflected in the Rules of State Responsibility, the requirement is cessation and reparation. Reparation takes the forms of restitution, compensation, and satisfaction. General international law fails to distinguish sharply between restitution and compensation as obligations, whereas law and economics theory does so. In law and economics theory, there is an important distinction between property rights, which would require restitution, and liability rules, which merely require compensation. Art. 35 of the Rules of State Responsibility provides for restitution only where it is possible and does not impose a wholly disproportionate burden. Depending on how the disproportionate burden criterion is applied, this approach may be understood as a hybridized property-liability rule.

The remedies that may be applied for violation of international law may be described by the following table:

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<thead>
<tr>
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<th>Material Requirement</th>
<th>Temporal Application</th>
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<tbody>
<tr>
<td><strong>Cessation</strong></td>
<td>End violation</td>
<td>Prospective (ex nunc)</td>
</tr>
<tr>
<td><strong>Restitution</strong></td>
<td>Restore status quo</td>
<td>Retrospective (ex tunc)</td>
</tr>
<tr>
<td><strong>Compensation</strong></td>
<td>Substitute for restitution/cessation</td>
<td>Retrospective/prospective</td>
</tr>
<tr>
<td><strong>Countermeasures</strong></td>
<td>Sufficient to induce compliance</td>
<td>Prospective</td>
</tr>
<tr>
<td><strong>Punishment</strong></td>
<td>Sufficient to punish</td>
<td>Retrospective</td>
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There are two analytical components: the measure of damages and the period of time for which that measure is calculated.

b. Cessation, Lex Specialis, and Countermeasures

Under the Rules on State Responsibility, a primary obligation of a state that violates its international legal obligations is cessation of the violation. However, we

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23 We exclude from our analysis the potential remedy of “satisfaction,” as it is an exceptional and specialized form of reparation.
should note that obligations require compliance in accordance with their terms. Therefore, if a state has an obligation that is qualified by an alternative performance—e.g., refrain from polluting or clean up the pollution—it cannot be said that there is a strict obligation to refrain from polluting. Similarly, in the WTO context, a safeguards measure that complies with the conditions specified in Article XIX of GATT must be understood as authorization not to comply with the prohibitions for which it provides an exception. Again, it cannot be said that there is a strict obligation to comply with the prohibitions that are relaxed by Article XIX of GATT.

Similarly, it is possible for states to specify the remedy that will be available for violation. States are permitted to create lesser or greater remedies than those available at general international law as described in the Rules on State Responsibility. The Rules reflect this in Article 55, which specifically authorizes lex specialis arrangements for responsibility. The Commentary suggests that certain provisions of WTO law relating to remedies have the character of lex specialis.25

Interestingly, and in contrast to some of the arguments made regarding strict compliance with WTO law, the International Court of Justice “has generally not made orders for specific performance or for restitution in the absence of express provision for this in an agreement between the parties.”26

c. Restitution

As articulated in the Chorzów Factory case, restitution is the preferred remedy at general international law. In the Rules, “restitution” is defined as re-establishing “the situation which existed before the wrongful act was committed . . . .”28 This may be achieved by returning territory or property. In many contexts, restitution is impossible. In the trade context, restitution could apply in some areas. For example, where an illegal subsidy is paid, it may be that a requirement of disgorgement may be understood as restitution. On the other hand, even disgorgement may not place injured competitors back into the position that they would have enjoyed if the subsidy had never been paid. In many trade contexts, restitution will not be apposite, or will be highly impractical. Thus, our focus will be on cessation, compensation, and countermeasures.

d. Compensation

Under the Rules on State Responsibility, compensation is a “second-best” form of reparation for violation of international law. As the ICJ stated in the Chorzów Factory case, “[t]he impossibility, on which the Parties are agreed, of restoring the Chorzów

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24 Article 30.
25 Commentary at p. 357.
28 Article 35.
factory could therefore have no other effect but that of substituting payment of the value of the undertaking for restitution.” As we discuss below, the calculation of the value of the asset taken, or of the performance denied, is complex. In WTO law, “compensation” is understood to be a voluntary arrangement under Article 22.2 of the Dispute Settlement Understanding (DSU). This is different from the meaning under the Rules, where compensation may be understood as the payment of damages—voluntary or not.

e. Countermeasures: Inducing Compliance

According to the structure of the Rules on State Responsibility, countermeasures are separate from remedies per se. Countermeasures are unilateral measures by the injured state in response to failure of the injuring state to comply with its obligations to cease the violation and make reparations for the violation. However, countermeasures have a dual character: they are generally designed to induce compliance, but they may also provide some compensation to the injured state.

Under the Rules on State Responsibility, countermeasures are intended to induce compliance by the target state. The Commentary to the Rules understands WTO law to exclude the general international law on countermeasures, by virtue of the DSU’s requirement for authorization of measures “in the nature of countermeasures.” Thus, by requiring authorization prior to the use of countermeasures, the WTO restricts the right of states that would otherwise exist at general international law.

f. Punishment

International law does not sanction punitive action by states. Article 49 of the Rules of State Responsibility requires countermeasures to be “proportionate,” which seems to exclude punitive countermeasures. Under Article 47 of the Rules, the purpose of countermeasures is to induce compliance, and does not include punishment. However, retaliation is fungible in a sense: a measure that is intended to induce compliance may also be felt to punish.

While punishment of states in many international law settings seems unappealing, there is a rationalist basis for disproportionately large countermeasures in certain


Countermeasures are distinguished from retorsion by virtue of the fact that countermeasures would be illegal if they were not taken in response to a prior wrongful act by the target state. Article 49.

Commentary to Chapter II, para. 9, p. 328.

See Warren F. Schwartz & Alan O. Sykes, THE ECONOMIC STRUCTURE OF RENEGOTIATION AND DISPUTE RESOLUTION IN THE WORLD TRADE ORGANIZATION, 31 J. LEGAL. STUD. 179 (2002) (arguing that limitation on retaliation was the main purpose of the innovations in the DSU).
contexts. This basis is the probability of enforcement. Where the probability of enforcement is 50%, there is a rationalist argument for doubling the damages in order to induce compliance. Such doubling might be interpreted as punitive.

g. Reputation and “International Obligation”

Reputation in this context is best understood not as a formal remedy, but as a parameter that may be valued by states, and may be lost by non-compliance. Reputation, broadly understood, is the reason that there might be a right that has real effects without a formal remedy. The best way to understand reputation is as an informal remedy, and it may easily be understood in rationalist terms.

Indeed, we might understand reputation as an additional motivation by states to comply. In this sense, reputation may add an important finger to the scale of compliance. Reputation may help to explain why we observe widespread compliance with WTO law despite existing prospective-only remedies that would seem, considered alone, to provide incentives for breach. Of course, states may not care about reputation per se, but are more likely to care about their ability to induce other states to make concessions in the future, and to comply with existing concessions. This role of reputation may be understood bilaterally, as similar to linkage politics in the political science literature, or as similar to multi-sector contact in the industrial organization literature. Alternatively,


34 For analyses of the role of reputation, sometimes referred to in this literature as “international obligation,” see Shannon K. Mitchell, GATT, Dispute Settlement and Cooperation: A Note, 9 ECONOMICS AND POLITICS 87 (1997); Dan Kovenock & Marie Thursby, GATT, Dispute Settlement and Cooperation, 4 ECONOMICS AND POLITICS 151 (1992). While “international obligation” and “reputation” are not necessarily the same thing, for our purposes, it is acceptable to treat them as such.


to the extent that information and incentive problems may be overcome, it is possible that multilateral reputational effects could add a much larger finger to the scale of compliance.

Under these circumstances, we might understand dispute settlement as providing a method for discriminating between defection and compliance, in order to provide information necessary for multilateral reputational sanctions to operate. Milgrom, North and Weingast argue that third-party dispute settlement can assist in developing cooperation. Maggi makes this point in the trade context. Third-party dispute settlement can solve the following information problem. If two parties have a dispute, in which one accuses the other of defection, how can other members of the community determine whether the accusation is true?

Reputation may be a powerful force in promoting compliance, and should be factored into any analysis of remedies. As Kovenock and Thursby, and Mitchell, conclude, formal WTO remedies that seem inadequate to induce compliance on their own seem to be supplemented by reputation, or “international obligation,” in order to induce a high level of compliance. While their work does not distinguish sharply among (i) generalized multilateral retaliation and issue linkage, (ii) concern for general respect for international legal rules (which may be the same as (i)), and (iii) a preference for a good reputation, each of these factors may be at work. However, Bown finds “only limited evidence that the costs imposed by ‘international obligation’ are sufficiently large to” credibly affect behavior.

Article 22.8 of the DSU, specifying that suspension of concessions is a temporary remedy, provides that the WTO Dispute Settlement Body shall continue to keep under surveillance the implementation of adopted recommendations or rulings. This surveillance would help to effectuate the role of reputation.

It may be that reputation has different effects in different types of cases. Perhaps where the violation is clear or flagrant, reputation would have a stronger effect. On the other hand, where the violation is a matter of interpretation, and there are appealing arguments on both sides, as in many circumstances where trade liberalization comes into conflict with other values, including domestic regulation, reputation may play a weaker role. In the Hormones case, it is not clear whether the EC or the U.S. has paid a greater price in reputation.

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39 Note 34, supra.
h. Public Interest Remedies and Public Choice Remedies

As we consider remedies in the international system, among states, as compared with remedies in the domestic system, among individuals and firms, we must recognize that states are imperfect mediators of individual preferences. Therefore, a remedy that appears on its face to be consistent with public interest—with welfare economics—may not yield efficient incentives in a world of states.

