# ENVIRONMENTAL HARM AS ECONOMIC SUBSIDY: NEW PERSPECTIVES ON THE FEASIBILITY OF TRADE SANCTIONS FOR ENVIRONMENTAL PROTECTION

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It has become commonplace to worry about the conflict between international agreements to promote free trade and attempts to preserve the global environment. Environmentalists question the value of trade rules that prohibit efforts to encourage environmental protection through trade restrictions, and those committed to free trade fear barriers to trade cloaked in environmental concern.

Discussion about this potential incompatibility of goals is fought primarily over the issue of trade sanctions. In the most notorious example of this potential conflict, the dispute settlement process of the General Agreement on Tariffs and Trade (GATT) twice disallowed U.S. prohibition of imports of tuna products caught in a manner that harmed dolphins (GATT, 1991; 1994).[1] Free traders claimed these rules were simply disguised protectionism, since they benefited the U.S. tuna fishing industry with a cost borne by foreign producers of identical goods. Environmentalists pointed to the importance of including the process by which a product is made in determining whether it has harmful environmental consequences.

Those who are concerned about the use of trade restrictions for environmental protection often have two different types of concerns. The one that has been raised most frequently is about the compatibility of these sanctions with international trade regimes, particularly the GATT, now part of the World Trade Organization (WTO). Are these environmental measures compatible with the international trade rules, and, if not, what should be done to address this incompatibility? The second concern is about the potential unfairness of trade measures for environmental protection. Are they simply tools of the wealthy or powerful, used to bully states into changing their behavior? What can check potential abuses of power?

There is no shortage of evidence that these sanctions can play an important role in an environmental protection strategy. In some cases, domestic environmental protection is enabled by the assurance to domestic industries that they will not be disadvantaged by competition from those who do not have to undertake costly environmental regulation (DeSombre, 1995). In other cases, states have been persuaded to join international environmental agreements by the prohibition of trade advantages to those outside of the agreement (Brack, 1997).

It is therefore worth examining the types of trade restrictions threatened in the name of environmental protection, to determine if these concerns are inherent in the use of environmental sanctions, or if there are certain conditions under which trade restrictions for environmental protection could be considered within a broader acceptance of a regime that discourages barriers to trade and guards against protectionism.

The main way to include the potential for environmental trade restrictions within a free trading regime may be to reconceptualize the role of these sanctions and their relationship to an

overall goal of free trade. If we examine the potential hidden subsidies from production of goods in a way that causes environmental damage, there may be room even within the current trade regime to allow for countervailing duties. This shift of focus would allow for environmental measures that could be seen as less disruptive of free trade, and would be a way to distinguish protectionism from environmental protection. If environmental sanctions could be allowed under specific conditions only, they could be used as a valuable tool for achieving environmental goals without harming the overall goal of unrestricted trade. Environmental sanctions of this sort could even contribute to this broader goal by eliminating unfair competition.

This paper investigates the issue of creating compatibility between these two goals. It first explains the extent to which environmental sanctions conflict with current interpretations of the free trade regime, and then examines the characteristics of sanctions processes that have been instigated at least nominally for the purpose of environmental protection. It determines that while most of the types of sanctions currently threatened for environmental protection would run afoul of current interpretations of free trade rules, many of them could be applied in a way that is arguably non-protectionist.

## Trade vs. Environment

Thousands of trees have been felled in the service of evaluating the GATT-compatibility of the environmentally-justified trade restrictions currently in use, and these restrictions are generally found to be wanting. The world trading regime, encompassing large parts of the globe, was established before most of the environmental issues that provide the basis for current sanctions were even discovered, and hence exceptions to trade rules for environmental concerns are minimal.[2]

The GATT/WTO system is designed to disallow restrictions of trade under most circumstances, since the point of creating such a system internationally is to prevent states from taking individually advantageous actions that would lower collective advantages from free trade. States are not allowed generally to impose discriminatory trade restrictions; they are not allowed to treat goods from one country differently than those from another within the regime, and they are not allowed to impose restrictions on imports of goods that are not restricted domestically. In addition, to the extent that states are allowed to impose restrictions on free trade, these should be in the form of tariffs rather than non-tariff barriers such as quotas or prohibitions, and they should be applied in a non-discriminatory manner.

