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ARTICLES

RECONCILING INTERNATIONAL TRADE WITH PRESERVATION OF THE GLOBAL COMMONS: CAN WE PROSPER AND PROTECT?

JEFFREY L. DUNOFF*

I. INTRODUCTION

Through the ages, people have reached beyond their own borders to obtain essential, valued, or exotic materials. Today's surer communications and larger trade and capital movements have greatly enlarged this process, quickened its pace, and endowed it with far-reaching ecological implications.¹

A series of global environmental crises—ozone depletion, climate change, deforestation, species loss—has moved international environmental issues from the periphery to the center of the world political stage. The recent "Earth Summit" in Rio de Janeiro, Brazil, which focused on many of these issues, was the largest meeting of heads of state in history.² As a result of this attention, international environmental treaties and regimes have been proliferating at an astonishing rate.³

However, one of the areas that has been largely ignored—until recently—is the multifaceted relationship between international trade and the global environment.⁴ One of the most controversial issues within this area is the

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1. WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT, *OUR COMMON FUTURE* 67 (1987) [hereinafter WCED].

2. James Brooke, *U.N. Chief Closes Summit With an Appeal for Action*, N.Y. TIMES, June 15, 1992, at A8.

3. See, e.g., U.S. INT'L TRADE COMM'N, *INTERNATIONAL AGREEMENTS TO PROTECT THE ENVIRONMENT AND WILDLIFE* vii (1991) (identifying 170 international environmental treaties and noting that approximately two-thirds of them have been signed in past twenty years).

4. Scholars, policymakers and advocates have started to address the relationship between international trade and the environment. See, e.g., GENERAL AGREEMENT ON TARIFFS AND TRADE SECRETARIAT, *TRADE AND THE ENVIRONMENT* (1992) (advance copy) [hereinafter GATT SECRETARIAT]; FRANCES CAIRNCROSS, *COSTING THE EARTH* 299-316 (1992); THE GREENING OF

use of trade barriers⁵ to protect the “global commons”—those areas or resources outside the jurisdiction of any nation or group of nations, such as the high seas, the atmosphere, and outer space.⁶ Such “green” trade barriers are becoming increasingly common. For example, this nation forbids the importation of tuna caught in a manner that causes excessive dolphin deaths.⁷ Similarly, nations that have signed the Montreal Protocol have agreed to reduce their use of ozone depleting chemicals and to refrain from trade in such chemicals with nations that have not become parties to this treaty.⁸ To protect marine life, the United States and other nations limit the importation of fish caught in driftnets.⁹

These green trade barriers starkly present the conflict between the imperative of environmental protection—as recognized by a growing body of international environmental law¹⁰—and the prohibition of such barriers in international trade law. The barriers raise difficult questions: can nations restrict international trade to protect the global commons? If so, under

WORLD TRADE ISSUES (Kym Anderson & Richard Blackhurst eds., 1992); U.S. CONGRESS OFFICE OF TECHNOLOGY ASSESSMENT, *TRADE AND ENVIRONMENT: CONFLICTS AND OPPORTUNITIES* (1992) [hereinafter OTA REPORT]; Robert Housman & Durwood Zaelke, *Trade, Environment, and Sustainable Development: A Primer*, 15 HASTINGS INT’L & COMP. L. REV. 535 (1992); John Whalley, *The Interface Between Environmental and Trade Policies*, 101 ECON. J. 180 (1991); *GATTery v. Greenery: The Perils of Eco-sanctions*, ECONOMIST, May 30, 1992, at 12 (Supp.).

5. For purposes of this paper, the terms “trade barrier” and “green trade barrier” refer to import or export restrictions, taxes on products or means of production, and other restrictions on the free flow of goods across national borders designed to serve environmental purposes.

6. This paper is limited to the issues raised by the use of green trade barriers to protect the global commons. The use of trade restrictions to preserve resources *within* the territory of another nation raises somewhat different issues. For example, under international law, nations have “the sovereign right to exploit their own [natural] resources pursuant to their own environmental policies. . . .” Report of the United Nations Conference on the Human Environment, June 16, 1972, Principle 21, U.N. Doc. A/CONF.48/14/Rev. 1 (1973), U.N. Doc. A/CONF.48/14 and Corr.1 (1972), 11 I.L.M. 1416, 1420 [hereinafter Stockholm Declaration]. Nations also have the right to develop their own economic and social systems. *Charter of Economic Rights and Duties of States*, G.A. Res. 3281, U.N. GAOR, 29th Sess., U.N. Doc. A/9631, at 50 (1974), *reprinted in* 14 I.L.M. 251 (1975). The attempts of one nation to protect resources found within another nation must take account of these international law principles.