And yet, public choice analysis recognizes that government operatives are often especially sensitive to the concerns of concentrated or well-organized interest groups. Therefore, it would not necessarily be inconsistent with public choice analysis to use a reference to profitability as a measure of damages. Of course, it might be equally plausible to use references to jobs lost and gained as a measure of damages from a public choice perspective. But there is no reason to assume that volumes of trade are the sole or even central governmental preference. Public choice does not require mercantilism. Rather, the benefit that would be received by import competing domestic producers or by domestic exporters is dependent on the prices they would receive. While in certain circumstances, trade volumes may be congruent with terms of trade, there can be no assurance that volumes of trade are linked with terms of trade effects, or welfare, in any particular case. This is especially true for small economies.

The normative goal of positive public choice analysis must be to enhance the alignment between the behavior of governmental operatives and public welfare. So, there is no normative argument that remedies in WTO disputes should be designed to maximize the welfare of governmental operatives. Rather, the normative goal is to suggest methods in which remedies could be redesigned in order to provide optimal incentives for welfare maximization. Of course, without great knowledge of the problems of alignment between governmental operative welfare and public welfare, it is

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41 Actually, firms, too, are imperfect mediators of individual interests, as shown by the study of corporate law over the past 50 years. This raises the question, in connection with contracts entered into by firms and damages or penalties assessed against firms, whether a non-welfarist approach to damages would be desirable in order to respond to the representational defects of the firm.

42 Lawrence points out the mercantilist perspective behind this system. Lawrence, supra note 12, at 43.


44 See Howse & Staiger, supra note 12 (suggesting that the 1916 Act arbitrators’ interpretation would call for quantification of the welfare effect on the relevant governments). Howse and Staiger focus on governmental welfare in a public choice sense, referring to political pressures and dislocation costs.

45 But see Lawrence, supra note 12, at 43, stating that “rebalancing also accords with the ideas of trade theory. By rebalancing, the plaintiff is able to eliminate any deterioration in its terms of trade that might have resulted from the violation of the agreement.”
impossible to be certain that any particular pattern of incentives will result in public-welfare oriented behavior by government operatives. Thus, under this uncertainty, there seem to be three possible strategies:

i. Assume that WTO law is already sufficiently aligned with public welfare to make it worthwhile to seek remedies that compel compliance; that is, the specific performance remedy. As discussed below, this amounts to an assumption that the WTO treaty is a reasonably complete contract. Of course, in the domestic setting, we recognize that contracts are never this complete, as it is inefficient to write contracts that address every possible state of the world. Therefore, in the domestic setting we use courts to enforce contracts and in most cases of breach to assess money damages. This domestic contract approach is similar to the approach described in paragraph (ii) below.

ii. Design a remedy based on public welfare, in the hopes that remedies that are congruent with public welfare will cause states to act in a manner congruent with public welfare. Similarly, we assume in the domestic system that contract remedies aligned with welfare—calculated in terms of lost welfare benefits—will cause corporate actors to act in a manner congruent with welfare.46

iii. Design a remedy that is intentionally inconsistent with public welfare per se, on the ground that due to public choice problems that cause governments to act inconsistently with public welfare-based incentives, a different calculation of remedies will provide incentives for states to act in a manner congruent with public welfare.

We will focus on strategy (ii). Strategy (i) seems inappropriate for at least some areas of WTO law. Strategy (iii) is a grand complication that imposes a double burden of determining first what public welfare is and then structuring a remedy that, in light of public choice, conforms with public welfare. Given the variety of public choice problems that states in the WTO may have, it seems unlikely that a single public choice structure could induce public welfare-maximizing behavior. Rather we would expect that the best way to provide incentives for public welfare maximizing behavior is to design incentives consistent with such behavior.

Moreover, it seems clear that the present system of remedies in the WTO has no particular claims to public choice efficiency. There is no reason to believe that calculation of nullification or impairment in terms of volumes of trade or amounts of

46 While firms may be more transparent than states, the assumption that public welfare-denominated remedies produce public interest maximizing behavior does not seem significantly more heroic than the similar assumption in the context of firms. Indeed, the public choice critique is analogous to a critique of the ability of firms to act rationally in response to incentives.
subsidies approximates the incentives of governmental operatives better than a welfarist
calculation. In fact, the opposite seems true. Under circumstances of uncertainty as to
the motivations of governmental operatives, it would seem better to assume congruence
with welfare than to make any other assumption. At least we hope that governmental
structures are somewhat accountable to the preferences of citizens in a welfare sense.47

3. Existing WTO Treaty Rules and Jurisprudence of Remedies

The structure of remedies under the WTO treaty exhibits important areas of
continuity with the structure of remedies that developed under GATT from 1947 to
1994.48 The main characteristic of these remedies is twofold: first, cessation by the
respondent of measures that violate WTO law, and second, if the offending measure is
not terminated in a timely manner, suspension by the complaining state of equivalent
concessions.49

i. Cessation

The primary remedy of cessation is itself problematic, as it (i) is not clearly stated
in WTO law, (ii) is by its nature only prospective,50 and (iii) is not necessarily associated
with either justice or efficiency. The limitation of remedies to prospective ones51 seems
to provide perverse incentives for violation. So, a violating state generally has a “free
ride” for the period from the date the illegal measure is made effective until the
expiration of the “reasonable period of time” determined under Article 21.3 of the DSU.
Of course, this reasonable period of time only begins after the Dispute Settlement Body
has adopted the relevant panel or Appellate Body rulings.

47 One further caveat: a welfare calculation performed by a court seems inconsistent
with the principle of consumer sovereignty, as it involves interpersonal comparison of
utility.
48 For an in-depth comparison, see Mavroidis, supra note 18.
49 See ROBERT E. HUDEC, ENFORCING INTERNATIONAL TRADE LAW: THE EVOLUTION OF
50 But see Article 21.5 Panel Report, Australia—Leather, Recourse to Article 21.5 of the
DSU by the U.S. (holding that Article 19.1 of the DSU does not limit remedies under
Article 4.7 of the SCM Agreement to purely prospective action). See Gavin Goh &
Andreas Ziegler, Retrospective Remedies in the WTO After Automotive Leather, 6
51 There are some exceptions to this limitation, in addition to Australia—Leather.
During the GATT period, antidumping duties and countervailing duties found to be
imposed illegally were often recommended to be reimbursed. See, e.g., United States—
Measures Affecting Imports of Softwood Lumber from Canada, 41 B.I.S.D. 413-15
(1993); United States—Countervailing Duties on Fresh, Chilled and Frozen Pork from
Canada, 38 B.I.S.D. 30 (1991); New Zealand—Imports of Electrical Transformers from
Finland, 32 B.I.S.D. 55 (1985). This practice was by no means uniform.
According to an analysis by the Government of Mexico,\textsuperscript{52} the average period from the establishment of a panel to the adoption of the final panel or Appellate Body report in cases involving review under Article 21.5 exceeded 3 years. If we add (i) the period prior to establishment of a panel, (ii) the “reasonable period of time” made available to the respondent state, and (iii) the time to obtain authorization to suspend concessions, this free ride is lengthy indeed.

However, cessation is not necessarily congruent with either justice or efficiency. For example, in connection with the \textit{Hormones} case, some may take the view that compliance by the EU with WTO law would have been inefficient, and an injustice. In this regard, we might begin to distinguish among different rules of WTO law. First, breach of tariff reduction commitments or other \textit{de jure} protectionist measures, or perhaps even some category of clearly protectionist \textit{de facto} measures, will generally reduce welfare, and so might be seen as suitable for a specific performance remedy.\textsuperscript{53} Second, domestic regulation measures that may violate national treatment requirements or MFN requirements, or requirements under the TBT or SPS Agreement, or similar requirements under the GATS, may give rise to greater uncertainty regarding welfare, and thus may be less suitable for a specific performance remedy. Finally, of course, non-violation nullification or impairment may be even more normatively ambivalent. Under current law, there is no obligation to withdraw a measure that results in non-violation nullification or impairment. Export subsidization may be a special case. Export subsidies can rarely harm consuming states in a welfare sense. They generally harm the state conferring the export subsidy, and therefore might be expected, under responsive domestic government, to require no legal remedy. And yet, from a public choice perspective, and under strategic trade theory, export subsidies can do harm and can result in pressure on other governments to respond in kind. Therefore, there may be some good reason based on the irrational behavior of states for the existing prohibition.

Thus, considering the following four broad categories of potential violations of GATT (or related codes relating to goods), remedies might be approached in the following ways:

<table>
<thead>
<tr>
<th>Type of violation</th>
<th>De jure excessive tariffs</th>
<th>De jure discrimination, quotas, or other \textit{de jure} “protectionist” regulation, without</th>
<th>De facto discrimination or other \textit{de facto} “protectionist” regulation or \textit{de jure}</th>
<th>Non-Violation Nullification or Impairment</th>
</tr>
</thead>
</table>

\textsuperscript{52} Proposal by Mexico, TN/DS/W/23, November 4, 2002.

