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## **Agreements and Disputes over Non-Tariff Measures<sup>\*</sup>**

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**Abstract:** In trade agreements, governments can design remedies to ensure compliance (property rule) or to compensate victims (liability rule). This paper describes an economic framework to explain the pattern of remedies over non-tariff restrictions—particularly domestic subsidies and nonviolation complaints subject to liability rules. The key determinants of the contract form for any individual measure are the expected joint surplus from an agreement and the expected loss to the constrained government. The loss is higher for domestic subsidies and nonviolations because these are the policies most likely to correct domestic distortions. Governments choose property rules when expected gains from compliance are sufficiently high and expected losses to the constrained country are sufficiently low. Liability rules are preferable when dispute costs are relatively high, because inefficiencies in the compensation process reduce the number of socially inefficient disputes filed.

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## 1 Introduction

An important decision in trade agreement design is whether remedies should ensure compliance or instead allow breach with appropriate compensation. In standard law and economics parlance, the former defines a *property rule*, while the latter defines a *liability rule*.<sup>1</sup> This paper applies economic theory to understand the history of property rules vs. liability rules in the GATT/WTO, and its particular aim is to understand remedies for non-tariff measures. I focus on two stylized facts from this history: (1) the progression from a system of liability rules under the GATT to a system of property rules under the WTO;<sup>2</sup> and (2) two remaining examples of liability rules are actionable subsidies and non-violation complaints.<sup>3</sup> In proposing an explanation, I first observe that the two examples of liability rules each primarily regulate non-discriminatory domestic policies that could be first-best policy solutions. Building on this observation, I argue that governments choose a liability rule when the loss to a government from a policy constraint is large relative to the potential gains from cooperation, and such is the case for actionable domestic subsidies and non-violations.

Here I describe key features of the proposed economic framework. Potential policies to include in trade agreements exhibit heterogeneity in both the ex-ante expected global gains from coordination and the ex-ante expected loss to the government whose policy is constrained. After signing an agreement, relative payoffs from cooperation are subject to shocks that are unverifiable and non-contractible. The choice to include a policy in the agreement or not then depends on whether the gains from coordination are worth the dispute costs, and policies with high ex-ante expected losses are far more likely to result in disputes. Disputes are necessary for enforcement, but they come with high costs, large enough to swamp the gains for coordination on the marginal policies included in the contract, though filing disputes is still individually rational. One advantage of the liability rule is that it reduces the incentive to file disputes that are jointly inefficient. With fewer disputes also comes lower probability of compliance overall, but larger gains conditional on compliance. The advantages of the liability rule are largest when the ex-ante loss to the constrained country is large relative to the gains from coordination, because such policies have the largest potential for disputes.

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<sup>1</sup> CALABRESI; MELAMED, 1972.

<sup>2</sup> MAGGI; STAIGER (forthcoming).

<sup>3</sup> See PAUWELYN, 2008, ch. 5; MAGGI; STAIGER, 2013.

I argue the framework can explain the pattern of liability rules vs. property rules in the GATT/WTO. Achieving compliance is more difficult on actionable subsidies and non-violations because of the potential benefits of these policies, so my economic framework suggests these policies will be subject to liability rules. I support my argument using (1) the negotiation history and case law of non-violations and (2) the negotiating history of the Agreement on Subsidies and Countervailing Measures. As for the progression from liability rules in the GATT to property rules in the WTO, the economic framework suggests this results from increases in gains from coordination over time, and such coordination gains have indeed occurred due to falling trade costs.

The paper contributes to the literature by providing an economic explanation for long-puzzling distinctions in remedies in the WTO. For example, Bagwell criticizes the SCM for regulating export subsidies with the harsher property rule punishment compared to the lighter liability rule punishment for actionable domestic subsidies.<sup>4</sup> Pauwelyn questions why “politically and culturally more controversial commitments such as those under WTO agreements on health and safety are more rigidly protected under a property rule.”<sup>5</sup> More recently, Maggi and Staiger argue that the property rule vs. liability rule choice depends on the uncertainty in expected outcomes after contracting over any individual policy, and that such uncertainty is higher in both domestic subsidy and non-violation cases.<sup>6</sup> They argue that greater uncertainty means greater possibility of breach being first-best ex-post, and the liability rule allows for this efficient breach. While they focus on second moments of payoffs, I focus on the first moments, and I argue that properties of the first moments are the key distinguishing features of the policies in question.

