

THE WHO/WTO STUDY ON TRADE AND PUBLIC HEALTH: A CRITICAL ASSESSMENT

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Introduction

The release in August 2002 of a joint study¹ by the World Trade Organization and the World Health Organization on trade and public health is a landmark event. It suggests a recognition by the WTO that the rules of multilateral free trade have important implications for health, and that these rules cannot properly be interpreted and evolved by the WTO in isolation from international health policy, and the expertise of the public health community concerning health risks.

The contents of the study are, disappointing in many respects. The presentation of the existing law of the WTO is often misleading, and does not take into account properly some important recent rulings of the WTO's Appellate Body, the ultimate court of appeal in WTO dispute settlement. The study tends to over-estimate the capacity of science, and scientific evidence, to resolve disputes about health risks of traded products. And the study takes too dim a view of the role of legal dispute settlement in addressing these issues.

This brief article analyzes those parts of the study that relate to issues of health risk under the law of the WTO concerning trade in goods. Other parts deal with intellectual property rights and trade in services, where the public health issues are less directly related to questions of risk analysis and regulation.

Risk Regulation, Public Health and the Law of the GATT

The WHO/WTO study contains a general discussion of the provisions of the GATT, the basic WTO treaty governing trade in goods, and public health, and then more detailed treatments of specific disputes about public health that implicate GATT rules.

The general discussion of GATT law is the most accurate and least misleading part of the entire study. The study rightly notes that the basic obligations in GATT relevant to domestic health regulation are those of *non-discrimination*. Health measures that neither treat products from some WTO Members better than others nor treat "like" domestic products better than imports are consistent with WTO law, and do not require a justification under the health "exception" in Art. XX of the GATT. In particular, the study rightly suggests that in determining "likeness", WTO rules permit health risks to be taken into account (para. 18). Thus, even if imported product A and domestic product B are alike in many other respects, if imported product A creates health risks that domestic product B does not, it would be consistent with National Treatment under the GATT to ban or restrict A but not B.

¹ *WTO Agreements and Public Health: A joint study by the WHO and the WTO secretariat*, World Health Organization and World Trade Organization, Geneva, August 2002 [hereinafter, WHO/WTO study].

With respect to the obligation of non-discrimination on the basis of the national origin of the product (the MFN obligation), the WHO/WTO study makes the important suggestion that “where there is evidence that some countries have a higher level of risk” legitimate concerns of consumer protection may be at stake in a regulation that singles out certain countries of origin and not others. The study does not actually take a view as to whether, in such a circumstance, the regulation would be consistent with the MFN obligation in Art. I of the GATT. Probably, that is wise, as the case law is not yet entirely clear. A recent panel did, however, observe: “We therefore do not believe that, as argued by Japan, the word “unconditionally” in Article I:1 must be interpreted to mean that making an advantage conditional on criteria not related to the imported product itself is *per se* inconsistent with Article I:1, irrespective of whether and how such criteria relate to the origin of the imported products. . . . whether conditions attached to an advantage granted in connection with the importation of a product offend Article I:1 depends upon whether or not such conditions discriminate with respect to the origin of the products” The implication of this statement is that a measure that does single out certain countries, but based on objective criteria, such as the health situation in those countries, may not in fact *discriminate* on the basis of national origin, even if on its face it distinguishes on that basis. (*Canada-Autos*, paras.) However, the Appellate Body was not called upon to affirm or reverse this finding on appeal, and has not spoken to the issue.

In any case, if such measures were to be found in violation of Art. I, they would likely be capable of justification under Art. XX (b) of the GATT, the health exception, which permits measures that would otherwise be in violation of GATT rules, provided they are necessary for purposes of, *inter alia*, protection of human life and health. Concerning this exception the WHO/WTO study has this to say in its general discussion: “Determining whether a measure is “necessary” involves a process of weighing and balancing a series of factors which include the importance of the interests protected by the measure, its efficacy in pursuing the policies, and its impact on imports and exports. The more vital or important the policies, the easier it would be to accept as “necessary” a measure designed for that purpose.”(para. 23) This is a quite good summary of some very complex Appellate Body case law on Art. XX (b) and related provisions. from the Appellate Body. Nevertheless, by mentioning “impact on imports and exports”, the study may give the impression that a kind of balancing whereby, for example, if a government’s health measure has a large negative impact on imports and exports, its measure might not be justified as necessary. If this were the case, it would compromise another fundamental feature of WTO law on trade in goods that is well articulated in the WHO/WTO study (para. 22). This is the right of each Member to determine its level of protection against risk, even if that level of protection entails measures that could be quite restrictive of trade. It is true that the Appellate Body has suggested a measure could be considered “necessary” in some circumstances even though *not* strictly speaking “indispensable” or the least restrictive means to a Member’s level of protection, depending on, among other factors, the impact on trade.² But where the measure *is* indispensable, no weighing or balancing is involved to determine if it is justified.