\textsuperscript{53} Measures of welfare in this context are generally ignorant of distributive consequences. So it may be that even where the measure should be withdrawn in accordance with welfare maximization, transaction costs may suggest that it might be maintained because those who lose as a result of withdrawal will not otherwise be compensated.
<table>
<thead>
<tr>
<th>Remedy</th>
<th>colorable defense</th>
<th>discrimination with colorable defense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific performance</td>
<td>Specific performance</td>
<td>Damages</td>
</tr>
</tbody>
</table>

The point is that for measures that are more likely to be welfare-reducing, a mandatory remedy, perhaps specific performance, seems appropriate. In other words, in these areas, we would not be greatly concerned with the potentially resulting bilateral monopoly that would frustrate negotiations and by default leave the entitlement with the complainant state, as this would result in the efficient outcome of cessation. In other areas in which mandatory remedies might be more likely to result in inefficient compliance, a more subtle damages mechanism may be required.

ii. Compensation

Where cessation does not occur, the parties may negotiate “compensation”, which is voluntary, under Article 22.2 of the DSU. This voluntary remedy, used only once since the establishment of the WTO, is not generally understood to contemplate financial compensation. Rather, compensation is understood to be trade-flow based—the expectation is that the losing respondent provides greater liberalization. However, instead of suspension of concessions, this concept involves grant by the respondent of substitute concessions. One explanation for the infrequent use of this facility may be that any compensatory concession would be required to be provided on an MFN basis, whereas suspension of concessions under Article 22.6 is only authorized for the complaining state, and thus is not provided on an MFN basis.

iii. Suspension of Concessions

Where neither withdrawal of the offending measure nor voluntary compensation occurs, any party that invoked the dispute settlement procedures may request authorization to suspend the application to the respondent of concessions or other obligations under the covered agreements. The suspension of concessions is not automatically available to all injured states.

Under Article 22.4 of the DSU, “The level of the suspension of concessions or other obligations authorized by the DSB shall be equivalent to the level of the

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55 For a proposal to pre-establish the type of compensation that would be granted, see Lawrence, supra note 12 (proposing pre-negotiated “contingent liberalization commitments”).
56 It is required to be “consistent with the covered agreements,” which include obligations of MFN treatment.
nullification or impairment.” This is the sole guidance provided by the DSU as to the calculation of remedies.\textsuperscript{57}

It seems strange, and it is not required or even suggested by the text of Article 22.4, that the level of nullification or impairment is considered only prospectively\textsuperscript{58} rather than from the commencement of the violation. While all arbitrations considering the level of nullification or impairment under Article 22.6 have assumed that the remedies they authorize are limited to prospective nullification or impairment,\textsuperscript{59} the panel in \textit{Australia—Leather} rejected arguments that an arcane reading of Article 19 of the DSU permitted only remedies that involved prospective action.\textsuperscript{60}

Furthermore, diplomats and other practitioners seem to think of WTO remedies as intended to implement “rebalancing.” It would be a strange rebalancing that was solely prospective in its regard. If this were the only parameter to consider, it would be patent that remedies in the WTO legal system are insufficient to provide incentives to comply. It is comparable to a law against theft that simply requires the thief to return the stolen property once caught.

The reference to “the level of the nullification or impairment,” following GATT “lore,” has generally been taken to mean the volume of blocked trade. However, recall that withdrawal of concessions was only authorized once in the GATT era (from 1947 to 1994), and in that case, the panel had regard to the value of the trade involved, and “broader elements in the impairment suffered by the Netherlands.”\textsuperscript{61} In the WTO era, arbitrators have sought to equate the value of imports to be blocked by the complaining

\textsuperscript{57} However, arbitral panels have found that language in the SCM Agreement provides a special regime for remedies in response to export subsidies. \textit{See}, \textit{e.g.}, Brazil—Export Financing Programme for Aircraft, Recourse to Arbitration by Brazil, WT/DS46/ARB, 21 August 2000; United States—Tax Treatment for ‘Foreign Sales Corporations,’ Recourse to Arbitration by the United States under Article 22.6 of the DSU and Article 4.11 of the SCM Agreement—Decision by the Arbitrators, WT/DS108/ARB, 30 August 2002.

\textsuperscript{58} This appears to have been the “understanding” in the GATT era. \textit{See} \textit{ROBERT E. HUDEC, ENFORCING INTERNATIONAL TRADE LAW: THE EVOLUTION OF THE MODERN GATT SYSTEM} (1993). This “understanding” was followed under the WTO, in \textit{Bananas}. Report of the Panel, European Communities—Regime for the Importation, Sale and Distribution of Bananas—Recourse to Article 21.5 by Ecuador, WT/DS27/RW/ECU, para. 6.105 (April 12, 1999).


\textsuperscript{60} Article 21.5 Panel Report, \textit{Australia—Leather}, Recourse to Article 21.5 by the United States. Both the U.S. and Australia argued against the retrospective component of this decision, and the panel report was severely criticized by some member states. \textit{See} Minutes of Meeting, Held in Centre William Rappard on February 11, 2000, WT/DSB/M/75.

\textsuperscript{61} Netherlands—Measures of Suspension of Obligations to the United States, BISD 1S/32-33.
state to the value of the complaining state’s exports blocked by the respondent state’s WTO-inconsistent measure. In a useful analysis, Spamann shows that arbitrators fail to achieve even this equivalence, and shows that blocked trade, as opposed to affected trade, is an artificially limited category.\footnote{Holger Spamann, \textit{The Myth of ‘Rebalancing’ Retaliation in WTO Dispute Settlement}, working paper dated January 11, 2005. Spamann analyzes arbitration decisions, finding that WTO retaliation authorizations are “random.” Specifically, “Article 22.6 decisions use an underspecified trade effects comparator and asymmetric measurements of nullification and suspension, respectively. As a result, equivalence of the levels of nullification and suspension is defined by comparisons of numbers that refer to entirely different things.” \textit{Id.} at 2. Jackson has also found that rebalancing is a fallacy. \textit{John H. Jackson, International Law Status of WTO Dispute Settlement Reports: Obligation to Comply or Option to ‘Buy Out’}, 98 Am. J. Int’l L. 109, 121-22 (2004).}

iv. Summary

To summarize the WTO system of remedies analytically, we might use the following approach, focusing initially on incentives to states as “billiard balls.” A second layer of analysis would examine incentives to firms or other constituencies within the state.

States would be expected to comply if the global payoff from defection is less than the value of bilateral prospective suspension of concessions plus multilateral reputation. Under the present system, as described above, states would be expected to comply if

\[ ps_{pb} + r_m > d_m \]

where

\[ s_{pb} = \text{the value of bilateral prospective suspension of concessions, multiplied by a discount rate to reflect the delay between the occurrence of injury and the effectiveness of the suspension of concessions.} \]

\[ p = \text{the probability of enforcement, where } 0 < p < 1 \]

\[ r_m = \text{the value of multilateral reputation effects} \]

\[ d_m = \text{the global payoff to defection} \]

We have suggested above that there is some question about the two subscripts of \( s \): whether suspension of concessions is related only to prospective nullification or impairment and whether it is merely bilateral. Here, by bilateral, we refer to the last sentence of Article 22.2 of the DSU, permitting only those member states that have “invoked the dispute settlement procedures” to “request authorization from the DSB to
suspend the application to the Member concerned of concessions or other obligations under the covered agreements."\textsuperscript{63} In the next section, we address the question of valuation of nullification or impairment, and therefore of suspension of concessions.

Many have pointed out that it is unlikely that $s_{pb}$ would exceed $d_{on}$—that the value of bilateral suspension of concessions would exceed global payoffs to defection. Kovenock and Thursby have suggested that $r_m$ must fill the gap, as we observe substantial compliance. But the compliance that they observe is with rulings themselves after a case has been brought and concluded. Obviously, the complaining state will always be left inadequately compensated by $s_{pb}$. Perhaps more saliently, compliance with rulings is not necessarily enough to address the losses of complainants—the reputational effect that rulings seem to invoke comes too late. States have a significant period of free-riding. It may be hypothesized that reputation or international obligation builds up and induces states to avoid repeat violations in order to avoid a reputation as a “scofflaw.” But without data supporting this hypothesis, we have the remaining problem of non-compliance: of theft where the only obligation is to give back the stolen property some time after adjudication. [check new Busch-Reinhardt paper]

Different kinds of violations will entail varying probabilities of enforcement, and different probabilities of reputational consequences with other states. We have not reflected the costs of litigation.

Finally, as Guzman points out, at least some portion of what might be understood to be $r_m$ does not accrue to the benefit of the complainant.\textsuperscript{64} In Guzman’s model, lost “reputation” is not recovered by anyone. An alternative approach, which understands reputation as information regarding the suitability of the respondent as a counter-party, would see a collective action problem in connection with the production of this information. The point is that the amount of $s_{pb}$ that, when added to $r_m$ is sufficient to induce compliance may not be sufficient to compensate the complainant.

States would be expected to comply optimally, and to breach efficiently, where damages are set to equal the obligees’ expectations: an expectation measure of damages. Where it is difficult to calculate this measure, and where negotiations between the parties would be expected to arrive at this measure at lower costs, specific performance may be preferred.

Below, this paper suggests the following method of calculating damages resulting in a measure of damages equal to the value of multilateral injury resulting from the

\textsuperscript{63} This is true of formal sanctions. Obviously, informal sanctions (or at least those permitted by Article 23 of the DSU) may be multilateral. See Giovanni Maggi, The Role of Multilateral Institutions in International Trade Cooperation, 89 AM. ECON. REV. 190 (1999).

violation, both retrospectively and prospectively, plus interest, and increased by a multiplier to reflect the uncertainty of enforcement.

\[
\frac{1}{p} c_{\text{mt}} + e = m_d
\]

where

\[
c_{\text{mt}} = \text{the value of multilateral injury caused by the violation, } ex \ tunc \text{ (including both retrospective and prospective components), plus interest from the date of injury}
\]

\[
p = \text{the probability of enforcement}
\]

\[
e = \text{cost of enforcement}
\]

\[
m_d = \text{measure of damages}
\]

On first analysis, it appears that where \( c_{\text{mt}} < d_m \), states should be encouraged to violate. Therefore, in these cases, the role of reputation is problematic. Interestingly, where formal remedies are set right, reputation may impede the achievement of efficiency. On the other hand, reputation may reflect a wider context in which there is value to compliance even where the individual act of compliance is inefficient: there may be real value in upholding the system of promises even if it results in a cost within the narrow case.

