

Food Fears: Health and Safety at the WTO

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I. INTRODUCTION

In May 2003, the United States, Canada, and Argentina filed a complaint at the World Trade Organization (WTO) alleging that European restrictions on the importation of genetically modified

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organisms (GMO) violate WTO rules.¹ If the parties fail to reach a settlement, the WTO's dispute settlement bodies will determine whether the European Communities (EC) has violated its WTO obligations. If the EC loses the case, it will be required, under WTO law, to admit the relevant products into the European market, notwithstanding concerns about health and safety.

The *GMO* case tests the extent to which the WTO is prepared to intervene in the decisions of member governments in an area long thought to be central to notions of sovereignty: health and safety. In this sense, the case relates to fundamental concerns about the trading system and the WTO, including the extent to which trade rules override other societal values, the legitimacy of the WTO's dispute settlement mechanisms, and the perceived trade-bias within the organization.² The *GMO* dispute is still more sensitive because it will surely receive prominent news coverage and publicity,³ provoking anger, controversy, and frustration on the part of citizens, industry groups, and governments.⁴ Nor does it help that the parties to the case include the

1. See Request for Consultations by Argentina, European Communities—Measures Affecting the Approval and Marketing of Biotech Products, WT/DS293/1, 2003 WL 21191302 (WTO May 21, 2003); Request for Consultations by Canada, European Communities—Measures Affecting the Approval and Marketing of Biotech Products, WT/DS292/1, 2003 WL 21180725 (WTO May 21, 2003); Request for Consultations by the United States, European Communities—Measures Affecting the Approval and Marketing of Biotech Products, WT/DS291/1, 2003 WL 21180726 (WTO May 20, 2003) [hereinafter *GMO*].

2. These issues obviously go far beyond those in the *GMO* case and are beyond the scope of this Article, whose more modest goal is to recommend changes to the WTO's jurisprudence on health and safety issues. For a discussion of some of the larger systemic problems facing the WTO, see Andrew T. Guzman, *Global Governance and the WTO*, 45 HARV. INT'L L.J. 303 (2004) [hereinafter *Global Governance*].

3. See Johannes S.A. Claus III, *The European Union's Efforts to Sidestep the WTO Through Its Ban on GMOs*, 24 NW. J. INT'L L. & BUS. 173, 174 (2003) ("The European Union's four year moratorium on GMOs continues to be one of the most hotly-contested trade issues facing it and the United States. Officially, US patience with the E.U. refusal to process applications for biotechnology imports is 'growing very thin.'"); see, e.g., Edward Alden, *Europeans Not Amused by Bush's Rhetoric*, FIN. TIMES, June 26, 2003, at 10; Frances Williams, *US Fires First Shot at EU Biotech Policy*, FIN. TIMES, Aug. 19, 2003, at 7.

4. A loss for the EC would signal that decisions about the health and safety of citizens can be reviewed and overturned by an international panel. On the other hand, a victory for the EC would be perceived by the complainants as an endorsement of protectionism masquerading as concern for health and safety. The weakness (some would say absence) of the scientific evidence of health risks suggests to many that an EC victory would usher in an open season for abuses of the WTO's health and safety rules. It is true that other cases have found health and safety measures to be in violation of WTO rules. See WTO Appellate Body Report, Japan—Measures Affecting the Importation of Apples, WT/DS245/AB/R, 2003 WL 22813859 (WTO Nov. 26, 2003) [hereinafter *Japan—Apples*]; WTO Appellate Body Report, Japan—Measures Affecting Agricultural Products, WT/DS76/AB/R (Feb. 22, 1999), available at <http://docsonline.wto.org/DDFDocuments/t/WT/DS/76ABR.doc> [hereinafter *Japan—Agricultural Products*]; WTO

two titans of the trading system, the EC and the United States.⁵

In the background is a prior contentious case, the *Hormones* dispute, which remains unresolved.⁶ Like the *GMO* case, the *Hormones* dispute also featured the EC as defendant and both the United States and Canada as complainants.⁷ In the *Hormones* case, the WTO's Appellate Body determined that the EC violated its WTO obligations when it banned the importation of meat and meat products derived from cattle that had received certain growth hormones. Despite the loss at the WTO, the EC refused to lift the ban. Consistent with its rights under the WTO's Dispute Settlement Understanding (DSU), the United States responded by imposing sanctions in the form of trade restrictions on certain European goods.⁸ Since 1998, both the EC ban and the U.S. sanctions have remained in place, as have the predictable tensions these measures have generated.⁹

In both the *Hormones* and *GMO* cases, the EC has cited health and

Appellate Body Report, Australia—Measures Affecting the Importation of Salmon, WT/DS18/AB/R (Oct. 20, 1998), available at <http://docsonline.wto.org/DDFDocuments/t/WT/DS/18ABR.DOC> [hereinafter *Australia—Salmon*]; WTO Appellate Body Report, EC Measures Affecting Livestock and Meat Products (*Hormones*), WT/DS26/AB/R (Jan. 16, 1998), available at <http://docsonline.wto.org/DDFDocuments/t/WT/DS/26ABR.WPF> [hereinafter *Hormones*]. Those cases, especially the *Hormones* case, are themselves important and controversial cases. The *GMO* case, if it is not settled by the parties, is likely to be more controversial because it is likely to force the WTO's Appellate Body to confront more directly the question of how much deference it will give to domestic evaluation of health risks.

5. The WTO's most controversial cases almost always (and not surprisingly) seem to involve these members. See, e.g., WTO Appellate Body Report, European Communities—Regime for the Importation, Distribution and Sale of Bananas, WT/DS27/AB/R (Sept. 25, 1997) [hereinafter *EC—Bananas*]; *Hormones*, *supra* note 4; WTO Appellate Body Report, United States—Tax Treatment for 'Foreign Sales Corporations,' WT/DS108/AB/R (Feb. 20, 2000).

6. See *Hormones*, *supra* note 4.

7. Australia, New Zealand, and Norway were third-party participants. *Hormones*, *supra* note 4, ¶ 7.

8. The United States was granted authorization to impose trade sanctions of up to \$117 million a year, starting in 1999. See 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, WT/DS26/ARB, ¶ 83 (July 12, 1999). Canada was authorized to impose sanctions of up to \$11.3 million. Decision by the Arbitrators: European Communities—Measures Concerning Meat and Meat Products (*Hormones*), Original Complaint by Canada, Recourse to Arbitration by the European Communities Under Article 22.6 of the DSU, WT/DS48/ARB, ¶ 68 (July 12, 1999). The sanctions are authorized by Article 22 of the WTO's Dispute Settlement Understanding. See Understanding on Rules and Procedures Governing the Settlement of Disputes, WTO Agreement, Annex 2, Apr. 15, 1994, art. 22, 33 I.L.M. 1226 (1994) [hereinafter DSU].

9. The EC has attempted to bring itself into compliance by introducing what it cites as new and convincing evidence of health risks from the hormone-treated beef. The United States dismissed the European claims and refused to lift the ban. See Tobias Buck, *US 'Will Not Lift' Sanctions on EU in Beef Spat*, FIN. TIMES, Oct. 20, 2003, at 8.

safety concerns in excluding products from its markets that, in the eyes of other states—most notably the United States—pose no health risk. The relevant legal rules for these cases are provided in the WTO's Sanitary and Phytosanitary (SPS) Agreement, which allows states, under certain circumstances, to adopt trade restrictions to protect plant, animal or human life. Under existing WTO jurisprudence, the Appellate Body has interpreted the SPS Agreement to require that there be a rational relationship between the enacting state's policy measures and the risk assessment justifying them.¹⁰

This Article argues that the WTO's review of SPS measures is inappropriately intrusive and generates unnecessary costs to the trading system. Not only should there not be a rational relationship test, there should be no substantive review of the state's decision to adopt SPS measures. Specifically, panels and the Appellate Body should defer to the implementing state's evaluation of the level of risk it is willing to tolerate, the relevant scientific evidence, and the relationship between the measure and the risk assessment.¹¹ There should, however, be a review of compliance with the SPS's transparency and procedural requirements.¹² In particular, panels and the Appellate Body should require that the measure not be arbitrarily or unjustifiably discriminatory,¹³ not constitute a disguised restriction on trade,¹⁴ and not be more trade-restrictive than necessary.¹⁵

This deferential and procedure-focused approach is preferred to a substantive review because the costs of a substantive review are likely to be systematically higher in the SPS area than in more traditional trade disputes. Matters of health and safety implicate deeply held notions of sovereignty and autonomy. For the WTO to review the substance of a state's health and safety rules is to invite non-compliance, resentment, and conflict. In addition, there is great disparity among states in the way they evaluate scientific evidence and in their willingness to accept

10. See *infra* Part II.

11. Agreement on the Application of Sanitary and Phytosanitary Measures, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization [hereinafter WTO Agreement]; Annex 1A, LEGAL INSTRUMENTS-RESULTS OF THE URUGUAY ROUND vol. 27, 33 I.L.M. 1125 (1994) arts. 2(2), 3(3), and 5(1), 5(2), 5(3) [hereinafter SPS Agreement]. Appellate Body jurisprudence currently states that the acceptable level of risk and the evaluation of scientific evidence are not to be reviewed by a panel or the Appellate Body. See *infra* notes 37-38 and accompanying text.

12. SPS Agreement, Annex B. See also *infra* Part V.

13. *Id.* arts. 2(3), 5(5).

14. *Id.*

15. *Id.* art. 5(6). For convenience, this Article will generally refer to this latter set of obligations as "procedural," and those that should be immune from review as "substantive."

health and safety risks. These differences make it difficult for a WTO panel or the Appellate Body to identify the true preferences and beliefs of states involved in a dispute, making it more likely that they will make mistakes in their judgments and rulings.

It is true that a substantive review can help discourage protectionist policies, but a strong procedural review can provide some of the same protections. By subjecting a country's policies and justifications to scrutiny, procedural requirements ensure that protectionism masquerading as an SPS concern will be exposed to both international and domestic political pressures. This limits the ability of states to use the SPS Agreement as cover for protectionism.

The SPS Agreement must respond to at least two concerns. The first is regulatory sovereignty. States should retain their autonomy to select the levels of health risks they are prepared to tolerate. Domestic control over such decisions is important for a number of reasons; for instance, both the willingness of individuals to accept risk and confidence in the applicable scientific evidence may vary from state to state. The second concern is restricting the scope of protectionism. Full domestic control over health and safety decisions necessarily gives the states the ability to use those measures for protectionist purposes.

The tension between these concerns leaves little middle ground.¹⁶ The WTO regime must, in the end, either leave policy decisions in the hands of individual states or engage in a substantive review of those decisions, making judgments about the relevant scientific evidence and the risk tolerance of states. These are high stakes for those interested in health and safety issues, and the stakes are rising over time. Between the continued growth in international trade and the steady emergence of innovation in biotechnology, the SPS Agreement will continue to become more important and more controversial.¹⁷

16. See Robert Howse, *Democracy, Science, and Free Trade: Risk Regulation on Trial at the World Trade Organization*, 98 MICH. L. REV. 2329, 2334 (2000) [hereinafter *Risk Regulation*] ("Judgments by the WTO dispute settlement organs about what constitutes de minimis scientific evidence, however, would themselves entail substantive judgments of value concerning the regulatory process, begging the question of which regulatory values should determine the 'minimum.'"); Alan Sykes, *Exploring the Need for International Harmonization: Domestic Regulation, Sovereignty, and Scientific Evidence Requirements: A Pessimistic View*, 3 CHI. J. INT'L L. 353, 355 (2002) [hereinafter *Sovereignty*]

("WTO law must then choose between an interpretation of scientific evidence requirements that essentially eviscerates them and defers to national judgments about science, or an interpretation that gives them real bite at the expense of the capacity of national regulators to choose the level of risk that they will tolerate.").