² *Korea-Measures Affecting Imports of Fresh, Chilled and Frozen Beef*, Report of the Appellate Body, WT/DS161/AB/R, 11 December 2000, para. 164: “. . . , determination of whether a measure, *which is not*

When the WHO/WTO study turns from these general readings of the law to the discussion of specific health related disputes under the GATT, the analysis becomes much less adequate.

Let us begin with the notorious *Thai Cigarette*³ case where Thailand banned imported US cigarettes but not domestic cigarettes. Here, Thailand argued that, given the kind of marketing and advertising that were associated with the imported cigarettes, they posed a health risk in terms of attracting young people to cigarette addiction that did not exist in the case of domestic cigarettes. In this case, prior to the coming into existence of the WTO dispute settlement arrangements including appellate review, the GATT panel found that Thailand's import ban could not be justified under Art. XX (b) of the GATT, on the basis that other, less trade restrictive measures such as control of advertising.

The WHO/WTO study is utterly uncritical of this result, despite the fact that Thailand had argued that because multinational tobacco concerns were able to circumvent domestic regulatory controls over marketing, these alternative means would not achieve its health objective effectively. Indeed, the WHO/WTO study credits the GATT panel ruling with encouraging domestic tobacco control policies in developing countries (Box 10 and para. 134). This uncritical view stands in sharp contrast to the intervention of the WHO in the WTO litigation at the time, where the WHO representative intervening in the panel proceedings noted that "Multinational tobacco companies had routinely circumvented national restrictions on advertising through indirect advertising and a variety of other techniques."⁴ The panel simply ignored this evidence, which suggested an important reason as to why, for Thailand, advertising regulation might not be a reasonably available less-trade-restrictive alternative to an import ban.

Another case that is discussed in some detail in the WHO/WTO is the recent Appellate Body ruling in *Asbestos*.⁵ In that case, Canada challenged a ban by France on all asbestos and asbestos-containing products, whether domestic or imported. The panel held that asbestos and asbestos-containing products were "like" substitute products on the domestic market in France, and therefore that France had violated Art. III:4. In effect, the panel was saying that a product that has a long history of causing loss of human life has to be treated under WTO law the same as a non-lethal substitute, for the sake of free trade. The Appellate Body reversed this ruling, finding that the panel erred in law in deciding that health effects could not be taken into account in the determination of likeness. The panel had held that the EC's measure was nevertheless justified under Art. XX(b), the health exception, and the Appellate Body went on to uphold the approach of the panel to Art. XX, even though strictly speaking it did not need to, since the AB had reversed the panel and found no violation of Art. III:4 of the GATT in the first place.

WHO/WTO study never makes it clear that the Appellate Body actually reversed the panel's finding that France's measure violated Art. III:4. It describes the AB ruling

"*indispensable*", may be "necessary" . . . involves in every case a process of weighing and balancing" (emphasis added).

³ *Thailand-Restrictions on Importation of Cigarettes*, BISD 37S/200.

⁴ *Thailand-Cigarettes*, para. 55.

⁵ *European Communities-Measures Affecting Asbestos and Asbestos-Containing Products*, Report of the Appellate Body, WT/DS135/AB/R, 12 March 2001.

as merely “affirming the dispute panel’s ruling in favor of the EU while clarifying several important issues”(Box 12). The WHO/WTO thus leaves the impression that the AB might have found, like the panel, a violation of Art. III:4, albeit on rather different grounds or reasoning.⁶

