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Working Paper Series
Paper No. 502

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Alan O. Sykes*

International trade agreements such as those of the WTO reduce barriers to trade among member nations. Seven decades ago when the General Agreement on Tariffs and Trade (GATT, predecessor to the WTO) was negotiated, the principal barriers to international trade were border instruments – tariffs and quotas. But the drafters anticipated that as a consequence of the tariff ceilings negotiated under GATT Article II and the general prohibition of quotas in GATT Article XI, domestic political pressures for protectionism would spill over into other policy instruments, such as domestic taxation and regulation. Accordingly, they included a “national treatment” obligation in GATT Article III, prohibiting domestic tax and regulatory discrimination against imported goods. More precisely, the national treatment obligation for regulation prohibits “less favourable treatment” of imported goods relative to “*like products* of national origin” with respect to all “laws, regulations and requirements” affecting their sale. It is subject to exceptions under GATT Article XX for various legitimate regulatory purposes such as the protection of health and safety, resource conservation, and public morals.

This structure proved increasingly inadequate over time. A number of intransigent disputes arose over what constitutes “discrimination” (or “likeness”) and over the sincerity of appeals to various Article XX exceptions. It also became increasingly clear that nominally non-discriminatory measures can afford protection to domestic firms when they have a cost advantage in compliance.¹ Likewise, if the benefits of regulation flow to domestic entities while compliance costs are borne in considerable part by foreign exporters who lack political representation, excessively costly regulation may result. Accordingly, the GATT membership developed additional disciplines on domestic regulatory measures, beginning with the “Standards Code” of the late 1970s and culminating in 1994 with the WTO Agreements on Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary Measures (SPS) (together, the “technical barriers” agreements).²

This paper focuses on a group of disciplines that may be termed “regulatory consistency requirements.” Consistency requirements endeavor to ferret out protectionist policies from evidence that “like cases are not being treated alike,” targeting regulations that have protectionist effect and that reflect unjustifiable discrimination across comparable regulatory problems. The national treatment

* Stanford Law School. I am grateful to Bob Staiger for thoughtful comments and suggestions, and to conference and workshop participants at Georgetown, Stanford, and Washington & Lee.

¹ The classic paper on this proposition is Steven C. Salop & David T. Scheffman, *Raising Rivals’ Costs*, 73 Am. Econ. Rev. 267 (1983).

² A review of these developments may be found in Alan O. Sykes, *Product Standards for Internationally Integrated Goods Markets* (Brookings 1995).

obligation of GATT Article III is itself a species of regulatory consistency requirement, albeit limited to the inconsistent treatment of “like” imported and domestic products. Other consistency requirements in the WTO system, especially those added by the technical barriers agreements, sweep more broadly as the following hypothetical elaborates.

Consider a nation with two industries, one that produces pork and one that produces beef. All domestically consumed pork products are produced domestically, while many of the beef products consumed domestically are imported from abroad. Both pork and beef are used to produce cured products such as jerky, bacon and sausages. The chemicals that can be used to cure these products include a substance that is known to be a low-level carcinogen, widely used for curing meats around the world. The chemical residue after curing, and associated carcinogenic risk, is the same in both pork and beef products. With knowledge of these facts, a national regulatory authority enacts a prohibition on the sale of beef products cured with the carcinogenic substance, but allows it to be used freely in curing pork products. Various beef products that were previously imported into the nation are no longer permitted to enter. Domestic beef producers, selling only to their home market, gain a relative cost advantage from the new regulation because they can modify their entire production process to comply rather than maintain different production processes for different markets. Foreign producers of these beef products absorb some of the compliance costs on their export sales to remain competitive rather than pass all of them along to their customers. The net result of the prohibition is reduced imports of beef products, reduced profits for the foreign exporters that produce them, and a shift in consumption toward domestically produced beef and pork products.

In this hypothetical scenario, a prohibition on the sale of beef products containing the carcinogen (many of the products imported) and the absence of any prohibition on the pork products containing the same carcinogen (all of the products domestic) raises suspicions of protectionism. The risk to consumers is assumed to be the same both in kind and degree whether the low-level carcinogen is ingested with beef or pork, and no high-minded justification for prohibiting its use in one product but not the other is apparent. A prohibition applicable to beef burdens foreign suppliers in significant part, however, while benefiting domestic producers of substitute beef and pork products. A comparable prohibition applicable to pork would burden only domestic suppliers. Accordingly, a worry arises that the prohibition in the beef industry may be motivated at least in part by protectionist objectives. And even if protectionist intent is absent, the prohibition in the beef industry may be politically viable only because the costs fall heavily on foreigners who lack domestic political efficacy. If so, the regulation arises only because of its protectionist effect and the attendant political implications.

As shall be seen below, the WTO SPS agreement might condemn the disparity in the regulatory treatment of beef and pork on the grounds that the inconsistent treatment has an adverse impact on international trade and no apparent

justification. Such a result would not require a finding that beef and pork are “like,” and thus would not turn on the existence of a national treatment violation.

The reader may well be wondering, however, whether some hidden factor might justify a difference in regulatory treatment across the beef and pork industries (might domestic consumption of pork products be much less, for example?) Indeed, consistency requirements in practice can confront difficult challenges. Any consistency analysis requires adjudicators first to identify the circumstances that are “comparable.” For example, must the regulatory problems involve the *same* risk (e.g., cancer from a particular additive used in food) or merely similar risks (e.g., cancer from any additive used in food)? If the latter, how does one define “similar?” Likewise, once the problem of identifying “comparable” situations has been addressed, adjudicators must next ascertain whether discrimination or inconsistency is present, which requires a clear conception of what those concepts mean. Even within the domain of “comparable” situations, for example, regulatory limits on risk may differ for good reason. A low-level carcinogen contained in food, for example, may have a close substitute that is not carcinogenic, while another low-level carcinogen contained in food may serve an important function and have no close substitutes. A ban on the use of the first chemical may make sense while a ban on the second may not.

Related to both the comparability and consistency inquiries, it is well known that regulation often exhibits perplexing differences in efficacy based on measures such as cost per life saved.³ Even if this variation frequently reflects a misallocation of resources, it may be unrealistic to expect national regulators to behave “consistently” across different domains that vary considerably in factors such as their political saliency -- regulatory inconsistencies may arise for purely domestic reasons that have nothing to do with any protectionist intentions or effects. Should international trade agreements address regulatory inconsistencies that have no connection to protectionism? How is the line between an international consistency obligation and domestic regulatory sovereignty to be drawn?

The modern economic theory of trade agreements suggests an answer to these questions, at least in principle. It posits that trade agreements arise to address international externalities that arise if nations act unilaterally. In particular, if nations choose regulatory policies unilaterally, they tend to ignore adverse effects on foreigners, and thus to engage excessively in policies that burden foreign interest groups. The function of a trade agreement is to induce member

³ This theme recurs regularly in the writings of Cass Sunstein. See, e.g., Cass Sunstein, *After the Rights Revolution*, Appendix B (Harvard Press 1990); Cass Sunstein, *The Cost-Benefit State* (American Bar Association 2002). See also Tammy O. Tengs et. al., *Five Hundred Life Saving Interventions and their Cost Effectiveness*, 15 *Risk Analysis* 369 (1995).

nations to “internalize” these negative international externalities,⁴ and regulatory consistency requirements in trade treaties should not go beyond what is necessary to identify and correct them.

The central claim of this article is that consistency requirements can play only a limited role to this end, and that their utility is dubious once the consistency analysis is broadened beyond a basic national treatment obligation qualified with appropriate exceptions. Putting the point slightly differently, *intra-industry* consistency requirements (which include the GATT national treatment obligation) can be and have been useful tools for identifying unnecessarily protectionist policies both under the original GATT and under the technical barriers agreements. But due to the sizeable information challenges in identifying regulatory problems that are meaningfully “comparable” across different industries, *inter-industry* consistency requirements rarely afford a useful way to identify regulatory distortions due to international externalities, and have proven useless to date in practice.

Section I reviews WTO treaty text pertaining to regulatory consistency. Section II briefly develops the economic logic of consistency requirements. Section III then offers an analytical discussion and critique of consistency analysis in the WTO case law, dividing cases between *intra-industry* and *inter-industry* comparators. Section IV is a brief comparative note on the use of consistency requirements in the U.S. Federal system (dormant commerce clause).

I. Consistency Requirements in WTO Treaty Text

The phrase “consistency requirement” appears nowhere in the text of GATT or any other WTO treaty text. Nevertheless, consistency requirements as the term is used here are present in a number of places and have been at issue in many important disputes.

A. GATT

Although the WTO replaced the GATT as an organization, the treaty obligations of the original GATT remain in force as part of the WTO legal system. As noted, the primary GATT obligation with respect to domestic regulatory policies is

⁴ See, e.g., Gene M. Grossman & Elhanan Helpman, Trade Wars and Trade Talks, 103 J. Pol. Econ. 675 (1995); Gene M. Grossman & Elhanan Helpman, The Politics of Free Trade Agreements, 85 Am. Econ. Rev. 667 (1995); Kyle Bagwell & Robert W. Staiger, An Economic Theory of GATT, 89 Am. Econ. Rev. 215 (1999); Kyle Bagwell & Robert W. Staiger, The Economics of the World Trading System (MIT Press 2002).

the national treatment requirement of Article III(4) proscribing less favourable treatment of imported products relative to “like” domestic products.⁵

In principle, one might imagine that issues of regulatory consistency could enter under Article III(4) in two ways – through the inquiry into whether products are “like,” or through the inquiry as to whether treatment is “less favourable.” One could say that imported and domestic products are treated consistently as long as any differences in regulatory treatment have legitimate, non-protectionist justifications. If the different treatment of imports had legitimate regulatory justification, and in that sense the imported and domestic goods were being treated consistently, one could say that the imports are not “like” the domestic goods. Similarly, if the difference has legitimate justification, one could say that the imports are not being treated “less favourably.” But as it turns out, the legitimacy of the regulatory distinction is not adjudicated under either rubric in GATT jurisprudence. Instead, imported and domestic products are “like” if they are reasonably close substitutes in the marketplace from a consumer perspective, roughly speaking.⁶ And if the difference in regulatory treatment results in a shift of competitive opportunities toward domestic producers, the treatment is “less favourable” even if it is justified from a public policy standpoint.⁷

The question whether the difference in treatment might have legitimate justification is instead adjudicated under GATT Article XX, which contains the general exceptions to primary GATT obligations such as the national treatment obligation of Article III. Article XX lists ten reasons that may justify deviation from such primary obligations, including the protection of human, animal or plant life or health, resource conservation, public morals, and the enforcement of GATT-legal domestic laws such as those relating to consumer protection and intellectual property. This list of permissible measures is preceded by a “chapeau” that contains an important proviso making all the exceptions “[s]ubject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade.”