The GATT does allow trade restrictions under several circumstances, some of which relate to environmental protection. States are allowed to impose domestic regulations on imported products for such things as health and safety standards, provided that these restrictions are applied universally. Any product standards applied to national products can be applied to the same goods imported from foreign countries. If a state decides to ban a product outright because of the environmental harm it causes, that state can ban imports of that product as well. If a state

requires labels to indicate contents of national goods, it can require them for identical imported goods.

The major environmental exceptions to GATT rules are found in Article Twenty of the agreement. This article sets out the conditions under which state may take actions that would otherwise violate the rules of free trade. In particular, it allows for non-discriminatory rules that are "necessary to protect human, animal, or plant life or health (GATT, 1947: Article 20(b))," and those that are "related to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption (GATT, 1947: Article 20(g))."

There are reasons to be concerned about the trade implications of environmental measures, and indications that some of them are thinly disguised protectionism. The EU ban on imports of beef produced with hormones may sound like a concern for safety, but has the effect of keeping out U.S.-produced beef, when there is little agreement on harm from these hormones. Canadian requirements that salmon caught by the U.S. be landed in Canada in order to be sold there had the effect of increasing the cost to U.S. fishers and therefore serving as a barrier to trade. More frequently, both processes may be at work. In the case of the beef hormones, if there are health reasons (though they have not yet been proven) to keep out American beef raised with hormones, there are economic advantages as well. Landing salmon in Canada may permit better monitoring of catches and therefore improve protection of the stocks, but it also certainly helps Canadian fishers. A study of U.S. environmental sanctions showed that almost all of them have their origin in benefits both to the environment and to certain industry actors (DeSombre, 1995). How should we separate what it protecting the environment from what is protecting industry?

In the cases where the world trading system has weighed in against the acceptability of environmental trade restrictions, a discussion frequently follows about what should be done about this incompatibility. Those who value free trade are not satisfied with a situation in which individual states or multilateral organizations continue with policies that are found to countervail free trade. Those who supported trade measures as a way to protect the environment are resentful of an organization that tells them they can never use these effective tools to pursue their important goal. Scholars attempt to suggest ways to resolve the conflict.

One of the most frequent suggestions is the creation of a multilateral environmental organization to balance the influence of the World Trade Organization (Charnovitz, 1995; Esty, 1994; French, 1994; Runge et. al., 1994). Supporters of this option suggest that such an organization would have legal and political competence to overrule (or at least provide competing legitimacy to) rulings by the World Trade Organization on environmental trade restrictions.

The creation of such an environmental organization seems unlikely at best. The difficulties encountered in the efforts to create the United Nations Convention on the Law of the Sea appear to have scared anyone away from proposing large-scale multi-issue environmental agreements. States have been reluctant to grant the level of decisionmaking authority to

environmental organizations that has been given the multilateral trade agreements; the decisionmaking bodies within international environmental agreements often operate within a tightly restricted mandate, and either require unanimous consent or allow (and experience) opting out by members. Moreover, as Samuel Barkin argues persuasively (Barkin, 1998), it is not clear that even if such an organization were possible it would be desirable. The issues that states take up in attempting to protect the environment are not logical extensions of a universally agreed-upon method of environmental protection in the way GATT/WTO negotiating rounds make trade rules stricter. The protection of the environment through separately-negotiated agreements to address specific issues of concern to certain populations, though difficult, at least allows for measures to be adopted to mitigate certain environmental problems. An attempt to do so within a more general environmental organization would run the risk engaging potentially divisive political issues or becoming hobbled by undue fear of precedent.