One of the supposed “clarifications” of the Appellate Body ruling according to the WHO/WTO study is that “it is appropriate to consider whether the physical characteristics influence the relative health risk of a product in evaluating its “likeness” under Art. III:4” (Box 12). This could give the impression that health risks that do *not* emanate from differences in physical characteristics between products are *not* considered in determining “likeness” (for example, health risks to workers that might occur due to the method of production or health risks due to the likelihood that a product will be abused or misused). It is true, that in correcting the panel’s analysis the Appellate Body itself brought in health concerns when dealing with the physical differences between asbestos and the substitute products. But the AB never asserted the proposition that this is the *only* basis on which health risks are relevant to likeness. In this particular case it obviously focused its health analysis on physical characteristics, because it *is* the physical properties of asbestos that give rise directly to a risk to health. But what the AB overruled was the finding of the panel that, as a general matter, health risks cannot be taken into account in dealing with likeness. Thus, the AB held: “Under Art. III:4 health risks may be relevant in assessing the *competitive relationship in the marketplace* between allegedly “like” products”.⁷ Earlier in the ruling the Appellate Body noted that not only physical characteristics, but consumer tastes, end uses, and indeed other criteria still may be relevant to assessing “likeness” from the point of view of “competitive relationships among and between products”.⁸

In sum, the WHO/WTO study tends to understate the scope and generality of the AB’s finding that health risks are relevant to the assessment of likeness under Art. III:4.

The SPS Agreement, “Scientific Evidence” of Risk, Disease Control and Biotechnology

The treatment of the provisions of the WTO Sanitary and Phytosanitary Agreement in the WHO/WTO study is divided into a general discussion of the legal text of the Agreement, a more detailed case study of how the Agreement was interpreted by the Appellate Body of the WTO in the *Beef Hormones*⁹ ruling, and an elaboration of how the SPS Agreement might affect government efforts to deal with such issues as infectious disease control and GMOs.

The general discussion begins with the observation that the SPS Agreement

⁶ The study makes the confusing statement that the “AB agreed . . . that Canada did not satisfy its burden of proving likeness”. By not saying with whom the AB agreed and referring to an affirmation of the panel ruling by the AB, the WHO/WTO study creates great (and unnecessary) confusion as to exactly what was decided by the AB, and in what way it reversed or overruled the panel.

⁷ *Asbestos*, para. 115.

⁸ *Asbestos*, para. 103.

⁹ *EC-Measures Affecting Meat and Meat Products*, Report of the Appellate Body, WT/DS26, 48/AB/R (16 January 1998).

“places quite strict requirements” on SPS measures, among these the condition that they be “based on a scientific justification”. Yet the notion of “scientific justification” does not exist in the SPS Agreement. Indeed, the idea that “science” could ever justify a risk regulation is itself naïve and an inaccurate conception of the regulatory process: scientific techniques can result in the identification of risks and the determination of their magnitude with varying degrees of precision or error. But whether any given regulatory intervention is justified will obviously depend on the judgments of regulators and the citizens they represent as to the best allocation of resources, what level of risk is tolerable, which kinds of risks are tolerable, and how to deal with uncertainty and error in the evidence itself.

The WHO/WTO study goes on to more precisely identify one of the relevant obligations in the SPS Agreement, which is not maintain an SPS measure without “sufficient scientific evidence”. Now the real question here is: sufficient for what?

The WHO/WTO study is silent on that question. Instead, the study goes on to contrast this provision with 5.7 of SPS, which permits provisional measures where inadequate scientific evidence exists to make a risk assessment of the kind required by 5.1. The study suggests: “Provisional measures could be taken, for example, as an emergency response to a sudden outbreak of an animal disease suspected of being linked to imports” (page 38). It is doubtless true that 5.7 might be invoked in such a situation, but there is nothing in the language of 5.7 that limits its use to emergency circumstances. The mere inadequacy of existing scientific evidence is enough, and 5.7 contemplates the continuing use of provisional measures until that inadequacy is remedied, subject to review of the measure within a reasonable period of time, and the requirement to seek better information. To justify provisional measures, contrary to the impression that the “outbreak” example gives, the risk in question need not be something that is new or arises suddenly.

