EVALUATING THE WTO’S TWO STEP TEST FOR ENVIRONMENTAL MEASURES UNDER ARTICLE XX

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Abstract

There has been considerable dissatisfaction expressed by both free trade proponents and environment activists with respect to the WTO’s exercise of authority on the impact of environmental measures on international trade. The Article first sets out a analytical framework, based on public choice theory, which examines the incentives to implement measures to achieve environmental goals which function effectively as disguised barriers to trade. This is followed by a careful examination of the WTO’s jurisprudence in the area, which suggests that the WTO’s focus on the measure being implemented is correct. Furthermore, the two step test under Article XX, as conceived and applied by the various WTO panels, seems to be reasonably effective in weeding out measures that are functionally barriers to international trade.

INTRODUCTION

The incorporation of environmental concerns into international trade agreements has been a source of considerable dissatisfaction for both environmentalists and free trade advocates.¹ The concerns of environmentalists center around the fear that free trade would be treated as the primary goal, and that that the pursuit of free trade across nations will lead to a race to the

¹ This Article does not address any normative questions regarding the advisability or desirability of the expansion of international trade agreements and arrangements to include non-trade matters, such as environmental standards, or other social issues. Instead, we begin from the empirical reality that environmental standards are expressly included in the current law, as exemplified by treaty, and must be addressed by the World Trade Organization. Some recent commentators have argued for further expansion of the WTO’s role into non-trade areas. See, e.g., Andrew T. Guzman, Global Governance and the WTO, 45 HARV. INT’L L.J. 303 (2004). See also Sungjoon Chu, Linkage of Free Trade and Social Regulation: Moving Beyond the Entropic Dilemma, 5 CHI. J. INT’L L. 625 (2005). The focus of this Article is on the interpretation by the WTO on existing treaty provisions.
bottom, and worsening global environmental standards.\textsuperscript{2} On the other hand, many developing
countries, and some economists, regard unilateral environmental measures with suspicion - as
disguised barriers to trade, and a means of granting protection to domestic producers from
foreign competition.\textsuperscript{3} A significant concern of free trade advocates is that requiring the World
Trade Organization to include environmental considerations draws resources away from its
primary purpose of preserving and advancing the gains from freer international trade, and could
result in dilution of its mission. The adverse ruling by the World Trade Organization ("WTO")
on two separate environmental measures,\textsuperscript{4} which received considerable media attention, seemed
to provide validation of the concerns of environmental activists that permitting the WTO to rule
on environmental measures would make improvements in environmental standards more
difficult, particularly in view of the history of similar adverse rulings under the previous GATT
regime. In a third report, that has since been adopted, the WTO upheld the environmental
measure being challenged, as being consistent with treaty obligations for the first time.\textsuperscript{5}

Furthermore, in November 2001, the WTO adopted a ruling that was effectively favorable to the
challenged environmental measure.\textsuperscript{6} In this Article, I suggest that a careful reading of the


\textsuperscript{3} See, e.g., Jagdish Bhagwati, Trade and Environment: The False Conflict? in TRADE AND THE ENVIRONMENT:

\textsuperscript{4} World Trade Organization: Report of the Appellate Body in United States – Standards for Reformulated and
Conventional Gasoline, 35 I.L.M. 603 (1996) (hereinafter Reformulated Gasoline); World Trade Organization:

\textsuperscript{5} World Trade Organization, Report of the Appellate Body in European Communities – Measures Affecting

\textsuperscript{6} World Trade Organization: Report of the Appellate Body in United States – Import of Certain Shrimp and Shrimp
Products: Recourse to Article 21.5 of the DSU by Malaysia, WT/DS58/AB/RW (22 October 2001 (hereinafter
Shrimp-Turtle Recourse Action).
WTO’s decisions provides grounds for cautious optimism for the future of unilateral environmental measures to the extent they impact on international trade.

As an initial premise, both freer international trade and environmental protection are deemed desirable as increasing social welfare. In a world with finite resources, however, trade-offs are inevitable and hard choices between two desirable objectives are often necessary. The problem is aggravated in the case of environmental standards, because environmental concerns can be used as a pretext for protection of domestic producers from foreign competition; that is, as a barrier to international trade.

The WTO has the unenviable task of separating legitimate environmental measures from measures that use environmental concerns to impose trade barriers. The WTO has devised a two step test based on Article XX which relies on the Vienna Convention on the Law of Treaties in its interpretation of treaty language, as a way to deal with this problem. This Article, using a framework based on game theory and public choice analysis, argues that this two step test, as applied by the WTO in *Reformulated Gasoline, Shrimp-Turtle,* and *Asbestos,* has been quite effective in distinguishing between legitimate environmental standards and environmental standards that primarily function as non-tariff trade barriers, and could signal the start of a jurisprudence that will weed out non-tariff barriers in the area in the future with reasonable efficiency.

This Article follows the lead of the WTO and does not address the issue of the validity or value of the policy goal. The issue of the benefits, or otherwise, of including environmental concerns into the matter of international trade is also beyond the scope of this Article. The focus is on the positive issue of the effectiveness of the WTO in the area, given the reality of the express grant of authority over of environmental concerns to it, by treaty, in terms of its
obligation to protect the gains to fair trade. Thus, like the WTO, this Article focuses on the
*measure* that a country enacts in pursuit of an expressly stated environmental goal.

Part I sets out, using standard economic theory of the gains from international trade, the
prisoner’s dilemma that countries face in liberalizing trade. Part II analyzes the domestic public
choice dynamics of trade liberalization, and the reasons for opposition to trade liberalization.
Part III sets forth a theoretical framework that could be used as a basis to suggest means to
distinguish “legitimate” environmental measures from “illegitimate” ones which would
effectively function as disguised barriers to trade, or would otherwise be in derogation of treaty
obligations. Part IV analyzes the exceptions set out in WTO’s Article XX,7 as applied using the
two step test in *Reformulated Gasoline*8, *Shrimp-Turtle* and *Shrimp-Turtle Recourse Action*,9 and
*Asbestos*,10 and examines the rulings in these cases to see if it possible to develop any kind of
rule of thumb where the form and scope of a particular environmental standard is more likely to
function primarily as a disguised restriction on international trade. In Part V, this Article
concludes that the WTO was correct in refusing to declare a *per se* rule against unilateral
environmental measures, effectively acknowledging the validity and utility of such measures.11
Nonetheless, because of the potential for abuse, unilateral environmental measures demand close
scrutiny by the WTO. Further, the WTO should continue to clarify the standards it uses in its
evaluation of unilateral environmental measures.

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7 General Agreement on Tariffs and Trade (1947 as amended) (hereinafter GATT) Art. XX. See text *infra* Part IV.
8 See *supra* note 4, Reformulated Gasoline.
9 See *infra* note 6 Shrimp-Turtle; Shrimp-Turtle Recourse Action.
10 See *infra* note 5, Asbestos.
11 See Shrimp-Turtle Recourse Action.
I. GAINS FROM TRADE LIBERALIZATION AND THE PRISONER’S DILEMMA

The roots of economic theory of the gains from international trade lie in the work of Adam Smith\textsuperscript{12} and David Ricardo,\textsuperscript{13} based on the notions of absolute and comparative advantage.\textsuperscript{14} Smith and Ricardo demonstrated that, as long as the opportunity cost of producing goods was different in different countries, and each country specialized in the good in which it had the “advantage” of lower opportunity cost, and then traded, overall world output of goods would increase as a result of this specialization. The fundamental insight of these highly stylized

\textsuperscript{12} ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS (5\textsuperscript{th} ed. 1789) [1976 University of Chicago Press, Edwin Cannan, editor). Smith developed the theory of absolute advantage that is when one country is more efficient in the production of a good. In the illustration in Table 1, country A has an absolute advantage in both goods. Ricardo’s insight was that gains from trade are possible even when one country is absolutely more efficient in the production of every good, as long as the relative opportunity costs were different.

\textsuperscript{13} DAVID RICARDO, THE PRINCIPLES OF POLITICAL ECONOMY AND TAXATION, (Irwin 1963) (1817).

\textsuperscript{14} Ricardo introduced the notion of comparative advantage. A country has a comparative advantage in producing a certain good if the opportunity cost of producing that good in terms of other goods is lower in that country than in other countries. Consider the case of two countries, A and B, which produce two goods, wine and cheese. Assume that there is a single factor of production, labor, in both countries. The labor requirements for production of the goods in the two countries are:

<table>
<thead>
<tr>
<th>Comparative Advantage</th>
</tr>
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<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Wine</td>
</tr>
<tr>
<td>Country A</td>
</tr>
<tr>
<td>2 hours per gallon</td>
</tr>
<tr>
<td>Country B</td>
</tr>
<tr>
<td>3 hours per gallon</td>
</tr>
<tr>
<td>Cheese</td>
</tr>
<tr>
<td>1 hour per pound</td>
</tr>
<tr>
<td>6 hours per pound</td>
</tr>
</tbody>
</table>

In country A, the opportunity cost of cheese in terms of wine is $\frac{1}{2}$, that is, for every pound of cheese produced, country A forgoes one-half gallon of wine. In country B, the opportunity cost of cheese in terms of wine is 2, that is, producing one pound of cheese means that country B has to forgo 2 gallons of wine. Thus, it is more expensive, relatively speaking, for country B to produce cheese than country A. Assume that each country has a total endowment of 60 hours of labor. Assume further that each country divides its labor equally between the two commodities. Then, country A could produce 10 gallons of wine and 30 pounds of cheese. Country B would produce 10 gallons of wine and 5 pounds of cheese. That is, the world output would be 20 gallons of wine and 35 pounds of cheese. Now, consider the case where the countries engage in trade. Each country will specialize in the product in which it has a comparative advantage. A will specialize in the production of cheese and B will specialize in wine. With complete specialization, world output would be 60 pounds of cheese (produced by A), and 20 gallons of wine (produced by B). Total world production increases as a result of trade.