The second main suggestion to address the conflicts between trade sanctions and environmental protection is a reform of the trade regimes in question, to include acceptance of trade sanctions. One of the issues suggested for reform is the distinction between regulations on a product and regulations on the process by which it is produced. The GATT system, as explained above, has allowed for prohibitions on *products* that cause environmental harm. It is less clear, however, that restrictions are allowed on products that by themselves are not either environmentally harmful but that were produced in an environmentally damaging way, particularly if they are not distinguishable from products produced differently. Explicitly allowing discrimination based on production processes is one of the reforms most fervently pushed by environmentalists, since it is clear that at least as much environmental harm is caused by the process of making goods as by those goods themselves (Weiss, 1992).

Substantial reform of the world trading system, in a way that explicitly accepts trade restrictions for environmental protection, is unlikely. Those who negotiate trade policy are coming from a trade perspective and are strongly committed to the basic principle of no restrictions to trade. Moreover, changes to the GATT take many years and require a high degree of consensus. At the moment, those states most frequently targeted by these trade restrictions (and those that most benefit from the trade advantages of lower environmental standards) would surely resist making environmental sanctions explicitly part of the GATT. Addressing these issues through amending the GATT would not be a near-term solution to any incompatibility problems.

If radical reform of the WTO system and creation of a global environmental organization are unlikely and possibly undesirable, the issue of trade conflicts over environmental actions will remain, unless simpler alternatives are devised. There is some possibility that the WTO system may not apply its rules as strictly as possible in issues relating to environmental protection. Both tuna/dolphin panel reports suggest that multilateral approaches should have been attempted (GATT 1991: 1620; GATT 1994: 886), and it is possible that the same types of sanctions, undertaken in the context of a multilateral environmental agreement, might have been deemed acceptable. A report of the WTO Committee on Trade and Environment indicated a difference

of opinion about the extent to which the distinction between products and the processes by which they were made was important in the case of importing goods across borders (World Trade Organization, 1996). This report also provided support for addressing environmental problems through multilateral environmental agreements, without stating explicitly that these agreements could not include trade restrictions.

## Trade Effects of Environmental Degradation

This paper proposes a different approach to environmental sanctions, based not on GATT Article Twenty exceptions to free trade but instead on provisions in Articles Six and Sixteen of the agreement. These two articles address subsidies, anti-dumping, and countervailing duties. Article Sixteen indicates that states are to avoid granting any form of income or price support "which operates directly or indirectly to increase exports of any product from . . . its territory." The agreement recognizes that granting such subsidies can harm other contracting parties and "may hinder the achievement of the objectives of this Agreement." In particular, parties are required to cease granting such subsidies, directly or indirectly, on products other than primary products, and to apply subsidies to primary products only where doing so does not result in giving that party a "more than equitable share of world export trade in that product." Article Six defines dumping as the process "by which products of one country are introduced into the commerce of another country at less than the normal value of the products" and disallows it.

Both of these articles refer to the price of the good. One measure of whether a good is being dumped is whether it is being sold for less than the price being paid for the good on its domestic market (GATT, 1947: Article 6(1)(a)). Subsidies are indirectly considered as things that result "in the sale of such a product for export at a price lower than the comparable price charged for the like product to buyers in the domestic market (GATT, 1947: Article 16(B)(4)." Neither of these definitions quite fits the situation when a state implicitly subsidizes its industries by not internalizing the externalities of environmental costs into production costs, but the other elements of the definition fit this process well.

These provisions help bring together the issues of trade and environmental degradation. Article Six in particular suggests a way out of the current dilemma, by allowing countervailing duties to be assessed on goods that are improperly subsidized, or dumped. This type of duty is defined as a "special duty levied for the purpose of offsetting any bounty or subsidy bestowed, directly, or indirectly, upon the manufacture, production or export of any merchandise (GATT, 1947: Article 6(3))." States are allowed to assess a duty on these goods that is equal to the margin of dumping; the amount by which its price is unfairly lowered.

It may therefore be more useful to turn the question around, and look not at the trade impacts of environmental sanctions but the trade impacts from a lack of environmental protection. Many of the environmental trade measures we see used relate to efforts to widen the scope of environmental protection, to ensure that more actors act in a way that is environmentally

responsible. One of the claims made by those who push for environmental trade measures is that they are necessary to level the economic playing field. Domestic actors who have to bear the costs of operating under environmental protection regulations push for their international competitors to be subject to the same regulations they are, or not allowed to compete domestically with the regulated actor, so that those that protect the environment are not disadvantaged in international trade (DeSombre, 1995).