The WHO/WTO study also gives (at least in this point in its analysis) an inaccurate impression of the burden of proof in SPS disputes. The study states: “A fundamental requirement of the SPS Agreement is that Members have to be able to demonstrate, on the basis of scientific evidence, that there is indeed a risk to health which justifies trade measures not based on international standards.” But there is no such stricture to be found in the SPS Agreement. First of all, as with other obligations in WTO Agreements, the burden of proof is on the complainant to show that the defendant has violated the provision. So, for example, if Canada complains that Australia’s measure is not “based on” a risk assessment, the panel will require Canada, in the first instance, to prove these propositions, rather than Australia having the burden to demonstrate that its measure *is* based on a risk assessment or that there *is* sufficient scientific evidence. Moreover, the requirement that a measure be based on a risk assessment does not imply that the regulating Member must actually conduct such an assessment. In fact, this would be a punitive condition for many if not most developing countries. The requirement that a measure be based on a risk assessment means only that, if another Member challenges the measure and makes a *prima facie* case that it is *not* “based on” a risk assessment, the regulating Member will have to produce evidence of a risk assessment to which the measure bears a rational relationship. This could be an assessment of risk conducted by another government or an international agency, or indeed as an independent academic study. And the assessment need not have existed, nor

the regulating Member have been aware of it, at the time the measure in question was imposed. This was all made clear by the Appellate Body in the *Beef Hormones* dispute, to which I now turn.

The WHO/WTO study discusses the *Hormones* ruling in connection with its treatment of food safety as a specific health issue. Here, contrary to the impression conveyed by the earlier discussion, the study states that the Appellate Body in *Hormones* did indicate that the burden of proof is on the complainant to show that the measure is not justified. Yet the study's treatment of the Precautionary Principle compounds and adds to some of the deficiencies in its earlier general discussion of the SPS rules.

The study begins by rightly noting that in *Hormones* the EC did not attempt to justify its ban on hormone-injected beef as a provisional measure under 5.7. But it then goes on to mis-state 5.7 as about situations where scientific evidence is "inconclusive". But 5.7 is not about such circumstances, but rather where the scientific evidence is inadequate to make an assessment of risk according to scientific principles. A case where the evidence is simply not there to permit of a risk assessment is very different from a case where a risk assessment can be made according to scientific principles, but the evidence brought forth in such assessments is inconclusive concerning the risk in question. In this latter case, we are dealing with a quite different state of affairs. The Appellate Body in *Hormones* responded to the latter problem by indicating that Governments are free to act on the basis of minority or non-mainstream scientific views where scientific evidence is contradictory or inconclusive. This was further elaborated in the *Salmon* case where the AB indicated that what is required by SPS is *some* scientific evidence of risk. In other words, rather than the strict standard that the WHO/WTO study would make us believe exists in SPS, the standard is rather a quite deferential one, a de minimus requirement of a scientific basis for the existence of a risk, rather than a mere assertion or assumption that there is a risk. Under the existing case law, there is no quantitative or qualitative threshold of scientific *certainty* or *weight* of scientific evidence.

The WHO/WTO study notes that in *Hormones* the Appellate Body rejected the EC's argument that the Precautionary Principle, as general international law, should trump the risk assessment requirements of the SPS Agreement. What the study fails to note however is that the Appellate Body also agreed with the EC that 5.7 does not *exhaust* the relevance of the concept of precaution to the *interpretation* and *application* of the SPS Agreement. The AB noted that the Precautionary Principle was also reflected in the Preamble of the SPS Agreement (part of the context for purposes of treaty interpretation under the Vienna Convention) and further that "a panel charged with determining, for instance, whether "sufficient scientific evidence" exists . . . may, of course, and should, bear in mind that responsible, representative governments commonly act from perspectives of prudence and precaution where risks of irreversible, e.g. life terminating damage to human health are concerned." (para. 124) The suggestion here is clearly that the Precautionary Principle may affect a panel's determination in a particular case of how much scientific evidence is "sufficient", lowering the threshold of sufficiency where considerations of precaution are genuinely relevant. The silence of the

study on this dimension of the applicability of the Precautionary Principle to SPS renders its treatment of precaution fundamentally inaccurate and misleading.

This deficiency also taints the study's treatment of the regulation of GMOs and WTO law.

The study claims that there is a conflict between the Cartagena Protocol on biosafety and WTO agreements: “. . . , under the Cartagena Protocol, a country which wants to export LMOs—such as seeds for planting—must seek advance informed agreement from the importing country before the first shipment takes place, and, under certain circumstances, the importer can ask the exporter to carry out the risk assessment. Under the SPS Agreement, it is up to the importer to justify its import measure on the basis of a risk assessment.”(para. 269) First of all this passage restates the erroneous interpretation of burden of proof under SPS: it is the exporting country that bears the initial burden of proof to show that the importing country's measures is *not* based on a risk assessment. Secondly, as the Appellate Body made clear in *Hormones*, there is no requirement that the importing country conduct the risk assessment itself. The SPS Agreement is silent on who is responsible for undertaking, and paying for a risk assessment. As the Appellate Body notes: “Article 5.1 does not insist that a Member that adopts a sanitary measure shall have carried out its own risk assessment. It only requires that SPS measures be “based on an assessment, as appropriate for the circumstances. . . .” The SPS measure might well find its objective justification in a risk assessment carried out by another Member, or an international organization.” (para. 190)