17. See Theofanis Christoforou, *Settlement of Science-Based Trade Disputes in the WTO: A*

The Article proceeds as follows: Section II briefly reviews the existing rules and WTO jurisprudence on health and safety measures. Section III analyzes the core tension within the SPS Agreement between a desire to discipline domestic SPS measures and a desire to leave policy decisions to national governments. Section IV then applies this analysis to the SPS Agreement, explaining why a more deferential standard would better serve the interests of the trading system. Section V responds to the concern that a more deferential standard will give states carte-blanc to engage in protectionism. Section VI concludes. Though this is certainly not the first article to comment on the SPS Agreement, or the first to advocate a more deferential approach, the theoretical argument for deference is novel and relevant to the ongoing *GMO* case.¹⁸

II. OBLIGATIONS UNDER THE SPS AGREEMENT¹⁹

The SPS Agreement establishes that WTO Members may adopt SPS measures so long as the measures satisfy a series of conditions,

Critical Review of the Developing Case Law in the Face of Scientific Uncertainty, 8 N.Y.U. ENVTL. L.J. 622 (2000).

18. There is a significant literature devoted to the SPS Agreement. I am not aware, however, of any analysis along the lines proposed herein. See, e.g., Howard F. Chang, *Risk Regulation, Endogenous Public Concerns, and the Hormones Dispute: Nothing to Fear but Fear Itself?*, 77 S. CAL. L. REV. 743 (2004) (discussing public fears that are disproportionate to the known risks of a product and arguing in support of the Appellate Body's current jurisprudence); see also Jeffery Atik, *Identifying Antidemocratic Outcomes: Authenticity, Self-Sacrifice and International Trade*, 19 U. PA. J. INT'L ECON. L. 229 (1998); Jeffery Atik, *Science and International Regulatory Convergence*, 17 N.W. J. INT'L L. & BUS. 736 (1996); Jan Bohanes, *Risk Regulation in WTO Law: A Procedure-Based Approach to the Precautionary Principle*, 40 COLUM. J. TRANSNAT'L L. 323 (2002); Steve Charnovitz, *Improving the Agreement on Sanitary and Phytosanitary Standards*, in *TRADE, ENVIRONMENT, AND THE MILLENNIUM* 171 (Gary P. Sampson & W. Bradnee Chambers eds., 1999) [hereinafter *Improving the Agreement*]; Christoforou, *supra* note 17; Howse, *Risk Regulation*, *supra* note 16; Robert Howse & Petros C. Mavroidis, *Europe's Evolving Regulatory Strategy for GMOs—The Issue of Consistency with WTO Law: of Kine and Brine*, 24 FORDHAM INT'L L.J. 317 (2000) [hereinafter *Regulatory Strategy*]; Joost Pauwelyn, *The WTO Agreement on Sanitary and Phytosanitary (SPS) Measures as Applied in the First Three SPS Disputes*, 2 J. INT'L ECON. L. 641 (1999); Sykes, *Sovereignty*, *supra* note 16; Michael Trebilcock & Julie Soloway, *International Trade Policy and Domestic Food Safety Regulation: The Case for Substantial Deference by the WTO Dispute Settlement Body Under the SPS Agreement*, in *THE POLITICAL ECONOMY OF INTERNATIONAL TRADE LAW* 537 (Daniel L. M. Kennedy & James D. Southwick, eds., 2002); David Victor, *The Sanitary and Phytosanitary Agreement of the World Trade Organization: An Assessment After Five Years*, 32 N.Y.U. J. INT'L L. & POL. 865 (2000); Vern Walker, *The Myth of Science as a "Neutral Arbiter" for Triggering Precautions*, 26 B.C. INT'L & COMP. L. REV. 197 (2003) [hereinafter *Myth of Science*].

19. For a comprehensive exposition of the current SPS rule, see Howse & Mavroidis, *Regulatory Strategy*, *supra* note 18, at 327-50; Victor, *supra* note 18. This section provides a brief synopsis sufficient for the purposes of this Article.

including: that they are “applied only to the extent necessary to protect human, animal or plant life or health,”²⁰ that they are “based on scientific principles and [are] not maintained without sufficient scientific evidence,”²¹ that they do not “arbitrarily or unjustifiably discriminate between Members where identical or similar conditions prevail,”²² and that they do not “constitute a disguised restriction on international trade.”²³

Measures that conform to international standards are presumptively consistent with WTO obligations and, therefore, avoid review by a panel or the Appellate Body.²⁴ The interesting cases, then, are those in which a measure is alleged to result in a higher level of protection than would be achieved by measures conforming to international standards.²⁵ In such cases a state is required to base its measures on a “risk assessment.”²⁶ The best definition of the term “risk assessment” is found in *Australia—Salmon*, which states that a risk assessment must: (i) identify the disease whose entry, establishment, or spread is being addressed as well as the biological and economic consequences of such entry, establishment, or spread; (ii) evaluate the likelihood of entry, establishment, or spread; and (iii) evaluate the likelihood of entry, establishment, or spread according to the SPS measures which might be applied.²⁷

The requirement of a risk assessment suggests that some potential for

20. SPS Agreement art. 2(2).

21. *Id.* An exception to this requirement is provided in Article 5(7) of the SPS Agreement, which allows for provisional measures in the event that relevant scientific information is insufficient. *Id.* art. 5(7).

22. *Id.* art. 2(3).

23. *Id.*

24. *Id.* arts. 3(1), 3(2).

25. This includes measures for which there is no corresponding international standard.

26. *See* SPS Agreement arts. 3(3), 5(1). SPS Agreement, Article 3(3) states that a higher level of protection is permitted “if there is a scientific justification or as a consequence of the level of sanitary or phytosanitary protection a Member determines to be appropriate in accordance with the relevant provisions of...Article 5.” Despite this language, which seems to allow a higher level of protection based on either a scientific justification or a risk assessment, the Appellate Body established in *Hormones* that compliance with the requirements of Article 5(1) is required for any measure that results in a higher level of sanitary protection. *See Hormones*, *supra* note 4, ¶¶ 174-76.

27. *Australia—Salmon*, *supra* note 4, at 121. The SPS Agreement itself defines a risk assessment in paragraph 4 of Annex A as: (i) the “evaluation of the likelihood of entry, establishment or spread of a pest or disease” in an importing country and the consequences thereof; or (ii) “evaluation of the potential for adverse effects on human or animal health arising from the presence of additives, contaminants, toxins or disease-causing organisms in food, beverages or feedstuffs.” SPS Agreement Annex A, ¶ 4.

harm must be present—otherwise what sense would there be in evaluating the biological and economic consequences? Such a reading is supported by the Appellate Body's statement in the *Hormones* case that "theoretical uncertainty" is not the sort of risk that is to be assessed under the risk assessment requirement.²⁸ Theoretical uncertainty is to be avoided because science cannot provide complete certainty about the safety of products.²⁹ Without more, these statements by the Appellate Body would signal that a WTO member must produce at least some evidence that a risk exists. In the same paragraph, however, the Appellate Body states that no minimum magnitude of risk must be established.³⁰ The bottom line, then, is that there must be some identifiable risk (though there is no minimum threshold), but once the risk is identified, a state can choose to take measures that reduce its exposure to zero.³¹

It is the relationship between SPS measures and relevant scientific evidence that really drives the evaluation of those measures.³² The SPS Agreement requires that measures be "based on scientific principles and ...not maintained without sufficient scientific evidence."³³ The Appellate Body has elaborated on these requirements, stating that "there [must] be a rational relationship between the measure and the risk assessment."³⁴ The country implementing an SPS measure, therefore, is entitled to determine the appropriate level of protection,³⁵ subject to this

28. *Hormones*, *supra* note 4, ¶ 186.

29. *Id.* The Appellate Body does not explicitly advance the argument offered in the text for why theoretical uncertainty is not sufficient; that argument is advanced by the Panel. The Appellate Body, however, seems to agree with the Panel on this issue.

30. Similarly, the Appellate Body states in *Australia—Salmon* that "there is no requirement for a risk assessment to establish a certain magnitude or threshold level of degree of risk," and "[a member can] determine its own appropriate level of protection to be 'zero risk.'" *Australia—Salmon*, *supra* note 4, ¶¶ 123-24, 125.

31. See Howse & Mavroidis, *Regulatory Strategy*, *supra* note 18, at 336-37. To carry out a risk assessment the state must consider the relevant scientific evidence. SPS Agreement art. 5(2). In so doing it has considerable leeway to interpret that evidence and is not required to follow the mainstream scientific view.

32. If the relevant scientific evidence is "insufficient," the SPS Agreement allows a member to adopt SPS measures based on available pertinent information. The member must then seek to obtain the additional information necessary to carry out an assessment of risk. See SPS Agreement, art. 5(7); *Japan—Agricultural Products*, *supra* note 4, ¶¶ 92-93. See also *infra* Part IV.D.2.

33. SPS Agreement art. 2(2).

34. *Hormones*, *supra* note 4, ¶193 (emphasis added). See also *Japan—Agricultural Products*, *supra* note 4, at ¶ 79 ("[T]here is a 'scientific justification' for an SPS measure, within the meaning of Article 3.3, if there is a rational relationship between the SPS measure at issue and the available scientific information.")

35. For example, in *Australia—Salmon*, the Appellate Body states that the panel or Appellate Body should not "substitute its own reasoning about the implied level of protection for that

rational relationship constraint.

Once the above substantive rules are understood, there remains the question of the appropriate standard of review by a panel or the Appellate Body of the decisions of a member state.³⁶ In the SPS context, the Appellate Body has stated that panels and the Appellate Body should not substitute their own views regarding the proper interpretation of scientific evidence³⁷ or their own risk analysis.³⁸ The Appellate Body has further stated that a panel must “consider the evidence presented...and make factual findings on the basis of that evidence.”³⁹ Any thought that panels are required to show deference to the defendant was eliminated by the recent *Japan—Apples* case, in which the Appellate Body stated that “Japan’s submission that the Panel was obliged to favour Japan’s approach to risk and scientific evidence...conflicts with the Appellate Body’s articulation of the standard of ‘objective assessment of the facts’.”⁴⁰ The message is that a panel should consider the evidence presented and form its own opinion based on that evidence.

The combination of the “rational relationship” test and a less than

expressed consistently by Australia. The determination of the appropriate level of protection, a notion defined in paragraph 5 of Annex A, as the ‘level of protection deemed appropriate by the Member establishing a sanitary...measure’, is a prerogative of the Member concerned and not of a panel or the Appellate Body.” *Australia—Salmon*, *supra* note 4, ¶ 199.

36. The SPS Agreement does not explicitly provide for any particular standard of review. The relevant textual provision is article 11 of the DSU, according to which the panel is to “make an objective assessment of the matter before it, including an objective assessment of the facts of the case and the applicability of and conformity with the relevant covered agreements.” DSU art. 11.

37. “[R]esponsible and representative government may act in good faith on the basis of what, at a given time, may be a divergent opinion coming from qualified and respected sources. By itself, this does not necessarily signal the absence of a reasonable relationship between the SPS measure and the risk assessment.” *Hormones*, *supra* note 4, ¶ 194.