One of the reasons that industries resist taking measures that protect the environment is the possibility that these measures will be costly. In the short run at least, producing a good in way that protects the environment is likely to cost more than producing it as it was previously produced. Those who bear this cost will suffer a competitive disadvantage relative to those who do not. Empirical studies have shown that there are costs to industries from domestic environmental regulations. Anthony Barbera and Virginia McConnell (1990) studied the impact of pollution regulation on the growth in productivity of five U.S. industries in the 1970s, and concluded that there was a reduction in productivity due to pollution regulation. Joseph Kalt (1988) found an inverse correlation for U.S. industries between costs of compliance with domestic environmental regulations and export performance. A 1992 EPA study predicted that due to costs imposed by the 1990 U.S. Clean Air Act Amendments the balance of trade in three affected industries would decline (Paskura and Nestor, 1992).

There are differences of option about the long term impacts of environmental regulation. Some, like Michael Porter, argue that environmental regulation is beneficial to the economy as a whole. He suggests that "tough standards trigger innovation and upgrading," and finds that states with the most stringent requirements often have the lead in exports, even of the regulated product (1992: 168; 1990). A study of the relationship between relative stringency of environmental regulations across countries and net exports found no correlation (Tobey, 1990). It is worth noting, however, that most of these positive studies focus on a country's economy as a whole, rather than on the impacts of regulations to the regulated industries. It would certainly be advantageous to countries *and* to the world as a whole if the costs of environmental externalities were internalized; an individual industry, however, would bear mostly costs and gain few direct benefits from doing so.

Products produced in ways that harm the environment could be considered as those receiving subsidies; when these goods are traded in ways that do not reflect the full (environmental) costs of their production they could be considered as being dumped. This would allow for restrictions in trade consistent both with provisions already in the GATT and with the broader goal that goods not be traded at a price lower than their cost so as to receive trade advantages.

It may be useful, then, to examine examples of trade restrictions that have been suggested as promoting environmental protection, to determine whether this re-casting of the justification for trade restrictions could allow states to achieve similar goals in more GATT-friendly ways.

## Sanctions for Environmental Protection

Environmental sanctions, or restrictions in trade for the protection of the environment,[3] provide an important tool for examining the broader relationship between free trade and environmental protection. It has been these conflicts through which the broader discussion of trade/environment linkages has been held. As implied above, restrictions of trade *are* allowed by the WTO system for environmental protection. No dispute settlement cases are brought when states prohibit passage of toxic goods across their borders, or when all automobiles sold in a country are required to meet certain emissions standards or contain pollution control technology. The issues that are brought out by the disputes that do happen are those about which the GATT rules are less clear or less widely accepted. In particular, these cases contribute to a discussion of what constitutes discrimination, and the acceptability of trade discrimination based on the environmental effects of products or based on the environmental effects of production processes.

It is important to begin a discussion of environmental trade restrictions with a word about threatening vs. imposing sanctions. The distinction has different implications when considering the legal and the political effects of the actions in question. Politically it is essential to look at threats of sanctions as well as those that are imposed. To some extent, the most successful sanctions are those that never have to be imposed; if simply threatening to do something is sufficient to get another state to change its behavior, then the process has been effective without ever having to impose sanctions. If we want to understand the reasons that states choose to impose sanctions, we cannot understand those without examining the times when they do not have to be imposed. For this reason, it is important to include threats of sanctions in any general consideration of the issue. In the realm of environmental protection, we see a large number of sanctions threatened` but not imposed, and in many cases the target actors change their behavior arguably as a result of these threats.