The rest of the paper proceeds as follows. Section 2 details the background on liability rules vs. property rules in the GATT/WTO. Section 3 details the economic framework. Section 4 discusses the case law and negotiating history. Section 5 concludes.

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<sup>4</sup> BAGWELL, 2008.

<sup>5</sup> See PAUWELYN, 2008.

<sup>6</sup> See MAGGI; STAIGER (forthcoming).

## 2 Background

This section details the legal and economic facts which motivate the analysis. Specifically, I discuss property rules vs. liability rules in the GATT/WTO, I explain why actionable subsidies and non-violations are classified as liability rules, and I detail relevant economic features of actionable subsidies and non-violations.

The key distinction between property rules and liability rules, per the Calabresi and Melamed classification, is that the property rules offer an entitlement that can be taken only with the holder's consent, while liability rules offer entitlements that can be taken with appropriate compensation.<sup>7</sup> In the domestic law context, the broad conclusion is that the optimal contract progresses from property rule to liability rule as the transaction costs of bargaining increase.<sup>8</sup>

The question of what is a property rule or liability rule in the GATT/WTO context is murkier, because there is no comparably powerful international authority that can enforce property rules as in the domestic law context, and rarely do we observe interstate transfers typical of liability rules. Both enforcement and payment in the GATT/WTO are typically achieved through tariff retaliation. Paulewyn makes a convincing case that the WTO is largely a property rule regime, since in most matters, the case is not closed until compliance is achieved by removing the offending policy, or the complainant settles.<sup>9</sup> Though tariff retaliation is a form of compensation in the WTO, disproportionate retaliation designed to ensure enforcement is characteristic of a property rule. Still some GATT/WTO remedies classify as liability rules because the cases can be closed through adjustments without the consent of the complainant.

The difference in rules between export subsidies and domestic subsidies in the Agreement on Subsidies and Countervailing Measures exemplifies the difference between property rules and liability rules in the WTO. Export subsidies are in the "prohibited category" for which a subsidizing country should "withdraw the subsidy without delay" per Article 4.7. In contrast, for an "actionable" domestic subsidy, members "shall take appropriate steps to remove the adverse effects or shall withdraw the subsidy." To enforce the limited set of options for export subsidies requires harsher punishment than for domestic subsidies, such as disproportionate retaliation in

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<sup>7</sup> See CALABRESI; MELAMED, 1972.

<sup>8</sup> Ibid.

<sup>9</sup> See PAULEWYN, 2008. He argues that international law generally falls in between the two extremes of "European absolutism (international entitlements should be inalienable) and American voluntarism (international entitlements are, at best, protected by a mere liability rule)."

line with the trade effects of the subsidy, and Bagwell argues this is indeed true in the WTO SCM case law.<sup>10</sup> Domestic subsidy remedies classify as liability protection because the offending subsidy need not be withdrawn provided its adverse effects are removed.

In addition to domestic subsidies, authors agree that non-violation complaints have features of liability rules. The rule, dating back to Article XXIII of the 1947 GATT, concerns policies leading to the nullification or impairment of benefits. Targets of complaints can either remove the offending policy, provide compensation, or face withdrawal of substantially equivalent concessions.<sup>11</sup> Since the offending policy need not be removed, the non-violation is a liability rule. Among liability rules, domestic policies and non-violations are the focus of my analysis, though tariff bindings and a few GATS and TRIPS rule also have liability rule features, according to Paulewyn's classification.<sup>12</sup>