These chapeau principles require consistency to a limited degree. Discrimination across “*countries where the same conditions prevail*” must not be “*arbitrary or unjustifiable*.” Likewise, measures taken in the name of the enumerated exceptions must not be a “*disguised restriction on international trade*.”

⁵ As the case law will indicate, another provision at issue is the Article XI prohibition on quotas. A ban on an imported good, enacted for whatever reason, may be characterized as a zero quota on that good.

⁶ Common tariff classification practices are also taken into consideration. See the discussion of “like products” in Japan – Taxes on Alcoholic Beverages, WT/DS8, 10 & 11/AB/R, Appellate Body Report adopted November 1, 1996.

⁷ See generally William J. Davey, Non-discrimination in the World Trade Organization: The Rules and Exceptions (Hague Academy 2012).

None of these terms are defined, however, and many interpretive issues arise. What is meant by “discrimination?” Does “discrimination between countries” refer only to foreign countries or does it include the importing country invoking the Article XX exception⁸? What suffices to establish that conditions in two countries are the “same?” When is discrimination arbitrary or unjustifiable? What is the test for the presence of a “disguised restriction?”

The scope of the consistency obligation in the Article XX chapeau is inherently limited, however, by the fact that Article XX has no applicability to regulatory measures that do not violate primary GATT obligations (and that accordingly require no “exception” from the primary rules). In our earlier beef and pork illustration, for example, a finding that beef and pork products are not “like” would eliminate the possibility of any violation, and make it unnecessary for the regulating nation to appeal to an Article XX exception or to satisfy its chapeau.

Consistency issues can also arise under the enumerated exceptions of Article XX. For example, the first exception concerns measures “necessary to protect public morals,” and the second concerns measures “necessary to protect human, animal or plant life or health.” The term “necessary” has been interpreted, roughly speaking, as a least restrictive means requirement⁹ – can the regulatory objective at issue be achieved satisfactorily with an alternative measure that is less restrictive of trade? When one regulatory problem has been addressed with a measure that has a substantial protectionist effect, while a comparable problem has been addressed satisfactorily with a measure that has appreciably less protectionist effect, this “inconsistency” may serve as evidence that the measure under scrutiny is not “necessary.” Once again, however, this “necessity test” has no bite unless the regulatory measure at issue violates some primary GATT obligation.

B. Technical Barriers Agreements

The WTO technical barriers agreements significantly extend the consistency requirements found in GATT Articles III and XX. Prior to that discussion, however, it is useful to note the coverage of those agreements. The SPS Agreement applies to measures (a) to protect animal or plant life or health within the territory of the regulating nation from pests or diseases; (b) to protect human or animal life or health within the territory from additives, toxins or disease-causing organisms in food or feedstuffs; (c) to protect human or animal life or health within the territory from diseases carried by animals or plants or from pests; and (d) to prevent other damage within the territory from the spread of pests.¹⁰ The TBT Agreement

⁸ The issue was unsettled under GATT, but WTO case law suggests the latter interpretation. United States – Shrimp, Appellate Body Report, *infra*, ¶150.

⁹ See Alan O. Sykes, *The Least Restrictive Means*, 70 *U. Chi. L. Rev.* 403 (2003).

¹⁰ SPS Agreement, Annex A.1.

applies to regulatory measures that are *not* covered by the SPS Agreement.¹¹ Between them, therefore, essentially all product regulations are addressed.¹²

Beginning with the TBT Agreement, consistency issues enter the analysis under the TBT Agreement through the application of the national treatment principle, in a way that they did not under Article III of GATT. As noted, GATT adjudicates the legitimacy of the regulatory distinctions drawn between imported and domestic like products through an appeal to GATT Article XX. The formal structure of the TBT Agreement is different – it does not contain a national treatment obligation subject to exceptions. Instead, it simply states in Article 2.1 that “in respect of technical regulations, products imported from the territory of any Member shall be accorded treatment no less favourable than that accorded to like products of national origin and [those] originating in any other country.” This core obligation, to which no “exceptions” exist, requires a different jurisprudence to implement it lest every detriment suffered by competitive imported products be condemned as a violation even if it is justified by legitimate regulatory concerns. In particular, as shall be seen below in the discussion of case law, the question whether the distinctive treatment of imported products is justifiable becomes part of the inquiry into “less favourable treatment.”¹³

Beyond this feature of the TBT Agreement, both the TBT and SPS Agreements also convert the “necessity” test into a primary WTO obligation. For example, TBT Article 2.2 provides:

Members shall ensure that technical regulations are not prepared, adopted or applied with a view to or with the effect of creating unnecessary obstacles to international trade. For this purpose, technical regulations shall not be more trade-restrictive than necessary to fulfil a legitimate objective, taking account of the risks non-fulfilment would create. Such legitimate objectives are, *inter alia*: national security requirements; the prevention of deceptive practices; protection of human health or safety, animal or plant life or health, or the environment...

Comparable language is found in SPS Article 2.2, which provides that SPS measures are to be applied “only to the extent necessary to protect human, animal or plant life or health.” Even if a regulation complies with all obligations of the original GATT and the other substantive obligations in the technical barriers agreements, therefore, it is now subject to a least restrictive means inquiry, and

¹¹ TBT Agreement, Art. 1.5.

¹² WTO law distinguishes between “regulations” and “standards.” The essential difference is that compliance with regulations is mandatory, while compliance with standards is voluntary. The focus here is on regulations.

¹³ The SPS Agreement, by contrast, has a different structure. It lacks a freestanding prohibition on “less favourable treatment” akin to TBT Article 2.1, and thus does not inject consistency issues into the analysis of “less favourable treatment.”

evidence of regulatory inconsistency may be offered to suggest the existence of a less restrictive alternative.¹⁴

The SPS Agreement adds a second consistency requirement in Article 2.3, which is based on the language of GATT Article XX:

Members shall ensure that their sanitary and phytosanitary measures do not arbitrarily or unjustifiably discriminate between Members where identical or similar conditions prevail, including between their own territory and that of other Members. Sanitary and phytosanitary measures shall not be applied in a manner which would constitute a disguised restriction on international trade.

This language goes beyond the GATT Article XX chapeau in three key respects. First, it converts the principles in the Article XX chapeau into a primary obligation. Second, the language makes clear that the non-discrimination obligation applies not only to discrimination among trading partners, but also to discrimination between domestic and foreign producers. Finally, discrimination is a concern when it arises between territories where the “*identical or similar*” conditions prevail, a broader set of cases than those where the “same” conditions prevail.

A third consistency requirement is found in SPS Article 5.5:

With the objective of achieving consistency in the application of the concept of appropriate level of sanitary or phytosanitary protection against risks to human life or health, or to animal and plant life or health, each Member shall avoid arbitrary or unjustifiable distinctions in the levels it considers to be appropriate in different situations, if such distinctions result in discrimination or a disguised restriction on international trade.

For the first time, the word “consistency” appears in treaty text pertaining to domestic regulation. “Consistency” is not a binding obligation in itself, however, merely an “objective.” Toward that objective, however, Member nations “shall avoid arbitrary or unjustifiable distinctions” in the levels of protection that they consider “appropriate in different situations,” if those distinctions result in “discrimination”

¹⁴ The reader may wonder at this point exactly what is meant by a less restrictive alternative. Suppose, for example, that a less trade-restrictive alternative exists that would be vastly more costly to implement – must the regulating nation employ the more expensive option? The answer is not necessarily, and WTO jurisprudence adds that the less restrictive alternative must be “reasonably available.” In practice, the less restrictive alternative analysis may be conceptualized as a crude form of cost-benefit analysis, asking whether a more cost-effective way to address the regulatory issue exists. See Alan O. Sykes, *The Least Restrictive Means*, 70 *U. Chi. L. Rev.* 403 (2003).

or a disguised restriction on trade. Like the Article XX chapeau, this language too raises a number of interpretive issues, such as the relationship between “distinctions” and “discrimination,” along with questions regarding the meaning of “arbitrary or unjustifiable” and “disguised restriction.”

II. The Economic Logic of Consistency Requirements and its Limitations

The introduction offered some intuitive foundation for consistency requirements. This section develops the economic logic a bit more carefully to highlight key assumptions and practical limitations.¹⁵

Consider a government engaged in regulating an industry in which consumption of industry output produces some negative non-pecuniary externality (such as pollution). For simplicity, assume that the government chooses its regulatory policy to maximize national economic welfare.¹⁶

The non-pecuniary externality arises entirely within the jurisdiction of the regulating government. Assume further that the externality affects the citizenry at large and is not felt directly by consumers making purchasing decisions; hence, it does not affect their willingness to pay for industry output. Government regulators will select a regulatory standard, s , which all producers in the industry (foreign and domestic) must meet,¹⁷ and which imposes on them some marginal compliance cost. Define the aggregate social harm from the externality as $E(s)$, a function that is decreasing (a higher standard diminishes the total external harm) at a decreasing rate (as the standard rises the incremental reduction in the total externality falls).

The choice of standard affects other components of economic surplus. Beginning with the production side, assume that industry output is perfectly homogeneous and fungible. Assume further that output is produced in a perfectly competitive industry that has two components – a group of domestic producers, and a group of foreign producers, each with access to the same production technology. Higher standards increase marginal production costs, resulting in higher prices and reduced sales of industry output. The supply curve for each group is upward sloping (higher prices elicit greater output), and total supply is the sum of the two

¹⁵ More elaborate formal models of this class of problems may be found in Robert W. Staiger & Alan O. Sykes, *International Trade, National Treatment and Domestic Regulation*, 40 J. Legal Stud. 149 (2011), and in Robert W. Staiger & Alan O. Sykes, *The Economic Structure of International Trade in Services Agreements* (mimeo 2016).

¹⁶ Similar points can be made if we instead assume a “welfare” function that incorporates political economy “weights” on different interest groups – the essential assumption for present purposes is that the welfare of non-citizens receives less weight than the welfare of citizens.

¹⁷ The national treatment obligation prohibits discriminatory standards. We assume here that the national treatment obligation will be obeyed, and focus on the logic of a consistency requirement that goes beyond national treatment.

supply relations. The assumption that foreign supply slopes upward implies that the regulating nation is *not* a price taker in the relevant international market. Rather, as the nation imports more (less) from abroad, it will pay a higher (lower) price.

Because domestic and foreign firms have identical production technologies, both are certain to suffer a diminution of producer surplus in response to higher regulatory standards and the attendant higher marginal costs. We denote domestic and foreign producer surplus by the functions $DPS(s)$ and $FPS(s)$, both downward sloping and assumed to obey regularity conditions necessary for a unique interior solution to the maximization problem below.