Legally the issue is a bit different. Sanctions are only considered to violate trade law if they are actually imposed; states otherwise have not been subject to any unfair trading practices. This distinction means that threatened trade restrictions that cause states to change behavior are not considered to be illegal; it is only those that fail to effect change without imposition that run afoul of trade rules. It is nevertheless important to consider threatened sanctions from a legal standpoint as well, because sanctions that are threatened may later be imposed. More importantly, if the broader issue to be discussed is whether environmental sanctions could be imposed in a way that is consistent with international trade law, it will be useful to examine as full a range as possible of environmental sanctions, rather than looking only at those that have been adjudicated in trade disputes.

The major types of sanctions that have been threatened or imposed for environmental ends are examined in this section, to determine whether any of them are imposed in a way that is consistent with the current interpretation of GATT rules. To the extent that they are not necessarily consistent, it will be determined whether these sanctions address issues that could be

considered unfair subsidies or dumping. If so, could a case be made that countervailing duties are appropriate responses to the problems the sanctions are trying to address?

Examining the viability of sanctions for environmental protection can best be done by addressing examples of sanctions of a range of types. A first essential distinction is whether sanctions are applied within the context of a multilateral environmental agreement or undertaken unilaterally by one state. Several examples of each type of sanction will be discussed, followed by an examination of the implication of approaching the same environmental issues through the idea of countervailing duties.

*Multilateral Environmental Sanctions*

Several important multilateral environmental agreements include restrictions on trade as essential parts of their environmental regulations. The Convention on International Trade in Endangered Species (CITES) regulates -- and sometimes bans -- trade in animal and plant species or parts of these species, regardless of a state's membership in the WTO. It prohibits trade except in exceptional circumstances in species listed in Appendix I, representing those that are most endangered. It requires permits to trade in species listed in Appendix II, representing those that are threatened. In all cases, trade in endangered species is not permitted with those who are not members of the agreement, unless those states provide documentation that meets the requirement of the agreement (CITES, 1973: Articles 3, 4 and 10). The Montreal Protocol denies access to trade in controlled (ozone-depleting) substances to those states that have not signed the agreement (Montreal Protocol, 1987: Article 4).

Trade bans or other restrictions could be made that, if not GATT-consistent, were at least not illegal. If two laws relevant to a set of parties conflict (and cannot be interpreted as consistent) the later in time prevails (Vienna Convention, 1969: Article 30).[4] So a set of states party to the GATT/WTO system could collectively make an agreement to restrict trade amongst themselves and do so legally. Neither of these two examples, however, meets that criterion. In the first place, the set of parties to either agreement is not identical to that of the GATT. There are states that are party to one and not the other, so they would be bound by different sets of obligations. More importantly, these agreements intend to affect behavior of those outside of the agreements. The main point of having trade restrictions in the case of the Montreal Protocol is to negatively impact those outside of the agreement and thereby convince them to join. Sanctions are therefore applied only to those who are not members of the agreement and thus have not agreed to be bound by new law that conflicts with an older treaty (the GATT).

An environmental agreement that in its function requires trade restrictions may be slightly different than one that can collectively agree to impose sanctions. Thus far no organizations have agreed to impose environmental sanctions in this way, so it is not clear how such an action would be interpreted by the international trade regime. The Montreal Protocol requires the Parties to consider imposing restrictions not only on ozone depleting substances, but on products made with, or containing, ozone depleting substances (Article 4(4)), but they have not done so.

The Conference of the Parties of the Convention on International Trade in Endangered Species suggested trade sanctions as an option for dealing with illegal wildlife trade taking place in China and Taiwan but did not decide as an organization to require its members to do so, though the United States did impose sanctions on Taiwan (Naughton, 1994). In neither of these cases would sanctions violate GATT rules, since these states are not GATT members, but that would not necessarily be the case with all suggested sanctions.