7. 16 U.S.C. § 1371 (1988).

8. Montreal Protocol on Substances that Deplete the Ozone Layer, Sept. 16, 1987, 26 I.L.M. 1550 [hereinafter Montreal Protocol].

9. 16 U.S.C. §§ 1371(a)(2)(E), 1822, 1826 (1988) (granting Secretary of Treasury authority to impose trade sanctions on nations that driftnet); New Zealand: Driftnet Prohibition Act 1991, 31 I.L.M. 214 (1992) (prohibiting landing or processing in New Zealand of any fish or marine life taken using driftnet). In addition, the United Nations General Assembly has called upon all nations to reduce and eventually phase out all large scale pelagic driftnet fishing by December 31, 1992. *Large-Scale Pelagic Drift-net Fishing and its Impact on the Living Marine Resources of the World’s Oceans and Seas*, G.A. Res. 215, U.N. GAOR, 46th Sess., U.N. Doc. A/Res/46/215 (1992), *reprinted in* 31 I.L.M. 241 (1992). Fifteen nations have signed the Wellington Convention prohibiting fishing with long driftnets in the South Pacific. Convention for the Prohibition of Fishing with Long Driftnets in the South Pacific, Nov. 24, 1989, 29 I.L.M. 1449.

10. See *infra* text accompanying notes 164-90.

what conditions? To date, no international tribunal has developed a framework for determining which such barriers are permissible. This article represents an attempt to provide such a framework, focusing on the "tuna/dolphin" dispute between the United States and Mexico as a paradigmatic example of this issue.

The framework developed below is based on a careful balancing of the underlying interests at stake. International trade rules serve three primary interests: economic efficiency, sovereignty, and international political harmony.¹¹ These trade interests must be weighed against the interest every nation has in preserving our atmosphere, oceans, and other global commons resources which are essential for human survival. To do so, I propose a balancing test that involves examination of several factors: the nature and strength of the environmental interest being protected, whether the measure favors domestic over foreign products, or discriminates among foreign nations, and whether the measure is related to and proportionate to the environmental goal.¹²

This framework can be utilized by bodies that adjudicate disputes involving the tensions between trade and the environment, such as the General Agreement on Tariffs and Trade (GATT)¹³ and the European Court of Justice (ECJ).¹⁴ It could also guide negotiators in pending international environmental and international trade negotiations. Finally, it could profitably be used by domestic legislators as they consider the imposition of future green trade barriers.

II. THE TUNA/DOLPHIN DISPUTE

A. Background

The most prominent example of the tension between the interest in liberalized trade¹⁵ and the interest in protecting a global commons resource

11. See *infra* text accompanying notes 90-130.

12. See *infra* text accompanying notes 214-62.

13. The GATT is both an international agreement, General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A11, 55 U.N.T.S. 187 [hereinafter GATT], and the principal international institution and rule system governing most international trade in goods. At present, over 100 nations are Contracting Parties to the GATT. The GATT sets forth dispute resolution procedures in the event of a disagreement between two or more Contracting Parties. GATT, *supra*, arts. XXII, XXIII, 61 Stat. at A64-65, 55 U.N.T.S. at 266-68.

14. The European Court of Justice is the judicial institution of the European Community, and decides cases arising under the treaties establishing the European Community. Treaty Establishing the European Economic Community, Mar. 25, 1957, 298 U.N.T.S. 11, 73 [hereinafter Treaty of Rome].

15. Although the GATT is commonly said to promote "free" trade, a more accurate term is "liberal" trade because the GATT permits a variety of restrictions on the international flow of goods. See, e.g., GATT, *supra* note 13, art. XX(e), 61 Stat. at A61, 55 U.N.T.S. at 262 (authorizing restrictions on trade in goods made with slave labor); *id.* art. XXI, 61 Stat. at A63, 55 U.N.T.S. at 266 (permitting trade restrictions on national security grounds). As

is the tuna/dolphin dispute between the United States and Mexico considered by a GATT dispute resolution panel.¹⁶ This dispute has attracted considerable international attention. Australia, Canada, the European Community (representing twelve member states), Indonesia, Japan, Korea, Norway, the Philippines, Senegal, Thailand, and Venezuela all filed submissions with the dispute resolution panel in this action.¹⁷