The focus of the analysis is why domestic subsidies and non-violations are still subject to liability rules. I start by considering the economic features of such complaints. For domestic subsidies, it has long been understood they can be the first-best instrument for addressing domestic distortions.<sup>13</sup> For example, the Checklist of Issues for SCM Negotiations, notes "The Code quite rightly intends not to restrict the right of signatories to use other subsidies than export subsidies as legitimate instruments for the promotion of important social and economic policy objectives which are given the form of e.g. regional development, employment policy programmes, structural adjustment, research and development schemes."<sup>14</sup> The possibility of restricting such first-best subsidies ultimately leads Bagwell and Staiger to criticize all SCM restrictions on domestic subsidies.<sup>15</sup> They argue that non-violations provide the appropriate protection, though their analysis abstracts from the dispute settlement process. My analysis, which does model the dispute settlement process, will consider distinguishing features of payoffs from domestic subsidy disputes. First, restrictions of domestic subsidies, relative to restrictions of other policies are likely to cause a larger loss to the constrained country because domestic subsidies directly address domestic distortions. This larger loss, all else equal, implies a lower

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<sup>10</sup> See BAGWELL, 2008.

<sup>11</sup> STAIGER; SYKES, 2013.

<sup>12</sup> See PAULEWYN, 2008.

<sup>13</sup> BHAGWATI; RAMASWAMI, 1963.

<sup>14</sup> See MTN.GNG/NG10/W/9/Rev.4.

<sup>15</sup> BAGWELL; STAIGER, 2006.

expected joint surplus from restrictions on domestic subsidies, relative to other policies. I then proceed to analyze how these facts influence the liability vs. property rule choice.

As for non-violations, Staiger and Sykes summarize the case law as follows: “Successful non-violation claims have all involved ‘commercial measures’ such as subsidies and tariffs that change in a way that reduces export opportunities for the complainant.... Historically, the paradigm non-violation case was a new (post-negotiation) subsidy to domestic firms that compete with imports.”<sup>16</sup> Staiger and Sykes further note that the past cases could now be challenged as actionable domestic subsidies under the SCM. Still, subsidies that satisfy the economic subsidy definition but do not meet the SCM criteria (e.g. subsidies that are not specific) could still nullify and impair benefits and lead to non-violation complaints. I conclude that the types of policies typically challenged under non-violations are more similar in joint and unilateral payoffs to actionable domestic subsidies than to other restricted domestic policies in the WTO.

My assessment of the economic facts has focused on the first moments of expected payoffs to countries who agree to actionable domestic subsidy rules and non-violations. In contrast, the theories of Maggi and Staiger argue that these policies are subject to liability rules due to higher uncertainty in their evaluation from the dispute settlement body.<sup>17</sup> As evidence, they put forth that domestic subsidies and non-violations are more likely to involve import-competing industries subject to political shocks that the DSB cannot easily evaluate. Such an argument is readily applicable to contingent protection like safeguards, for which the criterion regards injury to domestic production for the country imposing the safeguard. But for actionable subsidies the criterion is about adverse effects of trade-distorting subsidies, and for non-violations the criterion is about nullification and impairment of benefits. The laws for actionable subsidies and non-violations are about evaluating external effects of the policies, and not at all about evaluating the domestic benefits.<sup>18</sup> Comparing the criteria for safeguards to the criteria for these domestic policies, the law for these domestic policies does not require assessment of injury to the member from removing the disputed policy (i.e. the overall benefit from imposing the policy in addition to trade benefits). So it is then questionable that relative DSB inability to assess

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<sup>16</sup> See STAIGER; SYKES, 2013.

<sup>17</sup> See MAGGI; STAIGER (forthcoming).

<sup>18</sup> The external effects, of course, could be positively correlated with the domestic benefits.

domestic effects of these policies compared to other policies is what is driving the liability rule choice, given that the law is indifferent to variation in the domestic effects that are deemed useful information for other WTO laws.

The theory that follows instead argues that the main driver of the liability rule choice is the relative loss to the constrained country, compared to the gains from cooperation. To contrast with the hypothesis that uncertainty alone drives the choice, I compare two hypothetical policies which have the same expected gains from cooperation and the same ex-post uncertainty in policy payoffs, so the probability of “efficient breach” for both policies is the same.<sup>19</sup> The difference between the policies instead is that one is characterized by a large expected loss to the constrained country, while other policies have a smaller expected loss. This variation alone can lead to a liability rule for the policy with the higher transfer of welfare between nations from any restriction over a single policy, and a property rule for the policies with the lower transfer of welfare between nations from any restriction over a single policy. The conventional economic theory I described above then suggests that actionable subsidies and non-violations require a relatively higher shift in welfare across nations to achieve gains, so they are a better suited to be governed by liability rules. The new theory will then explain the tradeoffs between liability rules and property rules in such an environment and how this fits with negotiating history and case law of the GATT/WTO.