Alternatively, it may be that where a state pays the appropriate level of damages, reputational effects would be diminished to near zero. After all, if the obligee is made indifferent by the appropriate measure of damages, why would others decline to deal with the obligor in the future, or impose other “reputational” or informal responses or penalties? This seems even more correct if we distinguish among WTO law rules as suggested above. Reputational sanctions might still apply where a state fails to comply with rules that can be understood as property rights, whereas if a rule is understood as a liability rule perhaps no reputational sanction would attach.

b. Calculation of Nullification or Impairment and Suspension of Concessions

There have only been eight arbitrations of the magnitude of nullification or impairment and suspension of concessions under Article 22.6 of the DSU as of the date of this article, and three of those involved export subsidies under what the arbitrators held were special rules.

In the export subsidies cases, the arbitrators authorized suspension of concessions in amounts (a) related to the magnitude of the global subsidy, and (b) designed to compel compliance, based on an incorrect reading of the SCM Agreement. For example, in

65 This may help to explain the move to restrict extra-judicial remedies in Article 23 of the DSU.
"Brazil—Aircraft," the panel determined that nullification or impairment is not the correct reference in export subsidies cases. It used as its reference the amount of the subsidy, in order to enhance the efficacy of countermeasures in the special case of prohibited subsidies.\(^{66}\) In effect, in the export subsidies cases, the arbitrators crafted a property rule, and tried to calculate suspension of concessions in order to compel compliance.

The relevant text is Article 22.4 of the DSU, which simply requires that the level of suspension of concessions or other obligations authorized be “equivalent” to the level of the nullification or impairment.

During the GATT period, the relevant text, GATT Art. XXIII:2, specified that the contracting parties could authorize the suspension of “such concessions or other obligations under [GATT] as they determine to be appropriate in the circumstances.” Thus, the reference was to “appropriate” concessions, rather than concessions “equivalent” to the level of nullification or impairment. However, in the 1952 Netherlands case, “the Working Party was instructed by the CONTRACTING PARTIES to investigate the appropriateness of the measure which the Netherlands Government proposed to take, having regard to the equivalence to the impairment suffered by the Netherlands as a result of the United States restrictions.”\(^{67}\) Thus, the distance between “appropriate” and “equivalent” under GATT may not have been great. Today, we might interpret “appropriate” in GATT Art. XXIII:2 by reference to the general international law of state responsibility, as evidenced by the Rules of State Responsibility.

In the context of export subsidies, also, the relevant standard appears to be “appropriate” pursuant to Article 4.10 of the Agreement on Subsidies and Countervailing Measures. This reference could also have been taken as a reference to Article 22.4, but it has not been. Rather, arbitrators interpreting “appropriate” in the context of Article 4.10 have focused on the context there of illegal export subsidies and have held that remedies should be designed to compel compliance. Therefore, in the FSC case, they authorized retaliation by a single member in respect of the amount of global subsidization.

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\(^{66}\) Decision of the Arbitrators, Brazil—Export Financing Programme for Aircraft, Recourse to Arbitration by Brazil, WT/DS46/ARB, August 21, 2000, paras. 3.58, 3.54-3.60. See also Decision of the Arbitrators, United States—Tax Treatment for ‘Foreign Sales Corporations,’ Recourse to Arbitration by the United States under Article 22.6 of the DSU and Article 4.11 of the SCM Agreement—Decision by the Arbitrators, WT/DS108/ARB, 30 August 2002; Decision by the Arbitrator, Canada—Export Credits and Loan Guarantees for Regional Aircraft—Recourse to Arbitration by Canada under Article 22.6 of the DSU and Article 4.11 of the SCM Agreement, WT/DS222/ARB (February 17, 2003).

It appears that “equivalent” is a less complex, less nuanced, comparator than “appropriate.” In the EC—Bananas III (U.S.) case, the arbitrators first sought to define “equivalence” under Art. 22.4, based on dictionary entries:

We note that the ordinary meaning of the word "equivalence" is "equal in value, significance or meaning", "having the same effect", "having the same relative position or function", "corresponding to", "something equal in value or worth", also "something tantamount or virtually identical". Obviously, this meaning connotes a correspondence, identity or balance between two related levels, i.e. between the level of the concessions to be suspended, on the one hand, and the level of the nullification or impairment, on the other.

This passage contains a number of ideas about the meaning of equivalence between nullification or impairment and the suspension of concessions, but it does not respond to the essential problem of interpreting this language in context. The arbitrators found that correspondence is the key meaning, without asking which value should “correspond,” and without paying attention to the dictionary language regarding “equal in value” and “having the same effect.” This language would lead to an examination of the effects of trade barriers and the reasons for valuing free trade in accordance with WTO commitments. However, without discussion, the arbitrators assumed that the U.S. level of suspension is “clear”, implicitly assuming that equivalence is to be determined in terms of the magnitude of the barriers, not in terms of the value of the barriers.

One approach that the arbitrators did not use is to refer to the general international law meaning of the coordinate concept, as reflected in the Rules of State Responsibility. Art. 36 of the Rules provides for compensation, stating that “The compensation shall cover any financially assessable damage including loss of profits insofar as it is established.” Although it may be argued that the reference to “equivalence” in Article 22.4 is different from “compensation,” there is no reason to think that by use of the term “equivalent” the member states intended to provide for something more or less than “compensation.” Rather, compensation might well be understood to entail equivalence. In this sense, Article 22.4 might be understood simply to invoke, with a different word, the customary international law concept of compensation reflected in the Rules. Recall also that the parties are intended to negotiate “compensation” under Article 22.2 of the

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70 Bananas 22.6 U.S., para. 4.2; see also para. 7.1.
DSU. It would seem likely that the drafters of the DSU expected that each side would negotiate “compensation” under Article 22.2 under the shadow of “equivalence” under Article 22.4. Thus, it would be unrealistic to expect different measures, and it is not unreasonable to use the customary international law meaning of “compensation” to inform our understanding of “equivalence.”

The arbitrators in EC-Bananas III (U.S.) used the prospective gross value of lost exports from the U.S. to the EU as the measure of nullification or impairment.\textsuperscript{71} It specifically declined to consider other losses, including U.S. losses due to loss of exports to third countries.\textsuperscript{72} Furthermore, as Spamann points out, a focus on lost exports, instead of affected exports, may artificially and significantly reduce the level of possible retaliatory suspension of concessions.\textsuperscript{73} A focus on lost trade to the exclusion of affected trade would tend to ignore substantial terms of trade effects.

EC-Bananas III (U.S.) has been followed by subsequent arbitrations in terms of the focus (outside of export subsidy cases) on lost exports, rather than other possible measures of damages.

In the Hormones case,\textsuperscript{74} the arbitrators also used a “but for” approach to comparing the amount of exports that existed, and the amount of exports that would have been made “but for” the EC’s measure. The arbitrators focused on trade flows.\textsuperscript{75}

Of course, Ecuador had significant problems in utilizing rights to retaliate against the EC in Bananas.\textsuperscript{76} Here, the arbitrators specifically stated that they could not determine equivalence beyond trade in goods and services under Articles 22.6 and 22.7. Therefore, the arbitrators could not estimate the magnitude of non-compliance with TRIPS.\textsuperscript{77} The arbitrators’ position seems inconsistent with their explicit mandate. Furthermore, the arbitrators specifically noted that they did not consider lost profits as part of their calculation.\textsuperscript{78} It is rumored that Ecuador was granted certain non-WTO benefits in order informally to settle this case.

\textsuperscript{71} Bananas 22.6 U.S., paras. 6.12, 7.1.
\textsuperscript{72} Bananas 22.6 U.S., para. 6.12.
\textsuperscript{73} Spamann, supra note 62, at 8.
\textsuperscript{74} Decision by the Arbitrators, European Communities – Measures Concerning Meat and Meat Products (Hormones) – Original Complaint by the United States – Recourse to Arbitration by the European Communities under Article 22.6 of the DSU, T/DS26/ARB, July 12, 1999 [Hormones 22.6 U.S.].
\textsuperscript{75} Id., para. 42.
\textsuperscript{76} Decision by the Arbitrators, European Communities – Regime for the Importation, Sale and Distribution of Bananas – Recourse to Arbitration by the European Communities under Article 22.6 of the DSU, WT/DS27/ARB/ECU, March 24, 2000.
\textsuperscript{77} Id., para. 159.
\textsuperscript{78} Id., at footnote 52.
In the 1916 Act case, the EC proposed mirror legislation in order to avoid the difficulty of quantifying the effects of the U.S. prohibition on dumping. The arbitrators rejected this qualitative approach, on the ground that it could result in a greater-than-equivalent quantity of retaliation. The arbitrators agreed that the quantity of nullification or impairment would be equal to the amount of future judgments entered against, or settlements accepted by, EC exporters under the U.S. law. The arbitrators did not evaluate how a monetary sum representing the nullification or impairment by the U.S. could be translated into the anticipated suspension of trade concessions in retaliation by the EC. The arbitrators seemed to assume a “dollar-for-dollar” correspondence. However, from the EC standpoint, one would imagine that it would rather have a dollar than the right to block a dollar’s worth of trade.

In a case outside of Article 22.6, the U.S.—Copyright case, monetary compensation was granted. This arbitration took place under Article 25 of the DSU, but the mandate to the arbitrators was to determine the level of nullification or impairment of benefits to the EC. In the special case of TRIPS, where the claim related to a failure to protect intellectual property rights that give rise to royalty payments, there was little alternative but to resort to monetary compensation of approximately $1 million per year.