Assume that the foreign producers sell exclusively to consumers in the regulating nation (so we can ignore foreign consumer surplus). Domestic consumer surplus is also a function of the regulatory standard. Because consumers are assumed to perceive no benefit from reducing the society-wide externality, consumer surplus falls as the standard rises (because the price paid by consumers increases). We denote consumer surplus by $CS(s)$, and assume that it obeys the regularity conditions required for unique interior solutions to the welfare maximization problem.

With these assumptions, we can now characterize both the global- and national-welfare maximizing choice of the regulatory standard. The global welfare function is:

$$GW(s) = CS(s) + DPS(s) + FPS(s) - E(s)$$

The choice of s that maximizes this function will satisfy the first-order condition:

$$-E_s = -[CS_s + DPS_s + FPS_s]$$

where the subscript s denotes the derivative with respect to s .

The left hand side is the marginal social benefit from a small increase in the regulatory standard, consisting of the marginal reduction in the aggregate external harm. The right hand side is the marginal social cost of a small increase in the standard, consisting of the marginal reduction in the sum of all consumer and producer surplus. Denote the globally efficient choice of the standard as s^w .

Now consider the choice of the standard by the *national*-welfare maximizing government. The national welfare function, $NW(s)$, is identical to $GW(s)$ except we assume that it places less weight on the welfare of foreigners -- $FPS(s)$. Let the weight given to foreign welfare be λ , where $0 \leq \lambda < 1$. The first-order condition for national welfare maximization becomes:

$$-E_s = - [CS_s + DPS_s + \lambda FPS_s]$$

Evaluating the left and right hand sides at s^w , $-E_s$ exceeds $-[CS_s + DPS_s + \lambda FPS_s]$. Intuitively, the marginal social cost of the standard is perceived to be lower at any choice of standard because the marginal cost to foreign producers receives less than full weight. Accordingly, the regulating government will choose a standard to maximize national welfare, s^n , that exceeds the globally efficient standard s^w (driving down the marginal benefit until it equals the reduced marginal cost). Note that this problem would not arise if the regulating nation were a price-taker in the international market (facing a horizontal supply curve for imports). In that circumstance, foreign producer surplus would not be affected by the choice of standard [$FPS_s = 0$] and no international externality would arise.¹⁸

Now consider regulatory policy in another “industry,” the same in all particulars as above, including the same number of producers with the same production technologies and thus the same aggregate supply relationship. The only difference is that all of the producers are domestic. In that scenario, the nationally- and globally-optimal standards converge because all producer surplus receives equal weight in the national welfare calculus. The government thus chooses a less stringent and globally efficient regulatory standard.

This last observation is the key to the economic logic of a consistency requirement. Regulatory requirements invariably burden producers that must comply with them, whether foreign or domestic. Trade agreements do not arise for the purpose of eliminating the burdens of regulatory compliance and their effects on producer surplus in general. Rather, as suggested in the introduction, they arise to address globally inefficient policies that burden trade due to international externalities in policy formulation. When foreign producers complain that a regulatory standard burdens them excessively, the key question under a trade agreement is whether that burden is attributable to the type of international externality problem that trade agreements are designed to solve. Some insight into that problem can be had when it is possible to observe how governments regulate in other settings that are the same in all relevant particulars except that the international externality is plausibly absent.

¹⁸ This simple exposition assumes that the regulatory standard is the only policy instrument in play. If the importing nation has a tariff that is not subject to any legal constraint (such as a negotiated ceiling under GATT), the international externality may be manifest in tariff policy rather than regulatory policy. See Staiger & Sykes, *supra*. Thus, the analysis is best understood as applicable to a situation in which the tariff instrument and other fiscal instruments are indeed constrained – an observation that is consistent with the history of GATT, as the constraints on regulatory policy have deepened and evolved extensively following the extensive negotiated restrictions on tariffs.

Accordingly, if we observe two settings in which the externality problem is essentially the same, production technologies are essentially the same, compliance costs are essentially the same, and the determinants of consumer surplus are essentially the same, except that one industry has substantial imports and the other does not, and if we further observe that the regulatory standard is considerably higher in the industry where substantial compliance costs are absorbed by foreigners, then we can infer that a portion of the burden on foreigners in the first industry is attributable to an international externality.¹⁹

Of course, this observation elides an enormous number of practical complexities. Most importantly, when can we be confident that all of the relevant conditions are “essentially the same” across two industries? Buried in the surplus and externality functions are a large number of factors that can cause the maximization problems to differ in important respects, and that can justify substantially different regulatory choices under a global welfare standard. The effects of price increases on consumer surplus may be significantly different even if two goods have some important similarities, as may the effects of cost increases on producer surplus (domestic or foreign). For regulatory standards that are expressed in terms of risk per unit (allowable pollutants per mile of vehicle travel, for example, a common type of automobile standard), the external harm from consumption of a product will depend on quantity consumed as well as on the external harm per unit of consumption. It may then be justifiable to devote more regulatory attention to widely consumed products, particularly if regulatory compliance costs include an important fixed cost.

In short, when we move from the world of a theoretical model to the practical challenges of defining “comparable” situations and establishing “inconsistencies” in their treatment, a host of variables come into play about which adjudicators may have limited information depending upon the chosen comparators. The information requirements necessary to identify meaningful “inconsistency” may be so great that the analysis is not worth undertaking, and it may be cheaper to assess the efficiency of regulation directly against a global welfare standard rather than attempting to draw inferences about its efficiency from some questionable comparator.

When the comparison involves different producers of the same product with the same external harm (and thus sets of producers in the same “industry”), however, reasonably confident inferences about protectionist inconsistencies are often possible. The reason is simple – it is more likely to be the case that the components of economic surplus and the nature of the externality at issue will be “essentially the same” across the producers being compared to each other, so that

¹⁹ Equivalent logic applies to the problem of inconsistency in the regulatory treatment of trading partners – the welfare of one trading partner may receive greater weight in the national welfare calculus, leading to discrimination between them that is attributable to an international externality.

disparate regulatory policies will offer a more solid basis for an inference that any more burdensome regulation of foreign producers will be the product of an international externality. This observation hints at a basis for taking consistency requirements more seriously when products are “like” in the legal sense under GATT Article III. The next section will elaborate these thoughts with reference to the WTO case law.

III. Consistency Analysis in WTO Case Law: Analysis and Critique

Issues of consistency arise with some regularity in WTO disputes. This section reviews the most important cases to date, dividing the discussion into cases where the comparator for purposes of consistency analysis consists of other products/producers in the same industry, and cases where the comparator lies in another industry. As suggested in the introduction, the utility of consistency analysis is much greater in the former group of cases.

A. Intra-Industry Comparisons

1. Article XX Chapeau Decisions²⁰

United States – Gasoline.²¹ The *Gasoline* dispute concerned U.S. clean air regulations. The EPA promulgated rules allowing only reformulated (less polluting) gasoline to be sold in certain urban areas. To prevent pollutants extracted from reformulated gasoline from simply being dumped into conventional gasoline sold in other areas, the rules also required that pollutant levels in conventional gasoline be no greater than 1990 levels. For U.S. refineries in operation in 1990, the acceptable pollutant level was established on an individual basis using historical data from that year. All foreign refiners, however, were subject to a “statutory” baseline that purportedly reflected the average level of pollutants in U.S.-produced gasoline in 1990. The United States argued that the administrative costs of trying to establish reliable individual baselines for foreign refiners were too great. The statutory baseline was higher than the individual baselines established for many U.S. refiners, however, and much of the gasoline produced in the United States did not meet the statutory baseline. Venezuela and Brazil brought a case challenging the baseline rules as a violation of the national treatment obligation.

The complainants were successful in persuading the dispute panel that national treatment was violated and that no Article XX exception applied. The WTO

²⁰ The chapeau decisions are extensively surveyed in Lorand Bartels, *The Chapeau of the General Exceptions in the WTO GATT and GATS Agreements: A Reconstruction*, 109 Am. J. Int’l L. 95 (2015). See also Julia Ya Qin, *Defining Discrimination under the Law of the World Trade Organization*, 23 B. U. J. Int’l L. 215 (2005); William J. Davey, *supra*.

²¹ *United States – Standards for Reformulated and Conventional Gasoline*, WT/DS2/AB/R, Appellate Body Report adopted on May 20, 1996.

Appellate Body ruled, however, that the national treatment violation was provisionally justified by GATT Article XX(g) pertaining to resource conservation. But the United States ultimately lost the case under the Article XX chapeau. The Appellate Body found that the United States might have undertaken to cooperate with the governments of Venezuela and Brazil to address the administrative challenges of establishing individual baselines for foreign refiners, and had not given enough weight to “the costs for foreign refiners that would result from the imposition of statutory baselines.” Accordingly, the baseline rules reflected both “unjustifiable discrimination” and a “disguised restriction on international trade.”²² The regulations at issue were subsequently modified to impose a uniform baseline for all refiners.

The inconsistent treatment here – individual baselines for domestic refiners and a statutory baseline for foreign refiners – imposed higher compliance costs on foreign refiners whose 1990 pollution levels fell above the statutory baseline than on similarly situated domestic refiners that were not required to meet the statutory baseline. Accepting the regulatory goal of maintaining the 1990 pollutant levels in conventional gasoline, this disparity in treatment might have had reasonable economic justification if it had been significantly more costly to obtain credible data on 1990 pollutant levels for the output of the foreign refiners. But the United States made no effort to obtain such data, and was not in a position to show that the costs of establishing individual baselines were higher for the foreign producers, particularly if their governments had been offered the opportunity to assist in the data gathering process. Instead, the facts suggested that the United States was willing to undertake additional costs to minimize compliance costs for domestic firms, but was unwilling to expend comparable resources to reduce compliance costs for foreign firms, who may well have had to absorb some of the additional costs to remain competitive. Given that the external harm from pollutants was identical whether the gasoline was produced domestically or abroad – so that there was no basis for imposing stricter controls on imported over domestic gasoline -- it is reasonable to infer that the disparate treatment of foreign refiners was attributable to the ability of the United States to externalize some or all of the compliance costs.

*United States – Shrimp.*²³ The *Shrimp* dispute concerned regulations intended to reduce the killing of endangered sea turtles by shrimpers. Pursuant to statute, the United States required domestic shrimpers to employ “turtle excluder devices” (TEDs) in their shrimping operations, and prohibited the importation of shrimp from countries that had not been certified by the United States as employing comparable turtle-protection technology. Initially, the statute was interpreted to apply only to foreign shrimpers in the Caribbean/Western Atlantic, who received a three-year phase-in period and some technical assistance from the United States in

²² Id. p. 27. The Appellate Body offered no general definitions of these terms.

²³ United States – Import Prohibition of Certain Shrimp and Shrimp Products, WT/DS58/AB/R, Appellate Body report adopted November 6, 1998.

adapting their fleets. A court ruling reversed this interpretation, and required that the statute be applied to imports on a worldwide basis within a matter of months after the ruling. The result was a prohibition on shrimp imports from certain Southeast Asian countries, which brought a complaint to the WTO.