*Unilateral Environmental Sanctions*

Unilateral environmental sanctions represent the most controversial environmental trade barriers, and the main ones on which the GATT/WTO process has ruled. Most think of the U.S. sanctions on tuna caught in a way that harms dolphins as the quintessential unilateral environmental sanction. A better example is the nearly-parallel U.S. refusal to import shrimp caught by those who do not sufficiently protect sea turtles.[5] The relationship between shrimp and sea turtles is quite similar to the relationship between tuna and dolphins: turtles get caught in shrimp nets and drown, in the methods most frequently, and efficiently, used to catch shrimp. The U.S. requires that its shrimp fishers use "Turtle-Excluder Devices" (TEDs) on shrimp nets, to allow sea turtles to escape. Beginning in 1991 it also required that states that export shrimp to the United States only be allowed to do so if they provided evidence that they took specified steps to protect sea turtles in the course of shrimp fishing (U.S. P.L. 101-162). Initially the U.S. Department of State applied these regulations to the Caribbean/Western Atlantic region, since that area covered the migratory range of the turtles in question (U.S. Federal Register, 1991). U.S. environmental organizations, led by the Earth Island Institute, brought suit to expand the number of states required to take action to protect turtles; in December 1995 the U.S. Court of International Commerce ruled that regulations must be applied to all states that catch shrimp, thus expanding the number of states subject to these rules to 70. Several of the targeted Asian states have brought suit before the World Trade Organization dispute settlement process which has heard the case but has yet to rule on the matter. Although these trade restrictions avoid some of the problems of the tuna/dolphin regulations, the WTO recently found them unacceptable as well (WTO, 1998).

Another example of a unilateral trade restriction for environmental goals was Austria's short-lived policy discriminating against tropical timber that was not harvested sustainably. Under this law, all tropical timber and products containing tropic timber had to be labeled as such. It also created a voluntary labeling scheme to label those tropical timber products that were harvested using "sustainable forestry practices." Along with these processes, Austria passed a law increasing by 70% the tariff on tropical timber products, and planned to use the revenue generated by this tariff to encourage management programs for sustainable harvesting of tropical timber (Staffin, 1996). After complaints from tropical-timber exporting countries to the International Tropical Timber Organization and the GATT, as well as threats to boycott Austrian companies, Austria repealed the law ("Tropical Wood Labeling," 1993). Although the labeling

provisions of the law have been discussed as contrary to international trade, the tariff is the most clearly discriminatory provision of the regulation. Austria intended the legislation to address the issue of sustainability and charge its tariff on woods less likely to be harvested in a sustainable manner. Even that type of discrimination (because it is based on the process of harvesting, rather than the product traded) would likely run afoul of current interpretations of GATT rules. But the legislation was poorly crafted to meet even those goals, since the tariff was applied to all tropical timber, regardless of the methods by which it was harvested.

## Evaluating Sanctions

In the examples presented here none of the sanctions would be deemed consistent with GATT/WTO rules as currently interpreted. CITES trade restrictions on species in various Appendices are the most likely to pass international legal challenges (though not necessarily GATT-specific ones), because those provisions are accepted by states who have signed the agreement. More problematic would be the requirement that these be applied to states outside the agreement. The same is true for the Montreal Protocol trade sanctions (Elliot, 1998; Von Moltke, 1991). In both of these instances states that have not agreed to restrictions in trade are subject to them, in ways that would probably not be accepted in the narrow exceptions to Article Twenty.

The U.S. import restrictions on shrimp caught by countries that do not sufficiently protect sea turtles were recently found to be illegal by the dispute settlement process of the WTO. Drawing a connection specifically to the two tuna cases, the panel found that the U.S. import restrictions on shrimp were contrary to the GATT Article 11(1) prohibition on quantitative restrictions (WTO, 1998: 7.11-16), and that the U.S. could not justify its actions under Article Twenty exceptions (7.24-62). Malaysia complained to the GATT about the Austrian tropical timber measures, and although the regulations were repealed before the case could be heard, Austria would have likely lost. It did not apply the regulations in a way that even allowed it to distinguish based on the process of production, but simply targeted a certain type of product for discrimination. Even if Austria had been able to create a law the came closer to working for its concern for sustainability, it would have run afoul of the process/product distinction.

What would be different if instead the idea that the environmental damage in these cases was to be considered a form of subsidy or dumping were applied? Taking the environmental goal in each of these cases as a legitimate concern, what could be done in the way of countervailing duties to accomplish the same end?