Economic analysis of law has enhanced our understanding of contract and tort, as well as other areas of law, by focusing analysis on incentives and consequences. We thus return to the question, raised above, of whether WTO law operates as a property rule or as a liability rule. It will be recalled that in 1972, Guido Calabresi and Douglas Melamed suggested that while property rules might promote efficient exchange under low transaction costs, liability rules promote efficient exchange under high transaction costs. As we examine remedies in the WTO, it is useful to draw on this literature in order to understand the incentive effects of various possible approaches to remedies.

a. Interpreting and Applying WTO Law

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79 Decision by the Arbitrators, United States – Anti-Dumping Act of 1916 – Original Complaint by the European Communities – Recourse to Arbitration by the United States under Article 22.6 of the DSU, WT/DS136/ARB, February 24, 2004 [1916 Act 22.6].

80 Id., para. 5.60.

81 Award of the Arbitrators, United States - Section 110(5) of the US Copyright Act, Recourse to Arbitration under DSU Article 25, WT/DS160/ARB25/1, November 9, 2001.


83 Calabresi & Melamed, supra note 22.
Before we develop a normative analysis, however, it is useful to examine the debate over the existing doctrinal requirements. Here, we must carefully distinguish between the law as legislated and the law in action.

John Jackson, Jide Nzelibe and others argue that the correct reading of WTO law is that something approximating a property rule applies, rather than a liability rule. That is, according to their interpretation, WTO law is mandatory law and states are not permitted to violate even if they accept the consequences of suspension of concessions. Although not free from doubt, this is probably the better interpretation of existing WTO law.

However, this position requires us to begin to distinguish between authority and power. Even if we assume that this interpretation is correct, a legal realist, and a legal economist, would ask not what the formal law specifies, but what it does in response to breach. *Ubi ius ibi remedium.* Here, the law in action clearly does not operate as a property rule.

States violate WTO law, and they are not subject to enforceable specific performance-type remedies, nor do they experience any greater penalty for their violation, outside of the SCM Agreement context. So, as a matter of fact and practice, if not as a matter of legal doctrine, the WTO legal system is best characterized as employing a liability rule, rather than a property rule. In fact, the Director-General of the WTO, Pascal Lamy, has stated that “[a]s long as you pay the penalties, you can go on as you are.” A former director of the WTO Legal Affairs Division, Pieter Jan Kuyper, has suggested that “we should go in the direction of accepting compensation and suspension of concessions as full alternatives to compliance. . . .”

Doctrinally, WTO arbitration panels have rejected the concept of punitive damages. They have also rejected the possibility of damages that exceed the value of the violation in order to compel compliance, except, as discussed above, in connection with export subsidies under a curious interpretation of the Agreement on Subsidies and Countervailing Measures. It should be noted, however, that outside of the SCM

84 Jackson, *supra* note 62.
86 See the textual counterargument provided by Schwartz and Sykes, *supra* note 32, at 190.
89 See, e.g., Decision by the Arbitrators, Regime for the Importation, Sale and Distribution of Bananas—Recourse to Arbitration by the European Communities under Article 22.6 of the DSU, WT/DS27/ARB, paras. 6.1-6.3 (April 9, 1999).
Agreement, there is no question of authorizing suspension of concessions greater than a level equivalent to the nullification or impairment. Thus, doctrinally, it appears that there is no general property rule at WTO law.

In addition, as discussed above, while the Rules of State Responsibility generally require restitution, which would be consistent with a property rule, they also provide no basis for punitive damages or the enforcement of specific performance through compelling remedies. While the International Court of Justice in the Chorzow Factory case suggested the remedy of restitution, this remedy has not been common in the international investment context or in the broader international law context. Rather, a rule of damages—of liability—is common in practice.

b. Property Rules and Liability Rules

In the domestic system, we distinguish between property rules and liability rules on the basis that liability rules are subject to the unilateral choice of an actor to violate the rule and incur the liability. The owner of the entitlement that is protected by a liability rule cannot object to the action, but must accept the payment of damages. Liability rules require, in order to operate, that courts are available to determine the value of the damages. They are therefore dependent on an appropriate institutional structure. Property rules, on the other hand, protect the entitlement unless the owner consents to its taking. We often assume (perhaps incorrectly) that property rules are backed by injunctive or specific performance remedies.

From a neoclassical economics standpoint, some might assume that in the WTO context, a property rule, supported by specific performance or by enormous punitive damages, would yield greatest efficiency. After all, there is no proposition more commonly accepted in economics than the fundamental theorem of welfare economics, which in our context argues that reduction of barriers to trade increases welfare. Yet we must challenge an implicit assumption of this perspective. The implicit assumption is that compliance with WTO law maximizes welfare. This assumption might generally be true of tariff reduction and quota elimination obligations. But WTO law today includes a wide variety of obligations, some of which are quite ambivalent from a welfare standpoint. One need only consider the requirements of the TRIPS agreement, or the restrictions on domestic regulation under the SPS and TBT Agreements. As suggested above, we should begin to discriminate among these various obligations.

90 See 1916 Act 22.6, supra note 79, at para. 5.8.
91 Case Concerning the Factory at Chrozow (Ger. V. Pol.), 1928 P.C.I.J. (ser. A) No. 17 (Judgment of Sept. 13).
92 Indeed, we might note that with respect to tariff bindings and de jure quotas, compliance in the WTO legal system seems quite good, and approximates what would result from a property rule. This may be because in connection with these clear rules, violation would entail much greater reputational consequences than might be expected in connection with more nuanced rules.
Now, there is a difference between (i) automatic and compelling specific performance—a requirement that parties comply without any opportunity for renegotiation—and (ii) specific performance as a bargaining chip. Many international lawyers see WTO law as absolute in its requirement for compliance, without the possibility for renegotiation. We might understand this as a rule of inalienable property rights. This would be broadly inefficient, as it would deny the possibility of efficient breach in appropriate cases. However, the possibility of specific performance as a bargaining chip is not necessarily inefficient. Rather, it gives rise to the requirement to negotiate with the holder of the entitlement.

The WTO Agreement has been compared to a contract. The WTO “contract” reflected efficiency—if it were a complete contract—then the prescription would be clear: compel performance through a remedy of specific performance. The WTO contract, however, is not by any means complete. The dispute settlement system, including its remedies, may be understood as a means of providing further articulation of the contract.

On the other hand, as suggested above, some components of the WTO contract may be understood as complete, such as the tariff bindings and the prohibition on de jure discrimination and de jure quotas (where a colorable argument for exception exists, the contract becomes incomplete). Under these circumstances, it may well be that specific performance is the correct remedy.

Under incompleteness, however, it is not clear that specific performance is the efficient remedy. In fact, the parties to the WTO agreement did not indicate specific performance as the remedy, but rather established the possibility for compensation and countermeasures and failed explicitly to require compliance. Furthermore, there are

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95 It is not the purpose of this article to make a doctrinal argument regarding whether compliance is required under the DSU. However, if the member states wished to provide for an absolute obligation of compliance, they failed to express it clearly within the DSU. Many substantive provisions of the WTO treaty are phrased in mandatory terms. However, the mandatory nature of these substantive obligations might be understood to be qualified by the general language of the DSU. For example, Article 22.1 of the DSU states that “neither compensation nor the suspension of concessions or other obligations is preferred to full implementation of a recommendation to bring a measure into conformity with the covered agreements.” That other outcomes are “not preferred” is a circular way of saying that cessation is required. Furthermore, as reflected in Article 22.1, where a respondent loses a case, the panel or Appellate Body merely “recommends” cessation under Article 19 of the DSU. On the other hand, Hudec states that “[d]espite the softer connotation of the word ‘recommendation,’ the traditional understanding of the word ‘recommendation’ in GATT/WTO jurisprudence has been that, when approved by
specific provisions for “escape” and renegotiation in specific areas: for example, the safeguards provisions of Article XIX of GATT and the renegotiation provisions of Article XXVIII.

Under circumstances where specific performance is unavailable, or where there are no additional penalties for non-compliance beyond equivalent compensation, there is little difference between a liability regime and a property regime. That is, in a world without specific performance or punitive damages, the liability rule applies as a matter of law in action. On the other hand, the debate over whether states have the authority or power to “buy out” their WTO obligations is a struggle over reputational sanctions. If it is understood that “international obligation” applies regardless of the authorization of retaliation or the provision of compensation, then states that follow this route will incur reputational costs.

In the WTO context, a liability rule would mean that a state may violate WTO law, so long as it pays the damages, or accepts the suspension of concessions. In the domestic system, we often assume that a property right is absolute: if property is taken from us without our consent, a court will order that it be given back. Of course, the actual remedies in domestic law may be somewhat less clear than the theory supposes. The procedural requirement for specific performance or an injunction is a demonstration that damages are inadequate to right the wrong. So not every property right will have the characteristics anticipated by theory.

As Schwartz and Sykes point out, the normative goal of any system of contract remedies is to deter inefficient breaches — those that impose greater costs on the promissee than benefits on the promisor — and to promote efficient breaches — those that impose lower costs on the promissee than benefits on the promisor. Note that this formulation is unconcerned with distributive consequences. In the area of remedies for antitrust law violation, a similar concept is often discussed in terms of “type 1 error” (false negative) and “type 2 error” (false positive). Type 1 error fails to induce efficient compliance. Type 2 error induces inefficient compliance.

Schwartz and Sykes refer to contracts theory which suggests that under circumstances where liability would be difficult to measure, a property rule would be favored. They argue that because a property rule would require negotiations with each...
WTO member state (148 as of August 26, 2005) under the MFN principle, the transaction costs and holdout problems would be excessive.