This is the standard illustration for comparative advantage, and is, of course, highly stylized and simplified. \textit{See, e.g.}, PAUL R. KRUGMAN and MAURICE OBSTFELD, INTERNATIONAL ECONOMICS, THEORY AND POLICY (7\textsuperscript{th} Ed. 2006). This illustration abstracts from a number of real-world complications from trade liberalization, such as the loss faced by import-competing industries, which is discussed \textit{infra} Part II.
models about international trade is that it is a positive sum game; that is, the size of the pie increases when such trade takes place. International trade, in the simple model, seems like a free lunch, in that it seems to provide something for nothing. Why, then, is trade liberalization so difficult?

The answer lies in the fact that, even though the economy as a whole gains from trade liberalization, import-competing groups lose in the transition. These groups have an incentive to lobby the government to maintain trade barriers. Further, a nation that can maintain its own trade barriers when other nations are lowering theirs, gains politically and possibly in economic terms as well. Thus, trade liberalization is, in effect, a prisoner’s dilemma. In the trade context, the pay-off matrix for trade policy could have the following form:

<table>
<thead>
<tr>
<th>Country B</th>
<th>Liberalize</th>
<th>Protect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberalize</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Protect</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 1: Pay-off for Trade Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country A</td>
</tr>
<tr>
<td>Liberalize</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

15 See discussion, infra Part II.

16 For example, a large economy (one that can influence prices in the international market) can improve the aggregate welfare of its low skill workers by maintaining a tariff. See Wolfgang Stolper and Paul A. Samuelson, Protection and Real Wages, 9 REV. ECON. STUDIES 58 (1941).

17 The name derives from the problem of two prisoners who are questioned separately. If neither confesses, both go free. If one confesses, he gets a light sentence (1 year), and the other gets a very heavy sentence (10 years). If both confess, both get the same sentence (7 years). Both would be better off if neither confessed, but each has a strong incentive to confess, to get the lighter sentence. See Thomas C. Schelling, The Strategy of Conflict (1980) at 214.

18 The arrows show the dominant strategy for each country in each case; the dominant outcome is in bold. To simplify the discussion, the numbers here are not consistent with the numbers used to illustrate the comparative advantage model. For a more complex version of this, see Francesco Parisi and Nita Ghei, The Role of Reciprocity in International Law, 36 CORNELL INT’L L.J. 93 (2003).
Global output would be maximized at 10 units if both countries liberalized. The dominant strategy for each country, however, is to follow a protectionist policy and erect barriers to trade. When both countries rationally adopt this policy, the resultant global output is 4, and a world with autarky.

Such an outcome is clearly sub-optimal. The imposition of a reciprocity constraint would be a way out of this prisoner’s dilemma. A reciprocity constraint would require that both countries pre-commit to liberalizing if the other liberalizes, and impose trade barriers only if the other does the same. The imposition of reciprocity constraint removes two options for the countries, and leaves them with two choices: either both liberalize trade or neither does. The payoff matrix takes the following form, with the imposition of a reciprocity constraint:

<table>
<thead>
<tr>
<th></th>
<th>Country A</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Liberalize</td>
<td>Protect</td>
<td></td>
</tr>
<tr>
<td>Country B</td>
<td>5</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Liberalize</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Protect</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

The dominant strategy for both countries is to liberalize trade, once the reciprocity constraint is in place.

Trade treaties, such as the General Agreement on Tariffs and Trade ("GATT"), and the treaty that established the WTO, are attempts to secure the gains from trade. The principal means of achieving this goal is by the imposition of reciprocity constraints.\(^{19}\) In the case of the WTO

\(^{19}\) See Parisi and Gheï, *supra* note 18. They term this type of constraint “induced reciprocity.” The MFN and national treatment clauses eliminate the off-diagonal choices, leaving only two options: both countries liberalize or both protect. Once the sucker’s payoff is eliminated, the optimal strategy for both countries is to liberalize trade.
agreement, these constraints are imposed through the most favored nation (“MFN”)\textsuperscript{20} and national treatment clauses.\textsuperscript{21} These two clauses provide some insurance that a nation will not be left with the “sucker’s payoff”, when it liberalizes, but its trading partners do not.\textsuperscript{22}

The existence of a reciprocity constraint, thus, at the minimum, reduces the incentive for a nation to defect from a trade policy that favors freer international trade and lowers barriers to such trade. It does not, however, change the incentives for import competing industries within the nation to continue to lobby for protection from foreign competition. Nor does it change the incentives of groups with other goals, such as higher environmental standards, to seek protection if they believe that a measure that would also have the incidental effect of acting as a barrier to international would be helpful in achieving their goals.

II. INTEREST GROUPS AND TRADE LIBERALIZATION

A vast literature on the role of interest groups has accumulated over the years, under the general rubric of “public choice theory.” The analysis generally starts with an assumption that all actors are rational optimizers.\textsuperscript{23} The legislature is a marketplace, with legislators as the

\textsuperscript{20} Art. I, which states in part:
. . . any advantage, favour, privilege, or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties. (Spelling in original).

\textsuperscript{21} GATT Art. III, para 2:

The products of the territory of any contracting party imported into the territory of any contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess to those applied, directly or indirectly, to like domestic products.

\textsuperscript{22} \textit{See} Parisi and Ghei, \textit{supra} note 18 for a fuller discussion of this point.

suppliers of legislation. Interest groups are the consumers, who try to procure legislation that is beneficial to their members. An interest group will pursue legislation only when the expected benefits exceed the costs. Legislators will provide legislative benefits to maximize their own welfare; typically, the assumption is that the primary objective of legislators is re-election.\textsuperscript{24}

Legislation typically imposes costs on some groups, and provides benefits to some groups. In a strict utilitarian world, the legislation should be enacted if social benefits outweigh the social costs. However, the socially optimal legislation may not be enacted in a world with interest groups, who would lobby for legislation that favors them.

Lobbying, however, requires the interest group to organize. As Mancur Olson\textsuperscript{25} demonstrated, interest groups will have difficulty in getting organized due to a “free-rider” problem. Since all members of a group would benefit from favorable legislation, and it would most probably be very difficult to exclude anyone from these benefits, there is little incentive for a single individual to incur the costs of getting favorable legislation enacted.\textsuperscript{26} A rational optimizer will prefer that someone else incur the costs of getting the legislation passed, and then enjoy the benefits, that is, “free-ride” on someone else’s efforts. Organizing the group permits costs to be spread across members. However, organizing costs increase with the size of the

\textsuperscript{24}See Stearns, supra note 23 at 400. Note that this does not mean that the legislator’s goal of re-election is merely maximizing influence for personal gain. The legislator is in a better position to mold policy if he is in power. Thus, the legislator may well have altruistic reasons for seeking re-election, such as moving policy in the direction he deems to be in the best interest of the country or his constituents.

\textsuperscript{25}See Olson, \textit{supra} note 23.

\textsuperscript{26}Legislation is effectively a public good in some sense, in that its consumption is non-excludable and non-rivalrous. Arguably, the enactment of an environmental standard has some inherent value to environmentalist. Once the measure is in place, all environmentalists who value that measure (such as, for example, setting aside a parcel of land for fairy shrimp), will derive utility from the knowledge, even if they did not expend any effort in lobbying for the measure.
Therefore, due to lower costs, small groups can organize more easily than large groups. Thus, the most effective interest groups will be those that are relatively small.