A final legal error in the study's assessment of the relationship of the Cartagena Protocol to the SPS Agreement (and other WTO rules) is the suggestion that the Cartagena Protocol may only be taken into account in WTO dispute settlement, “when the two disputing parties are also signatories of the Protocol.” First of all, the Cartagena Protocol could contain international standards within the meaning of the SPS Agreement, and therefore where a WTO Member regulates GMOs in conformity to these standards, under SPS it would be *presumed* to comply with WTO law. It is not necessary for the disputing parties to be signatories to an agreement for it to contain valid international standards within the meaning of SPS; however, the organization that produces the standards must be open for membership to all WTO Members (in this case the organization would be the Biodiversity Convention). This being said, the SPS Agreement gives precedence to international standards promulgated by the FAO Codex Alimentarius in the area of food safety (SPS Annex 1, 3 (a)). Thus when the FAO does manage to cover LMO matters, it is those standards that will be “international” within the meaning of SPS, not the norms in the Biosafety Protocol.¹⁰ But that is only the case for “food safety”: with respect to risks to *human* health that may arise from GMOs *other than through* consumption of food, the standards from the “Rio” multilateral biodiversity regime will be “international standards” within the meaning of SPS Annex 1: 3(d).

Secondly, regardless of whether in the circumstances the provisions of the Biosafety Protocol constitute “international standards” within the meaning of SPS Annex

¹⁰ See R. Howse and J. Meltzer, “The significance of the Protocol for WTO dispute settlement”, in C. Bail, R. Falkner and H. Marquard, eds., *The Cartagena Protocol on Biosafety: Reconciling Trade in Biotechnology with Environment & Development* (London: Royal Institute of International Affairs, 2002), 482-496.

1:3(d), the Appellate Body has already held, in the *Shrimp/Turtle* case, that law and policy that has emerged from the Rio biodiversity regime is relevant to the interpretation of WTO rules, regardless of whether the parties to the dispute are signatories to the treaty instrument in question (in *Shrimp/Turtle* the United States, the appellant, was not a signatory). The Appellate Body so held, because the Preamble to the WTO Agreement explicitly contains the concept of sustainable development, and interpreting WTO rules in the light of the Preamble, which is part of the “context” for purposes of treaty interpretation under the Vienna Convention, requires illumination of WTO provisions from the perspective of sustainable development.¹¹

Finally, again regardless of whether both parties to a WTO dispute are signatories, the Biosafety Protocol may be relevant as evidence of evolving customary international law, for instance with respect to the Precautionary Principle.

The Agreement on Technical Barriers to Trade

The substantive obligations of the Agreement on Technical Barriers to Trade have not yet been the subject of judicial interpretation by the Appellate Body of the WTO.¹² At the time the WHO/WTO study was published, there had been one ruling of a WTO panel on this agreement, the *EC-Sardines*¹³ case, which was on appeal to the Appellate Body (the ruling expected this fall). Because the *Sardines* case does not deal with health regulation (the issue being what species of fish can be marketing in the EC under the trade description “sardines”), and considering that it is on appeal, one can understand why the case is not discussed in the WHO/WTO study.

However, the brief general discussion of the TBT Agreement in the WHO/WTO study is misleading in important respects. According the study, the TBT Agreement requires that WTO members “design technical regulations in the way that is not more trade restrictive than necessary to full a legitimate objective, making them proportional to the objectives which they are trying to fulfill.”(para. 29) There is an important qualification on the obligation to make these measures the least-trade-restrictive, which the study fails altogether to mention. The relevant provision of the TBT Agreement reads: “technical regulations shall not be more trade-restrictive than necessary to fulfill a legitimate objective, *taking account of the risks non-fulfillment would create.*”(Art. 2.2: emphasis added) The notion that the requirement of least-trade-restrictiveness should be applied “taking account of the risks non-fulfillment would create” arguably is an expression of the Precautionary Principle. For example where a risk would cause irreversible harm if it were to materialize (e.g. loss of human life), regulators faced with the choice between a more or less trade restrictive measure, each of which has a high likelihood of effectiveness, may nevertheless opt for the stricter, more sweeping measure, preferring to err on the side of caution, as it were.