### 3 Theory

I propose a two-country model of bilateral agreements such that countries negotiate over several different policies which can differ in the joint surplus of the first-best agreement, as well as who gains and who loses. Governments choose to contract over a symmetric set of policies which are the same in the expected gains from cooperation but exhibit heterogeneity in the loss to the country whose policy is constrained. Here loss can be interpreted in the broad political economic sense from a government preference function — so payoffs could include economic

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<sup>19</sup> By “efficient breach” I mean simply that ex-post nations are better off not complying with the contract for a particular policy. Paulewyn (2008) argues for a stronger standard in using this term, noting that breach is efficient only when the other party is fully compensated. I follow the usage of Maggi and Staiger (forthcoming) in comparing contracts’ ability to facilitate efficient breach as I have defined it, i.e. to move closer to the ideal.



factors in the sense of national income maximization, but also distributional concerns.<sup>20</sup> A cooperative agreement is then achieved by contracting over several policies that lead to losses for one country for any individual policy in the contract, but the overall contract exhibits gains for each country. The objective of the agreement is to maximize the joint gains of the negotiating nations, whatever their aims may be.

Governments act in a sequential game as follows:

1. For each policy, governments maximize the ex-ante expected gains from the agreement by choosing between (1) a liability rule, (2) a property rule or (3) no contract.<sup>21</sup>
2. Unverifiable mean-zero shocks are realized for the payoffs to both governments for noncooperation and cooperation over each policy
3. Each government decides whether to renege on the contract for an individual policy. In doing so, each government anticipates the other government's decision to file a dispute and the potential cost of such a dispute.
4. For any violations, governments decide to file dispute at a cost, anticipating an uncertain DSB decision.
5. The DSB rules with exogenous accuracy.
6. If a property rule was chosen and DSB ruling favors the complainant, then payoffs are realized when the policy is removed. If a liability rule was chosen, then the target of the complaint can then choose to compensate the complainant. The complainant is assured to be worse off from compensation (under the liability rule) relative to compliance (under the property rule) because unverifiable shocks to the complainant are uncompensated.

Such a game can then be solved through backward induction, whereby at each step the choice rule for each government is solved for based on the expected payoffs from future stages.

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<sup>20</sup> For details of the many pros and some cons of this economic modeling approach, see Grossman and Horn (2013).

<sup>21</sup> I assume governments can maximize joint welfare at the stage of designing the institution while anticipating future individualistic behavior. This is typical of the economic literature (e.g. Maggi and Staiger, forthcoming).

This model clarifies the tradeoffs between liability rules and property rules. The two rules differ both in the level and type of compliance with the contract, and also in the number of disputes filed. Because the inefficiency of the liability rule overall reduces the incentive to use the dispute settlement system given the errors in compensation, the incentives fall for potential complainants to file disputes under liability rules, which in turn induces far greater breach under liability rules.<sup>22</sup> But the breach under liability rules is more likely to be efficient (e.g. the joint payoffs are greater than if the contract were followed) then would be the case under property rules. When the costs of filing disputes is sufficiently large—such that dispute costs are large enough to swamp joint payoffs, but filing a dispute is still individually rationale—the reduction in disputes from the liability rule is also an advantage.<sup>23</sup>

How the loss to the constrained country then affects the liability rule choice then depends on how this loss interacts with the various tradeoffs. Disputes are more likely when the loss to the constrained country is high, holding the joint payoff fixed, as it is more likely that a particular issue will satisfy the threshold for dispute costs. Choosing liability rules for such policies becomes optimal, because of the lower use of the DSB, and compared to the property rule, the DSB is more likely to be invoked when there is potential for efficient breach, and there is more compliance when breach is inefficient.