**Table 3: Lobbying Effort Matrix**

<table>
<thead>
<tr>
<th>COSTS</th>
<th>BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Widely Distributed</strong></td>
<td><strong>Narrowly Distributed</strong></td>
</tr>
<tr>
<td>PUBLIC INTEREST CATEGORY</td>
<td>SPECIAL INTEREST CATEGORY</td>
</tr>
<tr>
<td>Weak lobbying -</td>
<td>Strong lobbying in favor</td>
</tr>
<tr>
<td>Both sides</td>
<td>Weak lobbying against</td>
</tr>
<tr>
<td><strong>Narrowly Distributed</strong></td>
<td>PROTECTED CATEGORY</td>
</tr>
<tr>
<td>Weak lobbying in favor</td>
<td>Strong lobbying against</td>
</tr>
<tr>
<td>Strong lobbying against</td>
<td>Both sides</td>
</tr>
<tr>
<td>PROTECTED CATEGORY</td>
<td>PLURALIST CONFLICTUAL PATTERN CATEGORY</td>
</tr>
</tbody>
</table>

The costs and benefits of any piece of legislation can be distributed widely, across a large group, or narrowly, over a small group. Table 3 lays out the four possible combinations of the distribution of costs and benefits, and their implication for lobbying efforts. As lobbying is costly, lobbying effort by an interest group depends on the costs or benefits of specific legislation to the group. Legislation where the both the costs and benefits are widely distributed is the type of legislation that a democratically elected legislature is expected to pass, as it affects the largest proportion of constituents. But a wide distribution of either costs or benefits or both, means that a large group will need to be organized, to lobby for or against the legislation. This is much harder

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27 For example, monitoring costs, to ensure that each member contributes his or her share, increase with the number of members in the group.

28 Adapted from Stearns, *supra* note 23 at 407.
and more costly than organizing a small group. Therefore, this type of legislation will be under-supplied, relative to the social optimum, in a world where interest groups have influence over legislators, and therefore, over legislation.

On the other hand, when either the costs or benefits only are narrowly distributed, that is, a small group either bears most of the costs or garners most of the benefits, strong lobbying by that group will often increase the likelihood of passage of legislation that favors the interest group. It is these people, with strong preferences about the issue, who will organize, because the benefits to them, in the form of higher utility are correspondingly higher. Both trade protection and environmental concerns fall into the Special Interest category, that is, benefits accrue to a small group, while costs are spread over a large group. An import competing industry will capture the gains from the imposition of trade barrier; the cost of protection, in the form of a higher price of the product, will be spread out over all consumers. Producers (including employees) are generally a much smaller group than consumers. Thus, the average benefit of protection will be higher than the average cost of protection to consumers, even when total costs exceed total benefits.

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29 An implicit assumption here is that interest groups form to achieve a goal that is legally permissible. Therefore, Congress will pass legislation aimed at curbing behavior that is widely viewed as socially undesirable, such as organized crime. Organized crime is a case where a small group could organize to act, but social norms, as well as laws, act to limit the actions of the interest group to influence legislators. At the same time, reputational and other political incentives would discourage legislators from supporting such interest groups. The assumption is that the legislator’s goal is to win re-election. Supporting unpopular and unsavory interest groups is not likely to be helpful. Thus, the influence of interest groups is also limited by factors other than the ability to organize.

30 The socially optimal level of public interest category legislation would be supplied in a world where it would be costless to organize groups, there was perfect information, and legislators acted so as to maximize the utility of their constituents.

31 Stearns, supra note 23 suggests socialized medicine as an example of “Protected Category,” where the medical interest lobby arguably succeeded in preventing implementation of socialized medicine.
Similarly, environmental groups value environmental quality more than the average person. In fact, we can define environmentalists as those individuals who value environmental quality highly, and/or feel strongly about such issues. Thus, environmental groups will have a membership that values environmental quality more than the median voter. It follows that the group will lobby for environmental measures that reflect their preferences. To the extent these preferences diverge from the preference of society at large, the legislation the group lobbies for will not be socially optimal.

Higher environmental quality, just like any other good or service, is not free. Imposing a higher environmental standard comes at a positive, non-zero cost. On the other hand, environmental degradation is also costly, and this cost is never entirely borne by the person or entity responsible for the damage. That is, there is an external cost of environmental damage. The choice of policy ultimately needs to balance the two costs in terms of social preferences for environmental standards. To the extent that the policy adopted is influenced by an interest group with preferences that are more extreme than that of the median voter, the policy adopted may not

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32 This is a reasonable view of preferences. Generally groups are organized by those who value the particular cause the most, whether it be lower taxes, higher environmental standards or rescuing homeless domestic animals. See, e.g., Michael P. Leidy and Bernard M. Hoekman, ‘Cleaning up’ While Cleaning Up? Pollution Abatement, Interest Groups and Contingent Trade Policies, 78 PUB. CHOICE. 241 (1994) (“Environmentalists can be expected to value both current and expected future environmental quality largely to the exclusion of all else”).

33 In this Article, I assume that the socially optimal level of environmental quality is that desired by the median voter. There has no implication of a normative judgment of whether this level is “right” or “wrong” by some other standard.

34 Consider for example a factory that discharges effluents into a stream, worsening water quality downstream. The cost of the dirty water (or the cost of clean-up) is not borne by the factory directly. To the extent this external cost exists, the factory will produce more than the social optimum. Thus, restricting output would be efficient. The issue that remains is the means of restriction. A tax is arguably more efficient than quantity restrictions, but might not be implemented, as discussed infra Part III. For a comprehensive discussion of instruments for environmental regulation, see Jonathan Baert Wiener, Global Environmental Regulation: Instrument Choice in Legal Context, 108 YALE L.J. 677 (1999).
socially optimal.\textsuperscript{35} Adopting higher than socially optimal environmental standards, that is, the level desired by the median voter, means that either society at large, or some group contained therein, incurs a cost of implementation that is also higher than optimal. Much of the benefit of these higher standards is captured the groups with a strong preference for these standards, but these groups do not bear all the cost. That is, the distribution of benefits and costs is asymmetric. Thus, for example, depending on the instrument used,\textsuperscript{36} the cost of the measure could be borne by the domestic industry, the global industry, foreigners or taxpayers.\textsuperscript{37}

Thus, in a nation with an elected government, and special interest groups, there is no \textit{a priori} reason to believe that the policy adopted is one that is socially optimal. If two interest

\textsuperscript{35} The influence of interest groups on electoral outcomes and policy adopted has generated a vast literature under the rubric of public choice. For an overview, see Mueller, supra note 23. One such model is found in Gene M. Grossman and Elhanan Helpman, \textit{Electoral Competition and Special Interest Politics}, 63 REV. ECON. STUDIES 265 (1996). Grossman and Helpman consider a world with two political parties; two types of policy, ideological and pliable; two types of voters, informed and uninformed; and multiple interest groups. An equilibrium is achieved through a two-step game. In the first stage, the interest groups strategically design their campaign contributions to maximize net expected welfare. In the second stage, parties announce policy platforms to maximize their representation in the legislature. Campaign contributions do not change the vote of an informed voter, but can influence the vote of an uninformed voter. The difference in policies and spending levels determines the electoral outcome, and correspondingly, the probability that the party’s policy platform will be implemented. Grossman and Helpman’s model predicts divergence in party platforms in the presence of interest groups. The party that is expected to win gets greater attention from the special interest groups, and gives greater weight to their welfare. The expected loser gets fewer contributions from special interests, and its platform is likely to be closer to that of the median voter. The problem is likely to be exacerbated if two interest groups favor the same sort of policies, such as trade barriers, which could happen in the case of environmental standards. This is the corollary of the result that the presence of two opposing interest groups results in moderation in policy platforms of the candidates. This moderation is a way for candidates to reduce backlash from the opposing group. For a formal exposition, see Richard Ball, \textit{Opposition Backlash and Platform Convergence in a Spatial Model with Campaign Contributions}, 98 PUB. CHOICE 269 (1999).

\textsuperscript{36} These could include emission standards, taxes, flat bans, and clean-up by state agencies. See also Wiener, supra note 34.

\textsuperscript{37} Higher standards could increase the cost of production, which will be shared by producers and consumers. On of the more striking examples of separation of benefits and costs in the international context is found in the ban on the ivory trade under the Convention on International Trade in Endangered Species of Wild Flora and Fauna (hereinafter CITES). The benefit arguably accrues to those in other countries, typically much wealthier, who obtain “existence value” from elephants, from knowing that elephants exist in the wild. However, the ban eliminates any value that Africans could have derived from a sustainable off-take of elephants. Further, Africans have to bear the cost of the destruction caused by elephants to their farms, and the cost of creating and policing preserves. See William H. Kaempfer and Anton D. Lowenberg, \textit{The Ivory Bandwagon: International Transmission of Interest Group Politics}, 4 INDEP. REV. 217 (1999).
groups lobby for similar policies, the resulting deviation from the optimal policy will be correspondingly greater. The next part analyzes the case where the interests of those seeking protection from foreign competition and those seeking higher environmental standards converge.

III. ENVIRONMENTAL STANDARDS AS TRADE BARRIERS

Free trade advocates all too often condemn environmental standards as trade barriers. From a different perspective, environmentalists view international trade treaties as setting up a race to the bottom with respect to environmental standards. Both international trade and environmental quality are socially valuable. While unilaterally imposed environmental standards can, in theory, be the mechanism to achieve environmental protection that is globally socially desirable, they could also be a covert way to impose trade barriers.

Michael Leidy and Bernard Hoekman offer a succinct analysis of conditions under which inefficient environmental policies are adopted so as to lead to an increase in trade barriers. Thus, the issue is not the goal of environmental policy. As Leidy and Hoekman demonstrate, there will be incentives for various interest groups to lobby at the implementation level, so that the measures imposed to achieve the stated environmental goal. Therefore, as discussed infra, the WTO’s emphasis on the implementation of the measure is apposite.