38. See WTO Panel Report, *Japan—Measures Affecting Agricultural Products*, WT/DS76/R, (Oct. 27, 1998), ¶ 8.32, available at <http://docsonline.wto.org:80/DDFDocuments/t/WT/DS/76R.DOC> (“We are not empowered to...conduct our own risk assessment.”) [hereinafter *Japan—Measures Affecting Agricultural Reports*]; see also WTO Panel Report, *Australia—Measures Affecting Importation of Salmon—Recourse to Article 21.5 by Canada*, WT/DS18/RW, 2000 WL 204743, ¶ 4.141 (WTO Feb. 18, 2000) [hereinafter *Australia-Salmon (21.5)*]; WTO Panel Report (Canada), *European Communities—EC Measures Concerning Meat and Meat Products (Hormones)*, WT/DS48/R/CAN, 1997 WL 569984, ¶ 8.104 (WTO Aug. 18, 1997); WTO Panel Report (United States), *European Communities—EC Measures Concerning Meat and Meat Products (Hormones)*, WT/DS26/R/USA, 1997 WL 569984, ¶ 8.101 (WTO Aug. 18, 1997).

39. *Hormones*, *supra* note 4, ¶ 133.

40. *Japan—Apples*, *supra* note 4, ¶ 165. In the next paragraph of the same case the Appellate Body states that panels are not required to give precedence to the importing member’s evaluation of scientific evidence. *Id.* ¶ 166.

fully deferential standard of review necessarily implies that a panel or the Appellate Body must review the scientific evidence before it, reach a conclusion on the meaning of the evidence, and then determine whether the evidence is sufficient to justify the measure. In *Japan—Apples*, for example, the panel concluded, on the basis of the scientific evidence before it, that there was only a negligible risk of transmission of fire blight through apples,⁴¹ that the measure at issue was “clearly disproportionate to the risk identified” and, therefore, was maintained without sufficient scientific evidence.⁴²

III. OF STATE PREFERENCES AND PROTECTIONISM

Although the main argument advanced in this Article—that the WTO should show greater deference toward domestic health and safety decisions—implicates the authority of states, a proper defense requires more than a simple appeal to notions of sovereignty.⁴³ The WTO agreements, after all, represent a large-scale, multilateral compromise of sovereignty. To argue that risk regulation should remain in the hands of individual states simply because any other rule would undermine their sovereignty proves too much. The same claim would apply to any WTO obligation, not to mention commitments made under virtually every other international agreement.

Rather than rely on sovereignty arguments, this Article explains why leaving substantive decisions on risk regulation to the states serves the interests of the WTO and the international system. Greater deference is warranted in the SPS context because the costs of WTO review of health and safety decisions are likely to be larger than the costs in other trade contexts. This is so because panels and the Appellate Body are more likely to make mistakes in this area than in others, and because the costs of mistakes in SPS cases will tend to be larger than in other trade disputes. Mistakes are more likely because domestic attitudes toward health and safety risks are more likely to differ across states than in other issue areas such as, for example, safeguards. Mistakes are likely to be more costly because health and safety concerns are central to notions of domestic sovereignty. Losing defendants will face strong pressures to

41. WTO Panel Report, *Japan—Measures Affecting the Importation of Apples*, WT/DS245/R (July 15, 2003), ¶ 8.169, available at <http://docsonline.wto.org/DDFDocuments/t/WT/DS/245r.doc>.

42. *Id.* ¶ 8.198.

43. See, e.g., J. Martin Wagner, *The WTO's Interpretation of the SPS Agreement Has Undermined the Right of Governments to Establish Appropriate Levels of Protection Against Risk*, 31 LAW POL'Y INT'L BUS. 855 (2000) (advancing an argument favoring sovereignty).

resist compliance, making it more likely that a dispute will lead to a long-term standoff in which the losing defendant retains the measure and the winning complainant suspends concessions in response. The trading system then ends up with two trade barriers rather than one.

The first step of the analysis is to consider why regulatory diversity among states is valuable in the health and safety context and to evaluate the merits and demerits of leaving such decisions with states. That is the task of the following two subsections.

A. In Praise of Regulatory Diversity

WTO review of SPS measures poses a familiar dilemma: on the one hand, the trading system should design and enforce rules that encourage trade and discourage the adoption of protectionist measures, but on the other hand, it should respect national preferences and values. For instance, one can imagine two countries employing different policies with regard to the raising and importation of meat treated with certain hormones. Even if both countries make policy decisions based only on domestic attitudes, values, and tastes (rather than based on the trade implications of the policy), one country may decide to ban such meat and the other may conclude that the meat can be sold without special regulatory controls. As long as these policies reflect the preferences and priorities of the country rather than protectionist motives, there are powerful reasons to respect these differing preferences even when the policies have an impact on trade.

As a positive matter, it is fair to say that the SPS Agreement and the related case law attempt to separate measures that are legitimately designed to promote local preferences from those that are simply protectionist. The basic restrictions on SPS measures are that they be applied only to the extent necessary,⁴⁴ that they be based on scientific principles and not maintained without sufficient scientific evidence,⁴⁵ that they not arbitrarily or unjustifiably discriminate between measures,⁴⁶ that they not be a disguised restriction on trade,⁴⁷ and that they not be more trade-restrictive than required.⁴⁸ Importantly, none of these requirements seeks to limit a state's ability to protect itself from a health threat. The rules focus instead on limiting the restrictions on trade

44. SPS Agreement art. 2(2).

45. *Id.* arts. 2(2), 5(1), 5(2).

46. *Id.* arts. 2(3), 5(5).

47. *Id.* arts. 2(3), 5(5).

48. *Id.* art. 5(6).

that result from an SPS measure, preventing discrimination, and, to guard against abuse, ensuring that there is at least some evidence in support of the measure. If the goal were to constrain the decision of a state with respect to the risk it is willing to accept, one would expect a much more robust test with, for example, a minimum threshold of risk.

From a normative perspective, differences in risk tolerance or in the interpretation of scientific evidence should be permitted. This is true for several reasons. First, states may have different preferences, as already discussed. When states' preferences differ, divergent policies make sense. Second, countries that are differently situated may make different policy decisions, even if their underlying preferences are identical. A poor country, for example, may choose to allow the importation of hormone-treated meat that carries a risk (or for that matter a certainty) of negative long-term effects in order to fight hunger, malnutrition, and starvation in the short term. A richer country, on the other hand, may prefer to avoid the less expensive but potentially harmful meat. Even when both countries are acting responsibly and seeking to maximize the welfare of their citizens, they may make different decisions. To insist that the countries adopt a common policy would impose a needless cost on the country that must abandon its preferred policy. Finally, diversity across states generates innovation and encourages debate, both of which contribute to a better understanding of health and safety policies.⁴⁹

To highlight the relationship between WTO review and this sort of legitimate and healthy diversity, it is helpful to assume for the moment that states act without protectionist motives—i.e., that their decisions with respect to SPS measures are motivated entirely by health and safety concerns.⁵⁰ Under the admittedly strong assumption that states are motivated only by health and safety concerns, the case for deference to domestic policy decisions is compelling.⁵¹ For any form of global

49. See, e.g., Paul B. Stephan, *The Futility of Unification and Harmonization in International Commercial Law*, 39 VA. J. INT'L L. 743, 792-93 (1999).

50. This assumption is relaxed in the next section and throughout the remainder of the Article.

51. A state that is motivated by health and safety concerns may choose from a range of possible policies to achieve their health and safety goals. Some of these policies may impose greater costs on foreign producers of the good while others impose costs on domestic actors. For example, in the *EC—Asbestos* case, Canada argued that France could adopt a policy of “controlled use” of asbestos rather than through a ban. See European Communities—Measures Affecting Asbestos and Asbestos-Containing Products, WT/DS135/AB/R, 2001 WL 256081, ¶¶ 162, 165 (WTO Mar. 12, 2001) [hereinafter *EC—Asbestos*]. One can imagine that a state would select the policy that imposes costs on foreigners rather than locals, even if the former is more expensive overall. In this circumstance, the case for deference must be qualified, because ideally we would like to have states use the most efficient tools to achieve their health and safety goals. Problems of this sort are addressed through the least restrictive means test in article 5(6) of the SPS Agreement, and this requirement is discussed later in the Article. See *infra* notes 106-112

policymaking to improve on the performance of domestic governments, then, the global policymaker must have a better sense of domestic preferences than decision-makers in the individual states.

At the WTO, policymaking occurs through the dispute settlement process.⁵² If the Appellate Body were better at creating rules to serve the interests of states and their citizens than are the states themselves, one could advance a case for rulemaking by the Appellate Body.⁵³ It is clear, however, that domestic governments are better at satisfying the needs of their citizens than is the Appellate Body. One reason for this is that the Appellate Body is a tribunal rather than a legislature. It is not structured to study problems, to consider potential solutions, or to select the best possible policies. Instead, it addresses one case at a time, without control over its content, and can only respond to the particular facts of the case. This means that the Appellate Body lacks both the resources to identify the preferred policies and the opportunity to implement a coherent regulatory regime. For the same reasons, the Appellate Body is also poorly suited to the evaluation of scientific claims.

A second problem with rulemaking by the Appellate Body is that its members are not accountable to anyone. The Appellate Body is not elected, and members cannot be removed by any elected official; indeed, members can only be removed under exceptional circumstances.⁵⁴ Third, there are no checks on Appellate Body decisions. In practice, there is no higher authority to review its

and accompanying text.

52. The other realistic way to engage in global policymaking is (directly or indirectly) through international agreement. International intellectual property issues, for example, are regulated directly through the TRIPs Agreement. See Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, WTO Agreement, Annex 1C, LEGAL INSTRUMENTS—RESULTS OF THE URUGUAY ROUND vol. 31, 33 I.L.M. 81 (1994). To a certain extent SPS measures are also governed in this way, though it is done less directly and with reference to international standards formulated outside the WTO. The SPS Agreement, for example, references the Codex Alimentarius Commission. SPS measures which correspond to relevant international standards are presumed consistent with a state's WTO obligations. See SPS Agreement art. 3(2), Annex A(3). This Article takes no position on the way in which international standards are dealt with by the SPS Agreement.

53. This assertion even assumes the Appellate Body's willingness and ability to allow for heterogeneous policies.

54. See Understanding on Rules and Procedures Governing the Settlement of Disputes, Annex 2, art. 17, LEGAL INSTRUMENTS—RESULTS OF THE URUGUAY ROUND VOL. 31, 33 I.L.M. 112 (1994) ("The DSB shall appoint persons to serve on the Appellate Body for a four-year term, and each person may be reappointed once."); *Global Governance*, *supra* note 2, at 336-45 (providing a detailed discussion of the legitimacy problem facing decisions of the WTO's dispute settlement body).

decisions, and there is essentially no legislative check.⁵⁵ This stands in contrast to domestic governments, where legislators must answer to the electorate and can (in general) overrule court decisions through legislative action.⁵⁶ Without either accountability or checks on Appellate Body decisions, the institution lacks the legitimacy to craft effective, policy-driven solutions.