In the case of the ozone layer, the costs of damage to the ozone layer could be taken into consideration when engaging in trade with those who have not agreed to take measures to protect the ozone layer. These trade restrictions would not be able to be applied in the way they currently are, that is to the purchase by non-Montreal Protocol member states of ozone depleting substances. Since countervailing duties are applied only to the purchase of subsidized goods,

they could be levied on the purchase of goods made with or containing ozone depleting substances from states that have not taken steps to protect the ozone layer. Specifically, any ozone depleting substance (or product produced with such a substance) could be subject to a countervailing duty. This process would have the added advantage of providing an extra cost to any use of ozone depleting substances in producing products for trade, and would therefore give an incentive to states to limit their use of these substances even before limits are required by law.

In the case of trade in endangered species, the goal would be for the cost of species loss to be reflected in the process endangered species or products made containing them. This scenario is more difficult to envision than the process described for ozone layer protection, since the killing of an individual animal or plant is less problematic for the environment than is the lack of a way to protect the species as a whole. It would make more sense then to charge countervailing duties based on the cost of a species protection plan as a whole (or for a particular species). Those who have established a species protection program could charge countervailing duties on endangered species products from those who have not set up such a program, that would cover the cost of imposing the protection. The discussion of sea turtles should illuminate in a particular instance how this type of measure could be applied.

The U.S. has made a commitment to protecting sea turtles harmed in the process of shrimp fishing. The process of doing so requires shrimp fishers to bear costs, both from buying turtle excluder devices and from the potentially slightly less efficient process of shrimp fishing while using these devices.[6] Instead of refusing to import shrimp caught in a manner that endangers sea turtles, a countervailing duty equal to the amount the U.S. shrimp protection costs could be applied to imports of shrimp. This process would be better for foreign shrimp fishers than the current system; they would have the option of determining whether to accept countervailing duties or apply turtle protection measures.

The case of importing unsustainably harvested tropical timber provides some of the same difficulties as protecting endangered species. Nevertheless, studies have been done to attempt to determine the environmental cost of deforestation, and also the relative "value" of a tree when left standing versus cut down. These costs could be incorporated into taxes imposed on imports of timber products, or costs of forest protection programs in importing countries could be assessed against products from countries who do not take similar measures.

The discussion above should be taken only as suggestive; more study would have to go in to a determination of how to apply countervailing duties to address particular environmental harms. This section is simply meant to illustrate the possibility for applying this shift in perspective in practice. But it does suggest that for all the cases of environmental sanctions examined here there would be an alternate way of achieving the same end with a potentially more trade-friendly means.

## Conclusion

This possible approach to acceptance of environmental trade sanctions has some advantages over either the current system or several of the proposed revisions to it. It would provide a way to avoid penalizing states that behave in an environmentally friendly manner, create a systematic way to determine whether a trade restriction is acceptable for environmental reasons, and do so largely within the confines of the system already created by the GATT to avoid distortions to trade.

There is already evidence that the effects of environmental damage are being considered barriers to free and fair trade. The environmental side agreement to the North American Free Trade Agreement implicitly acknowledges the potential trade distortions from failure of the parties to uphold their environmental laws. The idea of "incremental costs," the difference between the cost of taking action to protect the global environment and the income that will be generated by these actions, is already the measurement for receiving aid from the Montreal Protocol Multilateral Fund and the Global Environmental Facility, and provides a similar acknowledgment of the costs of protecting the environment.

This approach also has some hurdles to overcome. The current definitions of subsidy and dumping fit the case of poor environmental practices in some respects, but not in others. In particular, most environmentally-based "dumping" does not involve a situation in which the country charges less to the receiving country for a good than its domestic citizens would pay, though in both cases the price of the good does not reflect the full cost of producing it. GATT dispute-settlement processes faced with a case of environmental dumping would have to be willing to apply a broad definition of the term rather than a narrow one.