38 The more libertarian free market advocates would consider environmental problems as a failure to assign property rights correctly. See, e.g., Roy E. Cordato, Market Based Environmentalism And The Free Market: They’re Not The Same, 1 INDEP. REV. 371 (1997). More moderate free trade advocates suggest market based solutions, such as taxes, to environmental problems. See, e.g., John A. Barrett, Jr., The Global Environment and Free Trade: A Vexing Problem And a Taxing Solution, 76 IND. L.J. 829 (2001). On the other extreme are commentators who view all international trade agreements as an assault on the environment. See e.g., Brian Trevor Hodges, Where The Grass is Always Greener: Foreign Investor Actions Against Regulations Under NAFTA’s Chapter 11, S.D. Myers v. Canada, 14 GEO. INT’L ENVTL L. REV. 367 (2001).

39 See Leidy and Hoekman, supra note 32. Their model extend earlier work by James Buchanan and Gordon Tullock and others who have observed that there might be incentive for industrial polluters to support inefficient pollution abatement policies. Id. at 242. See also, James M. Buchanan and Gordon Tullock, Polluter’s Profits and Political Response: Direct Controls Versus Taxes, 65 AM. ECON. REV. 139 (1975).
To begin with a simplified example, consider a policy goal of cleaner air, which is achievable through limiting industrial pollution. The imposition of industrial pollution controls may result in restrictions on output. This creates an opportunity for polluters to consolidate market power.\textsuperscript{40} Leidy and Hoekman consider two options for controlling pollution: a penalty tax and quantitative restrictions.

Consider the case of an industry that causes environmental pollution by emissions. The government decides on the amount by which these emissions have to be reduced.\textsuperscript{41} This reduction in emissions occurs only when production falls by some amount. One way to do this is by imposing a tax. The tax increases the cost of production, and thus increases the price at which suppliers are willing to supply any quantity of the good. The home industry will see some firms exit the industry. The demand for labor and other factors of production in the home industry falls with the fall in domestic production. However, the remaining firms continue to operate at the efficient scale. The gap between domestic supply and demand is covered by an increase in imports.\textsuperscript{42}

The outcome of a quantitative restriction on emissions has a similar effect, in that total domestic output of the product falls. But, the firms will be assigned production quotas that are below the efficient scale. This is inefficient in that more resources are used to produce the same quantity of the final good.\textsuperscript{43} The inefficiency implies that there will be a smaller decline in factor demand, including labor under the regulation option. Thus, layoffs will occur under both regimes, but will be smaller under the quantitative restriction. The industry, including labor with

\textsuperscript{40} Leidy and Hoekman \textit{supra} note 32 at 242.

\textsuperscript{41} \textit{Id.} at 246.

\textsuperscript{42} \textit{Ibid.}

\textsuperscript{43} \textit{Id.} at 247.
industry specific skills, will initially oppose the environmental protection. But once the decision to intervene is made, industry, particularly labor, will prefer output regulation to taxes.  

The scenario, then, plays out as follows: the imposition of environmental restrictions generates layoffs of industry specific labor and wages fall, the market share of the domestic industry falls, and imports increase. The stage is set for the industry to claim injury due to imports. It is difficult for regulators to separate the injury, which is linked directly to foreign policy from the injury that is a consequence of environmental policy. Further, as discussed above, producers, and labor, in a single industry will find it relatively easy to organize to lobby the legislature for protection from competition.

The industry – both producers and labor – will prefer production quotas with strict enforcement measures and binding barriers to entry. Barriers to entry reduce competition in the long run, and permit the firms to earn higher than normal profits. These profits are not dissipated over time, as new firms are not permitted to enter. Typically, the barrier to entry selected is the imposition of more stringent technology-based pollution control standards on the new entrants, while the existing firms are grandfathered and permitted to use the old technology. The cost differential might conceivably be so large as to make entry impossible. Further, the existing firms are likely to lobby to influence the indicators of injury, as an indirect means to maintain

44 Id. at 250.

45 Id. at 247-48.

46 Id. at 248. See also Buchanan and Tullock, supra note 36.

47 Leidy and Hoekman supra note 32 at 248. This was a feature in the Gasoline Rule invalidated in Reformulated Gasoline. See discussion infra Part IV.A.
protection from foreign competition.\textsuperscript{48} Thus, environmental standards can be a disguised means of protection.\textsuperscript{49}

The government would be more inclined to impose technology-based quantity restrictions rather than a more efficient tax, not only because the industry would prefer this outcome, but also because environmental groups are likely to prefer such standards.\textsuperscript{50} Environmentalists are, by definition, people who value environmental quality, current and future, very highly, certainly more highly than the median voter.\textsuperscript{51} Environmentalists may also have ethical problems with market-based solutions, such as taxes and pollution permits, regarding them as a “license to pollute.”\textsuperscript{52} Nor do market-based solutions guarantee a permanent decline in output and pollution. Either demand or supply conditions could change in the future. An increase in demand, or a fall in the price of other factor, would result in an increase in the equilibrium, profit-maximizing output, and in the corresponding level of pollution.\textsuperscript{53} A regulatory regime that controls the pollution levels directly creates more certainty for environmentalists, and will be preferred. This

\begin{itemize}
\item \textsuperscript{48} \textit{Id.} at 250. This behavior is termed “rent-seeking”. See Mueller \textit{supra} note 23 at 229.
\item \textsuperscript{49} Note that a tariff on an import-competing industry drives up the real return of the factor that is specific to that industry. Compare two industries that are lobbying to receive the same effective rate of protection. Each industry uses specialized capital, but similar labor. If both receive the same rate of effective protection, the return on capital on the labor-intensive return actually increases more. This means that the industry can use the argument that it needs protection because it is labor intensive, and more jobs are at stake. See Ronald W. Jones, \textit{Private Interests and Government Policy in a Global World}, 16 EUR. J. POL. ECON. 243 (2000).
\item \textsuperscript{50} \textit{See} Thomas J. Schoebaum, \textit{International Trade and Protection of the Environment: The Continuing Search for Reconciliation}, 91 AM. J. INT’L L. 268 (1997). As Schoebaum points out, environmentalists are concerned about protecting ecosystems. Others “fear unfair competition from pollution havens . . . . This group wants the ability to “level the playing field” by prohibiting imports from any country that refuses to adopt laws and regulations mirroring those of the importing country”. \textit{Id.} at 288 (quotes in original). Regulatory restrictions will appease both groups.
\item \textsuperscript{51} \textit{See} Leidy and Hoekman \textit{supra} note 32 at 251.
\item \textsuperscript{52} \textit{Ibid.}
\item \textsuperscript{53} \textit{Ibid.}
\end{itemize}
preference is reinforced to the extent there are international spillovers from foreign production, as it implies a reduction in trans-border pollution flows as well.\textsuperscript{54}

Thus, both legitimate environmental concerns and illegitimate protectionist rent-seeking can result in the use of environmental standards as trade barriers. The inefficiency of the standards adopted flows from the public choice dynamics of lobbying by both groups. Industry seeks trade barriers as a means of protection from foreign competition. The preferences of environmental groups are more extreme than that of the median voter. Further, as the cost of imposing standards that are more stringent than is socially optimal is not fully borne by the environmental groups, they have little incentive to seek an efficient solution. Thus, environmental measures that impose different standards on domestic producers, or on existing producers; that rely heavily on quantitative restrictions; that effectively create barriers to entry may be measures that might in effect be functioning as barriers to trade.

Not surprisingly, developing countries in particular regard the imposition of environmental standards on traded goods by developed countries with suspicion. Part of the problem is the unilateral nature of such standards. International law is based on notions of reciprocity between sovereign nations.\textsuperscript{55} Unilateral measures, such as the United States requirement of certification that all shrimp trawlers were equipped with Turtle Excluder Devices (TED)\textsuperscript{56} arouse antipathy as a derogation from this norm. Nonetheless, such unilateral measures

\footnote{\textit{Id.} at 252.}


\footnote{\textit{See} Shrimp-Turtle Recourse Action, \textit{supra} note 6. This was a follow-up proceeding of the \textit{Shrimp-Turtle} dispute, and both are discussed \textit{infra} Part IV.B.}
might be justified, and consistent with a country’s obligations under the GATT/WTO agreement.\footnote{This obligation is based in GATT Art. XX, discussed \textit{infra} Part IV.}

IV. **THE TWO STEP TEST UNDER ARTICLE XX**

The GATT/WTO Agreement\footnote{General Agreement on Tariffs and Trade (1994) (hereinafter GATT 1994).} was the result of many years of multilateral negotiations, and sought to secure the advantages of free trade. It incorporated two main provisions to extract the participating countries from the prisoner’s dilemma that trade liberalization poses, in Article I, which required most-favored-nation treatment,\footnote{GATT Art I. \textit{See supra} note 20 for the text.} and Article III, requiring national treatment.\footnote{GATT Art III. \textit{See supra} note 21 for the text.} Environmental measures were a specific exception to these obligations, and contained in Art XX, which states, in relevant part,

Subject 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 as a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:

\begin{enumerate}
\item [(b)] necessary to protect human, animal or plant life, or health:
\item [(g)] relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption[.]
\end{enumerate}

The WTO Dispute Settlement Body has evolved a two step test based on these listed exceptions and the so-called ‘chapeau’ of Art. XX to be used in the analysis to determine whether a

\footnote{GATT Art XX.}
particular environmental measure is consistent with a country’s GATT/WTO obligations. First, the measure must fall within one of the listed exceptions contained in Art. XX, and looks to the objective of the measure to determine if it falls within the scope of any of the listed exceptions. That is, it looks to the nature of the measure, which must primarily be aimed at the conservation of exhaustible natural resources. There is no requirement that the measure treat domestic and foreign producers identically.