However, the MFN principle would not necessarily operate in this context to require universal member consent to a bilateral settlement that required worse treatment of the respondent’s goods, as opposed to better treatment of the complainant’s. Say that the EC is found to have violated U.S. rights under the SPS Agreement in connection with GMOs. And say that it is understood as an entitlement under the conventional understanding of the requirements for compliance under the DSU the U.S. has the right to force the EC to comply. The normal WTO remedy would be for the U.S. to impose barriers only on goods from the EC, under Article 3.7 of the DSU. If the parties negotiated a specified level of U.S. import barriers, applicable only to EC goods, it is not clear that the EC would be required to negotiate with other states. Article I of GATT requires that any “advantage, favour, privilege or immunity” be accorded to like products imported any other contracting party. Thus, although it is not free from doubt, MFN might well be understood to allow states to be accorded less favorable treatment with their consent—other states would not be required to consent.100 On the other hand, if the “compensation” in our hypothetical took the form of special market opening by the EC, it is not clear that the EC would be required to negotiate with every other state—it would just be required under Article I to accord the same treatment. This feature would certainly make compensation unappealing in many cases.

Even if as a technical legal matter bilateral or plurilateral settlement agreements were to violate WTO law, it is not clear that other states would intervene, or experience any nullification or impairment. This may depend on the extent of trade deflection.

In any event, there may be problems associated with bilateral monopoly (as opposed to holdouts resulting from the requirement to negotiate with all WTO members) that make it difficult to reach efficient solutions under a property rule.101

On the other hand, while the public choice-based damages on which Schwartz and Sykes focus may be especially difficult to calculate, it is not clear that public interest-based damages would be more difficult to calculate than certain types of contract or antitrust damages. We return to this point below.

Schwartz and Sykes conclude that the modifications to WTO dispute settlement that were made in the Uruguay Round were intended to provide for a liability rule, and to set limits on retaliation. Limits on retaliation would reduce the possibility for inefficient compliance. Schwartz and Sykes argue that three forces induce compliance separately from multilaterally-authorized suspension of concessions. These forces are (i) rising

100 A bilateral agreement allowing an importing state to withdraw concessions to a single exporting state might be argued to violate Article 11 of the Safeguards Agreement. 101 See Richard A. Epstein, A Clear View of The Cathedral: The Dominance of Property Rules, 106 YALE L. J. 2091, 2092 (1997).
domestic costs of violations, especially after initial liberalization, (ii) reputation, and (iii) unilateral retaliation.

Schwartz and Sykes seem to suggest that these forces were in place before 1994, and that they persist after 1994 in order to induce compliance. Thus, they believe that multilateral authorization of remedies was not necessary to add to the forces that induce compliance. Rather, they suggest that the modifications in 1995 to make multilaterally-authorized suspension of concessions a more likely result were intended to limit retaliation, not to increase it. According to Schwartz and Sykes, the innovation of the DSU was to provide “the opportunity for the losing disputant to ‘buy out’ of the violation at a price set by an arbitrator who has examined carefully the question of what sanctions are substantially equivalent to the harm done by the violation.”

The result is to protect the respondent from excessive retaliation, and increases opportunities for efficient breach. However, there is no basis to believe that the magnitude of retaliation set by the arbitrators is correctly calibrated to induce efficient breach and efficient compliance.

c. The Conditions for Efficient Breach under a Liability Rule

Schwartz and Sykes explore the possibility that the existing WTO system of remedies is consistent with the law and economics theory of contracts that suggests the possibility of efficient breach. Their approach does not follow a welfare economics approach to efficient breach, but instead uses a public choice lens to evaluate the efficiency of breach in terms of the utility functions of political operatives. They argue doctrinally that the WTO system is, and normatively that it should be, more like a liability rule than a property rule. That is, the liability rule would induce states to comply when it is “efficient” (in public choice, as opposed to welfare, terms) to do so, and to breach when that is “efficient.” Schwartz and Sykes suggest that the theory of efficient breach is equally applicable in the context of trade agreements, despite the inability to monetize costs and benefits.

In fact, in standard law and economics theory, under incompleteness, an expectation measure of damages is understood to lead to efficient decisions by a promisor to perform or breach an existing contract, given a fixed level of reliance. Perfect expectation damages would make the obligee indifferent between performance and

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102 Schwartz & Sykes, supra note 32, at 201.
103 See Spamann, supra note 62.
104 Schwartz & Sykes, supra note 105
105 Id. at 184. “Although this theory of efficient performance and nonperformance has been developed with reference to private contracts, where the costs and benefits of performance may be measured in money, it applies equally to bargains such as trade agreements.”
breach.107 “Perfect expectation damages equal the gain that the promisee who relied optimally would have obtained from performance.”108

However, there are some important conditions that must be satisfied in order for efficient breach to operate. Efficient breach under a liability rule109 depends on the ability of a third party, such as a court, to determine a level of damages that will approximate the level of liability that will best distinguish between efficient and inefficient breach.110 Thus, in contract theory, efficient breach is dependent on calculation of the objective value of expectations of the non-breaching party. Similarly, in trade, efficient breach is dependent on calculation of the objective value of expectations of the non-breaching state.

It is critical that Schwartz and Sykes’ theory operates in the world of public choice, where the values exchanged and disputed are political welfare of political officials, rather than necessarily economic welfare of constituents. These values are calculated in votes, campaign contributions or graft. Thus, there is no court that can determine “damages” in political welfare terms. Schwartz and Sykes accept this,111 but this distinction limits the scope of utility of the efficient breach concept. That is, we may presume efficient breach, but because we have no way of identifying the actual value of breach, as we do in private contracts, we cannot determine whether any particular breach is or is not efficient. This limits substantially the ability of society to realize the benefits of efficient breach.

Using a public choice-based measure of damages in trade law would be equivalent to using a measure of damages in inter-corporate litigation that reflected the concerns of management, rather than the welfare-based lost profits or expectation damages that are actually used.

In short, liability rules rely on quantification to operate. How can actors determine whether their breach is indeed efficient without a possibility of quantification so that they may compare the benefits of breach with the resultant liability? If the resultant liability is relatively inaccurate or unreliable, parties may make inefficient decisions. Of course, under zero transaction costs, parties will presumably negotiate to an efficient outcome regardless of the liability for breach. But our working assumption is that positive transaction costs make the actual rule of liability meaningful for efficiency.

108 Id. at 246.
109 Efficient breach may also follow from a specific performance rule that induces bargaining toward efficient breach. However, as suggested above, specific performance suffers from the possibility of breakdown of negotiations due to bilateral monopoly.
111 Schwartz & Sykes, supra note 32, at 187.
d. The Limits of Auctions, Contingent Liberalization Commitments and Fines

An auction of the right to retaliate, as suggested by Bagwell, Mavroides and Staiger, and by the Government of Mexico, may solve important problems, including the problem that developing countries may find the right to retaliate less useful than do developed countries. However, the value of the right to retaliate is not necessarily related to the welfare value of the violation. The incentive effects of an auction of a (miscalculated) right to retaliate could be perverse. So if the amount of the retaliation right that is auctioned is calculated separately from welfare effects, there can be no guarantee that an auction will enhance efficiency. Where the level of suspension of concessions is calculated by reference to welfare, an auction of the right to retaliate may substitute for direct payment of cash, and may therefore solve some problems of enforcement. However, it would leave in place the possibility of welfare-reducing retaliation unless the respondent wins the auction, retiring the right to retaliate unused.

Using a general-equilibrium model, Bagwell and Staiger show that the balance of concessions is restored when a retaliatory action is large enough to restore the offending country’s original terms of trade (i.e., the ratio of the price of its export good to its import good on world markets). They consider the possibility that the harmed country may hold an auction for retaliation of this size. Their model equates this magnitude of retaliation with welfare.

In 2000, the Meltzer Commission (2000) proposed that "instead of retaliation, countries guilty of illegal trade practices should pay an annual fine equal to the value of the damages assessed by the panel or provide equivalent trade liberalization." Bronckers and van den Broek also propose a fine, as opposed to a welfarist calculation of monetary compensation. These approaches to monetary fines, while addressing the problem of capacity to retaliate and avoiding welfare-reducing trade barriers in retaliation, suffer from the same problem as auctions and contingent liberalization commitments. The amounts charged will not be related to the value of the violation.

116 Bronckers & van den Broek, supra note 12.
Of course it is possible that specification of liquidated damages, whether in terms of contingent liberalization commitments or cash amounts, may have substantial advantages under certain circumstances. However, these advantages would apply mostly to relatively discrete contracts with limited subject matters. It may be difficult for trade negotiators to pre-value appropriately all of the different types of breach that might occur. Again, the nature of international trade “contracts” entails substantial incompleteness.