The U.S. prohibition was judged to be a quota (of zero) on imports from certain nations in violation of GATT Article XI, and again to be provisionally justified under the resource conservation exception of GATT Article XX(g). But the Appellate Body again found a violation of the chapeau. A number of factors contributed to a finding of “unjustifiable discrimination.” First, the United States in practice refused to certify countries that did not employ the same TEDs technology as U.S. shrimpers, even if other comparably effective technologies might be available and in use. Second, the United States required this technology to be used everywhere by a country’s fleet, even in waters where the risks to sea turtles may have been minimal -- “unjustifiable discrimination” arises where “the application of the measure at issue does not allow for any inquiry into the appropriateness of the regulatory programme for the conditions prevailing in...exporting countries.” Third, some shrimp caught by foreign shrimpers using TEDs was denied entry into the United States because their countries had not yet been certified. Fourth, the United States had entered into negotiations regarding turtle conservation with Western Atlantic and Caribbean nations, resulting in an Inter-American convention on the subject, but had not attempted bilateral or multilateral negotiations with Southeast Asian complainants and had instead proceeded “unilaterally.” Finally, the complainants had been denied the three-year phase-in period afforded to Caribbean and Western Atlantic shrimpers, and had not received the sort of technical assistance given to shrimpers in those areas.²⁴

The United States responded with new guidelines for certification that allowed the use of “comparably effective” turtle protection technologies, and that promised to take account of different conditions in different fisheries, such as the absence of endangered turtles. It also attempted to negotiate a sea turtle conservation convention with the Southeast Asian complainants, although the negotiations did not succeed. The modified guidelines were challenged by Malaysia in a “compliance” proceeding, but the United States prevailed.²⁵

Taking the points one-by-one, the refusal to certify foreign shrimpers using comparably effective turtle protection technologies clearly justifies a finding of

²⁴ Id. ¶¶ 162-81. The United States was also deemed to have engaged in “arbitrary discrimination.” The Appellate Body reasoned that the certification process did not offer exporting nations any opportunity to be heard before the certification authorities, or any statement of reasons for the denial of certification, in effect equating “arbitrary discrimination” with failure to provide procedural due process.

²⁵ United States -- Import Prohibition of Certain Shrimp and Shrimp Products (Recourse to Article 21.5 by Malaysia), WT/DS58/AB/RW, Appellate Body Report adopted November 21, 2001.

inconsistency – the insistence on identical technology raises foreign compliance costs without any reduction in the external harm. Likewise, the refusal to relax the rules for foreign jurisdictions in which sea turtles are not present has no justification. The insistence on certification by *exporting country* rather than by exporter might be defensible if the costs of verifying compliance by each exporter are much greater, although the case report contains little information on this issue. Finally, the disparate treatment of the Southeast Asian exporters as compared to the Caribbean/Western Atlantic exporters with regard to prior negotiations, technology transfer, and phase-in period raised the compliance costs of the former group without any sound justification (an artifact of the change in judicial interpretation of the applicable U.S. statute). *Shrimp* thus provides several easy examples of indefensible regulatory inconsistency.²⁶

*EC – Seals.*²⁷ The *Seals* dispute concerned a prohibition on the sale of products derived from seals in the European Communities. Seal hunting had long been a concern of animal welfare activists in the EC. Canada and Norway challenged the ban on a number of grounds. The litigation centered on an “indigenous peoples” exception to the prohibition, allowing the sale of seal products derived from seal

²⁶ A more troublesome case is *Brazil – Measures Affecting Imports of Retreaded Tyres*, WT/DS322/AB/R, Appellate Body report adopted December 17, 2007. *Tyres* concerned a Brazilian prohibition on the importation of retreaded tires. Brazil offered a public health justification, citing the buildup of used tires in landfills. The tires accumulate stagnant water and contribute to serious mosquito infestation. The alternative of burning the tires causes noxious air pollution. Brazil allowed the sale of domestically retreaded tires, noting that this policy kept tires on the road longer and reduced their accumulation in landfills. Brazil’s import ban exempted imports from MERCOSUR, however, a South American customs union to which Brazil belongs, after a MERCOSUR dispute panel ruled that the ban violated MERCOSUR law. Before the WTO, the ban on retread imports was deemed a violation of the GATT Article XI prohibition on import quotas, and was provisionally justified under the public health exception of GATT Article XX(b). But the Appellate Body went on to hold that the exception for MERCOSUR imports “bears no relationship” to the public health objective and “even goes against this objective,²⁶” thereby rendering the discrimination “unjustifiable.” Brazil eventually complied with the ruling by banning MERCOSUR imports.

The inconsistent treatment of MERCOSUR imports in *Tyres* assuredly reflects a situation in which MERCOSUR trading partners were treated preferentially, and fits the model result where the welfare of some trading partners receives greater weight than others. But this inconsistency is “legal” in broad brush under WTO law, in accordance with the exception to the non-discrimination obligations for customs unions and free trade areas contained in GATT Article XXIV. If Brazil is allowed to afford tariff preferences and other trade benefits to MERCOSUR members, it is unclear why the regulatory inconsistency at issue in *Tyres* is any more problematic.

²⁷ *European Communities – Measures Prohibiting the Importation and Marketing of Seal Products*, WT/DS400/AB/R, Appellate Body report adopted June 18, 2014.

hunting by Inuit communities, while banning seals derived from “commercial” hunts. In practice, only the Inuit hunters in Greenland (which is not a part of the EC notwithstanding its association with Denmark) were able to take advantage of the exception, even though Canada had its own Inuit community engaged in seal hunting. The criteria for distinguishing Inuit products from commercial products were also fuzzy, and their application may have been inconsistent.

The dispute panel and the Appellate Body concluded that the disparate treatment of Canadian Inuit violated the most-favored-nation obligation of GATT Article I, but that the animal welfare rationale for the EC prohibition was sufficient to bring the measure within the public morals exception of GATT Article XX(a). The Appellate Body nevertheless found arbitrary and unjustifiable discrimination under the chapeau, however, for three reasons. First, the Inuit exception did not relate to, or promote, the public morals objective of the measure, since the Inuit hunt was just as detrimental to animal welfare as the commercial hunt. Second, the criteria for distinguishing Inuit and commercial hunts were not applied in a clear and consistent manner, potentially allowing commercial hunt products from Greenland to enter under the Inuit exception. Finally, Canadian Inuit hunters had not been able to take advantage of the exception, and the EC authorities had apparently made greater efforts to enable Greenlandic Inuit to avail themselves of it.²⁸

Again taking the points one-by-one, the existence of the indigenous peoples exception by itself seems a shaky basis for a finding of impermissible inconsistency. If seal hunting is a central occupation of Inuit communities, and alternative labor market options are few for members of those communities, the cost of applying the ban to the products of Inuit communities may be significantly greater than the costs of applying it to commercial hunters. Higher compliance costs for a subset of foreign exporters can justify more lenient regulatory requirements for that subset of exporters.

But the other disparities noted above – the loose effort to distinguish commercial hunters from Inuit hunters in Greenland, and the lack of effort to afford Canadian Inuit comparable access to the benefits of the exemption – strongly suggest favoritism toward the interests of Greenland, perhaps explained by its longstanding ties with Denmark (an EU member). No principled justification for these disparities is apparent. The EU now claims to have modified its seal products prohibition to comply with the ruling.²⁹

2. TBT Decisions

²⁸ Id. ¶ 5.338.

²⁹ See http://trade.ec.europa.eu/doclib/docs/2015/november/tradoc_153924.pdf.

United States -- Clove Cigarettes.³⁰ *Clove Cigarettes* concerned an Indonesian challenge to a U.S. Federal statute prohibiting the sale of flavored cigarettes. The prohibition was premised on the notion that flavored cigarettes attract young people to smoking. Indonesia was a major exporter of cigarettes flavored with cloves. The case centered on a gaping exception to the prohibition – menthol cigarettes could still be sold in the United States. The United States argued that many domestic consumers were addicted to menthol cigarettes, and would suffer serious withdrawal symptoms if they too were banned. Likewise, it argued, a ban on menthol cigarettes might lead to a criminal black market in them.

Both the panel and the Appellate Body ultimately determined that clove and menthol cigarettes are like products. The further question, pursuant to TBT Article 2.1, was whether clove cigarettes (mostly imported from Indonesia) were treated “less favourably” than menthol cigarettes (mostly produced in the United States). This decision introduced the proposition that “less favourable” treatment would not be found under the TBT Agreement if the differential treatment of imports were attributable to a “legitimate regulatory distinction.” On that issue, the Appellate Body was unpersuaded by the United States’ arguments for treating menthol cigarettes differently.³¹ Compliance with the ruling was not forthcoming. Indonesia initially requested authority to suspend trade concessions to the United States in retaliation, but later dropped the case in response to political pressures from the United States.

But Indonesia made a compelling case. The United States did not introduce any evidence that clove cigarettes are more harmful than menthol cigarettes, such as evidence that clove cigarettes are more likely to attract young smokers. The U.S. defense of the disparity in treatment instead rested on two arguments that bordered on frivolous. The Appellate Body was correct to note that the U.S. statute had no effect on the availability of unflavored cigarettes, so that smokers addicted to menthol cigarettes could readily turn to unflavored cigarettes to avoid the “withdrawal” problem that a ban on menthol cigarettes would purportedly cause. Likewise, the availability of a perfectly legal alternative for addicted smokers made it unlikely that a prohibition-era style black market in menthol cigarettes would emerge to cause serious issues in the United States. *Clove Cigarettes* thus offers a nice example of a situation in which politically connected domestic producers were successful in pressing their interests before domestic regulators, while politically ineffectual foreign producers of equivalently harmful products lost out in the regulatory process.

³⁰ United States – Measures Affecting the Production and Sale of Clove Cigarettes, WT/DS406/AB/R, Appellate Body report adopted April 23, 2012.

³¹ Id. ¶225.

United States – Tuna.³² *Tuna* concerned regulations under the U.S. Dolphin Protection Consumer Information Act. The Act sets out conditions under which tuna may be sold displaying a “dolphin safe” label in the United States. A key focus of the Act was on a technique of fishing known as “setting on dolphins” and on some additional measures to protect dolphins in the Eastern Tropical Pacific (ETP). Setting on dolphins involves placing nets around schools of dolphins, which often congregate above tuna schools, and results in high levels of dolphin mortality. The Act provided that fishermen using this technique could not market their tuna as dolphin safe. In addition, for fish caught in the ETP, the captain of the vessel and an observer were required to certify that no dolphins had been killed or seriously injured in catching the tuna, a requirement that did not apply outside the ETP.