The second step of the test focuses on the application of the measure, and whether the application is discriminatory in specific ways. This issue of discrimination, at the second step, is determined with reference to the “chapeau” of Art. XX. The chapeau prohibits the application of a measure that otherwise falls properly within the scope of Art. XX (g), if it would constitute

(a) “arbitrary discrimination” (between countries where the same conditions prevail; (b) “unjustifiable discrimination” (within the same qualifier); or (c ) “disguised restriction” on international trade.

All three terms are meant to be read “side-by-side,” and “impart meaning to one another.” The Appellate Body used this two step analysis in holding that a measure imposed by

62 The WTO interprets the terms of the GATT Agreement in accordance with the principles set out in the Vienna Convention that a treaty shall be interpreted in accordance with the ordinary meaning given to the terms in context, and in light of the purpose of the treats. See Vienna Convention on The Law of Treaties, opened for signature May 23,1969, Art. 31, 1155 U.N.T.S. 331 (hereinafter Vienna Convention). The Appellate Body refers to this principle its opinion. See Reformulated Gasoline, 35 L.L.M. 603, 621. For an argument that the WTO needs to place even greater reliance on the Vienna Convention to assure greater predictability in the future, see John H. Knox, The Judicial Resolution of Conflicts Between Trade and the Environment, 28 HARV. ENVT’L L. REV. 1 (2004).

63 See Reformulated Gasoline at 622.

64 See id at 625.

65 Reformulated Gasoline at 627 (quotes in original).

66 Id. at 629.

67 Ibid.
the United States in *Reformulated Gasoline* was inconsistent with GATT obligations. The Appellate Body’s used the same test in the *Shrimp-Turtle* case, when it rejected the idea that unilateral measures were *per se* inconsistent with GATT obligations. The *Shrimp-Turtle: Recourse Action* report suggests that the WTO is well on its way to finding a fine balance between legitimate environmental measures and trade barriers masquerading as environmental protection, as discussed *infra* in Part IV. A brief history of disputed environmental measures is worth considering before beginning the examination of the three most recent cases, to provide context, and to see if the disputed measures can be viewed through the Leidy-Hoekman rubric.

A.  The GATT Disputes

*Reformulated Gasoline* was not the first instance of litigation involving the various provisions of Article XX. In each of the six cases prior to *Reformulated Gasoline*, the GATT Panel found that the disputed measure was in violation of treaty obligations. The Panel Report was adopted in three cases: *Canadian Tuna, Salmon-Herring*, and *Cigarettes*, and failed to be adopted in the remaining three: *Tuna I, Tuna II* and *Automobiles.*

In *Canadian Tuna*, the United States imposed an import prohibition on tuna and tuna products from Canada as retaliation following the seizure of 19 fishing boats and arrests of U.S. fishermen by Canada. Canada then brought a complaint before the GATT and requested a Panel in January 1980. Even though the prohibition was lifted with effect from September 1980, Canada requested that the Panel continue with its work, and the United States agreed to cooperate after voice its doubts about the necessity of further examination. The Panel, in its

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68 See discussion, *infra*, this section.

69 These disputes are summarized succinctly in the Annex to *GATT/WTO Dispute Settlement Practice Relating to GATT Article XX, Paragraphs (b), (d) and (g)*, WT/CTE/W/203 (2002).

70 *United States – Prohibition of Imports of Tuna and Tuna Products from Canada*, adopted on February 22 1982, BISD 29S/91.
report, found that the prohibition was not justified, *inter alia, under Article XX (g). From the perspective of international trade, the United States in fact argued that this was publicly announced trade measure, and could not be considered a “disguised restriction on trade.” It was an express restriction on trade. The feature of interest here is the ingenious argument that a public announcement of the measure would be sufficient to vitiate the violation in treaty obligations, which was rejected by the Panel.

The case of *Canada – Salmon and Herring* is of more interest for the present analysis.\(^7\) Canada maintained regulations prohibiting the export, or sale for export, of certain unprocessed herring and salmon, as part of long-standing efforts aimed at the conservation and management of stocks. The United States complained that these measures were inconsistent with the treaty obligations embodied in Article XI, and were not justified by Article XX, and requested a Panel in February, 1987. Canada attempted to justify the measures under Article XX (g), as aimed at preserving fish stocks, inarguably an exhaustible natural resource. The Panel, while accepting that the salmon and herring stocks were “exhaustible natural resources” and the harvest limitations were “restrictions on domestic production” within the meaning of Article XX(g), nonetheless held that the measure could not be justified under that provision. For a measure to be justified under Article XX(g), according to the Panel, not only was it to be in conjunction with production restrictions, it must be primarily aimed at rendering those restrictions effective. Canada argued that the export prohibitions had an effect on conservation because they helped provide the statistical base, and that they increased the benefits of the Salmonid Enhancement Program.

\(^7\) *Canada – Measures Affecting Exports of Unprocessed Herring and Salmon*, adopted on march 22, 1988, BISD 35S/98.
The Panel rejected the statistically based arguments, noting that Canada collected data on several fish species without imposing export prohibitions, and that the Salmonid Enhancement Program included fish species not subject to export restrictions. Furthermore, and more importantly for present purposes, in finding that the measure was not justified because Canada limited the purchases of unprocessed fish only to foreign producers and consumers, with no corresponding restriction on domestic production and consumption.

The differential treatment of domestic and foreign agents would be an indication that the measure might be a disguised barrier to trade. The prohibition on the sale of unprocessed fish suggests that the measure might have been seeking to protect domestic jobs. In fact, the species subject to the export measure did in fact at that time give employment to almost five-sixths of the workers in the British Columbia fish processing industry.

A similar discrimination in the treatment of domestic and foreign producers was a feature of the disputed measure in Cigarettes. Thailand prohibited the import of cigarettes under a domestic statute, but authorized the sale of domestically manufactured cigarettes. The United States complained that the import restrictions were in violation of Article XI (1) and not justified by, inter alia, Article XX(b) and requested a Panel to consider the matter in February 1990. Thailand justified the discriminatory treatment of domestic and foreign cigarettes on the grounds that the chemicals and additives in the imported cigarettes might make them more harmful than domestically manufactured cigarettes. The Panel, in rejecting this argument, relied on the fact that the World Health Organization could not provide any scientific evidence about the differential impact on health of cigarettes with and without additives. Thus, the import restrictions imposed by Thailand could not be considered “necessary” under the terms of Article

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72 *Thailand- Restrictions on Importation of and Internal Taxes on Cigarettes*, adopted on November 7, 1990, BISD 37S/200.
XX (b), as there were less restrictive measures available by which Thailand could reasonably use to achieve its stated health policy goals of reducing smoking.

*Tuna I*\(^\text{73}\) and *Tuna II*\(^\text{74}\) were based on the import prohibitions imposed by the United States under the Marine Mammal Protection Act. In *Tuna I*, Mexico brought a complaint against the United States for a measure than banned, *inter alia*, the imports of yellowfin tuna harvested using purse seine nets (which also capture dolphins), unless the competent US authorities had established that the foreign country has a comparable program regulating the taking of marine mammals, and the average rate of taking of marine mammals was comparable to that of U.S. vessels. The facts of *Tuna II* are similar; the complainants were the then European Economic Community and the Netherlands. The Panel for Tuna I was requested in January 1991; for Tuna II, the Panel was requested in June 1992. The Panel Reports in both cases failed to be adopted.

The Panel found that the measure was not justified under the provisions of Article XX (b) on the grounds that its scope did not extend to measures protecting human, animal or plant life outside the jurisdiction of the country enacting the measure. As can be seen in the discussion of *Shrimp-Turtle, infra*, the international trade body has since moved away from this interpretation of the treaty provision, arguably correctly.

The Panel did, however, note that even if Article XX (b) and (g) had extra-jurisdictional application, the measure could still not be considered “necessary” within the meaning of the provision, because the United States had failed to demonstrate that it had failed to exhaust all measures available, consistent with treaty obligations, that would achieve its goal of protecting dolphin populations. The Panel also found the linking of the maximum import taking rate to the

\(^{73}\) United States – Restrictions on Imports of Tuna, circulated September 1991, not adopted, DS 21/R.