What prompted this interest? Far off in the Eastern Tropical Pacific Ocean (ETP),¹⁸ dolphins and yellowfin tuna associate with each other in an unusual manner. Dolphins often swim directly above schools of tuna that are foraging for food.¹⁹ The dolphins come to the surface to breathe and thus are seen easily from fishing vessels. Taking advantage of the tuna/dolphin relationship, fishermen encircle dolphins with huge purse seine nets,²⁰ which are used to catch the tuna below the surface.²¹ When the nets are gathered, the dolphins become the unfortunate and "incidental" victims of the tuna catch.

The United States pioneered the practice of purse seine fishing in the ETP during the late 1950s.²² During the 1960s and early 1970s, the U.S. fleet accounted for nearly all of the tuna catch and corresponding dolphin deaths. At this time, as many as 400,000 dolphins per year were being killed as a result of purse seine fishing. In response, Congress passed the

others have noted, the GATT negotiators assumed that governments would continue to regulate and intervene in national economies, and that such actions would necessarily include some controls on international trade. See John G. Ruggie, *International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order*, 36 INT'L ORG. 379, 385-88 (1982).

16. General Agreement on Tariffs and Trade: Dispute Settlement Panel Report on United States Restrictions on Imports of Tuna, 30 I.L.M. 1594 (1991) [hereinafter Tuna/Dolphin Panel Report].

17. *Id.* paras. 4.1-30, at 1610-16.

18. Under relevant United States regulations, the Eastern Tropical Pacific is defined as the area of the Pacific Ocean bounded by 40 degrees north latitude, 40 degrees south latitude, 160 degrees west longitude, and the coasts of North, Central, and South America. 50 C.F.R. § 216.3 (1991).

19. Tuna/Dolphin Panel Report, *supra* note 16, para. 2.2, at 1598.

20. A purse seine net is:

A large seine [net] designed to be set by two boats around a school of fish and so arranged that after the ends have been brought together the bottom can be closed . . . having the upper edge supported by floats and the lower edge weighted by brass rings through which the purse line passes, and being closed below when the ends of the net have been brought together by the dropping of a heavy lead weight, that is attached over pulleys to the ends of the purse line and that by its descent puckers together the bottom of the net.

WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY 1847 (4th ed. 1976).

21. Tuna/Dolphin Panel Report, *supra* note 16, para. 2.2, at 1598.

22. See generally JAMES JOSEPH & JOSEPH W. GREENOUGH, *INTERNATIONAL MANAGEMENT OF TUNA, PORPOISE, AND BILLFISH: BIOLOGICAL, LEGAL AND POLITICAL ASPECTS* (1979) (discussing United States use of purse seine fishing). An excellent discussion of the global purse seine industry is contained in David J. Doulman, *Development and Expansion of the Tuna Purse Seine Fishery*, in *TUNA ISSUES AND PERSPECTIVES IN THE PACIFIC ISLANDS REGION 133-60* (David J. Doulman ed., 1987).

Marine Mammal Protection Act (MMPA).²³ This Act bans the "taking" of marine mammals,²⁴ but contains an exception for commercial tuna fishing.²⁵ Pursuant to this exception, the American Tunaboat Association, a trade association of U.S. fishermen, is accorded a general permit to take a limited number of dolphins in the course of its commercial fishing operations.²⁶ The Act also provides for a ban on the importation of tuna caught by foreign fishermen who use technology which results in an incidental marine mammal taking rate greater than U.S. standards.²⁷

The MMPA was extremely successful in reducing the number of dolphin takings by the U.S. tuna fleet. The annual incidental mortality of dolphins in the U.S. fleet decreased from an estimated 400,000 per year in the early 1970s to fewer than 20,500 in the 1980s.²⁸ However, while the incidental taking rate of the U.S. fleet was declining, there was a dramatic increase in foreign tuna fishing efforts²⁹ and in incidental dolphin takings by foreign fleets. By the mid-1980s, foreign fleets were killing several times more dolphins than the U.S. fleet.³⁰ In addition, as U.S. fishermen were taking conservation measures not used by their foreign competitors, the MMPA placed the U.S. fleet at a competitive disadvantage. In response, Congress amended the MMPA to address more effectively the practices of foreign fleets.³¹

23. 16 U.S.C. §§ 1361-1407 (1988).