5. Is a Welfare-Based Remedy Possible in Existing WTO Law?

During the pre-1994 GATT period, retaliation was authorized just once, and in that case the Netherlands determined not to exercise the right to retaliate against the U.S. Moreover, until 1995, panel decisions were not adopted without consensus and authorization to suspend concessions was not granted without consensus. This meant that the respondent state could block any formal sanctions. So, there was little reason to scrutinize the calculation of authorized retaliation. Today, it appears desirable to examine the structure of remedies to determine whether it may be made more efficient.

a. Retrospective or Prospective Calculation

It seems clear that in order to equate retaliation with a welfare-based calculation of damage, it would be necessary to calculate damage on both a retrospective and prospective basis. Thus, first of all, a state that violates WTO law should be required to make a payment even if it ceases its violation after a DSB decision, or after the expiry of the “reasonable period of time” given for compliance. This is necessary in order to make WTO law incentive-compatible, and in order to compensate complainant states for their losses. In fact, unless it were shown that the present trade volume-based approach systematically overstated retaliation, or some other reason were shown to give offending states a “free ride” until adjudication and expiry of time for compliance, this modification should be made in the present system. As stated above, nothing in the text of the DSU limits retaliation to calculation based on prospective nullification or impairment. Indeed, it seems patently counter-textual to apply this limit.

b. Bilateral or Global Injury

117 Lawrence, supra note 12.
118 Netherlands - Measures of Suspension of Obligations to the United States, BISD 1S/32-33.
119 See Lawrence, supra note 12, at 30, 38. See also Proposal by Government of Mexico, TN/DS/W/40, 27 January 2003 (raising the issue of retrospective measurement).
120 There may be an argument that Article XVI:1 of the WTO Charter supports “continued” calculation on a prospective-only basis. That provision states that “[e]xcept as otherwise provided under this Agreement or the Multilateral Trade Agreements, the WTO shall be guided by the decisions, procedures, and customary practices followed” under GATT 1947. The questions would be whether the prospective-only calculation qualifies as a “customary practice” and whether Article 22.4 provides otherwise.
It seems likely that in order to make WTO law enforcement incentive compatible, it would be appealing to require violating states to pay damages in relation to the injury caused to all member states, and not just those who join in litigation. A change in the last sentence of Article 22.2 of the DSU would be necessary to achieve this outcome. If this change were made, it might make it more likely that states would negotiate voluntary compensation pursuant to Article 22.2.

c. Calculating Welfare

We show above that while a welfare-based approach might compete with a public choice-based approach, there is no assurance that the present system of calculating retaliation based on trade volumes is superior to a welfare-based calculation under a public choice model. Obviously, Article 22.4 limits authorized retaliation to “suspension of concessions or other obligations,” and so cash remedies would only be possible with an amendment to this provision.

Anderson shows that “ensuring equivalence between the damage and the retaliation in terms of the gross value of trade between the respondent and the complainant does not mean that retaliation has the same economic welfare effect on the respondent as the initial damage is having on the complainant.”121 Furthermore, retaliation is not costless to the complainant.122 Anderson concludes that

The economic purist might wonder why the value of imports curtailed, rather than a valuation of the national economic welfare consequences of the import barriers, is used to determine equivalence in retaliation to nullification or impairment. The reason probably has much less to do with an understanding of economics than with the relative simplicity of the traditional concept of trade equivalence.123

Lawrence agrees that “the dollar value of trade may give little guidance as to the welfare benefits and opportunity cost associated with any particular transaction.”124 Lawrence points out that as applied, the DSU does not provide complainants with what would amount to “expectation damages.”

Rebalancing trade volumes leads to equivalence only in a mercantilist sense of allowing the plaintiff to eliminate the “bad” of imports. If politicians are concerned only about the trade balance, they may feel compensated, but in terms of economic welfare, only (external) harm done to the plaintiff country due to the decline in its terms of trade can be taken care of by suspension. If it retaliates, the plaintiff country will not be compensated for the (internal) efficiency losses that will result from its higher tariffs. Instead of being in the position it would have

121 Anderson, supra note 12, at 127.
122 Id., at 128.
123 Id., at 133.
124 Lawrence, supra note 12, at 52.
been had the agreement been implemented, the plaintiff will find itself in the position it was before the negotiation that resulted in the agreement.\textsuperscript{125}

[check this] Bernstein and Skully set out the difference between a welfare-based calculation of damages and a volume of trade-based calculation.\textsuperscript{126} They note that both calculations rely on counterfactuals: compare the world with the illegal policy to the counterfactual world without the policy. The welfare-based calculation in connection with an illegally raised tariff would proceed as follows. (Note that other types of violation would require different, and often more complex, calculations.) The tariff results in higher domestic prices, causing domestic firms to increase production, and causing domestic consumers to reduce consumption. Import volumes are reduced. Current analysis would focus simply on the reduced import volumes.

A welfare-based calculation, on the other hand, would examine transfers between sectors and dead-weight welfarlosses. An illegal tariff reduces welfare of domestic consumers, through a transfer from consumers to domestic producers. The tariff itself represents a transfer from consumers to the government of the importing state. Domestic producers benefit from higher prices. And there is a net welfare loss. Bernstein and Skully show that, except for the net welfare loss, all other effects are transfers between domestic agents in the importing state, and from a national welfare perspective, they net out. However, it is important to note that Bernstein and Skully’s model is based on a small country, where there are no terms of trade effects. Furthermore, it may not be clear that it is appropriate to net transfers between domestic agents. From a public choice standpoint, benefits to domestic producers play a greater role than detriments to domestic consumers. And so, it might be argued that the government imposing trade barriers should not “benefit” in this sense from detriments it imposes on its own consumers. Or it might be argued that trade law should reverse the public choice bias by redistributing these benefits from domestic producers to domestic consumers. This suggests an argument that, in order to establish appropriate incentives for domestic governments, these governments should implement private rights of action that allow domestic consumers to recover amounts transferred to domestic producers.

Bernstein and Skully posit that “[e]conomists are concerned about efficiency, while arbitrators are concerned about dispute resolution and distributional justice.”\textsuperscript{127} However, WTO arbitrators are mandated simply to examine the equivalent level of nullification or impairment. As suggested above, this language does not exclude a welfare-based measure, although there may be an interpretative argument, based on prior GATT practice, that the language was intended to refer to trade volumes. Even this interpretative argument raises substantial questions, as many types of WTO law do not

\textsuperscript{125} Id. at 37.
\textsuperscript{126} Jason Bernstein & David Skully, Calculating Trade Damages in the Context of the World Trade Organization’s Dispute Settlement Process, 25 REV. AG. ECON. 385 (2003). This paragraph draws substantially on pages 386-387 of Bernstein and Skully’s work.
\textsuperscript{127} Id. at 386.
deal with trade volumes at all. Bernstein and Skully are concerned that the amount of dead-weight loss will not be sufficient to deter violation, and it is on this basis that they explain the turn to trade volume-based remedies. Their argument is that importing governments seek public choice welfare, and respond to incentives that loom larger than the requirement to compensate for the dead-weight loss. However, this position seems unconcerned with the possibility of efficient breach.

Bernstein and Skully argue for penalties above the level of welfare loss in order to deter non-compliance. They find that lost trade as a measure is simple and straightforward and “does a reasonable job of approximating the amount of impairment caused by the ban [in the Hormones case].” However, they offer no empirical support for the proposition that the lost trade measure reasonably approximates impairment. One might respond that, even in public choice terms, a specified volume of trade may have widely varying effects on profitability or jobs, and thus on political support.

Furthermore, as Mitchell, and Kovelock and Thursby, show, broader “international obligation” or reputation may induce compliance where formal remedies are otherwise insufficient. Hudec adds that legal rulings by themselves induce compliance by (i) empowering domestic constituencies who prefer the WTO-compliant policy, and (ii) bringing to bear longer-term interests in the efficacy of the legal system. Thus, legal rulings can be expected to have an effect that is separate from, and supplemental to, any formal remedy. Under GATT 1947, retaliation was almost never employed, yet compliance with panel decisions was rather good. The point is not that the magnitude of the formal sanctions is irrelevant to compliance, especially under the more formal WTO system, but that it is only one factor in determining compliance.

d. A Competition Law Analogy

Competition law responds to private actions that foreclose markets, and so there is at least some basis for considering an analogy between competition law remedies for private measures that foreclose markets and remedies for violations of WTO law that result in market foreclosure. Obviously, not all WTO law violations result in market foreclosure. There are many additional distinctions, some of which we address below. Keith Hylton writes that

Under the assumption that enforcement is costless and that the government will identify and punish all antitrust violators with probability one, the consumer

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128 See, e.g., U.S.—Copyrights, supra note 81.
129 Id. at 387.
130 Id. at 391.
131 See note 34, supra.
132 Hudec, supra note 2, at 82-83. Schwartz and Sykes follow this closely. Schwartz and Sykes, supra note 32, at 194.
welfare-maximizing fine is easy to state: *the optimal fine equals the sum of the portion of deadweight loss borne by consumers and the monopoly transfer.*  

However, there is no consensus that existing competition law remedies, including treble damages in the U.S., approximate optimal penalties. Where enforcement is costly and uncertain, the optimal fine (the distinction between a fine and a “liability” need not concern us here) adds the cost of enforcement, and multiplies the total by the inverse of the probability of enforcement. The equation is as follows:

\[
\text{Optimal fine} = \frac{1}{p} (\text{transfer plus consumer deadweight loss}) + C
\]

Where \( p \) is the probability of enforcement and \( C \) is the cost of enforcement.

e. Problems of Calculation

Of course, any welfare-based calculation will be difficult, and subject to many uncertainties. Lawrence states that “[i]n principle, assuming the product is produced competitively, this calculation requires a complex econometric model that embodies estimates of supply and demand elasticities to provide the answer.” Hylton suggests that “[m]any large antitrust cases now involve experts trained in econometrics who could provide reliable estimates of the transfer and foregone consumer surplus components.” These components would be analogous to those arising from violations of WTO law that result in market foreclosure.

Basically, the calculation would value the stream of income in a hypothetical world without the violation, and subtract the actual stream of income: a “but for” calculation. In the competition law context, the following principles would be applied to estimate damages:

i. Future damages may be measured as the net present value of expected cash flows in the “but for” world that would have existed but for the violation, minus the net present value of expected cash flows in the “actual” world after the violation. The net present value of expected cash flows will be equal to the present value of the cash flows generated by an investment minus the amount of the investment.

ii. Future expected cash flows should be discounted at the appropriate risk-adjusted opportunity cost of capital.