\(^{74}\) United States – Restrictions on Imports of Tuna, circulated June 1994, not adopted, DS29/R.
actual rate by US fisherman to be based on unpredictable conditions to a measure that could not be regarded as being primarily aimed at the conservation of dolphins under Article XX (g). This rejection of strict technical standards was refined in Reformulated Gasoline, again, quite correctly, as the use of rigid standards can be an indicator of an environmental measure that, as applied, becomes a disguised restriction on trade.

In Automobiles, the complainants were the European Communities, challenging three US measures on automobiles: the luxury tax on automobiles above some determined price; the gas guzzler tax, imposed on automobiles whose fuel economy failed to meet certain statutory requirements; and the Corporate Average Fuel Economy (CAFÉ) regulation, which required a minimum average fuel economy for passenger automobiles and light trucks sold in the United States by any manufacturer. For producers who were both importers and domestic manufacturers, the average fuel economy was calculated separately for domestically manufactured and imported automobiles.

The European Communities complained that the regulation had a disproportionate impact on EC cars, and the treatment based on fleet averaging was inherently discriminatory. Thus, the measures were inconsistent with Article III, and could not be justified under Article XX (g). The United States, on the other hand, contended that the CAFÉ measures were a central element of domestic energy conservation policy, and within the scope of Article XX (g).

The Panel was requested in March 1993, and circulated its Report (which was not adopted) in October 1994. In the Report, the Panel found a policy to conserve gasoline, an exhaustible natural resource, to be within the scope of Article XX (g). The Panel, however, found that the measure could not be justified under Article XX (g) because it did not contribute

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75 United States – Taxes on Automobiles, circulated October 11, 1994, not adopted, DS31/R.
directly to fuel conservation in the United States, and could not be considered to be primarily aimed at the conservation of an exhaustible natural resource.

The one common feature of all these measures is the differential treatment of domestic and foreign producers, either by the use of quantitative restrictions or through the use of stringent technical standards, applied differentially. The discussion in Section III, supra, analyzed the incentives that exist that would result in the adoption of environmental measures that, when applied, function as disguised restrictions on trade. These disputes provide illustrations of measures that begin with legitimate policy goals, but as applied, are effectively restrictions on international trade.

B. Reformulated Gasoline

The Clean Air Act (“CAA”) of the United States established two gasoline programs with the objective of limiting pollution from gasoline combustion to 1990 levels, and reducing pollution in major population centers. The CAA required that all gasoline sold in specified areas be “reformulated” during specific times of the year, when ozone pollution was the worst. At other time, and other places, sale of conventional gasoline was permitted.77 The U.S. Environmental Protection Agency (“EPA”) adopted the Gasoline Rule to implement the CAA.78 This rule relied heavily on 1990 baselines to determine compliance with the CAA. These baselines could be individual to the entity or statutory, as established by the EPA. The nature of the entity determined which base line applied.79

77 Reformulated Gasoline 35 I.L.M. at 608.
78 Ibid.
79 Id. at 609.
Any domestic producer that had been in operation for at least six months in 1990 had to establish an individual baseline representing the quality of the gasoline produced in 1990. Producers who had been in operation for less than six months in 1990, or commenced operation after 1990 were subject to the statutory baseline established by the EPA. The Gasoline Rule did not provide for individual baselines for foreign refiners, who were subject to the EPA’s statutory baseline.

Brazil and Venezuela challenged the Gasoline Rule at the WTO, claiming that it was not consistent with the U.S.’s obligations under GATT Art. III. The Panel that was subsequently convened issued its Report in January 1996. The Panel found that domestic and foreign gasoline were like products. Under the Gasoline Rule, imported gasoline was prevented from benefiting from the favorable sales condition that an individual baseline could create. The Panel then concluded that Gasoline Rule was inconsistent with Art. III in that it treated like products differently. Further, the Panel ruled, while clean air was an “exhaustible natural resource” within the meaning of Art. XX (g), this could not be used as a justification for the Gasoline Rule that was inconsistent with Art III. The Panel thus found it unnecessary to reach the second step of the inquiry – the consistency of the Gasoline Rule with the chapeau of Art. XX.

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80 Id. at 610.

81 Ibid.


83 Panel Report -Reformulated Gasoline at para. 6.16.

84 Id. at para. 6.37.

85 Id. at para. 6.40.

86 Ibid. These findings are summarized in Reformulated Gasoline, 35 I.L.M. at 612.
The Appellate Body reversed some of these findings when it applied the two-part test. According to the Appellate Body, what mattered for the Art. XX (g) analysis was whether the rules affected both domestic and foreign producers. That is, the restrictions on the “consumption or depletion of clean air” was established jointly on domestic and foreign producers. The fact that imported gasoline might be accorded less favorable treatment was not “material” to the Art. XX (g) analysis. Further, the Gasoline Rule was primarily a conservation measure, and therefore fell within Art. XX (g).

Having determined that the Gasoline Rule was provisionally justified under Art. XX (g), the Appellate Body turned to the second step of the analysis, based on the chapeau of Art. XX. According to the Appellate Body,

\[
\text{[t]he chapeau is animated by the principle that while exceptions of Art. XX may be invoked as a legal right, they should not be so applied as to frustrate or defeat the legal obligations of the holder of the right under the substantive rules of the General Agreement. . . . The provisions of the chapeau cannot logically refer to the same standard(s) by which a violation of a substantive rule has been determined to have occurred. To proceed down that path would be both to empty the chapeau of its contents and to deprive the exceptions in paragraphs (a) through (j) [of Art. XX] of meaning.}
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The Appellate Body then proceeded to apply the second step of the test, and consider the question whether the Gasoline Rule resulted in either arbitrary discrimination, unjustifiable discrimination or a disguised restriction on trade. Under this analysis, the Appellate Body held that the Gasoline Rule was in its application, “unjustifiable discrimination” and a “disguised

87 Reformulated Gasoline at 625.
88 Ibid.
89 Id. at 626-27.
90 Id. at 629.
restriction on international trade,” and failed to meet the requirements of the chapeau of Art. XX.  

The Appellate Body highlighted two omissions on the part of the U.S.:

To explore adequately means, including in particular cooperation with the governments of Venezuela and Brazil, of mitigating the administrative problems relied on as justification by the United States for rejecting individual baselines for foreign refiners; and to count the costs for foreign refiners that would result from the imposition of the statutory guidelines.  

Two things mattered to the Appellate Body: the inadequate efforts at cooperation with other governments by the U.S.; and that domestic producers were given time to restructure their operations, but foreign producers were not. The Appellate Body was careful to emphasize that a country’s ability to take measures to protect the environment was not the issue. Nonetheless the Gasoline Rules were held to be inconsistent with Art. XX of the GATT by the Appellate Body due to the differential impact on domestic and foreign producers.

The outcome is sensible when viewed in the Leidy and Hoekman framework. The Gasoline Rule had features that are characteristic of the inefficient environment regime that would be preferred by industry as a protectionist measure. The Gasoline Rule imposed regulatory quantitative restrictions. It treated older, established domestic firms more favorably than newer domestic firms or foreign firms. The Gasoline Rule, in effect, acted as a barrier to entry by raising the costs of new firms. The Rule also acted as a trade barrier by increasing the costs of foreign producers, who had to comply with the higher statutory standards. To the extent the environmental measure acted as a significant barrier to trade, the Appellate Body’s decision had the correct result.

91 Id. at 633.
92 Id. at 632.
93 Reformulated Gasoline at 633.
94 See Leidy and Hoekman, supra note 32nd discussion supra Part III.
The other issue that the Appellate Body focused on was that of cooperation between the affected countries. Treaties are entered into by sovereign nations, and can be maintained only by cooperation, as public international law operates without an external enforcement mechanism.\footnote{See Parisi and Ghei, supra note 18 See generally, IAN BROWNLE, PRINCIPLES OF PUBLIC INTERNATIONAL LAW (4th ed., 1990)} Unilateral action by any one country, which results in the repudiation of an obligation undertaken by treaty, makes the functioning of the system of international law that much more difficult.\footnote{If cooperation fails, the world would descend into anarchy, at the extreme. And, as Hobbes famously stated, in such a world, life is “solitary, poor, nasty, brutish and short.” THOMAS HOBBES, LEVIATHAN, (1651) (Liberal Arts Press 1958) at 110. See also, Knox, supra, note 59 (emphasizing the need for cooperation and political support for the continued functioning of the international trade regime).}

The analysis undertaken by the Appellate Body attempts to strike a balance between the exercise of sovereignty of a nation and its treaty obligation. The first step of the test, using Art. XX (g) recognizes the right of a nation to protect its environment; the second step limits this right by the obligation of the chapeau of Art. XX, such that countries are limited in using environmental standards as trade barriers.