24. For purposes of the Marine Mammal Protection Act (MMPA), to "take" means "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture or kill any marine mammal." 16 U.S.C. § 1362(12) (1988).

25. 16 U.S.C. §§ 1371(a)(2), 1374 (1988).

26. 16 U.S.C. § 1374(h)(2). In October 1976, the National Marine Fisheries Service proposed regulations setting a quota of 61,409 incidental takings. 41 Fed. Reg. 45,015-16 (1976). In 1980, this number was reduced to 20,500. 50 C.F.R. § 216.24(d)(2)(i)(A)(3) (1981). Pursuant to a 1984 amendment to the MMPA, this figure was written into the act. 16 U.S.C. § 1374(h)(2) (1988).

27. 16 U.S.C. § 1371(a)(2) (1988). This provision states, in relevant part, that "[t]he Secretary of the Treasury shall ban the importation of commercial fish or products from fish which have been caught with commercial fishing technology which results in the incidental kill or incidental serious injury of ocean mammals in excess of United States standards."

28. 55 Fed. Reg. 11,921 (1990).

29. For example, Mexico's fleet grew by nearly 50% during the 1980s, while the Venezuelan fleet more than tripled in size during that time period. MARINE MAMMAL COMMISSION, ANNUAL REPORT TO CONGRESS 93 (1991).

30. For example, in 1987, the U.S. tuna fleet killed 13,992 dolphins, while foreign fleets killed over 100,000 dolphins. S. REP. NO. 592, 100th Cong., 2d Sess. 7 (1988). In the following year, foreign fleets accounted for 68% of the eastern Pacific fleet and 85% of the incidental dolphin mortalities. *Marine Mammal Protection Act Amendments: Hearings on H.R. 2926 and H.R. 2948 Before the Subcomm. on Fisheries and Wildlife Conservation and the Environment of the House Comm. on Merchant Marine and Fisheries*, 101st Cong., 1st Sess. 201 (1989) (statement of Christopher Croff, Director, The Dolphin Coalition).

31. The amendments also imposed new requirements on U.S. fishermen. For example, to address the problem of higher dolphin mortality in evening sets, the 1988 amendments specified that U.S. tuna fishermen must complete the practice of backdown to remove porpoises from the net no later than 30 minutes after sundown. In addition, the amendments prohibited the use of certain types of explosives during sets on marine mammals. 16 U.S.C. § 1374(h)(B)(iv), (vii) (1988).

The amended Act provides for a ban on the importation of tuna caught by foreign fishermen using purse seine nets in the ETP, unless that nation's government demonstrated that it has (1) implemented a dolphin protection program "comparable" to that of the U.S. fleet, and (2) achieved an incidental dolphin kill rate "comparable" to the U.S. fleet.³² To be considered comparable after 1991, the average incidental dolphin mortality rate may not exceed 1.25 times the average for U.S. vessels for the same period.³³ In addition, the share of eastern spinner dolphin and coastal spotted dolphin may not exceed fifteen percent and two percent, respectively, of the total number of dolphins taken.³⁴

Under the amended law, the United States embargoed tuna caught by Mexican fishermen, even if it came to the United States via a third country.³⁵ Outraged by this embargo, Mexico took its grievance to the GATT.³⁶ At Mexico's request a dispute resolution panel was formed³⁷ to examine whether the U.S. embargo violated its obligations under the GATT. In particular, Mexico charged that the U.S. action violated GATT provisions prohibiting import quotas and discrimination against foreign products.³⁸

32. 16 U.S.C. § 1371(a)(2)(B) (1988).

33. 16 U.S.C. § 1371(a)(2)(B)(II) (1988).

34. 16 U.S.C. § 1371(a)(2)(B)(III) (1988); see also Regulations Governing the Importation of Tuna Taken in Association with Marine Mammals, 54 Fed. Reg. 9438 (1989) (interim final rule); Taking and Importing of Marine Mammals Incidental to Commercial Fishing Operations, 55 Fed. Reg. 11,921 (1990) (final rule).