Finally, the Appellate Body has no mechanism that would allow it to gauge the preferences of individuals. How can the Appellate Body know whether a particular population has a legitimate concern about a particular product? Appellate Body members are not expected to stay in touch with the wants and needs of any particular population and are not provided with any mechanism with which to do so. It is inconceivable that they would have a sense of local preferences that compares to that of domestic officials.⁵⁷

Simply put, the Appellate Body is not designed to make policy decisions or even to compare alternative policies. It has no way to evaluate the needs of member states and choose policies that address those needs. Furthermore, the WTO as it is currently conceived is not intended to supplant domestic regulatory choices.⁵⁸ States remain responsible for making their own regulatory choices. The case for deference is even stronger once one considers that panels and the Appellate Body are unable to accurately identify the preferences and goals of states and lack legitimacy. Under the assumption that states

55. Formally, there are some checks on the Appellate Body. An Appellate Body decision must be adopted by the Dispute Settlement Body—consisting of representatives from every member state—before it is effective. This adoption, however, is automatic unless there is consensus against adoption. This consensus must include the winning party in the case and is, therefore, virtually impossible to achieve. Appellate Body decisions can also be overruled by the Ministerial Conference, which has the authority to alter the obligations of states. *See* WTO Agreement art. IV(1). Appellate Body decisions may also be affected by the adoption of an “interpretation” of the relevant WTO agreement. This can be done by the Ministerial Conference or the General Council. *See id.* art. IX(2). As a matter of practice, however, these decisions also require a consensus among WTO members, greatly restricting the ability to members to check the Appellate Body.

56. It is true, of course, that not all members of the WTO are democracies. One could imagine an argument that panels and the Appellate Body are more likely to serve the interests of citizens than non-democratic governments. This argument, however, is beyond the scope of the present discussion.

57. Moreover, the Appellate Body is likely to have a pro-trade bias when it makes its decisions. *See Global Governance, supra* note 2, at 333 n.118; Sara Dillon, *Fuji-Kodak, the WTO, and the Death of Domestic Political Constituencies*, 8 MINN. J. GLOBAL TRADE 197, 208-09 (1999); James Thuo Gathii, *Re-Characterizing the Social in the Constitutionalization of the WTO: A Preliminary Analysis*, 7 WIDENER L. SYMP. J. 137, 155 (2001) (“[A] pro free-trade bias in the interpretation of the WTO’s mandate prevails over social issues.”).

58. *See Sykes, Sovereignty, supra* note 16, at 354.

behave without protectionist goals, these reasons would suffice to leave decisions in the hands of states without review at the WTO. Therefore, the trading system only constrains these decisions to the extent they are used for protectionist purposes.

B. *Regulatory Protectionism and WTO Review*

States, of course, sometimes use SPS measures to pursue protectionist goals. Accordingly, the underlying assumption in this subsection and for the balance of the paper is that states act in their own interests and without regard for the interests of other countries.⁵⁹ Under this assumption, panels and the Appellate Body may serve an important function in restricting the actions of states and discouraging the adoption of health and safety measures that represent no more than protectionism with a thin SPS justification.⁶⁰

WTO decisions, though less attuned to the preferences of individual citizens, have the merit of being unbiased. To illustrate the benefits of relying on the Appellate Body, assume that all states and individuals react to risk in the same way. Imagine a dispute between the United States and the EC, such as the *Hormones* or *GMO* cases.⁶¹ Assume that the EC has restricted the importation of certain goods and claims that this measure is justified under the SPS Agreement. The United States, in contrast, allows the importation and consumption of the products in question without restriction.⁶²

Given the assumption that the United States and the EC respond to risk in the same way, there is no reason to favor one interpretation over the other. That is, there is no reason to think that the EC measures serve the health and safety interests of EC citizens more than would the U.S. rules. That the states have a dispute signals either that one of them is posturing and using SPS arguments to achieve some other objective or that one of them is simply mistaken about which is the better policy.

59. See Andrew T. Guzman, *Choice of Law: New Foundations*, 90 GEO. L.J. 883, 886 (2002) (providing a general theory of the relationship between state policies and global welfare).

60. Even with respect to protectionist measures, however, some of the benefits of leaving decisions in the hands of individual states remain. As discussed in the previous subsection, states are more likely than a panel or the Appellate Body to know and respond to the preferences of their citizens, and they have a great deal more legitimacy when adopting rules.

61. *Hormones*, *supra* note 4; *GMO*, *supra* note 1.

62. See Kim J. Donat, *Engineering Akerlof Lemons: Information Asymmetry, Externalities, and Market Intervention in the Genetically Modified Market*, 12 MINN. J. GLOBAL TRADE 417, 423-29 (2003) (describing the alternative regulatory approaches of the United States and the EC with respect to GMOs).

The American willingness to accept the risk at issue may be motivated by the fact that American producers stand to profit from the sale of the relevant product. If the United States is a net exporter of that product, it can enjoy these profits while externalizing some of the associated costs onto foreigners (Europeans in this example). A U.S. policymaker must balance the economic benefits from production and sale of the good in question against the risks of that product. The policymaker will only take into account the potential harm from consumption that takes place within the United States. When a substantial share of production is exported, the United States is more likely to allow local production and consumption.⁶³ On the other hand, the Europeans also may be acting disingenuously. They may perceive the risk to be small (or nonexistent) but nevertheless prefer to ban the product to protect European producers of competing goods.

In this example, there is no obvious reason for the WTO to show deference to either member. The only thing we know for certain is that a state that internalized all the costs and benefits of the product would adopt a policy that lies somewhere between the policies chosen by these members. In such an environment, where the states themselves cannot agree on the preferred outcome, it makes sense to rely on a neutral tribunal such as the Appellate Body. Though the Appellate Body is less capable than states to observe the preferences of citizens, there is no particular worry about accuracy, at least when compared to the policies of the United States and the EC. These states have, by assumption, common preferences over health and safety matters and a common view of the scientific evidence. Without information on the reasons why one or both have distorted their policies, the only way to choose between them is for the Appellate Body (or a panel) to make a judgment.

The Appellate Body could carry out its own analysis and choose the policy of the state that most closely fits the findings of that analysis. Because the Appellate Body brings an unbiased perspective, it is likely to choose the policy that is closer to the true non-protectionist policy preference of the states. Furthermore, recognizing that both states' policies may be distorted, the Appellate Body could do even better by carrying out its own analysis and identifying what it believes to be the best policy. As long as the result lies somewhere between the proposed policies advanced by the states, it must be closer to the true preferences of the states than at least one of the proposed policies, and possibly

63. The United States could, of course, allow local production but forbid local consumption. This policy, however, would make it difficult for the United States to credibly claim that there is no health risk associated with the product.

both.⁶⁴

The assumption of homogenous preferences is not as far-fetched as it may initially seem. In at least some areas of trade law, we typically imagine that all states have a common set of preferences. Thus, for example, we are fairly comfortable with significant WTO review of claims alleging a violation of the national treatment obligation. The system assumes—or at least asserts—that all states believe national treatment to be desirable and that there are no significant differences as to how and when it should apply.⁶⁵ The system does not acknowledge legitimate reasons for divergent state preferences with respect to national treatment. Accordingly, the WTO feels free to carry out a detailed review of the facts of the case and the disputed measure. It then issues a ruling without any particular deference to the defendant's decision to adopt the measure. The panel or Appellate Body simply determines whether the measure is consistent with the national treatment rules as they appear in the General Agreement on Tariffs and Trade (GATT) or other covered agreements and as they have been elaborated in the relevant case law. This posture makes sense because the diversity in local preferences is thought to be modest and is, therefore, trumped by the need for an unbiased review of the case.

IV. WHY SPS IS SPECIAL

A. *Standards of Review at the WTO*

The prior section shows that if states have a common attitude toward risk and use their trade policy strategically, there is a strong case for de novo WTO review of SPS measures. Section III.A, however, shows that if the SPS measures are based on an honest evaluation of the preferences of citizens, without a strategic attempt to impose costs on foreigners, the best policy would be to defer to the SPS measures of WTO members.

The more difficult problem, of course, lies in determining the preferred WTO posture when states have diverse preferences *and* use SPS measures strategically. On the one hand, domestic governments are better at identifying the wishes of their citizens, including attitudes

64. Of course the panels and the Appellate Body do not carry out a full-blown review of their own under the existing regime. The point here is that given the assumption of homogeneous preferences, there is no obvious reason to defer to the decisions of the enacting state.

65. See, e.g., WTO Appellate Body Report, Japan—Taxes on Alcoholic Beverages, WT/DS8,10,11/AB/R (adopted Nov. 1, 1996).

toward risk, and they are better at evaluating science. On the other hand, they have parochial interests and adjust their policies in an attempt to protect powerful local interests and capture benefits while imposing costs on foreigners. These offsetting effects make it difficult to establish the proper balance between deference and de novo review at the WTO without empirical evidence on the relative costs of the alternative postures the WTO might take. It is possible, however, to draw conclusions about the merits of WTO review in the SPS context as compared to other trade disputes. To do so requires an inquiry into the features of SPS measures that make this a unique area of law.

Consider first the conventional standard of review in a WTO dispute.⁶⁶ In the interests of clarity, imagine a complaint that alleges a violation of the Safeguards Agreement.⁶⁷ Discussion of the appropriate standard of review begins with the text of Article 11 of the DSU, which states that the panel should “make an objective assessment of the matter before it, including an objective assessment of the facts of the case and the applicability of and conformity with the relevant covered agreements.”⁶⁸ This is only somewhat helpful, however, because it is hard to know what constitutes an “objective assessment of the facts.” Several WTO cases have addressed this question, though most give only modest guidance beyond what is clear from the text of the DSU.⁶⁹ The lesson from the Appellate Body’s jurisprudence is that although there should be something less than de novo review, panels should nevertheless conduct a substantive evaluation of the member state’s decision to adopt a measure. The best statement to this effect is the following:

[A] panel can assess whether the competent authorities’ explanation for its determination is reasoned and adequate *only* if the panel critically examines that explanation in depth, and in light of the facts before the panel. Panels must, therefore, review whether the competent authorities’ explanation fully addresses the nature, and, especially, the complexities of the data, and

66. For a discussion of the proper standard of review for WTO panels examining domestic policies, see Steven P. Croley & John Jackson, *WTO Dispute Procedures, Standard of Review, and Deference to National Governments*, 90 AM. J. INT’L L. 193 (1996).

67. Agreement on Safeguards, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1869 U.N.T.S. 154 (1994).

68. DSU art. 11.

69. See, e.g., WTO Appellate Body Report, *Argentina—Safeguard Measures on Imports of Footwear*, WT/DS121/AB/R, 1999 WL 1201339, ¶ 121 (WTO Dec. 14, 1999); WTO Panel Report, *United States—Restrictions on Imports of Cotton and Man-Made Fibre Underwear*, WT/DS24/R, 1996 WL 910165, ¶ 7.13 (WTO Nov. 8, 1996).

responds to other plausible interpretations of that data. A panel must find, in particular, that an explanation is not reasoned, or is inadequate, if some alternative explanation of the facts is plausible, and if the competent authorities' explanation does not seem adequate in the light of that alternative explanation.⁷⁰

The review applied outside the SPS context, then, is considerably more substantive than what is done in an SPS case.⁷¹ One could certainly imagine a regime in which a panel or the Appellate Body would make an "objective assessment of the facts" in an SPS case and "critically examine" the authorities' explanation. The Appellate Body would then make its ruling based on its own determination of whether the risk assessment justified the measure in dispute.

In fact, as discussed in Part II, as long as the procedural requirements of the SPS Agreement are met, the panel or Appellate Body demands only that there be a "rational relationship" between the measure and the risk assessment.⁷² The difference between the general standard and the SPS standard is not based on textual language in the SPS Agreement. In fact, the SPS Agreement, like the Safeguards Agreement interpreted above in *United States—Lamb*, is silent on the question of the appropriate standard of review. Rather, the difference between the general standard and that used in the SPS context is a product of Appellate Body jurisprudence.