C. Shrimp-Turtle and Shrimp-Turtle Recourse Action

The analysis undertaken by the Appellate Body in \textit{Shrimp-Turtle} was an application of the two-tier test. Four Asian countries challenged a U.S. regulation. When the WTO Panel issued its report, the U.S. appealed. The Appellate Body’s Report reversed some of the Panel’s findings, but held that the U.S. measure was inconsistent with the chapeau of Article XX, and agreed to a time frame for the U.S. to achieve compliance with its holding. Malaysia then sought a recourse proceeding under Art 21.5,\footnote{GATT (1994) Art 21.5 states in part: When there is disagreement as to the existence or consistency with a covered agreement of measures taken to comply with the recommendations and rulings such disputes shall be decided} claiming that the U.S. had failed to meet its obligations. The U.S.
then challenged the Recourse Panel’s report. The opinion of the Appellate Body on the recourse action confirmed in favor of the U.S.

1. Ecological Facts and U.S. Legislation

Sea turtles are found in most warm water oceans in the world. They are killed or captured when they become entangled in commercial fishing gear. Shrimp trawling, in particular, was a significant cause of turtle mortality. A Turtle Excluder Device (“TED”) is a simple adaptation that reduces turtle mortality by as much as ninety-seven percent, with minimal effect on the efficiency of shrimping operations. The U.S. imposed stringent regulations that effectively mandated the use of TED devices. Then, as Sanford Gaines points out, “commercial and environmental interests converged to support . . . enactment” of Section 609.

This legislation required the U.S. government to initiate negotiation of agreements to protect turtles. Under Section 609, wild-caught shrimp could be imported only from those nations that were “certified” on documentary evidence the adoption of a regulatory program that was aimed at limiting the incidental take of turtles to a rate that was comparable with the U.S. rate. Treaty negotiations were focused on the Western hemisphere, culminating in the Inter-American Convention for the Protection and Conservation of Sea Turtles. Then, a ruling by through recourse to these dispute settlement procedures, including wherever possible resort to the original panel.

98 This factual background draws in part on Sanford Gaines, *The WTO’s Reading of the GATT Article XX Chapeau: A Disguised Restriction on Environmental Measures*, 22 U. Pa. Int’l Econ. L. 739 (2001). Gaines considers the Shrimp-Turtle decision as damaging the cause of free trade. This Article does not support that conclusion. See discussion infra this part and Part V.


100 *Id.* at 762.

101 *Id.* at 763.

the Court of International Trade required the federal government to implement the embargo worldwide.\footnote{Earth Island Inst. v. Christopher, 913 F.Supp. 559 (Ct. Int’l Trade 1995). The suit was brought by an environmental group.} The Court of International Trade gave the federal government less than six months to impose the embargo. In April 1996, the U.S. government revised its guidelines to comply with the ruling by the Court of International Trade. Not surprisingly, four countries most immediately subjected to the embargo – India, Malaysia, Pakistan and Thailand sought help from the WTO.

2. WTO Reports

*Reformulated Gasoline*, which had been decided a year earlier, had articulated the importance of the chapeau of Art. XX. The Panel, analyzing the matter solely with reference to the chapeau of Art. XX, found that the restriction undermined the multilateral trading system and so was not within the scope of Art. XX.\footnote{Panel Report: United States – Import Prohibition of Shrimp and Certain Shrimp Products, WT/DS58/R, adopted November 6, 1998.} The Panel did so without going through the two-step analysis. The U.S. appealed, and the Appellate Body undertook the two-step analysis it set out in *Reformulated Gasoline*. The Appellate Body found that the measure was provisionally justified under Art. XX (g), but it failed to meet the requirements of the chapeau.\footnote{Panel Report: United States – Import Prohibition of Shrimp and Certain Shrimp Products, Recourse to Art 21.5 by Malaysia, WT/DS58/RW, adopted June 15, 2001 at para. 2.14.} The Appellate Body pointed to the unjustified discrimination between the countries that were members of the Sea Turtle Convention and the four Asian countries. The former had adopted the standards through good faith negotiation; the latter found the embargo imposed unilaterally, with
little time to restructure.\textsuperscript{107} By January 1999, the U.S. and the other parties agreed to a thirteen-month reasonable period to comply with the WTO body’s ruling.\textsuperscript{108}

The U.S. subsequently issued revised guidelines, which more flexible and transparent. Malaysia complained that the revisions were inadequate, and did not comply with the recommendations of the DSB, and sought recourse under Art. 21.5.\textsuperscript{109} The Panel found that the application of the revised guidelines by the pertinent authority in the United States in implementing Section 609 was justified under Art XX, particularly in light of “the ongoing serious good faith efforts to reach a multilateral agreement.”\textsuperscript{110} Malaysia appealed under the chapeau of Art. XX. Specifically, Malaysia argued that the U.S. had an obligation to conclude an international agreement, and the Panel had erred in considering the U.S.’s obligation to be limited to negotiating such an agreement.\textsuperscript{111}

The Appellate Body flatly rejected the notion that the U.S. had an obligation to “conclude an agreement on the protection . . . of sea turtles in order to comply with Art. XX.”\textsuperscript{112} However, the Appellate Body held, “the United States has an obligation to make serious good faith efforts to reach an agreement before resorting to the type of unilateral measure currently in place.”\textsuperscript{113}

\textsuperscript{107} “Clearly, the United States negotiated seriously with some, but not with other Members (including the appellees), that export shrimp to the United States. The effect is plainly discriminatory, and, in our view, unjustifiable.” Report of the Appellate Body  United States – Import Prohibition of Shrimp and Certain Shrimp Products at para. 172.

\textsuperscript{108} Id. at para. 2.20


\textsuperscript{110} Id. at para. 9 (b).

\textsuperscript{111} Id. at para. 16.

\textsuperscript{112} Id. at para. 115.

\textsuperscript{113} Ibid.
The Appellate Body adopted the Panel’s findings that the U.S. had in fact made such good faith efforts to negotiate an international agreement.\textsuperscript{114} Two points are worth noting here: the WTO’s emphasis on negotiation, and the fact it did \textit{not} declare that unilateral environmental measures were per se inconsistent with Art. XX. In fact, the Appellate Body said,

\begin{quote}
[C]onditioning access to a Member’s domestic market on whether exporting Members comply with, or adopt, a policy or policies unilaterally prescribed by the importing Member may, to some degree, be a common aspect of measures falling within the scope of one or another of the exceptions (a) through (j) of Article XX.\textsuperscript{115}
\end{quote}

The Appellate Body’s holding emphasizes the fact that unilateral measures can be upheld in a WTO dispute settlement proceeding. The result will depend on the nature of the measure. If market access is conditioned on the examining the effectiveness of the program adopted, it is likely to be upheld. The WTO is likely to consider unilateral measures that condition access on the adoption of the same program with considerably less sympathy.\textsuperscript{116}

\textit{D. Asbestos}

Chrysotile asbestos is generally considered a highly toxic substance and a known carcinogen, posing a significant danger to human health on exposure.\textsuperscript{117} Asbestos fibers, however, have been used widely in industrial applications due to certain features, such as the resistance to high temperatures. France, previously a major importer of asbestos fibers, adopted legislation, in December 1996, that banned the use of asbestos fibers, and products that contained such fibers to asbestos, with some limited exceptions:

\begin{quote}
\textsuperscript{114} \textit{Id.} at para. 133.
\textsuperscript{115} \textit{Id.} at para. 138.
\textsuperscript{116} \textit{Id.} at para. 144.
\end{quote}
I. On an exception and temporary basis, the bans instituted . . . shall not apply to certain existing materials, products or devices containing chrysotile fibre when, to perform an equivalent function, no substitute for that fibre is available which:

- On the one hand, in the present state of scientific knowledge, poses a lesser occupational health risk than chrysotile fibre to workers handling those materials, products or devices;
- on the other, provides all technical guarantees of safety corresponding to the ultimate purpose of the use thereof . . .

France justified the Decree on the grounds that its aim was to reduce the exposure to asbestos, and thereby reduce the number of death due to such exposure. Canada, at the time the largest exporter of asbestos, challenged the decree under the WTO agreements. Canada did not dispute the carcinogenic nature of chrysolite asbestos, but made, inter alia, a distinction between chrysotile fibers and chrysotile encapsulated in a cement matrix, and challenged the Decree to the extent it prohibited the use of such chrysolite-cement products. Canada claimed that the Decree violated Articles III:4 (like treatment of like goods) and XI of GATT 1993 (prohibition against quantitative restrictions on imports), and various provisions of the Agreement on Technical Barriers to Trade, and also nullified or impaired benefits under Article

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120 Article III:4 of GATT 1974 provides in pertinent part as follows:

Article III: National Treatment on Internal Taxation and Regulation

* * *

4. The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favorable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use.

Article XI of GATT 1974 provides in pertinent part as follows:

Article XI: General Elimination of Quantitative Restrictions

1. No prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licences or other measures, shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation or sale for export of any product destined for the territory of any other contracting party.
XXIII: 1 (b). The European Communities argued that the Decree was outside the scope of the Agreement on Technical Barriers to Trade, and was either compatible with Article III:4 or fell within the scope of Article XX (b) as a measure necessary to protect human life.