U.S. fleets had abandoned the technique of setting on dolphins, but that method of fishing was still prevalent in the Mexican fleet, which operated mainly in the ETP. Accordingly, most tuna from Mexico was ineligible for the dolphin safe label. Mexico did comply with the Agreement on the International Dolphin Conservation Program (AIDCP), however, which contained measures to reduce dolphin mortality, but did not prohibit setting on dolphins. Mexico brought a complaint to the WTO.

The Appellate Body ultimately held that the U.S. Act afforded Mexico “less favourable treatment” than that afforded to domestic tuna and tuna imported from areas outside the ETP. It reasoned that fishing methods other than setting on dolphins cause significant dolphin mortality, potentially as great as that caused by Mexican fishing techniques in compliance with the AIDCP. Consequently, the lack of a requirement for any certification regarding dolphin mortality outside the ETP comparable to that required inside the ETP was not a “legitimate regulatory distinction” – the United States had failed to demonstrate that the differences in regulatory treatment inside and outside the ETP were sensibly “calibrated” to differences in risk.³³

The United States amended its rules, and Mexico brought a further challenge before a compliance panel. The panel determined that aspects of the new U.S. rules – in particular the requirement that both the captain of the fishing vessel and an additional observer certify the absence of dolphin mortality in the ETP, while only the captain must certify the absence of mortality outside the ETP, was in violation of both GATT and the TBT Agreement.³⁴ The Appellate Body quibbled with some of

³² *United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products*, WT/DS381/AB/R, Appellate Body Report adopted June 13, 2012.

³³ *Id.* ¶297.

³⁴ *United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products*, WT/DS381/RW, Panel Report adopted December 3, 2015.

the panel's conclusions, but ultimately affirmed a finding that the United States remains in violation.³⁵

Tuna presents many of the same concerns as *Shrimp*. The United States offered little reason to suppose that dolphin mortality in the ETP was any more troubling than dolphin mortality elsewhere. Accordingly, in the original proceeding, it offered at best shaky justification for denying dolphin-safe certification to Mexican exports that were produced using a fishing technology that might well have caused no greater dolphin mortality than the fishing methods used by the U.S. fleet outside the ETP. And with respect to the amended rules at issue before the compliance panel, the more burdensome certification requirements in the ETP (where Mexico primarily operates) lack clear justification.

B. Inter-Industry Comparisons

1. Necessity Decisions

As noted earlier, the necessity test may be understood as a variant of least restrictive means analysis. The core question, as framed by the Appellate Body, is whether the regulatory objective at issue can be achieved by a "less trade-restrictive alternative measure" that is "reasonably available" to the regulating nation. Regulatory consistency is not directly at issue, but inconsistency may be used as evidence to suggest the availability of a less trade-restrictive alternative. Two decided cases involved arguments to that effect.

EC – Asbestos.³⁶ *Asbestos* involved a French ban on the importation and sale of most asbestos-containing products. Of particular concern to the complainants were certain concrete construction products reinforced with asbestos fibers. The Appellate Body ultimately found that the complainants failed to establish "likeness" between the asbestos-containing products and other products that were not prohibited, so that there was no violation of the national treatment obligation. In dicta, the Appellate Body went on to address the complainants' arguments regarding the "necessity" of the ban in relation to the Article XX(b) public health exception.

One such argument was that France had banned asbestos-containing concrete products but had allowed the continued sale of concrete products reinforced with other fibers that also pose a health hazard. The Appellate Body had two responses. First, it noted that France had made a decision to halt the spread of "asbestos-related health risks," pursuant to the right of Members "to determine the

³⁵ United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products, WT/DS381/AB/RW, Appellate Body Report adopted December 3, 2015.

³⁶ European Communities – Measures Affecting Asbestos and Asbestos-Containing Products, WT/DS135/AB/R, Appellate Body report adopted April 5, 2001.

level of protection of health that they consider appropriate in a given situation.” The clear implication is that national regulators may be selective in deciding what risks they wish to address. Second, it observed that “the risk posed by the [other] fibers is, in any case, *less* than the risk posed by” asbestos fibers...”[I]t seems to us perfectly legitimate for a Member to seek to halt the spread of a highly risky product while allowing the use of a less risky product in its place.³⁷”

The first point made by the Appellate Body effectively denies any scope for consistency analysis across industries. If WTO Members have the right to regulate some risks and ignore others altogether, regardless of the degree of similarity or the relative magnitude, then intra-industry inconsistency loses any relevance. Later cases, to be discussed below, suggest a broader role for consistency analysis than *Asbestos* suggests, although from a policy perspective the Appellate Body’s position in *Asbestos* has considerable appeal as the discussion to follow will indicate.

The second, narrower point seems unassailable. If the substitutes for asbestos-containing products pose less risk than asbestos-containing products, it is no objection that the less risky products escape prohibition. Sensible regulation may often entail efforts to channel consumer purchases into close substitutes that create less societal risk.

Asbestos thus offers an example of a case in which flawed consistency analysis was easily rejected as a basis for challenging the regulation of imported goods. The harder question is whether consistency analysis can ever supply a confident inference in the opposite direction – namely, an inference that the challenged regulation is indeed distorted by an international externality. The remaining discussion will suggest not.

Korea – Beef.³⁸ *Beef* involved a challenge to the “dual retail” system for the sale of domestic and imported beef in Korea. Korea allowed “small” retailers to sell only one or the other, although they were free to choose which one. In “large” stores, domestic and imported beef had to be sold in different sections of the store. The stated rationale for separating the sale of imported and domestic beef in this fashion was consumer protection -- imported beef was said to be cheaper and of lower quality, creating a temptation for retailers to pass off the cheaper imported product as domestic. The government maintained that that it was too costly to detect this type of fraudulent practice if the imported and domestic products could be commingled in stores. Both the dispute panel and the Appellate Body ruled that the dual retail system violated the national treatment obligation despite the fact the regulation did not on its face diminish the sales opportunities for imported beef. A

³⁷ Id. ¶168.

³⁸ Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef, WT/DS161&169/AB/R, Appellate Body report adopted January 10, 2001.

key piece of evidence in this regard was the fact that small stores, allowed to sell only one or the other, had overwhelmingly chosen to sell domestic beef.³⁹

Korea then appealed to an exception under GATT Article XX(d) for measures “necessary to secure compliance with laws...not inconsistent with [GATT],” in this case, the Korean Unfair Competition Act. Korea’s defense foundered, however, on the necessity test. As evidence that the dual retail system was not “necessary” to achieve Korea’s consumer protection objectives, the Appellate Body noted:

Korea does not require a dual retail system in related product areas, but relies instead on traditional enforcement procedures. There is no requirement, for example, for a dual retail system separating domestic Hanwoo beef from domestic dairy cattle beef. Nor is there a requirement for a dual retail system for any other meat or food product, such as pork or seafood. Finally, there is no requirement for a system of separate restaurants, depending on whether they serve domestic or imported beef, even though approximately 45 per cent of the beef imported into Korea is sold in restaurants. Yet, in all of these cases, the Panel found that there were numerous cases of fraudulent misrepresentation.⁴⁰

The Appellate Body was quick to note that its analysis “does not necessarily imply the introduction of a consistency requirement into the ‘necessity’ concept,” but that the consideration of enforcement measures in other settings is informative as to what less trade-restrictive measures may be available in beef retailing.⁴¹

Regarding Korea’s argument that alternative enforcement measures would be less effective than the dual retail system at reducing fraud, the Appellate Body responded:

We are not persuaded that Korea could not achieve its desired level of enforcement...using conventional WTO-consistent enforcement measures, if Korea would devote more resources to its enforcement efforts on the beef sector. It might also be added that Korea’s argument about the lack of resources to police thousands of shops on a round-the-clock basis is, in the end, not sufficiently persuasive. Violations of laws and regulations like the Korean Unfair Competition Act can be expected to be routinely investigated and detected through selective, but well-targeted, controls of potential wrongdoers.

Finally, to the argument that the greater expense associated with conventional enforcement measures rendered the dual retail system “necessary,” the Appellate Body noted:

³⁹ Id. ¶146.

⁴⁰ Id. ¶168.

⁴¹ Id. ¶170.

Securing through conventional, WTO-consistent measures a higher level of enforcement of the Unfair Competition Act with respect to the retail sale of beef, could well entail higher enforcement costs for the national budget. It is pertinent to observe that, through its dual retail system, Korea has in effect shifted all, or the great bulk, of these potential costs of enforcement (translated into a drastic reduction of competitive access to consumers) to imported goods and retailers of imported goods, instead of evenly distributing such costs between the domestic and imported products. In contrast, the more conventional, WTO-consistent measures of enforcement do not involve such onerous shifting of enforcement costs which ordinarily are borne by the Member's public purse.

Korea ultimately dismantled the dual retail system.

The ruling against Korea was correct in my view, but not because of the purported regulatory inconsistencies. Four aspects of the Appellate Body findings warrant discussion. First, with regard to the absence of a dual retail system for different types of domestic beef, as well as the absence of dual retail systems for pork and seafood, the Appellate Body (and the panel) are too quick to find evidence of meaningful inconsistency. Even if the origin of these other products is at times misrepresented to consumers as the Appellate Body concluded, no evidence was adduced to suggest that the harm to consumers was comparable to the harm associated with misrepresenting (typically low quality) foreign beef as (typically high quality) domestic. It is certainly possible that the average quality difference between different types of domestic beef, and between imported and domestic pork and seafood, is smaller. If so, the injury to consumers from any transaction tainted by misrepresentation would be less. Likewise, Korea made the argument to the panel that consumption of all domestic dairy beef was only 12-25% of total consumption and only about half of the volume of imported beef.⁴² Korea also argued before the Panel that the different treatment of beef as compared to other agricultural products such as pork and seafood owed to "beef's particular importance as a component of the average Korean's diet and the substantial commercial activity in beef."⁴³ The extent of any consumer harm from misrepresented sales is a function of both the harm from each such sale, and the number of such sales. It is not unreasonable to invest less regulatory effort in addressing a smaller problem.

Second, regarding the different treatment of imported and domestic beef in restaurants, the basis for an inference of inconsistency is somewhat stronger. Here, the same products are at issue, and any consumer harm from misrepresentation is presumptively comparable whether beef is prepared for consumption at home or in

⁴² Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef, WT/DS161&169/R, Panel report adopted January 10, 2001, ¶661.

⁴³ Id. ¶662.

a restaurant. But the costs of a dual retail system at the restaurant level may be different. Separate display counters, as in the “large” retail stores, would do nothing to prevent commingling of products in the kitchen. And the costs of requiring restaurants to sell only one or the other may have been greater. Consider, for example, a group of patrons with heterogeneous tastes for the more expensive high quality domestic product and the lower quality imported product. If restaurants could only sell one or the other, no restaurant could cater to these heterogeneous tastes in a group of diners.