This discussion raises the question of whether the divergence between the standard of review applied in the SPS context and that applied in other areas is justified. This Article argues that SPS cases differ from, for example, safeguards cases in important ways that mitigate in favor of a less stringent review by the WTO. Therefore, the Appellate Body should give even more deference to government decisions than it does under the current regime.

70. WTO Appellate Body Report, *United States—Safeguard Measures on Imports of Fresh, Chilled or Frozen Lamb Meat from New Zealand and Australia*, WT/DS177 & 178/AB/R, 2001 WL 470667, ¶106 (WTO May 1, 2001) [hereinafter *United States—Lamb*].

71. The Anti-Dumping Agreement differs from other areas in that it lays out its own standard of review which is much more deferential than that which is applied in other trade cases. See Agreement on the Implementation of Article VI of the General Agreement on Tariffs and Trade 1994, Apr. 15, 1994, WTO Agreement, Annex 1A, LEGAL INSTRUMENTS-RESULTS OF THE URUGUAY ROUND vol. 27 (1994) art. 17.6(i), reprinted in H.R. DOC. NO. 316, 103rd Cong. (1994), available at <http://www.worldtradelaw.net/uragreements/adagreement.pdf> [hereinafter *Antidumping Agreement*].

72. See *supra* Part II.

B. *SPS and the Problem of WTO Review*

The central thesis of this Article—that WTO review of SPS measures should be more deferential—stems from the recognition that SPS disputes challenge government decisions that are central to a state's sense of sovereignty and authority. The relevant decisions are: (i) conclusions drawn from existing scientific evidence;⁷³ (ii) decisions about how a state should react to health and safety risks;⁷⁴ and (iii) the relationship between science and the proposed measure. This section explains that the expected costs of WTO review and WTO mistakes are relatively high (as compared to other types of disputes), while the benefits of relying on the WTO are essentially the same as those in other trade disputes. The conclusion, then, is that there should be a more deferential standard of review in SPS cases than in other trade disputes, such as anti-dumping or safeguards cases. To illustrate this result, this Section first examines the benefits of WTO review in the SPS context and then turns to the associated costs.

1. *The Benefits of WTO Review*

WTO review is valuable, as previously discussed,⁷⁵ as a mechanism to discourage states from engaging in conduct prohibited by WTO rules.⁷⁶ When effective, WTO review succeeds by either deterring illegal conduct or causing a state to remove an illegal measure sooner than it otherwise would.

The benefits of removing a trade barrier depend on the particularities of the trade measure rather than on the reasons the measure was adopted. A ban on the importation of a product, for example, has the same trade impact whether that ban is justified as an SPS measure or as a safeguard. The magnitude of that impact depends on a variety of factors related to the structure of the market in question, such as the size of the trade barriers and the size of the relevant market. The key point is that the factors that might affect the size of the impact of the measure have no evident relationship to whether the justification for the measure invokes the SPS Agreement. Absent some reason to think that trade barriers adopted under the SPS Agreement have a systematically larger or smaller impact than that of other trade barriers, one cannot a priori

73. See SPS Agreement arts. 2(2), 3(3), 5(2).

74. See *id.* arts. 3(3), 5(1).

75. See *supra* Part III.B.

76. This includes any nullification or impairment of benefits under GATT XXIII, including both violation and non-violation nullification and impairment. See General Agreement on Tariffs and Trade, Oct. 30, 1947, art. XXI, 55 U.N.T.S. 194 [hereinafter GATT].

say that the avoidance of trade barriers in the SPS area is consistently more or less valuable than avoidance of trade barriers in other areas, such as safeguards or anti-dumping. The benefits of WTO review, then, offer no reason to favor a different level of review in SPS cases than in other cases.

2. *The Costs of WTO Review*

Given the above conclusion about the benefits of WTO review, the appropriate standard of review in the SPS context (relative to other contexts) depends on the magnitude of the costs generated by that review. This section demonstrates that the relevant costs are systematically higher in SPS disputes than in more traditional trade disputes. Specifically, the WTO dispute settlement organs are more likely to make mistakes in SPS cases than in, say, safeguards cases, and when mistakes are made, they are likely to be larger in magnitude.

a. The Likelihood of WTO Error

As discussed in Part III, the WTO cannot gauge the preferences of a member state as well as the government of that state. WTO dispute resolution bodies, therefore, are more likely to err in their evaluation of the level of risk that a state's population is prepared to accept. This risk of error exists, of course, in all WTO disputes. For instance, the panel or Appellate Body is also less capable of accurately estimating the likely injury in a safeguards case than is a domestic government. SPS cases differ from conventional trade disputes, however, in that domestic preferences toward risk and domestic evaluations of scientific evidence are more likely to differ from state to state. The United States, for example, has shown very little concern about the risks of beef treated with growth hormones, while European nations have serious concerns about that same beef. These differences are plausibly the result of fundamentally different views on the reliability of science, acceptable levels of risk, the level of precaution judged appropriate in policymaking, and the tradeoffs between public health and economic gain. In contrast, the merits of safeguard or anti-dumping measures rely on an economic analysis that is not closely tied to local preferences. Some states may worry more about dumping, than others, and some populations may view low-priced imports with greater or lesser suspicion, but there is no reason to think that preferences differ radically from state to state.

The more preferences diverge across states, the more difficult it is for

a panel or the Appellate Body to estimate those preferences. If all states have essentially the same attitude toward dumping, for example, a panel or the Appellate Body can carry out its own evaluation, and as long as the result lies within the range defined by the disputants' positions, there is no serious concern about accuracy. Though mistakes will still be made, the result will certainly be more accurate than in an SPS dispute, where every state is likely to have its own idiosyncratic preference toward risk and its own attitudes toward scientific evidence. The panelists in the SPS context must somehow determine the true preferences of a state without reference to the preferences of other states, and must do so despite the fact that all parties to the case have an incentive to misrepresent these preferences. As a result, it is more likely that the actual and legitimate preferences of a state toward risk and its actual view of science will diverge significantly from that of a panel or the Appellate Body.

In addition to differences in preferences—by which I mean a particular state's willingness to tolerate risk—states differ in the way they evaluate scientific evidence. This is more relevant in SPS cases than in traditional trade disputes, because the former require a “risk assessment” and (under current WTO jurisprudence) a rational relationship between the measure and the risk assessment.⁷⁷

For a panel or the Appellate Body to determine if a rational relationship exists, it must consider the risk assessment. As is often repeated in the legal literature on the SPS Agreement, the use and evaluation of scientific evidence is a subjective exercise.⁷⁸ Scientific evidence is often disputed within the scientific community, making it necessary for policymakers to evaluate that evidence themselves. In addition, states may not agree on what evidence qualifies as “good” or acceptable science. One state may view a particular piece of evidence as unscientific and, therefore, irrelevant, while another may view it as valid science to be taken into account. Even if states could agree on the quality of scientific evidence presented, a host of other issues can make that evidence contentious, including the way in which the risk of harm is defined, the types of harms that merit concern, and the likelihood that a particular measure would effectively reduce a particular risk. As with divergent risk preferences, if states have different views of what constitutes good science or how to interpret scientific evidence, a panel or the Appellate Body will have great difficulty in determining whether the defendant state is, in fact, acting out of a sincere belief that the

77. SPS Agreement art. 5(1).

78. See Charnovitz, *Improving the Agreement*, *supra* note 18, at 172.

science indicates a significant health risk or is merely making claims about the science to justify its protectionist measures.⁷⁹

The above problem is aggravated by the fact that panels and the Appellate Body are poorly equipped to evaluate scientific evidence. The dispute resolution organs of the WTO are typically staffed by individuals without scientific expertise operating under tight time constraints.⁸⁰ These bodies also lack the resources to carry out their own investigation in anything more than a cursory way. Without the appropriate expertise, resources, staffing, budgets, or time, these tribunals cannot be expected to carry out a thorough and informed evaluation of the evidence presented. Nevertheless, under the current rules, they have the responsibility of determining whether there is a rational relationship between the risk assessment and the disputed measure.⁸¹ The practice of appointing scientific experts to inform panels helps mitigate these problems but cannot resolve them, since it is not the experts who must make a final decision.⁸² In the end, a panel or the Appellate Body must evaluate the evidence presented by experts as well as by the parties. This evaluation becomes even more difficult when

79. For a more detailed discussion of the difficulties associated with appealing to science and the difficulty in identifying "neutral" science, see Walker, *Myth of Science*, *supra* note 18; Vern R. Walker, *The Siren Songs of Science: Toward a Taxonomy of Scientific Uncertainty for Decisionmakers*, 23 CONN. L. REV. 567 (1991); David A. Wirth, *The Role of Science in the Uruguay Round and NAFTA Trade Disciplines*, 27 CORNELL INT'L L.J. 817 (1994).

80. See DSU art. 12(8) ("[T]he period in which the panel shall conduct its examination, from the date that the composition and terms of reference of the panel have been agreed upon until the date the final report is issued...shall, as a general rule, not exceed six months."); Christoforou, *supra* note 17, at 627.

81. These tribunals are also called upon to evaluate the merit of scientific evidence. It is true that states can use minority scientific views in their risk assessment, but these views still must meet some minimum level of scientific legitimacy. "[G]overnments may act in good faith on the basis of what, at a given time, may be a divergent opinion coming from *QUALIFIED AND RESPECTED SOURCES*." *Hormones*, *supra* note 4, ¶ 194 (emphasis added). Panels and the Appellate Body must therefore determine whether scientific evidence meets this standard. In the *Hormones* case, for example, the Appellate Body dismissed the opinion of one of the scientific experts, Dr. Lucier. The Appellate Body stated that "this opinion by Dr. Lucier does not purport to be the result of scientific studies carried out by him or under his supervision focusing specifically on residues of hormones in meat." *Hormones*, *supra* note 4, ¶ 198. Whether this judgment by the Appellate Body was right or wrong, it certainly represents the evaluation of scientific evidence.

82. Article 13 of the DSU provides that a panel may seek information from "any individual or body which it deems appropriate." DSU art. 13(1). When dealing with scientific or technical matters, this consultation can take the form of a written report from an advisory group. DSU art. 13(2). Notice that these provisions do not provide a budget for investigation by panels or for the initiation of any new studies. Panels are thus essentially limited to asking one or more experts for their views on the matter.

relevant experts hold divergent views.⁸³

The fact that preferences about health and safety measures diverge across states means that a panel or the Appellate Body is more likely to make a mistake when evaluating these measures than when it evaluates other types of trade barriers, such as safeguards. It is more likely in the SPS context for the tribunal to find a measure that was in fact adopted out of a sincere concern about health to be a violation or, alternatively, to find a measure intended to serve a protectionist goal to be permissible.

b. The Magnitude of WTO Errors

In addition to the fact that panels and the Appellate Body will make more mistakes in the SPS context than in traditional trade disputes, the mistakes they do make will tend to be larger in magnitude. There is a wide array of ways in which a WTO mistake can impose costs on the parties and the trading system. Because SPS cases cut close to the heart of state sovereignty and domestic authority, WTO errors can result in increased strain on the trading system, losses to the residents of the violating state, losses to the residents of the sanctioning state, increased international tension, and a loss of legitimacy for the WTO.