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136 Lawrence, supra note 12, at 85.
137 Hylton, *supra* note 134. at 47.
138 Adapted from Tye & Kalos, *supra* note 133, at 643.
iii. Opportunity costs (possible mitigation) must be accounted for.
iv. Risks of future uncertainty should be accounted for by examining the full range of alternative scenarios.
v. Large damage estimates usually arise from either market imperfections or economic rents or the presence of sunk costs.

f. Probability of Enforcement

How is the probability of enforcement to be calculated? In order to provide appropriate incentives to each person, it might be suggested that the probability of enforcement should be calculated separately for each type of case and for each person. Thus, it is more likely that enforcement would be effected against the U.S. in a case of tariffs that exceed its bindings with no defense, than against Mozambique in a case of *de facto* discrimination where there is a plausible health-based defense. Under these circumstances, it might be argued, the probability multiplier should be higher for Mozambique than for the U.S. for two reasons. First, because Mozambique is less likely to attract enforcement attention. Second, because due to the uncertainty of victory, litigation is less likely. Yet this seems like a perverse approach that would result in greater remedies against states with the least power to consume, as well as greater remedies in cases where WTO law is most uncertain.

On the other hand, as developing countries are less likely to bring cases, it may be appropriate to use a higher multiplier in cases brought by developing countries in order to reflect those cases that are not brought, or the developing countries that fail to join in relevant cases.

An alternative approach is to utilize average probabilities of enforcement. This would result in states with higher probabilities of enforcement being subjected to higher multipliers than if their individual probabilities were considered. However, it is likely that the states subject to higher probabilities of enforcement would be larger economies than those subject to lower probabilities. Therefore, the use of average probabilities may not be politically attractive.

g. Collective Sanctions and Class Actions

Developing countries, and especially those with smaller economies, have two problems. First, WTO remedies do not seem to be designed to be useful to them. Second, even if WTO remedies were redesigned as suggested in this article to be more useful to developing countries, there are still significant barriers to their utility. These barriers include the cost of litigation. Costs of litigation can be reduced by arrangements by which smaller economies arrange to work together, sharing costs.

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More importantly, however, in order for remedies to have a full incentive effect on the behavior of potential violators of WTO law, it is necessary that all injured states receive the relevant compensation.\textsuperscript{141} If the likelihood is that only a subset of these states will be compensated, potential violators will not be deterred.

h. Police Patrols and Fire Alarms, Public Attorneys General, Public “Private” Attorneys General, and Private Private Attorneys General

[to be provided]

6. Cash Remedies and Enforcement

Financial compensation has been proposed by several governments in connection with Doha round negotiations.\textsuperscript{142} Once we calculate damages in welfare terms, it is an easy and all but inevitable step to move to payment of financial compensation. As Bronckers and Broek have pointed out, financial compensation “is not a novel idea: reparation by governments of injury for which they can be held responsible is part of the tradition of public international law.”\textsuperscript{143} Indeed, financial compensation seems to be the preferred remedy in general international law. It has been most widely used in arbitral awards in connection with the impairment of investments.

The greatest problems with cash remedies relate to enforcement. Whereas trade retaliation entails “self-help,” payment of cash requires action by the respondent. However, we have some experience with requirements of cash payments by states. As noted above, the U.S.-Copyright case was formally settled using cash payments. The Bananas case may have been settled informally between Ecuador and the EC through cash consideration. And we have some experience from outside trade law, as well as some new initiatives within the trade context.

a. Use of Cash Remedies in Investment Agreements

In connection with investment agreements, the presumptive remedy for violation of investor rights is calculation of a cash payment. For example, Article 1135 of NAFTA provides for final awards in investor-state arbitration requiring only either the payment of monetary damages or restitution. In cases where restitution is ordered, the award is required to provide that the state involved may pay monetary damages in lieu of restitution. So, we have some experience with state obligations to pay monetary damages. Monetary damages may be subject to dispute, and states may be recalcitrant in


\textsuperscript{142} See, e.g., Preparations for the 1999 Ministerial Conference—The Dispute Settlement Understanding (DSU), Communication from Pakistan to the General Council, WT/GC/W/162 (April 1, 1999); Least Developed Countries’ Proposal, TN/DS/W/17, October 9, 2002, point 13; Proposal of Ecuador, TN/DS/W/33, January 23, 2003, at 4.

\textsuperscript{143} Bronckers & Broek, \textit{supra} note 12, at 109.
paying, but this has not deterred the implementation of monetary remedies in the investment context.\textsuperscript{144} Of course, investment agreements generally provide for awards that specify payment from states to private parties, but there is no reason to believe that complainant states would have a greater problem collecting than private parties. As investment agreements address public policy issues with greater frequency, and as trade agreements are increasingly understood as affecting private persons, we may observe increasing convergence.

b. Use of Cash Remedies in Trade Agreements

Under the North American Agreement on Environmental Cooperation,\textsuperscript{145} states may complain about persistent failures by other member states to enforce their environmental laws. These complaints may be submitted to arbitration and the panel may impose a “monetary enforcement assessment.” While this facility has not been used to reach this stage, where a party fails to pay a monetary enforcement assessment, the complaining party may suspend the application of NAFTA benefits in an amount sufficient to collect the monetary enforcement assessment.\textsuperscript{146} Thus, trade-based sanctions may be used to enforce monetary sanctions. Such a structure could be considered in a restructured WTO system of remedies. Similar provisions are provided in the North American Agreement on Labor Cooperation. Other U.S. FTAs, notably that with Chile,\textsuperscript{147} incorporate similar facilities.

In addition, the U.S.-Chile Free Trade Agreement also permits monetary assessments to be substituted for retaliation in normal trade barrier cases, pursuant to Article 22.15. If the parties are unable to agree on an amount, the amount of monetary assessment is set at 50% of the level of nullification or impairment determined by the panel. Article 20.5 of the U.S.-Singapore Free Trade Agreement and Article 21.11 of the U.S.-Australia Free Trade Agreement make similar provision. The fact that these provisions calculate cash payments as a percentage of the trade effects (presumably intended by “nullification or impairment”) suggests how difficult negotiators may find it to develop a welfare-based formula. All these provisions have a retaliatory “back-up” if states decline to pay monetary compensation.

\textsuperscript{144} For a recent example of a state claiming that its domestic law stands in the way of its payment under its ICSID obligations, see Michael Casey, \textit{Buenos Aires Might Use Local Courts in Bid to Reverse International Rulings}, Wall St. J. March 7, 2005, p. A16.


\textsuperscript{146} NAAEC, Article 36.

c. Public Choice Problems with Cash Remedies

Nzelibe argues that the problem with a move away from the current system to cash remedies is that cash remedies would be paid by the violating state from general funds, and therefore would not provide incentives for compliance.\(^{148}\) This is a public choice-based analytical insight that assumes that the state’s actions are a kind of aggregate of interest group pressures, and further assumes that dispersed interest groups, like taxpayers, are unable to affect policy. However, these assumptions may not accurately portray the qualities of representative government in particular cases. Nzelibe also sees converse benefits in a rule of specific performance backed up by market-closing retaliation that can be used to enlist domestic export interests in the violating state to lobby for compliance.\(^{149}\)

Nzelibe’s argument relates to the allocation of penalties within the violating state, rather than to the quantification of penalties. However, it is not impossible that cash remedies could be imposed directly on the industry within the violating state that is benefited by the violation. This would have the triple advantages of (i) accurate quantification, (ii) avoidance of a second market distortion, and (iii) fairness, as it would not impose the punishment randomly on violating state export interests.

So, recognizing the value of Nzelibe’s insights, they do not necessarily argue against cash remedies. Rather, they argue in favor of a particular distribution of cash remedies to remove the incentives of import competing industries to seek protection. A decision to impose the cash remedies on the domestic beneficiary industry would be even better targeted in public choice terms than trade-blocking retaliation against an innocent bystander export industry in the same state. Interestingly, in the domestic antitrust context, the Noerr-Pennington doctrine would immunize industries that lobby government for action that violates antitrust laws.

[This is an argument for PRAs for domestic consumers paying too high a price, and for foreign producers to recover the transfer; in competition law, do we let the claimant producer recover the lost consumer surplus?]

7. Conclusion

As suggested above, it appears that an efficient approach to remedies at the WTO would distinguish among different types of rules. For rules that are amenable to a “damages” remedy, the following calculation would appear to be an appropriate starting point for discussion.

\[
\frac{1}{p} \frac{c_{mt} + e}{m} = m_d
\]

where

\(^{148}\) Nzelibe, \textit{supra} note __, at __.
\(^{149}\) \textit{Id.}
\( c_{mt} = \) the value of multilateral injury caused by the violation, calculated as the amount of the transfer plus consumer deadweight loss, \( \textit{ex tunc} \) (including both retrospective and prospective components), plus interest from the date of injury

\[ p = \text{the probability of enforcement} \]

\[ e = \text{cost of enforcement} \]

\[ m_d = \text{measure of damages} \]

As suggested above, the role of reputation is somewhat problematic, as it might induce inefficient compliance under full formal penalties. From a political standpoint, a damages multiplier to reflect the probability of enforcement may also be problematic, and may be unnecessary under full formal penalties. Full formal penalties might provide sufficient incentives for litigation to make the probability of enforcement relatively high.

This paper has been intended to suggest the legal and policy options available in order to reform the structure of remedies in WTO dispute settlement. While developed states may not be willing to give up the privileged position they now hold by virtue of the existing structure of remedies, negotiations may be advanced by demonstrating the extent and irrationality of the privilege.

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