Third, the Appellate Body finding that a dual retail system was unnecessary because alternative, less trade-restrictive approaches to enforcement would be equally effective (“selective, but well-targeted, controls”), offers a more convincing basis for condemning the Korean system. Assuming that inspectors can reliably distinguish the domestic and imported products (necessary if the dual retail system is itself to be enforceable), a “Gary Becker-style” approach to enforcement (with a modest number of spot inspections coupled with stiff penalties⁴⁴) can incentivize honest sales practices by merchants without cutting off channels for imported products. *Beef* thus offers one example of how direct evaluation of the measures at issue against an efficiency criterion may be easier and more useful than inter-industry consistency analysis.

Finally, the Appellate Body’s concern for the “shifting of costs” to imports is an important element of the case. Any system of enforcement entails enforcement costs, and those costs can be borne by the government or in one manner or another charged back to the regulated sector. A system of spot inspections can be financed by taxpayers, for example, or through inspection fees charged to retailers. WTO law has nothing to say about how enforcement mechanisms are to be financed unless the costs of enforcement are unevenly imposed on imported goods, so that their relative price increases compared to the domestic competition. A system of spot inspections, financed by an inspection fee on the sellers of imported goods only, for example, would plainly violate WTO law.⁴⁵ The dual retail system, which led the vast majority of small retailers to cease importing beef, is roughly analogous. The disproportionate burden on imports reflects the sort of international externality that trade agreements are intended to solve, and offers a firmer basis for a ruling against Korea than the speculative regulatory consistency analysis of the panel and the Appellate Body.

2. SPS Decisions

⁴⁴ Gary Becker, *Crime and Punishment: An Economic Approach*, 76. J. Pol. Econ. 169 (1968).

⁴⁵ The violation would arise under GATT Article III, with no plausible Article XX defense.

EC – Hormones.⁴⁶ The so-called *Beef Hormones* dispute originated under GATT in the 1980's, and is one of the longest running disputes in the history of the WTO/GATT system. The impasse in the dispute under GATT was a principal motivation for the SPS Agreement.

The dispute arose when the EC banned the sale of beef raised with a variety of growth hormones (including but not limited to a number of natural and synthetic estrogenic compounds). Growth hormones were in widespread use at the time in the United States and Canada, and imports of beef from those countries were greatly curtailed as a result of the ban. The costs of segregating animals and certifying them as hormone free were apparently too great at the time for U.S. and Canadian beef producers to do so and remain competitive with EU beef. A complaint was made under GATT but the EC refused to allow the adjudication to proceed. Canada and the United States promptly filed a case under the WTO when that option became available. The complainants argued that the use of growth hormones was perfectly safe, and that the European measure was driven by its protective effect for European beef producers. Europe responded that the ban was a legitimate health measure, and that it was entitled to choose a zero risk policy even if the health dangers from growth hormone residues were small and hard to establish with data from human populations.

The case raised a number of issues under the SPS Agreement, and the complainants eventually prevailed. I focus here only on the consistency arguments raised by complainants. The consistency claim was based on SPS Article 5.5, noted earlier, prohibiting “arbitrary and unjustifiable” distinctions in the level of SPS protection across “different situations” that result in “discrimination” or “disguised restriction on international trade.”

The WTO dispute panel found multiple violations of this consistency obligation. Along the way, it set forth a three-step inquiry for the application of SPS Article 5.5. Step one requires a showing that the respondent nation employs different levels of protection across different situations that are “comparable.” The panel proceeded to suggest that situations are “comparable” if they involve *either* the same residue or toxin, or the same adverse health effect (carcinogenesis in this case). Step two requires a showing that the differences across comparable situations are “arbitrary or unjustifiable.” Step three requires a showing that the distinctions result in “discrimination or a disguised restriction on international trade.”

Applying this test, the dispute panel identified five “different situations” that it deemed to be “comparable,” involving the regulatory standards for:

⁴⁶ EC Measures Concerning Meat and Meat Products (Hormones), WT/DS26/AB/R, Appellate Body report adopted February 13, 1998.

(i) residue levels of naturally occurring hormones introduced into animals for growth purposes;

(ii) residue levels for hormones occurring naturally in foodstuffs;

(iii) residue levels for naturally occurring hormones introduced into animals for therapeutic or zootechnical purposes;

(iv) residue levels for synthetic hormones introduced into animals for growth promotion purposes;

(v) residue levels for the anti-microbial agents carbadox and olaquinox introduced into animal feed for growth promotion in piglets.

These situations were deemed “comparable” because they involved residues of the same substances [items (i) – (iii)], or involved the same general risk of carcinogenesis from human ingestion.

The panel noted that the EC had established zero residue standards under items (i) and (iv), but no (or “unlimited”) residue standards under items (ii), (iii) and (v), thereby establishing “distinctions” across “different situations” for purposes of the first step in the test for a violation of SPS Article 5.5. It further found the distinctions to be “arbitrary and unjustifiable” under step two of the test, arguing that the health risks from the various substances were all comparable based on the scientific evidence that it had received. Indeed, it noted that the health risks from naturally-occurring hormones under item (ii) might be far greater than the health risk from residues under items (i) or (iii), because the amount of naturally occurring estrogens in certain animal products and in other foods far exceeds the estrogen residues from natural or synthetic hormones introduced for growth purposes. Eggs were offered as an example, which apparently contain many times the level of estrogen found in hormone-raised beef.⁴⁷

Finally, the panel adduced various reasons why the differences reflected a “disguised restriction on international trade.” For example, in comparing the standards across items (i) and (ii), the panel noted the large difference between zero and unlimited residue standards, the absence of a “plausible justification” for this large difference, the fact that the first item resulted in a ban on imports, the fact that the legislative history of the ban suggested that it was enacted in part to harmonize regulation within the EC to facilitate intra-European trade, and the fact that the use of growth hormones in Europe prior to the ban was much less

⁴⁷ EC Measures Concerning Meat and Meat Products (Hormones), WT/DS26/R, dispute panel report adopted February 13, 1998, note 397. The residue level of oestradiol-17 β equivalents in 50-60 grams of chicken eggs was found to be 1,750 nanograms; the average residue level in 500 grams of beef from a steer implanted with oestradiol-17 β was found to be 11.4 nanograms.

significant that abroad, so that the ban favored domestic beef producers.⁴⁸ As another example, in comparing item (i) to item (v), the panel emphasized that carbadox was used to treat piglets, while the banned growth hormones were used to treat cattle. The European beef market had been plagued by oversupply in the past, while the pork market had not been,⁴⁹ thus suggesting that the different treatment of the beef industry was driven in part by a desire to protect European beef producers.

The Appellate Body reversed all of the panel's conclusions on the consistency issue. Although it endorsed the panel's three-step test for a violation of SPS Article 5.5, and did not object to the panel's selection of the five areas for comparison, in each comparison it reversed either the finding that the differences were "arbitrary or unjustifiable," or the finding of a "disguised restriction." For example, on the comparison among items (i), (ii) and (iv), the Appellate Body found a "fundamental distinction" between hormone residues that arise naturally in foods on the one hand, and hormones that are introduced artificially on the other, whether natural or synthetic -- efforts to limit the ingestion of naturally occurring hormones would entail a "comprehensive and massive governmental intervention into the lives of ordinary people."⁵⁰ Accordingly, the distinction was neither arbitrary nor unjustifiable. Likewise, with regard to the comparison among items (i), (iii) and (iv), the Appellate Body accepted the argument that the use of hormones for therapeutic and zootechnical purposes was much more limited than for growth purposes, and that the former uses were carefully controlled by veterinarians, posing less danger of abuse. Accordingly, the health risk from the use of hormones for therapeutic or zootechnical purposes is lower, and the distinction in treatment was not arbitrary or unjustifiable (the panel had refrained from making a finding on this issue).

Regarding the anti-microbials carbodax and olaquinox, the Appellate Body noted that carbodax is known to be a genotoxic carcinogen. Given its danger and the absence of limits to its use in piglets, the Appellate Body concurred with the panel's finding that the absence of any limits on its use or residue was "unjustifiable." But as to the third step of the test under SPS Article 5.5, the Appellate Body reversed the finding of a disguised restriction. It noted that the legislative history of the hormone-beef ban evinced a genuine concern for the health effects of growth hormones. Further, the ban on growth hormones did not simply aid European farmers who used them more sparingly before the ban, but also foreign producers of hormone-free beef.⁵¹

Omitted from the analysis before both the panel and the Appellate Body was any analysis of "discrimination." Under the third-step of the test for violation of Article 5.5, the complainant must show *either* a disguised restriction on

⁴⁸Id. ¶¶8.203-205.

⁴⁹ Id. ¶8.243.

⁵⁰ Appellate Body report, *supra*, ¶221.

⁵¹ Id. ¶245.

international trade *or* “discrimination.” The complainants had focused on the former issue, and so the discrimination issue was never argued or discussed.

As noted, the complainants prevailed in the case, albeit on other grounds (essentially, that the scientific foundation for the European prohibition was inadequate). The EC refused to lift the ban, resulting in a number of years of retaliatory sanctions. The case was finally settled (at least for now) when Europe agreed to liberalize further its restrictions on imports of hormone-free beef. With the passage of time, U.S. and Canadian producers had seen a growth in domestic demand for hormone-free beef, and found it economical to segregate their herds to serve this domestic market segment, making it much less costly to comply with the European system of certifying beef to be free of growth hormones.

Three aspects of the Appellate Body findings warrant careful attention. Consider first the panel findings, reversed on appeal, that the EU acted “inconsistently” by prohibiting estrogenic growth hormones in cattle while ignoring the effects of higher levels of naturally-occurring estrogens in other foodstuffs such as eggs. The Appellate Body was right to suggest that there is an important difference between naturally-occurring carcinogens and those artificially introduced, notwithstanding the absence of a detailed explanation as to why. The costs of effective investment to reduce or eliminate harm may be dramatically different across the two types of cases. Indeed, it may be altogether impossible as a practical matter to reduce the natural estrogen content in eggs, and a complete prohibition on egg consumption -- perhaps the only practicable way to eliminate the estrogen hazard -- may be socially undesirable because the surplus from egg consumption is much greater than the aggregate harm. This situation can be understood crudely as a case where the marginal benefit of investment to reduce unit harm is below marginal cost even with zero investment, suggesting that optimal investment is zero. In the case of beef, by contrast, the complete elimination of all cancer risk is feasible through a ban on the use of growth hormones, and it is logically possible (although assuredly controversial as an empirical matter) that such a policy yields greater benefit at the margin than cost, thus representing a case where optimal investment in the reduction of harm entails a complete ban on the harmful chemical.⁵² With cancer risk thereby reduced to zero, competitive

⁵² The following simple formal structure elaborates the points made in the text. Suppose that consumers are ignorant of the risks associated with estrogen ingestion, or because of some other cognitive quirk tend to ignore or undervalue them (such an assumption is necessary to justify regulatory intervention at all), and assume further that consumer information remedies are for some reason inadequate to address the problem. Then, consider two domestic industries indexed by i (beef and eggs), each producing output Q_i . Assume that all output is domestic (we are interested here merely in characterizing the efficient regulatory policy for each industry, and so we assume away any international externality). The inverse demand function in each industry is $p_i(z)$, and the total cost function for each industry is $C_i(Q_i)$. Each unit of consumption causes social harm of $h_i(x_i)$, where

equilibrium in the beef market will naturally yield a price satisfying the condition for optimal consumption, even if consumers ignore cancer risk.