## 4 Evidence

I compare here how the theory matches with GATT/WTO negotiating history and case law. Section 2 already noted how the SCM negotiation history recognizes subsidies' legitimate uses. The fact that domestic subsidies can be maintained once adverse effects are removed reflects a standard “efficient breach” logic. The revealed preference that governments are willing to impose such subsidies, while potentially bearing costs of compensation and dispute, is the credible demonstration of the domestic benefits of any such policy. An additional bullet point from the negotiating history is also revealing: “The SCM

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<sup>22</sup> Again, to be clear, I use breach here to mean breach permitted by the contract leading to disputes, rather than a breach of the overall agreement, which is assumed to be binding.

<sup>23</sup> In such a case, economists would endorse a tax for using the dispute settlement system, but such a policy is problematic due to the inefficiency of international transfers. Liability protection limits disputes to similarly enhance efficiency.

Group should explore new approaches that would prohibit certain domestic subsidies... that are likely to have a significant effect on competitiveness or trade. This approach avoids the reliance on subjective judgments, or impractical prohibitions, that are inherent in the other subsidy approaches.”<sup>24</sup> The SCM ultimately did not prohibit such subsidies but just the adverse effects described. But a key point is the acknowledgement of “impractical prohibitions.” This reflects that property rules would create impractical remedies for certain kinds of subsidies. While it is unclear exactly what makes a prohibition impractical or a legitimate subsidy, my theory suggests a plausible interpretation is that domestic subsidies with trade effects are impractical to prohibit because of the large degree of conflict that could occur under property rule prohibitions.

Another key point of evidence is the limited number of disputes that would fall under liability rules, particularly for non-violation complaints. This case law has acknowledged that such disputes are exceptional. Specifically, the Japan – Film ruling states, “[B]oth the GATT contracting parties and WTO Members have approached this [non-violation] remedy with caution and, indeed, have treated it as an exceptional instrument of dispute settlement.... Members negotiate the rules that they agree to follow and only exceptionally would expect to be challenged for actions not in contravention of those rules.”<sup>25</sup> Staiger and Sykes also acknowledge the possibility that non-violations are often not worth the cost: “When the ‘price’ to be paid following a successful non-violation complaint does not capture the harm done to others with much accuracy, and when the other costs of the system including the economic costs of trade sanctions and the costs of litigation are substantial, one must then consider the possibility that the game is simply not worth the candle.”<sup>26</sup> My theory suggests that a reduction in disputes under liability disputes is part of their aim of liability rules compared to property rules, so that the cases that actually occur under liability rules do not by themselves appear to be efficient.

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<sup>24</sup> See *supra* n 14.

<sup>25</sup> Japan – Measures Affecting Consumer Photographic Film and Paper, WT/DS44,

<sup>26</sup> STAIGER; SYKES, 2013.

## 5 Conclusion

I have argued that a the liability rule and property rule choice is driven primarily by the expected loss to the constrained government, and that the benefit of the liability rule is to facilitate efficient breach and reduce the overall number of disputes, while the advantage of the property rule is achieving in overall compliance. The results are roughly consistent with the negotiating history and case law

In comparison to the Maggi and Staiger theory, in which the liability rule choice is driven by DSB uncertainty, there is little clear evidence from the case law or history to favor one theory over the other. But the larger loss to the constrained country in actionable subsidy cases is consistent with basic economic theory, and the importance of DSB uncertainty in the liability rule choice seems inconsistent with the negotiated law not evaluating the domestic effects for countries imposing actionable subsidies, and such domestic effects of policy are evaluated in other areas of WTO law.

Additionally, my explanation formalizes common concerns over national sovereignty.<sup>27</sup> There has long been some intuition that certain policies simply cannot have property enforcement in trade agreements because they violate a notion of sovereignty. This intuition often manifests itself in nations who seek to maintain a certain threshold of policy space in negotiations or come to regret what they have already given up.<sup>28</sup> Understanding the liability rule vs. property rule choices for these non-tariff measures will be important as trade negotiations are more intent on achieving domestic policy coordination going forward.<sup>29</sup>

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<sup>27</sup> See e.g. BAGWELL; STAIGER, 2001.

<sup>28</sup> See e.g. RODRIK, 2011; STIGLITZ, 2006.

<sup>29</sup> See WTO, 2012.

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