It is also not initially clear how it would be determined whether a lack of environmental protection constitutes an unfair subsidy or incidence of dumping. There are two basic approaches to the process of determining whether a state is gaining an unfair advantage through low environmental standards. A multilateral approach would involve some sort of negotiated agreement on what costs countervailing duties could be applied against. This could take place either within individual environmental agreements, or could involve negotiation of a separate agreement within the GATT, in the same way that the GATT Tokyo Round created a Subsidies Code, to approve environmental standards (Barceló, 1994). Some members of the U.S. Congress have called for such a negotiation (U.S. Senate, 1991: 3). A unilateral approach would allow individual states to determine, based on their own action, whether others are gaining a trade advantage from low environmental standards.

At its broadest, the acceptance of countervailing duties against products made with low environmental standards could create the potential for a complete revamping of the way we consider pricing of goods, since most production processes have some form of externality associated with them. Any good produced by a process that did not internalize the environmental costs of production could be subject to countervailing duties, a possibility that would fundamentally change the way we trade.

At its narrowest interpretation, there are dangers as well. Unilateral action could still be the determining factor in behavior, as states increase levels of environmental protection in order to be able to charge duties on goods from other states. Those concerned with the "bullying" aspect of current environmental sanctions would almost certainly be equally dismayed by the application of countervailing duties against their products. If applied properly, however, states would only be able to charge countervailing duties on goods for which they have fully internalized environmental costs. They would not be able to use measures in a punitive way.

These problems may also be part of the broader environmental advantage of this way of thinking about trade measures for environmental protection. If states cannot impose countervailing duties for someone else's environmental dumping until they have internalized whatever externalities they are concerned with, this process would give an incentive to increase the level of environmental protection. It would not penalize those who choose to increase their environmental standards. Analysis done in conjunction with the potential imposition of countervailing duties would help address the question of the economic costs of environmental protection, because for a state to impose countervailing duties it would have to show that there was an economic cost to environmental protection. Moreover, if it turns out that there are economic advantages to regulation rather than costs, no countervailing duties would be imposed, and such a finding would serve to undermine those who use cost as a reason to avoid environmental protection.

The debate about the relationship between free trade and environmental protection has focused too closely on using, or expanding, the Article Twenty exceptions to GATT rules. An approach that focuses on using countervailing duties to counteract the trade advantages gained from not considering the full costs of goods produced in ways that harm the environment may not be simple or uncontroversial to apply, it moves the consideration of the issue to the real costs of environmental degradation, and provides a new way to consider other important elements in the trade/environment relationship.

## Notes

1. Note that neither of these panel reports was brought before the GATT for an official vote.

2. It is worth noting that other protections within the GATT, allowing discrimination against goods produced with prison labor for instance, are no less discriminatory than regulations allowing discrimination against goods produced in ways that harm the environment. But because prison labor is an explicit exception to free trade written into the GATT, discriminatory practices are allowed.

3. The term "sanction" is used here rather broadly, to encompass most types of trade restrictions for environmental protection. Others, like Charnovitz, use the term much more restrictively, to apply only to restrictions that are unrelated to the environmental protection goal

of the trade measure. See Steve Charnovitz, 1993:p.4. The broader term is used here to fit with the broader use of the term outside the discussion of environmental trade measures and to avoid passing initial judgment on the extent to which a trade measure is directly related to its goal.

4. This article refers specifically to "treaties relating to the same subject matter" so there is some difference of opinion as to whether these types of issues would constitute "similar subject matter."

5. In the tuna/dolphin cases, important parts of the legislation deemed illegal by the GATT were simply poorly planned and not essential to carrying out the environmental—or competitiveness—aspects of the regulation. In particular, the number of dolphins that could be killed by foreign fishers in the process of catching tuna was set at 1.25 the number caught by American tuna fishers in a year. That meant that in any given year foreign fishers would not know, while they were fishing, whether they were meeting the requirements to export tuna to the United States. The GATT found this element of the legislation to be problematic. The sanctions to protect sea turtles has no such problems.

6. A TED is essentially a trap door in a net that allows a turtle to escape. The argument is that such a trap door also allows shrimp to escape.

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