One view of why these costs are particularly large in the SPS context can be illustrated as follows. Assume a state has adopted an SPS measure out of a sincere concern for human health. Now imagine that the measure is challenged by another WTO member and that the Appellate Body ultimately finds the measure to be a violation, ruling that it must be removed. Since individuals in the first state now face health risks greater than what they are willing to accept, the WTO's decision has imposed large costs on that state.⁸⁴

Though one can find this argument in the legal literature,⁸⁵ it exaggerates the power of the WTO to affect domestic policy and underestimates the autonomy of member states. Faced with a loss at the Appellate Body, a state can simply decide to maintain its SPS measure. Such an action may provoke a response from the victorious complaining

83. See, e.g., *Japan—Measures Affecting Agricultural Products*, *supra* note 38, ¶ 7.408 (“[W]e are called upon to examine and to weigh all the evidence...including the opinions we received from the experts advising the Panel.”). This statement by the panel received the explicit support of the Appellate Body in that case. See *Japan—Agricultural Products*, *supra* note 4, ¶ 127.

84. See Chang, *supra* note 18, at 749 (pointing out that even if fears are irrational, exposure to health and safety risks reduces welfare).

85. See, e.g., Christoforou, *supra* note 17, at 644 (“A wrongful finding could have potentially disastrous effects on the lives of millions of people.”).

party, but that response is limited by the DSU. If a party fails to bring the disputed measure into compliance after losing a case, the complaining party can eventually receive authorization to suspend concessions made to the non-compliant party.⁸⁶ The resulting sanctions, however, are limited to the “level of nullification or impairment” caused by the illegal measure.⁸⁷ This language is understood to mean that the sanctions cannot exceed the ongoing economic costs suffered by the complainant.

It is easy to imagine that a state might prefer the costs of a “withdrawal of concessions” to exposing itself to products that it considers harmful or potentially harmful to health and safety.⁸⁸ This is especially true in the SPS context because the state must balance the economic harm of the suspension of concessions against the non-economic harm of removing the health measure. When the losing defendant has strong feelings about the disputed measure—as is likely for a health and safety measure—the withdrawal of concessions will often be insufficient to generate compliance.⁸⁹ In other words, the scenario in which a state is “forced” to admit products that it considers dangerous is improbable.⁹⁰

This more realistic view of the WTO’s ability to compel compliance and force a state to open its borders does not, however, defeat the claim that mistakes in SPS cases will be larger in magnitude than mistakes in other cases. These higher costs do not stem from the opening of markets to products that locals consider too risky but rather from the systemic costs of demanding that a state, as a matter of law, eliminate a measure in an area of great importance to that state and one perceived to be central to its sovereignty.

From the perspective of a losing defendant, there are several reasons why compliance with an SPS decision will often be more costly than compliance with, say, an anti-dumping decision. First, as discussed above, opening the market to a product that is perceived to be dangerous imposes large costs on individuals within the state who are exposed to

86. DSU art. 22(2).

87. *Id.* art. 22(4).

88. See Steve Charnovitz, *Rethinking WTO Trade Sanctions*, 95 AM. J. INT’L L. 792, 820 (2001) (using the *Hormones* cases as an example).

89. This is what has happened to date in the *Hormones* case. See *Hormones*, *supra* note 4.

90. Because the WTO enforcement system will impose cost on the losing state, we expect, of course, to see at least some states changing their policies in response. These states, however, are the ones who are least committed to the SPS measure in question. That is, states that choose to comply will be those that place the lowest value on retaining the SPS measure.

risks beyond what they wish to accept.

Second, from a political perspective, opening the local market in compliance with a WTO ruling can make political leaders appear to be more concerned about currying favor with the WTO than protecting the interests of locals. Put another way, because health and safety are important for voters, political leaders who bend to pressure from the WTO may fall out of favor with the public.⁹¹

Third, the regulation of health and safety goes to the heart of national sovereignty.⁹² There is widespread acceptance of the idea that national governments are charged with protecting their citizens from harmful health effects,⁹³ and attempts by the WTO to insert itself into that policymaking process generate antagonism and resistance.⁹⁴ This reality makes it especially difficult for states to comply with SPS rulings. Compliance suggests a greater compromise of sovereignty than is the case in conventional trade disputes.⁹⁵ It indicates that an international tribunal can monitor not only trade measures but also policies that have long been thought to be entirely within the purview of domestic authorities. With the exception of national security issues, it is hard to imagine a greater intrusion on conventional notions of sovereignty. Faced with larger political and social costs from compliance, states will comply less, as we have seen in the *Hormones* case.⁹⁶ A similar result may well emerge from the *GMO* case currently before the WTO.

When states refuse to comply or refuse to comply in full with a WTO ruling, the WTO system is placed under strain. Non-compliance

91. See, e.g., Bohanes, *supra* note 18, at 348-49 (“[T]he SPS Agreement...may be politically and socially too sensitive, to the extent that the losing party will simply refuse to comply with the WTO ruling for lack of domestic political support.”).

92. See Jeffery Atik & David A. Wirth, *Science and International Trade—Third Generation Scholarship*, 26 B.C. INT’L & COMP. L. REV. 171, 172-73 (2003) [hereinafter *Third Generation Scholarship*] (“Reducing regulatory freedom-of-action strikes the heart of national political autonomy—sovereignty, if you will. This is particularly so in areas such as environmental and food safety regulation, where the people have long-standing and legitimate expectations of protection by their governments.”).

93. See *id.*

94. Steve Charnovitz, *The Supervision of Health and Biosafety Regulation by World Trade Rules*, 13 TUL. ENVTL. L.J. 271, 301 (2000)

(“Every time [the WTO] declares an SPS measure to be WTO-illegal, there will be consumers who lament a perceived loss in health security. Already there are many non-governmental organizations around the world who oppose the WTO because they believe that it privileges trade over a healthy environment. The WTO rules on food safety were one of the chief targets for protestors at the WTO Ministerial Conference in Seattle.”).

95. See Chang, *supra* note 18, at 747 (“[T]he EU asserted that its ‘economic sovereignty’ was at stake in the hormones dispute.”).

96. See *Hormones*, *supra* note 4.

generates a series of costs that have the potential to harm the WTO and international trade. The most obvious cost has already been discussed. When a state refuses to comply with a ruling the complaining party can eventually be granted authorization to adopt trade sanctions. These sanctions are intended to encourage compliance,⁹⁷ but they may stay in place indefinitely if the defendant prefers the sanctions to compliance. An indefinite sanction of this sort imposes costs on both the defendant and the complainant. It follows that everybody would be better off if an SPS measure were permitted (or at least not condemned by a panel or the Appellate Body) than if it were ruled a violation and that ruling generated a suspension of concessions from the complainant but no change to the challenged SPS measure. In this example, the ruling serves only to add an *additional* trade barrier to the international trading system. If, instead, the panel or Appellate Body simply did not review the substantive aspects of the measure, the costs associated with a pro-complainant decision would be avoided. In this example, a substantive review of the case reduces the welfare of all parties involved.⁹⁸

Non-compliance also generates another, more subtle, yet equally important set of costs. When states ignore the rulings of panels or the Appellate Body, the credibility of the WTO is eroded. Much of the power of the organization and the dispute resolution procedures emanates from the ability of the WTO to resolve conflicts and to bring violative measures into compliance. When states refuse to comply, the dispute resolution system loses some of its strength, and future cases become more difficult to resolve.⁹⁹ Nor is the credibility loss limited to the dispute settlement procedures. The WTO itself is weakened when it fails to generate compliance with its rulings.¹⁰⁰

97. See DSU art. 22(8) ("The suspension of concessions or other obligations shall be temporary and shall only be applied until such time as the measure found to be inconsistent with a covered agreement has been removed.").

98. This is an application of the more general notion that if the imposition of sanctions is socially costly, the optimal level of such sanctions is lower than if the sanctions are costless. See Louis Kaplow, *A Note on the Optimal Use of Nonmonetary Sanctions*, 42 J. PUB. ECON. 245 (1990); A. Mitchell Polinsky & Steven Shavell, *The Optimal Use of Fines and Imprisonment*, 24 J. PUB. ECON. 89 (1984); Steven Shavell, *Criminal Law and the Optimal Use of Nonmonetary Sanctions as a Deterrent*, 85 COLUM. L. REV. 1232 (1985). For an application of this theory to international agreements, see Andrew T. Guzman, *The Design of International Agreements*, (2004), at <http://ssrn.com/abstract=487662>.

99. See George H. Rountree, *Raging Hormones: A Discussion of the World Trade Organizations' Decision in the European Union-United States Beef Dispute*, 3 GA. J. INT'L & COMP. L. 607, 633 (1999).

100. See Robert E. Hudec, Daniel L. M. Kennedy, & Mark Sgarbossa, *A Statistical Profile of GATT Dispute Settlement Cases: 1948-1989*, 2 MINN. J. GLOBAL TRADE 1, 4 (1993) ("The

Furthermore, when an Appellate Body ruling is ignored, the legitimacy of the WTO is hurt in both the complainant and defendant states. In the defendant state the WTO is perceived as intruding on an area of domestic sovereignty. This resentment in the defendant state will also exist, of course, in the event of compliance. If the measure was adopted in good faith, the WTO ruling suggests that the state's own judgments about risk are not determinative. It is easy to see why this would generate hostility toward the WTO and why it would erode the legitimacy of the organization.¹⁰¹ The WTO may also suffer a loss of legitimacy within the complainant state. Having won the case, individuals in the complainant state will wonder why compliance is not forthcoming. The WTO's inability to generate compliance is likely to make it seem less relevant and less legitimate.

C. *Policy in the Face of Costly Mistakes*

Because both the likelihood of a mistake and the expected size of the harm from a mistake are larger in the SPS context, SPS measures should be subject to a weaker review at the WTO. Leaving the substantive decision in the hands of domestic authorities would reduce the risk of serious mistakes by a panel or the Appellate Body and would avoid the costs created when a losing defendant refuses to comply.

Notice that any approach that tasks panels and the Appellate Body with a substantive review of SPS measures is likely to generate more mistakes, and more costly mistakes, than is the case in other areas. As mentioned earlier, in the SPS context the WTO does not have the luxury of a middle ground between substantive review and regulatory sovereignty.¹⁰² It must either respect state decisions about science and risk or engage in its own evaluation of science and reach its own conclusions. Accordingly, it is not possible to tip the scales toward deference without simply accepting the decisions of member states with respect to these issues, as this Article recommends.

The policy recommendation that emerges from the analysis calls for deference to decisions based upon a state's willingness to tolerate risk, its evaluation of scientific evidence, and—contrary to current jurisprudence—the relationship between the risk assessment and the

primary test of a legal system is the extent to which the system can elicit compliance when a valid legal claim is asserted.”)

101. See Charnovitz, *supra* note 94, at 301 (“[T]here are grounds for worry that the SPS endangers public support for the trade regime.”).

102. See Howse, *Risk Regulation*, *supra* note 16, at 2334; Sykes, *Sovereignty*, *supra* note 16, at 355.

proposed measure.

With respect to the SPS's transparency and procedural requirements¹⁰³—the requirements that a measure not be arbitrarily or unjustifiably discriminatory,¹⁰⁴ that it not be a disguised restriction on trade,¹⁰⁵ and that it not be more trade restrictive than necessary¹⁰⁶—WTO review can and should proceed under the same standard of review as exists for most other trade disputes. These obligations do not implicate health and safety concerns in the same way as do decisions about science or risk. They can, therefore, be subjected to the WTO's normal standard of review.