The more general point is that simply because the harm from consumption arises from the same substance in both industries, it hardly follows that optimal regulation requires similar regulatory policies in each industry. Conceivably (although I do not claim to have established this fact empirically), even the extreme case of opposite “corner solutions” in each industry can be consistent with optimal regulation, and this purported “inconsistency” is not logically sufficient to demonstrate the presence of regulatory distortion attributable to an international externality.

If anything is awry in beef to eggs comparison, it may not be the ban on growth hormones in beef and the absence of a policy to reduce the hormone content of eggs, but the absence of any regulatory measure (such as a consumption tax) on eggs designed to induce consumers to take account of the harm from egg consumption that they presumptively ignore (thus leading to a price for eggs that is

x_i is a monetary expenditure per unit on reducing the harm from consumption, and $h_i(x_i)$ is decreasing and convex. Let x_i^{max} denote the level of investment that reduces the unit harm to zero. Let x_i^* denote the socially optimal level of investment and let Q_i^* denote the socially optimal level of consumption.

The optimal regulatory policy will maximize social welfare. The social welfare function is

$$\int_0^{Q_i} p_i(z) - C_i(Q_i) - h_i(x_i)Q_i - x_iQ_i$$

Differentiating with respect to x_i yields three possibilities for optimal investment:

$$\begin{aligned} -h_i'(0) &< 1 \text{ if } x_i^* = 0; \\ -h_i'(x_i) &= 1 \text{ if } 0 < x_i^* < x_i^{max}, \text{ and} \\ -h_i'(x_i^{max}) &> 1 \text{ if } x_i^* = x_i^{max}. \end{aligned}$$

Differentiation with respect to output Q_i yields the condition

$$p_i(Q_i^*) = C_i'(Q_i^*) + h_i(x_i^*) + x_i^*$$

assuming a positive level of consumption.

The first set of conditions indicates that the marginal benefit of investment in reducing the unit harm from consumption should equal marginal cost if optimal investment is positive but less than x_i^{max} ; it must be less than marginal cost (evaluated at $x_i=0$) if optimal investment is zero; and it must be greater than marginal cost (evaluated at x_i^{max}) if optimal investment is x_i^{max} . The last condition states that at the optimal (assumed positive) level of consumption of the good, price should equal the marginal social cost of each unit consumed, evaluated at the optimal level of investment in reducing harm.

below the social optimum, and attendant excessive consumption).⁵³ This observation affords a more plausible basis for finding inconsistency than the facts relied on by the panel, but it is hardly unassailable. The costs of a system of consumption taxes on eggs may exceed the benefits, especially if the optimal tax would be quite small. One might also wonder whether offsetting consumer quirks may be present – perhaps consumers overestimate the dangers of cholesterol in eggs, for example, so that excessive egg consumption because of inattention to estrogen risk does not arise.

In short, the disparate treatment of added hormones and naturally-occurring hormones is a shaky basis for a finding of troubling inconsistency. Too many other considerations, turning on empirical matters as to which the evidence is scant or non-existent, complicate the analysis and preclude any definitive conclusion.

A second set of findings concerned the disparate treatment of growth hormones on the one hand, and the same hormones for therapeutic or zootechnical purposes on the other. The evidence suggested that hormone administration for these purposes was on a much smaller scale, was carefully supervised by veterinarians, and was mainly done for breeding animals rather than slaughter animals. These factors led the panel to leave undecided the question whether the disparate treatment of hormone use for these purposes violated the SPS consistency requirement. The Appellate Body went farther, and ruled that no violation was present, an assessment that seems sound. The residues consumed by humans from the therapeutic and zootechnical use of hormones are clearly far lower than those resulting from routine use of growth hormones in all slaughter animals. Further, the benefits of using hormones to produce superior breeder animals are clearly different and perhaps greater than the benefits of hormones in slaughter animals, so that the marginal costs of curtailing hormone use may be greater. Once again, too many variables are in play, about which information is scant, for any inference of troubling inconsistency to be drawn.

Finally, the best argument for a finding of inconsistency under the SPS Agreement concerned the use of antimicrobials to promote growth in piglets, including carbodax, known to be genotoxic and potentially a more worrisome food additive than estrogens. Both the panel and the Appellate Body were persuaded that the disparate treatment of estrogen additives for growth promotion in cattle and antimicrobial additives for growth promotion in swine was “unjustifiable.” They differed only on the question whether the disparity was a “disguised restriction” on trade, avoiding any discussion of the alternative “discrimination” basis for a violation. The panel emphasized that the European beef industry was struggling and beset with foreign competition prior to the growth-hormone ban, while the pork industry was internationally competitive, engaged in exportation, and wished to remain competitive in foreign markets where the use of antimicrobials was apparently permissible. The Appellate Body countered with

⁵³ See note X *supra*.

evidence that the history of EU regulatory action revealed some genuine concern for human ingestion of growth hormones, and the fact that some foreign producers of hormone-free beef had benefited from the EU ban on hormone-raised beef.

Both the panel and the Appellate Body may have been too quick to find the disparate treatment of growth hormones in cattle and antimicrobials in piglets to be “unjustifiable.” No quantitative evidence was adduced on the extent to which the use of antimicrobials in piglets translated into human ingestion of those substances. No comparison was made between per capita beef and pork consumption, for example. More importantly, the EU argued that the use of antimicrobials in piglets left negligible residues by the time that the piglets reached maturity and were slaughtered. The panel responded that residue levels were nevertheless non-zero, but the evidence simply did not establish the level of hazard from pork consumption relative to the hazard from the consumption of hormone-raised beef.

Regarding the issue of a “disguised restriction,” the Appellate Body was prepared to rule for the EU on the basis of evidence that some genuine concern for hormone ingestion played a role in the enactment of the regulation, and that the ban benefited some foreign suppliers. The decision illustrates the awkwardness attached to a legal principle that in effect requires an international adjudicator to issue a ruling as to whether the motives of sovereign regulators are impure. Moreover, it highlights the extreme difficulty of ascertaining whether a disparity in regulatory treatment is due to an international externality, or instead to the vagaries of domestic politics that give some issues greater political saliency than others. The “disguised restriction” principle is simply not a very satisfactory device for sorting cases, yet no superior principle is apparent. The alternative hook in SPS Article 5.5 – “discrimination” – is as yet undefined in the case law, and it is unclear how it captures anything beyond the logically prior finding that disparate treatment exists and is “unjustifiable.” *Hormones* thus highlights the enormous challenge of distinguishing inter-industry “inconsistencies” due to an international externality from inconsistencies that arise from democratically legitimate policy choices that rest on *bona fide* domestic political preferences.

Australia – Salmon.⁵⁴ *Salmon* concerned Australia’s prohibition on imports of (uncooked) fresh, chilled and frozen salmon. The ostensible rationale for the prohibition was to prevent the spread of diseases that might afflict Australian salmon or other fish populations. Canada brought a complaint, arguing that the prohibition was unnecessary, lacked an adequate scientific foundation, and violated the consistency principle in SPS Article 5.5. I focus here only on the latter argument.

The panel concluded, and the Appellate Body agreed, that situations are “comparable” if they involve a risk of *either* the “entry, establishment or spread of the same or a similar disease” *or* the “same or similar associated biological and

⁵⁴ *Australia – Measures Affecting Importation of Salmon*, WT/DS18/AB/R, Appellate Body Report adopted November 6, 1998.

economic consequences.”⁵⁵ Likewise, “for situations to be comparable under Article 5.5, it is sufficient for these situations to have in common a risk of entry, establishment or spread of *one* disease of concern. There is no need for these situations to have in common a risk of entry, establishment or spread of *all* diseases of concern.”⁵⁶ Accordingly, it was permissible to compare the prohibition on imports of fresh, chilled and frozen salmon with the absence of import limitations on (i) uncooked Pacific herring, Atlantic and Pacific cod, haddock, European and Japanese eel and Dover sole for human consumption; (ii) whole frozen herring used as bait; and (iii) live ornamental finfish. The panel’s findings ultimately focused on the second and third of these comparisons.

The existence of a prohibition on salmon imports, and the absence of any limitations on imports of whole frozen herring for bait and ornamental finfish, was enough to establish “distinctions” among “different situations.” Further, the evidence before the panel suggested that the potential for the spread of various fish diseases was, if anything, greater with imports of herring for bait and live ornamental fish. In both cases, live organisms could be introduced into Australian waters directly, whereas fresh, chilled and frozen salmon for human consumption was typically cooked and in any case eaten rather than placed into Australian waters. Hence, the distinctions were “arbitrary and unjustifiable.”⁵⁷

The panel also found a disguised restriction on international trade in reliance on six factors. First, the distinctions among salmon, herring and ornamental fish were arbitrary and unjustifiable – in effect, a positive finding under step two of the test for a violation of SPS Article 5.5 became evidence in favor of a positive finding under step three. Second, the panel focused on the large difference in the chosen level of protection across the areas of comparison – a prohibition of all imports in one case, and no restriction at all on imports in the other two cases. Third, the panel noted that the Australian ban also violated a separate requirement of the SPS Agreement that its SPS measures be based on a proper scientific risk assessment. Fourth, the panel argued that the disparate treatment of salmon, herring and ornamental fish constitutes “discrimination.” Fifth, the panel noted that a draft report by Australian regulators at one time concluded that imports of uncooked salmon for human consumption should be allowed under certain conditions, but the final regulation contained a complete prohibition – a change in policy that “might well have been inspired by domestic pressures to protect the Australian salmon industry against import competition.” Finally, the panel noted that Australia did nothing to control trade in fish and fish products within its borders, despite the fact that some of its domestic fisheries had diseases that might spread to others as a result.

⁵⁵ Id. ¶143.

⁵⁶ Id. ¶152.

⁵⁷ Id. ¶158.

The Appellate Body endorsed the panel's analysis except with respect to the fourth factor, which it found to be redundant of the finding of "distinctions" under step one of the test for violation for SPS Article 5.5. It upheld the panel's ultimate findings, however, on the premise that the omission of the fourth factor would not change the panel's conclusion regarding the presence of a disguised restriction.⁵⁸ Australia subsequently modified its policies, and the case was settled.