The *Asbestos* dispute concerned the exception contained in Art. XX (b), not Art. XX (g), which was the relevant exception for both *Reformulated Gasoline* and *Shrimp-Turtle*, but was subject to the same two step test in determining the validity of the challenged measure. The Panel found that the provisions prohibiting the sale of chrysotile fiber and chrysotile-cemented products violated Article III:4, but was justified under Article XX (b), in that experts confirmed the health risks associated with exposure to various forms of asbestos, and a ban on such products fell within the scope of measures to protect human life and health. Furthermore, the Panel found that application of the Decree did not constitute “arbitrary or unjustifiable discrimination,” and the design of Decree was such that the Panel could not conclude that the

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121 Article XXIII: 1 (b) provides:

**Article XXIII: Nullification or Impairment**

1. If any contracting party should consider that any benefit accruing to it directly or indirectly under this Agreement is being nullified or impaired or that the attainment of any objective of the Agreement is being impeded as the result of

    * * *

(b) the application by another contracting party of any measure, whether or not it conflicts with the provisions of this Agreement, or

    * * *

the contracting party may, with a view to the satisfactory adjustment of the matter, make written representations or proposals to the other contracting party or parties which it considers to be concerned. Any contracting party thus approached shall give sympathetic consideration to the representations or proposals made to it.

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Decree was a “disguised restriction on trade.” As such, the Decree was not in conflict with the chapeau of Art XX.

Canada appealed the Panel’s decision on two issues; whether the use of chrysotile cemeted products posed a risk to human health and whether the measure being challenged was “necessary” to protect human life or health. In affirming the Panel’s decision, the Appellate Body deferred to the Panel’s assessment of the evidence on the risk to human health, and found no abuse of discretion. In rejecting Canada’s challenge with respect to the necessity for the measure, the Appellate Body reiterated “it was undisputed that WTO members have the right to determine the level of protection of health that they consider appropriate for a given situation.” The Appellate Body, in trying to evaluate whether the measure was “necessary,” examined, inter alia, whether there was a less restrictive alternative measure available which would either be consistent with treaty obligations which a Member could reasonably be expected to employ to achieve its stated objective. In this case, Canada argued that “controlled use” was such a measure, an argument that the Appellate Body rejected, stating:

\[\text{[T]he "weighing and balancing process … comprehended in the determination of whether a WTO-consistent alternative measure" is reasonably available is the extent to which the alternative measure `contributes to the realization of the end pursued.' In addition, we observed, in that case, that `[t]he more vital or important [the] common interests or values` pursued, the easier it would be to accept as `necessary` measures designed to achieve those ends. In this case, the objective pursued by the measure is the preservation of human life and health through the elimination, or reduction, of the well-known, and life-threatening, health risks posed by asbestos fibers. The value pursued is both vital and important in the highest degree. The remaining question, then, is whether there is an alternative measure that would achieve the same end and that is less restrictive of trade than a prohibition.}\]

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124 Asbestos, para. 155.

125 Asbestos, paras 161-163.

126 Asbestos, para. 168.

127 Asbestos, paras 172-174.
In our view, France could not reasonably be expected to employ any alternative measure if that measure would involve a continuation of the very risk that the Decree seeks to ‘halt.’ Such an alternative measure would, in effect, prevent France from achieving its chosen level of health protection. On the basis of the scientific evidence before it, the Panel found that, in general, the efficacy of ‘controlled use’ remains to be demonstrated. Moreover, even in cases where "controlled use" practices are applied ‘with greater certainty,’ the scientific evidence suggests that the level of exposure can, in some circumstances, still be high enough for there to be a ‘significant residual risk of developing asbestos-related diseases.’ The Panel found too that the efficacy of "controlled use" is particularly doubtful for the building industry and for DIY [do-it-yourself] enthusiasts, which are the most important users of cement-based products containing chrysotile asbestos. Given these factual findings by the Panel, we believe that ‘controlled use’ would not allow France to achieve its chosen level of health protection by halting the spread of asbestos-related health risks. ‘Controlled use’ would, thus, not be an alternative measure that would achieve the end sought by France.

E. Policy and Economic Implications

The opinion of the Appellate Body in Asbestos and Shrimp-Turtle Recourse Action\(^\text{128}\) advanced the analysis begun in Reformulated Gasoline and applied in Shrimp-Turtle.\(^\text{129}\) The WTO has clearly recognized and validated the role of unilateral measures in giving meaning to the exceptions of Art. XX. At the same time, the WTO was aware of the possibility of abuse of these exceptions. Every exception in the GATT weakens the reciprocity constraint imposed by the Agreement overall, and provides an incentive to cheat. That is, these exceptions can push countries back into the prisoner’s dilemma and result in outcomes that can leave everyone worse off. The two-tier test adopted by the WTO uses the chapeau of Art. XX as a way to limit abuse of the exceptions. The chapeau of Art. XX acts as a ledge on the slippery slope to the prisoner’s dilemma result of autarky.

The Shrimp-Turtle Recourse Action opinion also managed to limit two other possible sources of inefficiency. First, the Appellate Body refused to hold that the conclusion of an agreement was necessary. If it had done so, the result would have been the classic “hold-out


\(^{129}\) Reformulated Gasoline, 35 I.L.M. 603.
problem”, where one country could hold all others hostage by withholding agreement until it had secured concessions for itself.

The Appellate Body’s opinion also considered the nature of unilateral measures. The opinion seemed to indicate that unilateral measures focusing on comparable effectiveness were more likely to be viewed sympathetically. That is, it is the end that matters, not the means. This permits greater flexibility, and allows countries to adopt the measures that are most efficient in view of their specific conditions. This is efficient in that the desired environmental improvement can be achieved by using the least amount of resources, at the least cost. Further, flat bans designed to protect human health, where the scientific evidence provides support for the alleged objective, are more likely to be given deferential treatment, as stated by the Appellate Body report in Asbestos.

V. IMPLICATIONS FOR FUTURE UNILATERAL MEASURES

The WTO, within the framework of the two step test under Article XX, does not give free rein to unilateral measures, but leaves open the possibility of finding them valid, as in Asbestos. Problems that are similar to those inherent in turtle conservation are most likely to respond to unilateral measures by a large country such as the United States. Thus, problems based in a tragedy of the commons due to a migratory source are best suited for the sort of action the United States finally took.

The tragedy of the commons occurs when property rights are not assigned. Then individuals have an incentive to use as much as possible of the common resource, whether it be water, forests, whales or elephant. If the resource is converted to private property, then the owner

\[130\] Tragedy of the commons refers to incentive to use a resource in excess of sustainable levels that follows when there is no specified ownership of the resource.
has an incentive to limit use to sustainable levels, as this would maximize welfare over the long term. It is relatively easy to assign property rights to land, forests and mineral deposits, all of which are stationary. It is extremely difficult to assign property rights to migratory resources such as turtles or whales. The problem is exacerbated in the case of turtles and whales, as they are found in the high seas, where ships have free passage under international law. The result is either over-fishing (for whales) or incidental destruction (as in the case of turtles).

To the extent that turtles have value, it is worth preventing this destruction. The U.S. can impose a unilateral measure conditioning access to its market on turtle friendly practices. A sanction from a large country is more likely to be effective, as access to its market is highly valued. One way of viewing this is in the tradition of international law. The U.S. is attempting to create a new international norm with respect to turtles. The probability of this norm becoming binding custom increases with the extent of good faith negotiation, whether or not a treaty comes into existence.

Thus, the greater the use of negotiation, and the greater the flexibility of the unilateral measure in the matter of method of achieving the desired end, the more likely is the measure to

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131 See Brownlie, supra note 84.

132 Value does not have to mean economic or pecuniary value. Turtle could have existence value, that is, knowing they exist increases the welfare of people who may never even see a sea turtle. Or the value could be based on ethical grounds, for example, elimination of a species is wrong.

133 See Parisi and Ghei, supra note 18.

134 See also Schoenbaum, supra note 50. He uses a similar explanation for the Tuna-Dolphin dispute. Again, dolphin are migratory, just like turtles and whales. However, as he points out, this would not justify banning imports from intermediary nations, or imposing a specific technological measure. Id. at 299.

135 This would be in the tradition of the Truman Proclamation, claiming jurisdiction of the continental shelf. See Proclamation with Respect to the Natural Resources of the Subsoil and Seabed of the Continental Shelf (1945). At that time, the claim was both novel and inconsistent with existing international law. See Michael Byers, Custom, Power And The Power Of Rules (1999); Brownlie supra note 95. See also, Schoenbaum, supra note 50, who makes a similar argument.

136 Customary law is a primary source of international law. See Statute of the International Court of Justice, Art. 38 (1). See also, Byers supra note 127; and Brownlie, supra note 95.
pass WTO scrutiny. These conditions also diminish the probability that the measure is the result of rent seeking. That is, the restrictions imposed by the WTO analysis increases the probability a unilateral measure is truly welfare-enhancing; that the measure truly protects the environment from damage, and not special interest groups from foreign competition.