To be fair, the distinction between non-discrimination and the “least restrictive means” requirements of Articles 5.5 and 5.6 on the one hand and the evaluation of scientific evidence and risk tolerance on the other will not always be clear cut. To demonstrate the problem, consider the non-discrimination requirement. To determine if there has been arbitrary and unjustified discrimination, a panel or the Appellate Body will, in some cases, have to evaluate the regulatory categories adopted by the defendant and ascertain the relative risks posed by them. For example, *Australia—Salmon* involved a dispute about what imports should be considered comparable to ocean-caught Pacific Salmon for purposes of the non-discrimination requirement of SPS 5.5.¹⁰⁷ The Appellate Body upheld a panel finding that the admission of imports of certain other fish, including herring, haddock, certain cod, and live finfish was comparable to the importation of ocean-caught Pacific salmon.¹⁰⁸ An assessment of this sort requires a panel or the Appellate Body to consider the relevant risks of the alternative products in a manner similar to the substantive review of domestic measures that this Article criticizes.¹⁰⁹

In some cases, then, a review of the non-discrimination requirement will unavoidably lead to a review of a risk assessment or the rationality of a particular measure relative to the alternatives. This problem does

103. SPS Agreement art. 7; *id.* annex B.

104. *Id.* arts. 2(3), 5(5).

105. *Id.*

106. *Id.* art. 5(6).

107. To be precise, the Appellate Body upheld a panel ruling that the Australian measure led to arbitrary and unjustified distinctions and that these distinctions resulted in discrimination or a disguised restriction on trade. See *Australia—Salmon*, *supra* note 4, ¶ 178.

108. See *id.* ¶ 146.

109. See Jeffery Atik, *The Weakest Link—Demonstrating the Inconsistency of ‘Appropriate Levels of Protection’ in Australia-Salmon*, 24 RISK ANALYSIS 483 (2004) (discussing *Australia—Salmon*).

not, however, undermine the overall proposal advanced in this Article. First, in many cases this sort of categorization issue will not come up.¹¹⁰ Second, avoiding a heavy-handed direct review of risk tolerance and assessment of science reduces the likelihood of costly errors associated with WTO review of health and safety measures. It is true that the proposal fails to eliminate all such errors, but surely that is no reason to object to a proposal that reduces their frequency. Finally, and perhaps most importantly, an Appellate Body decision that a state has violated the non-discrimination requirement does not force the state to choose between removal of the measure and non-compliance. The country can, if it chooses, extend the SPS measure to those other categories of products considered comparable to the product affected by the disputed measure. Indeed, this is precisely what happened in *Australia—Salmon*. Rather than scrap the measure, the Australian government modified the measure and placed restrictions on the products that had been found to pose comparable risks. Compliance did not require that Australia eliminate the restrictions on the importation of Canadian Salmon. Thus, when the WTO finds that a state has violated the non-discrimination requirement, the state's decision of whether or not to comply does not implicate the same domestic sovereignty concerns that are raised when the WTO finds a measure to be an SPS violation.¹¹¹

One might wonder where the Appellate Body gets the authority to determine the appropriate standard of review in SPS cases. This is a fair question, as the SPS Agreement itself does not specify a particular standard of review. In this sense one might view the proposed standard of review as a matter to be left to negotiators rather than the Appellate Body. The problem with this view is that the Appellate Body has already established a unique standard of review for the SPS Agreement.

Like the standard of review proposed herein, the rational relationship test is not provided for in the text of the agreements. So, if one believes that it would be inappropriate for the Appellate Body to adopt the standard of review proposed here, one must also believe that the Appellate Body should not have adopted the rational relationship test. There may be some observers who think the rational relationship test strays too far from the text of the WTO Agreements, but that discussion would take us far afield and well beyond the SPS Agreement. As such, it is left for another day. Those who believe the Appellate Body acted within the scope of its authority in establishing the rational relationship

110. See, e.g., *Japan—Agricultural Products*, *supra* note 4.

111. Canada subsequently challenged Australia's compliance but Australia prevailed. See *Australia—Salmon (21.5)*, *supra* note 38.

test, on the other hand, cannot reasonably claim that the proposals advanced in this Article lie too far outside the text of the agreements. It is also worth noting that there is precedent for the Appellate Body to consider the relative importance of domestic regulatory decisions when interpreting WTO commitments. It did precisely this, for example, when considering the article XX(d) exception to the GATT.¹¹²

Finally, it is relevant that the issue here is the standard of review applied by panels and the Appellate Body, not the substantive obligations of states. States would still have, for example, a legal obligation to base their measures on a risk assessment. It is only the WTO's review of these actions that is affected. Because the proposal focuses exclusively on the standard of review, it can be implemented entirely by the Appellate Body without any changes to the text of the SPS Agreement.

D. Implications

The proposal advanced in this Article would simplify the application of SPS measures and give domestic governments greater authority to implement their preferred policies. To illustrate these benefits in more concrete terms, this Article considers two current and controversial issues relating to health and safety—the *GMO* case and the role of the “precautionary principle.”¹¹³

1. The GMO Case

As previously mentioned, the United States, Canada, and Argentina have filed a complaint with the WTO relating to the EC's ban on genetically modified organisms (GMOs).¹¹⁴ This is a complex case, and a full analysis is beyond the scope of this article.¹¹⁵ It is sufficient for

112. See WTO Appellate Report, Korea Measures Affecting Imports of Fresh, Chilled and Frozen Beef, WT/DS161/AB/R, WT/DS169/AB/R, 2000 WL 1811011, ¶ 162 (WTO Dec. 11, 2000); *EC—Asbestos*, *supra* note 51, ¶ 172 (“[T]he more vital or important [the] common interests or values’ pursued, the easier it would be to accept as ‘necessary’ measures designed to achieve those ends.”). I owe thanks to Joel Trachtman for making this point to me.

113. See Claus, *supra* note 3, at 186-87; Michele M. Compton, *Applying World Trade Organization Rules to the Labeling of Genetically Modified Foods*, 15 PACE INT'L L. REV. 359, 377-78 (2003).

114. See *supra* notes 1-5 and accompanying text.

115. For a more extensive treatment, see Robert Howse & Petros C. Mavroidis, *Essay: Europe's Evolving Regulatory Strategy for GMOs—The Issue of Consistency with WTO Law: Of Kine and Brine*, 24 FORDHAM INT'L L.J. 317 (2000); Marc L. Busch & Robert Howse, *A (Genetically Modified) Food Fight: Canada's WTO Challenge to Europe's Ban on GM Products*, C.D. Howe Institute Commentary No. 186, available at <http://www.cdhowe.org/pdf/>

present purposes to observe that the complainants have alleged that the EC had in place an impermissible moratorium on GMOs.¹¹⁶ The complainants argue that (among other concerns) the EC measure is not supported by scientific evidence.¹¹⁷

Even a casual reading of media accounts of the *GMO* case highlights the intensity of emotion surrounding this issue.¹¹⁸ Under existing Appellate Body jurisprudence, there is simply no good outcome for the trading system if the substantive issues in the case are reviewed by a panel and the Appellate Body.¹¹⁹ If the United States wins, the EC and its citizens will view the decision as an intrusion on their sovereignty and the WTO will face the legitimacy costs discussed in Part IV.B.2.¹²⁰ The EC's apparent conviction on the GMO issue, along with its prior behavior in the *Hormones* case,¹²¹ raises the additional concern that it may prefer to live with a withdrawal of concessions from the complainants rather than comply with a ruling. If the EC were to do so, of course, the system would not only suffer from the ban on GMO foods, it would also face a loss due to the trade barriers subsequently put in place by the winning complainants. On the other hand, if the EC wins the case, the EC will simply continue with its existing policies, and there will be resentment and anger within the complainant states that believe that the moratorium is simply a protectionist measure.

The more deferential standard proposed herein would allow the EC to retain its ban, but only if it satisfies the transparency and non-discrimination requirements and if the measure at issue is neither more trade restrictive than necessary nor a disguised restriction on trade.

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116. See European Communities—Measures Affecting the Approval and Marketing of Biotech Products, First Submission of the United States (Apr. 21, 2004), available at <http://www.foeeurope.org/biteback/download/US.1stSub.BITEBACK.pdf>. The complainants also make more procedural allegations, including that the adoption of the moratorium was done in an insufficiently transparent fashion and that the moratorium has caused undue delay. See *id.* Under this Article's proposal, these procedural objections would be subject to review by a panel or the Appellate Body without deference to the EC.

117. See *id.*

118. See Williams, *supra* note 3; Alden, *supra* note 3.

119. One possible outcome would be for a panel or the Appellate Body to rule for the United States on procedural grounds—for example, concluding that the EC measures were adopted without the required level of transparency. This sort of outcome would be a good deal less costly than a ruling on the substance, though it may simply delay the need to rule on the merits of the case.

120. See *supra* notes 99-100 and accompanying text.

121. There are a number of similarities between the positions of the parties in the *GMO* case and the *Hormones* case. See Michele D. Carter, Note, *Selling Science Under the SPS Agreement: Accommodating Consumer Preferences in the Growth Hormones Controversy*, 6 MINN. J. GLOBAL TRADE 625, 625-45 (1997) (describing the *Hormones* controversy).

Greater deference would improve the outcome of the *GMO* case in several ways. First, it would prevent any loss of legitimacy for the dispute resolution system. Just as WTO dispute resolution is not expected to eliminate tariffs that are consistent with tariff bindings, subsidies that are consistent with the subsidies agreement, or measures defended on national security grounds, it would not be expected under the proposed interpretation of the SPS Agreement to police states' substantive health and safety decisions. Second, it would reduce the stress on the trading system of having the WTO's two goliaths fight over compliance issues. Finally, greater deference would avoid the withdrawal of concessions and the attendant welfare losses in the event of non-compliance.

2. *Precautionary Principle*

A second issue worth mentioning is the precautionary principle.¹²² The Appellate Body has observed that Article 5.7 of the SPS Agreement, which allows states to adopt SPS measures in cases where relevant scientific evidence is insufficient, reflects this principle. If a state takes advantage of Article 5.7, it must then seek to obtain the necessary scientific information and review the SPS measure within a reasonable time.¹²³ In addition to disputes over the language of the agreement, there is debate about whether the precautionary principle is a rule of customary international law¹²⁴ and whether the scope of the principle should be enlarged within the SPS Agreement.¹²⁵ Whatever

122. *Hormones*, *supra* note 4, ¶124. The precautionary principle has no agreed-upon definition. For a discussion of various expressions of the principle, see Bohanes, *supra* note 18, at 329-47. The best known formulation emerged from the Rio Declaration of 1992: "[w]here there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation." Rio Declaration on Environment and Development, June 14, 1992, 31 I.L.M. 874. The precautionary principle has taken on formal legal status in the Cartagena Biosafety Protocol, which came into force on September 11, 2003. See Cartagena Protocol on Biosafety to the Convention on Biological Diversity, Jan. 29, 2000, arts. 1, 10(6), 11(8), 39 I.L.M. 1027 (2000) ("Lack of scientific certainty due to insufficient relevant scientific information and knowledge regarding the extent of the potential adverse effects of a living modified organism...shall not prevent that Party from taking a decision, as appropriate, with regard to the import of that living modified organism."). The Cartagena Protocol, however, explicitly states that it "shall not be interpreted as implying a change in the rights and obligations of a Party under any existing international agreements." *Id.* at pmbl.