¹¹ *Shrimp/Turtle*, paras. See R. Howse, “The Appellate Body Rulings in the Shrimp/Turtle Case: A New Legal Baseline for the Trade and Environment Debate”, 27 *Columbia Journal of Environmental Law* 491 (2002)

¹² The Agreement applies to regulations or “mandatory” standards other than those covered under the SPS Agreement, i.e. regulations that deal with risks other than those related to the safety of food and agricultural imports.

¹³ *European Communities-Trade Description of Sardines*, WT/DS231/R, appealed June 28 2002, AB-2002-3.

Contrary to the suggestion of the WHO/WTO study, there is nothing in the relevant provisions of the TBT Agreement to suggest that a WTO Member's measures must be "proportional" to the objectives being sought. Indeed, the Preamble to the TBT Agreement affirms "no country should be prevented" from taking measures necessary *inter alia* for the protection of human life or health "at the levels it considers appropriate". Provided the objective is "legitimate" within the meaning of the TBT Agreement, a Member may set level of protection against risk as high as it pleases, without concern for proportionality. Then the issue is whether it has adopted what in the circumstances appears to be the least trade restrictive means to achieve that level of protection, subject, as noted, to the Precautionary Principle ("taking into account the risks that non-fulfillment would create").

The WHO/WTO Study asserts that the TBT Agreement requires the "use" of international standards, from which WTO Members may only "depart" if they consider that "their application would be ineffective or inappropriate for the fulfillment of certain legitimate objectives". However, nowhere does the TBT Agreement state that Members must *use* international standards where not ineffective or inappropriate, but only that they must *base* their technical regulations on such standards. In fairness to the WHO/WTO study, a similar error of law was made by the panel in the *Sardines* case, but that finding has now been vigorously appealed to the Appellate Body by the European Community. In the *Hormones* case, the Appellate Body examined similar language in the SPS Agreement, noting that a measure could be "based on" an international standard, even if it does not strictly conform to that standard, for instance where "some, not all, of the elements of the standard are incorporated into the measure".¹⁴

Finally, with respect to appropriate level of protection, the WHO/WTO study claims: "Members are free to set standards at a level they consider appropriate, but have to be able to justify their decisions if requested by another Member to do so." (para. 31) There is no provision of the TBT Agreement that allows a Member to require another Member to justify its decision concerning appropriate level of protection.

Conclusion

One of the extraordinary features of the WHO/WTO study is its hostility to the use of WTO dispute settlement procedures. The study states: "Formal dispute settlement at the WTO is a last-resort option" (para. 84). Undoubtedly, there are disputes surrounding health risks that are not appropriately resolved through WTO dispute settlement. Arguably, the *Hormones* case is a good example. Even when interpreted as sensitively as it was by the Appellate Body in that case, the SPS Agreement does not address a situation where public opinion demands that democratic governments act, even where there is no credible scientific evidence of risk. To this date, the European Communities has failed to comply with the ruling in *Hormones*, even at the cost of having sanctions against it by the US authorized at the WTO. But the WHO/WTO study, with its focus on science and technocratic coordination of health policies, has really very little to say concerning the implications of public distrust of expert opinion, and the politics of risk regulation (apart from a few generalities about transparency and public participation).

¹⁴ *Hormones*, para. 163.

To describe WTO dispute settlement as a “last resort” is hardly an answer to some of the shortcomings of the procedures from the perspective of dealing with disputes about public health—such as secrecy of proceedings (which increases public distrust), the lack of competence of WTO panelists in addressing such matters, and limited opportunities for participation of NGOs and indeed even intergovernmental organizations in WTO litigation. Even with its shortcomings, one reason for not considering WTO dispute settlement as a last resort, is that in bilateral or even multilateral negotiations, powerful countries are likely to be able to flex their muscles against less powerful ones. Further, health-based trade disputes may be linked in such bargaining to other non-health related issues, and the result may be a compromise that gives short shrift to health concerns. Finally, the Appellate Body of the WTO has interpreted the law in such a way as to provide a significant scope for countries to protect against health risks without being unduly constrained by trade rules—much more scope than is often suggested in the WHO/WTO study. Thus, dispute settlement may reinforce the application of WTO rules in a manner that does not compromise the ability of governments to deal with health risks.