35. The import ban was imposed as a result of a lawsuit filed by an environmental group seeking enforcement of the MMPA's mandatory embargo provisions. *Earth Island Inst. v. Mosbacher*, 746 F. Supp. 964 (N.D. Cal. 1990), *aff'd*, 929 F.2d 1449 (9th Cir. 1991); see also Tuna/Dolphin Panel Report, *supra* note 16, para. 2.5, at 1599. In May, 1991, this embargo was extended to several other nations—including Japan, Costa Rica, Italy, France and Panama—that export tuna to the United States. Tuna from those nations was not permitted into the United States absent a certification that the tuna was not caught by the Mexican fleet.

36. Tuna/Dolphin Panel Report, *supra* note 16, at 1598 n.1 (request no. C/M/246/27).

37. Although the formal provisions of the GATT do not refer to dispute resolution panels, the Contracting Parties regularly refer disputes to such panels. *Understanding Regarding Notification, Consultation, Dispute Settlement and Surveillance*, GATT Doc. L/4907 (Nov. 28, 1979), BASIC INSTRUMENTS AND SELECTED DOCUMENTS [hereinafter BISSD] 26th Supp. 210 [hereinafter *GATT Understanding*]; *Improvements to the GATT Dispute Settlement Rules and Procedures*, GATT Doc. L/6489 (Apr. 12, 1989), BISSD 36th Supp. 61; see also Eric Canal-Forgues & Rudolf Ostrihansky, *New Developments in the GATT Dispute Settlement Procedures*, J. WORLD TRADE L., Apr. 1990, at 67.

38. Tuna/Dolphin Panel Report, *supra* note 16, at 1598 n.2. Mexico also challenged the Dolphin Protection Consumer Information Act (DPCIA), which regulates the use of the term "dolphin safe" and prohibits use of that term on cans of tuna harvested in the ETP through setting on dolphins with purse seine nets. 16 U.S.C. § 1385 (Supp. I 1990). In addition, Mexico challenged the Pelly Amendment to the Fisherman's Protective Act, which authorizes the ban of fish products from nations embargoed under the MMPA. 22 U.S.C. § 1978(a) (1988). The Panel held that the DPCIA did not violate the General Agreement, Tuna/Dolphin Panel Report, *supra* note 16, paras. 5.41-.44, at 1622, and that the Pelly Amendment was not facially inconsistent with the General Agreement. *Id.* paras. 5.20-.21, at 1619.

B. The GATT Panel Report

The tuna/dolphin dispute was the first time a GATT panel faced a conflict between the interest in liberalized trade and the interest in protecting a global commons resource. The Panel Report can be usefully analyzed by separating its analysis into two component parts. The first part examines whether the U.S. import ban violates the GATT, while the second part analyzes whether the ban is justified by any GATT exceptions.³⁹

1. Product v. Production Process

The Panel first examined whether the U.S. measure should be analyzed under GATT Article III as an internal regulation enforced at the point of importation, or under Article XI as a qualitative restriction on imports.⁴⁰ The United States argued that Article III applied. This article permits internal regulations on products imported from other contracting parties so long as they do not afford protection to domestic production and accord to imported products treatment no less favorable than that accorded to like products of national origin.⁴¹ The United States also relied upon the Note Ad Article III, which provides:

Any internal tax . . . or any law, regulation or requirement of the kind referred to in [Article III:1] which applies to an imported product and the like domestic product and is collected or enforced in the case of the imported product at the time or point of importation, is . . . subject to the provisions of Article III.⁴²

According to the United States, the import embargo was an enforcement at the point of importation of the MMPA incidental taking regulations, and thus within the purview of Article III. The United States also argued that the MMPA was nondiscriminatory because the requirements regarding the production of imported tuna were no less favorable than the requirements for tuna caught by the U.S. fleet. The Panel flatly rejected this argument. The Panel initially focused on whether the MMPA import pro-

39. The Panel adopted a similar approach. It "decided that it would examine . . . [the issues] first in the light of the provisions of the General Agreement which Mexico claims to have been violated by the United States and then, if it were to find an inconsistency with any of the provisions invoked by Mexico, in the light of the exceptions in the General Agreement raised by the United States." Tuna/Dolphin Panel Report, *supra* note 16, para. 5.7, at 1616-17.

40. *Id.* para. 5.8, at 1617.

41. GATT Article III:4 provides that

The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favourable 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.

Id. para. 5.9, at 1617.