Salmon is another example of a case that seems correctly decided, but not because the consistency analysis is independently helpful. The importation of salmon for human consumption was not shown to create any material risk of fish diseases spreading to Australian waters. In separate parts of its opinion, the Appellate Body affirmed the panel finding that the Australian regulation was not based on an acceptable scientific risk assessment as required by SPS Article 5.1.⁵⁹

Suppose, however, that contrary to the actual situation in *Salmon*, Australia had a sound scientific basis for concluding that imports of salmon for human consumption create a significant risk of spreading fish diseases to Australian waters. Would the disparate treatment of imported frozen baitfish, or ornamental fish for aquariums, be enough to establish that the prohibition on salmon imports was an "inconsistency" due to international externality? The answer is no. One would have to evaluate the risks associated with each regulatory policy carefully regarding the probability of each disease spreading, the economic costs associated with that disease, and the loss of surplus associated with a prohibition on trade in the relevant product. The information before the panel in this regard was quite incomplete. The mere fact that trade in these other products may have created some risk of the spread of some disease hardly compels the conclusion that a ban on one type of trade but not another is meaningfully "inconsistent."

In short, the consistency analysis adds nothing unless we have reason to believe that the risk from imports of salmon for human consumption is negligible, or is at least completely speculative and lacking in scientific foundation. And once we have evidence to that effect, the consistency analysis becomes makeweight and superfluous.

Australia – Apples.⁶⁰ *Apples* involved a variety of Australian measures put in place to prevent the importation of apples from New Zealand that might spread certain plant diseases, especially fire blight and European canker, to Australian orchards. Imports from New Zealand were permitted, but only after compliance with a range of costly inspection, quarantine and certification requirements. New Zealand complained to the WTO, and prevailed primarily on the grounds that the

⁵⁸ Id. ¶¶159-178.

⁵⁹ Id. ¶¶112-35.

⁶⁰ *Australia – Measures Affecting the Importation of Apples from New Zealand*, WT/DS367/AB/R, Appellate Body report adopted December 17, 2010.

Australian assessment of the risks from New Zealand apples was scientifically flawed and exaggerated.

New Zealand also advanced a consistency argument under SPS Article 5.5. It suggested that the measures applied to New Zealand apples were far more stringent and burdensome than those applied to imports of Japanese pears, which might carry similar plant diseases. The panel agreed that the plant diseases in Japanese pears were “similar” to those in New Zealand apples, even though caused by different organisms. Accordingly, the comparators put forward by New Zealand were acceptable. The panel went on to ask whether any distinctions in the regulatory treatment across apples and pears were “arbitrary and unjustifiable.” To that end, it examined a number of factors. In comparing the treatment of risk from European canker in New Zealand apples with the treatment of risk from brown rot in Japanese pears, for example, the panel adduced seven relevant considerations:⁶¹

- (a) The facility of transmission of the two pests – because, other things being equal, a more easily transmittable pest presents a higher risk;
- (b) The potential biological and economic consequences of the pests – because, other things being equal, more serious consequences entail a higher risk;
- (c) The range of host plants – because, other things being equal, a wider range of host plants for a pest results in a higher risk;
- (d) The presence of the pests in the exporting areas – because, other things being equal, a pest present in exporting areas poses a higher risk than one that is not present;
- (e) The presence of the pests in Australia – because a pest not yet present in Australia may be of greater concern;
- (f) The volume of trade – because...as the volume of trade increases, so does the probability that a given biological event may occur; and
- (g) The efficacy of existing controls in Australia for the two pests in question – because, other things being equal, if Australian controls already in place are also effective against one of the pests in question, the risks from that pest are lower.

After reviewing the evidence regarding these factors, the panel concluded that New Zealand failed to establish that apples and pears were subject to distinctions in treatment that could not be justified by differences in underlying risk. One key piece of evidence in this respect pertained to factor (f). Imports of Japanese

⁶¹ Australia – Measures Affecting the Importation of Apples from New Zealand, WT/DS367/R, dispute panel report adopted December 17, 2010, ¶7.994.

pears into Australia were historically less than 1,000 tons per annum, while Australia estimated that New Zealand apple imports might reach as high as 27000 tons.⁶²

A second comparison was made regarding the measures imposed to prevent the spread of brown rot from New Zealand apples with the measures to prevent the spread of Japanese *Erwinia* in Japanese pears. Here, the panel found that New Zealand had failed to establish that the two issues were subject to regulatory “distinctions.” Among other things, Australia’s import rules effectively excluded pears from regions of Japan infested with Japanese *Erwinia*, and indeed Japan claimed that the pest has been eradicated nationwide.⁶³

The panel’s findings with respect to SPS Article 5.5 were not appealed. As noted, New Zealand prevailed in the case on other grounds. Australia subsequently modified its requirements for imports of New Zealand apples, although controversy continues as to whether Australia has fully complied with the ruling.

The panel’s consistency analysis in *Apples* is by far the most thorough and thoughtful to date. It identifies a host of relevant factors that must be addressed before meaningful inconsistency can be established, let alone whether it can be attributed to an international externality rather than legitimate domestic preferences regarding different risks. And having listed pertinent factors, the panel then correctly noted that important differences exist among the challenged measures regarding apples and all of the comparators involving other fruit products. As a result none of the suggested comparisons offered conclusive evidence of “inconsistency.” A strong possibility existed that one of the diseases supposedly carried by Japanese pears had been effectively eradicated in Japan. Likewise, the quantity of Japanese pear imports was dramatically smaller than the quantity of potential New Zealand apple imports, raising the concern that the probability of the spread of disease from New Zealand imports was much greater.

Apples illustrates yet again the virtue of examining the challenged measures directly against their purported justification, rather than against some inter-industry comparator. If the scientific foundation for the controls in place is lacking, they can surely be called into question unless provisionally justified by the SPS version of the “precautionary principle” in SPS Article 5.7. But if the direct foundation for regulation is sound, consistency analysis based on inter-industry comparators is exceedingly unlikely to afford a persuasive basis for a challenge.

IV. Brief Comparative Note: Consistency Requirements in the United States

The problem of protectionist regulation by member states is not confined to the WTO. The United States Federal system has confronted the issue for decades,

⁶² Id. ¶¶7.1029-7.1032.

⁶³ Id. ¶7.1075.

and addresses it through express Congressional action and through a body of common law principles pursuant to the “dormant commerce clause.”

One can readily find dormant commerce clause cases that utilize narrow consistency requirements to invalidate certain state regulatory measures. *Granholm v. Heald*⁶⁴ invalidated a Michigan law that permitted in-state wineries to ship wine to customers through the mail but prohibited out-of-state wineries from shipping by mail. *Dean Milk v. City of Madison*⁶⁵ struck down a city ordinance prohibiting the sale of milk unless it had been pasteurized locally. Modern examples of such state regulations are fairly rare, however, because the jurisprudence so clearly condemns them. A denial of “national treatment” favoring local producers of a product over out-of-state producers of the same product has long made out an easy case for declaring state laws invalid.

By contrast, one does not observe “inter-industry” consistency requirements used as a basis for striking down state laws in dormant commerce clause cases. Instead, when a state regulation is deemed to be non-discriminatory between in-state and out-of-state producers of the same thing, the jurisprudence shifts to a (somewhat controversial) “balancing” analysis. A leading case is *Pike v. Bruce Church*,⁶⁶ which invalidated an Arizona regulation that required cantaloupes grown in Arizona to be crated in Arizona rather than across the border in California. The ostensible reason was that Arizona cantaloupes are of particularly high quality and the state’s producers wanted to receive credit for higher quality by having their produce delivered in crates establishing Arizona origin. The Court treated the case not as one in which the regulation discriminated in favor of in-state crating operations, but as one in which the state pursued a legitimate interest in publicizing the Arizona origin of its produce. Nevertheless, the burden on interstate commerce – which included the need for the plaintiff to spend hundreds of thousands of dollars establishing a new in-state crating facility -- was said to outweigh Arizona’s legitimate interests. No consideration was devoted, for example, to the question whether Arizona was inconsistent in treating cantaloupes differently than other high quality Arizona produce products.

An especially instructive case is *Maine v. Taylor*,⁶⁷ in which the Court upheld a regulation prohibiting the importation of live baitfish into the state. Maine’s justification for the regulation lay in the claim that it was impossible to prevent parasites that would damage Maine’s fisheries from entering with the baitfish shipments, in part because of the commingling of other fish species. Spot inspections and sampling of import shipments, which were used to prevent the entry of parasites in other freshwater fish such as salmon, would not work in the case of baitfish for this reason. Thus, evidence of “inconsistency” across different

⁶⁴ 544 U.S. 460 (2005).

⁶⁵ 340 U.S. 349 (1951).

⁶⁶ 397 U.S. 137 (1970).

⁶⁷ 477 U.S. 131 (1986).

types of freshwater fish was prominently highlighted, but the Court discounted such evidence because a scientific justification for the different treatment was plausible.

In sum, regulatory inconsistency of a sort that makes out a “national treatment” violation with respect to identical imported and domestic products is an easy basis for overturning state regulations under the dormant commerce clause, but one is hard pressed to find a single case in which inter-industry inconsistency has resulted in a finding adverse to the regulation. Instead, non-discriminatory state regulations are evaluated with a “balancing” analysis that seeks to determine directly whether the state regulation at issue imposes a burden on commerce that exceeds its benefits. This observation offers some further support for a skeptical view of inter-industry consistency requirements, and for the view that it is often easier to evaluate the economic implications of challenged regulations directly rather than attempting to draw inferences about protectionism through inter-industry consistency analysis.

Conclusion

Regulatory “consistency requirements” are employed widely in WTO jurisprudence, and have been utilized (correctly in my view) to identify unjustifiably protectionist policies in numerous cases. These cases involve disparate treatment of imported goods relative to the treatment of the same goods supplied by domestic producers or a favored trading partner – what this paper terms a case of “intra-industry inconsistency.” The language of consistency is not employed in these cases, to be sure, but the analysis nonetheless rests on a finding that comparable products or producers are being treated inconsistently under conditions that afford evidence of protectionist intent or effect.

Most of the controversy over “consistency” requirements in WTO jurisprudence arises in a different class of cases, involving efforts to compare regulatory policies across different products and their producers – what this paper terms “inter-industry consistency” analysis. Paradigm examples from the case law include different policies toward risk across the beef, pork, and egg industries, different policies toward risks from imported salmon and imported baitfish, and different policies toward risks from the importation of apples and pears. Here, many more variables are in play that might justify differences in policy, and it is generally impossible to identify “inconsistency” attributable to the kinds of international externalities that trade agreements exist to solve. Some of the policies at issue in these cases were questionable to be sure, but not because of confident inferences from consistency analysis. An examination of the challenged regulatory policies against direct evidence of their soundness and efficiency – such as the extent of scientific support for the existence of any material risk to be addressed – afford a much more reliable basis for detecting policies tainted by international externality.