123. SPS Agreement art. 5(7).

124. See *Hormones*, *supra* note 4, ¶ 123.

125. See Jan Bohanes, *Risk Regulation in WTO Law: A Procedure-Based Approach to the Precautionary Principle*, 40 COLUM. J. TRANSNAT'L L. 323, 338 (2002); Charnovitz, *Improving*

one's views on the precautionary principle, the proposal for greater deference to states that is advanced in this Article avoids the conflict and confusion that the debate on the subject has generated. The increased deference advocated here is justified on wholly different grounds, making it unnecessary for a panel or the Appellate Body to deal with this contentious issue on which the WTO Agreements offer very little guidance. Thus, the more deferential approach to state rulemaking, justified by an analysis of the costs and benefits of WTO review of health and safety measures, extinguishes a volatile controversy that has enflamed the passions of individuals, groups, and states.

V. CONSTRAINING STATE BEHAVIOR

If the WTO adopts a practice of deference to state decisions in the SPS context, there is, of course, a concern that states will use the SPS Agreement as a pretext for protectionist measures that would otherwise be illegal. One therefore would like to constrain domestic authorities as much as possible, consistent with the implications of the above analysis. The best way to do so is to bring to bear political pressure from domestic constituencies and other states. To the extent that the decisions of a state are known to its citizens and other states, and to the extent the reasoning for those decisions is made public, political realities will reduce the incentive to use the SPS Agreement for protectionist purposes.

The key to this sort of political constraint is transparency. State behavior can only be affected to the extent other states and local groups are aware of the policy being implemented and the reasons for its adoption. Fortunately, the SPS Agreement already provides a set of requirements that serves this purpose,¹²⁶ including an obligation to publish regulations promptly,¹²⁷ to give producers time to adjust before a measure comes into effect,¹²⁸ and to establish "enquiry points" to answer questions relating to the measure.¹²⁹ States adopting SPS measures are also required to give other member states an opportunity to comment

the Agreement, supra note 18, at 211; Sara Pardo Quintillan, *Free Trade, Public Health Protection and Consumer Information in the European and WTO Context*, 33 J. WORLD TRADE 147, 169 (1999).

126. See SPS Agreement art. 7; *id.* Annex B.

127. *Id.* Annex B(1).

128. *Id.* Annex B(2).

129. *Id.*

and to discuss the proposed measure.¹³⁰ The risk assessment itself must also be transparent. Members must answer all reasonable questions regarding the procedures used in the assessment, including the factors taken into consideration and the “determination of the appropriate level of sanitary or phytosanitary protection.”¹³¹

It is important that these transparency measures be enforced by the WTO dispute settlement system. For example, a state adopting an SPS measure should be required, upon request, to identify the risk assessment procedures used, provide information regarding the science taken into consideration, and explain its chosen level of protection.¹³² Panels and the Appellate Body should review compliance with these requirements and find states that fail to meet them to be in violation of their WTO commitments. Ideally a state would provide similar information to the general public, in addition to other WTO member states, as required by the SPS Agreement.¹³³

Enforcing transparency requirements makes it easier for affected states to observe, influence, and understand the reasons behind an SPS measure, and thereby makes it more difficult for the enacting state to use the SPS Agreement as a pretext for protectionist behavior. Measures that comply with the procedural requirements of the SPS Agreement but that look to the rest of the world like protectionist measures will be more costly to adopt because affected states will put political pressure on the enacting member. Transparency also serves to create more democratic domestic decisions. This point has been made eloquently by Professor Howse, who points out that transparency improves domestic deliberation on how best to regulate risk.¹³⁴ The more governments are required to make their decision processes public, the more difficult it is for concentrated interest groups to obtain the results they prefer and the more likely it is that the interest of the general public will be served. Domestic governments, then, are less likely to use the SPS Agreement as a pretext for protectionist measures if the risk assessment is visible to everyone.

To be sure, these procedures cannot prevent all SPS abuses, but they will reduce the frequency with which states use the SPS Agreement to

130. *Id.* Annex B(5)(d).

131. *Id.* Annex B(3)(c).

132. These requirements are found in Annex B(3)(c). *Id.*

133. *Id.* Annex B(3).

134. See Howse, *Risk Regulation*, *supra* note 16, at 2330 (“[The SPS] provisions can be, and should be, understood not as usurping legitimate democratic choices for stricter regulations, but as enhancing the quality of rational democratic deliberation about risk and its control.”).

shield protectionist motives. Notice that procedural requirements are likely to generate greater political pressure in the most egregious and troublesome cases. The more it appears to domestic groups and foreign states that the SPS justification is a pretext, the more these affected groups will bring pressure to bear on the enacting state. Because the strength of protest is likely to be correlated to the plausibility of a health and safety rationale, this form of discipline works something like a substantive review at the WTO, where a panel or the Appellate Body is more likely to find a violation if the SPS claim is strained.

The ability of political constraints to cabin abusive practices is demonstrated by their effectiveness in limiting the use of the least disciplined of WTO exceptions: the national security exception.¹³⁵ This exception provides that nothing in the GATT Agreement prevents a member from “taking any action which it considers necessary for the protection of its essential security interests.”¹³⁶ Because this exception is phrased in terms of what the country itself considers necessary, it is generally thought to be beyond review by a panel or the Appellate Body,¹³⁷ and this view is supported by the fact that there is no WTO jurisprudence interpreting the national security exception.

Despite its broad scope and the fact that use of the exception is apparently beyond review, the national security exception is not routinely invoked to justify challenged trade measures.¹³⁸ Given that this exception has a certain “get-out-of-jail-free-card” aspect to it, a state’s reluctance to use it to defend measures that are otherwise destined to lose before a panel or the Appellate Body can only be explained by the fact that using the exception will trigger a political response from other

135. GATT art. XXI.

136. *Id.* art. XXI(b).

137. See Eugene Kontorovich, *The Arab League Boycott And WTO Accession: Can Foreign Policy Excuse Discriminatory Sanctions?*, 4 CHI. J. INT’L L. 283, 302 (2003) (“[M]any also view the national security exception as self-judging: the Article can be read as explicitly leaving it to each nation to conclusively determine whether the national security exception is appropriate, with no possibility for review by a WTO dispute-resolution panel.”); Michael P. Malloy, *OÙ EST VOTRE CHAPEAU? Economic Sanctions and Trade Regulation*, 4 CHI. J. INT’L L. 371, 383 (2003) (“Given the breadth and flexibility of the self-judging national security exception, it would seem to be a difficult project to argue successfully to a WTO panel that US economic sanctions are impermissible under the GATT.”).

138. See John H. Jackson, *THE WORLD TRADING SYSTEM: LAW AND POLICY OF INTERNATIONAL ECONOMIC RELATIONS* 204 (1989) (“Because of th[e] danger of abuse, contracting parties have been very reluctant to formally invoke Article XXI, even in circumstances where it seems applicable.”); Kontorovich, *supra* note 137, at 302 (“Many observers believe that the reason that abusive and opportunistic invocations of Article XXI(b) have not been more common is that nations want to be seen as playing by the international trade rules.”).

states. Simply put, the fact that the exception is not regularly used indicates that it is simply too costly to invoke when the national security justification is not plausible. A similar dynamic would work in the SPS context. Deferral to domestic decisions on the substantive elements of the matter will not generate a flood of disingenuous appeals to health and safety any more than the national security exception has generated a flood of claims about security.

The SPS Agreement also provides some appropriate limits that serve to discourage protectionist efforts. These include a prohibition against arbitrary or unjustified discrimination¹³⁹ and a least restrictive alternative requirement.¹⁴⁰ These requirements call on a panel or the Appellate Body to evaluate the chosen measure in a way that plays to the strengths of the dispute settlement mechanism. Notice that states are unlikely to have different preferences with respect to non-discrimination or least restrictive alternative requirements.¹⁴¹ In this sense, these requirements resemble conventional trade obligations, such as the most favored nation or national treatment requirements. A panel or the Appellate Body is, therefore, less likely to err when it reviews these obligations than when it evaluates a risk assessment or the relationship between that risk assessment and an SPS measure.¹⁴²

In addition, non-discrimination and the least restrictive alternative requirements are unlikely to bring about non-compliance and its attendant costs. States found to be engaged in impermissible discrimination can bring their actions into compliance by terminating the measure at issue or, if that would be too costly, by adjusting the measure to avoid the discriminatory or unduly restrictive aspects. The first strategy may implicate strongly held domestic priorities and jealously guarded domestic authority, as previously discussed,¹⁴³ but the alternative is unlikely to have the same effect. A state may be committed to a particular health measure—even if the scientific evidence recommending it is weak—but it is much less likely to be committed to a health and safety justification for the discriminatory or

139. SPS Agreement arts. 2(3), 5(5).

140. *Id.* art. 5(6).

141. *But see* the qualification provided *supra* notes 107-111 and accompanying text.

142. The use of a least trade restrictive means test is not entirely without controversy. Without wading into the relevant debate too deeply, this article supports such a test as long as it is interpreted as the least restrictive “reasonably” available measure. *See* Howse, *Risk Regulation*, *supra* note 16, at 2353; Joel P. Trachtman, *Trade and...Problems, Cost-Benefit Analysis and Subsidiarity*, 9 EUR. J. INT’L L. 32, 70 (1998).

143. *See supra* Part IV.C.

unduly restrictive application of that measure.

VI. CONCLUSION

The *GMO* case is moving through the WTO's dispute settlement system. As of this writing, a panel has been composed to hear the case and eventually determine if the EC is in violation of its obligations. Though health and safety measures are not primarily trade issues, they have come to be regulated at the WTO because they can be used as barriers to trade. This makes good sense from a trade perspective, but it also brings the WTO into conflict with domestic decisions in areas that have traditionally been within the exclusive domain of sovereign governments. This raises sensitive issues of sovereignty and the treatment of non-trade concerns at the WTO.

The WTO's existing jurisprudence handles the clash between international regulation and domestic authority poorly. Requiring a rational relationship between a risk assessment and a challenged SPS measure forces panels and the Appellate Body to entangle themselves in evaluations of science and judgments about state preferences for which these dispute settlement organs are ill-equipped. Furthermore, because health and safety issues are especially important to domestic constituencies, a WTO ruling is less likely to induce a change in policy in this area than it is in more traditional trade disputes. Substantive review of domestic decisions, therefore, will often fail to remove trade barriers and will succeed only in imposing costs on the system in the form of economic losses to all parties, increased strain on the system, and a loss of legitimacy in the eyes of both the complainant and defendant states.

A more promising strategy would be to leave the evaluation of science, decisions about risk, and the relationship between science and SPS measures to domestic governments, which are better equipped to make these decisions and which have a better sense of domestic preferences and values. This approach does not threaten to open the floodgates of protectionism, because other obligations under the SPS Agreement, combined with the realities of trade politics, limit the scope for protectionist abuses. Transparency rules already in the SPS Agreement require states to divulge enough information for local citizens and other states to judge whether the SPS Agreement permits a particular measure or whether it is being used as pretext. The political reactions of individuals and states increase the costs of protectionist measures and serve as a deterrent to abuse.

With regard to the pending *GMO* case that motivates this Article, the proposal advanced here would effectively resolve the case as a legal matter and leave it to parties to settle the dispute through the usual tools of politics and international relations.¹⁴⁴ The alternative is to have the WTO issue a ruling that will likely impose costs on the system, fail to generate compliance by the EC, and make political resolution more rather than less difficult. We have already seen this result in the *Hormones* case. A similar result can be avoided in the *GMO* case if the Appellate Body adopts the more sensible policy of deference to domestic decisions on risk and science.

144. There may be some legal issues remaining—for example, the United States could claim that the EC has failed to meet the transparency and other standards that this Article argues should be reviewed by a panel or the Appellate Body. As discussed, the WTO is well equipped to handle disputes of this nature, and states are much more likely to respond favorably to WTO rulings in such disputes.

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