42. *Id.*

visions were measures “applie[d] to” imported and domestic tuna within the meaning of Article III and the Note Ad Article III.⁴³ The Panel noted that Article III refers to the application of laws and regulations to *products* and to internal “regulations requiring the mixture, processing or use of *products*.”⁴⁴ Article III also establishes the principle that “regulations on *products* not be applied so as to afford protection to domestic production.”⁴⁵ From this language, the Panel concluded that “Article III covers only measures affecting products as such.”⁴⁶

The Panel then reasoned that the MMPA embargo did not fall within the scope of Article III because the U.S. ban on Mexican tuna was unrelated to any inherent characteristic of the product—yellowfin tuna—itself. As the Panel explained:

the MMPA regulates the domestic harvesting of yellowfin tuna to reduce the incidental taking of dolphin, but . . . these regulations could not be regarded as being applied to tuna products as such because they would not directly regulate the sale of tuna and could not possibly affect tuna as a product.⁴⁷

The Panel thus sharply differentiated between a particular product and that product’s production process. Under the Panel’s reasoning, Article III requires a comparison between products of the exporting and importing nations, and not a comparison between different nation’s production processes that have no effect on the product *qua* product.

After concluding that Article III was inapplicable, the Panel had little difficulty concluding that the MMPA embargo violated GATT Article XI. This article provides that “[n]o prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas . . . 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.”⁴⁸ Article XI thus forbids the use of quotas, embargoes and other “quantitative” restrictions on imports and exports and permits contracting parties to regulate imports and exports through tariffs. The ban on tuna caught by Mexico blatantly contradicted the general prohibition on quantitative import restrictions. The Panel dryly noted that “[t]he United States did not present to the Panel any arguments to support a different legal conclusion regarding Article XI.”⁴⁹

43. *Id.* para. 5.10, at 1617.

44. *Id.* para. 5.11, at 1617 (emphasis in original).

45. *Id.* (emphasis in original).

46. *Id.* A similar analysis led to the conclusion that the Note Ad Article III also applied only to “those measures that are applied to products as such.” *Id.* para. 5.14, at 1618.

47. *Id.* para. 5.14, at 1618.

48. GATT, *supra* note 13, art. XI(1), 61 Stat. at A32-33, 55 U.N.T.S. at 224-26.

49. Tuna/Dolphin Panel Report, *supra* note 16, para. 5.18, at 1618. The United States did not oppose the assertion that its embargo was contrary to the prohibition on quantitative restrictions; rather, it argued that the Mexican tuna embargo was not governed by Article XI and, in any event, the embargo was permitted under Article XX.

This part of the Panel report clearly stands for the principle that "it is not possible under GATT's rules to make access to one's own market dependent on the domestic environmental policies or practices of the exporting country."⁵⁰ Although a detailed analysis of the significance of the product/process distinction is beyond the scope of this Article,⁵¹ the Panel's reasoning has significant implications for the use of green trade barriers. Nations seeking to protect global commons resources have imposed barriers to trade in products produced by environmentally destructive processes. The London Amendments to the Montreal Protocol require parties to determine the feasibility of banning or restricting trade in products "produced with, but not containing" ozone-depleting chemicals.⁵² Similarly, nations have banned the importation of fish and fish products caught by driftnets.⁵³ The Panel's analysis suggests that these green trade barriers are incompatible with the obligations imposed by international trade law.

2. The Article XX Exceptions

After concluding that the tuna embargo violated Article XI, the Panel focused on whether exceptions contained in GATT Article XX justified this trade barrier.⁵⁴ Article XX provides that:

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 a disguised restriction on international trade, nothing in this

50. GATT SECRETARIAT, *supra* note 4, at 10.

51. As explained more fully below, the question of whether a green trade barrier regulates a "product" or a "process" ought not to be determinative. Rather, the focus should be on the interest protected by the particular green trade barrier, and the costs the barrier imposes on the trading regime. "Process" based trade restrictions come in many varieties. They can seek to protect interests wholly within another nation, or a global commons resource. They may seek to protect a global commons resource pursuant to international treaty, or may seek to protect a resource unprotected by international law. The restriction itself may or may not be related to the resource to be protected. These and other factors outlined below can—and should—be used to distinguish between various process based trade restrictions. The use of such limiting principles undermines the assertion that to permit "process" based trade restrictions "would be to open a Pandora's box of problems that could open large loopholes in the GATT." John H. Jackson, *World Trade Rules and Environmental Policies: Congruence or Conflict?*, 49 WASH. & LEE L. REV. 1227, 1243 (1992).

52. Amendments to the Montreal Protocol on Substances that Deplete the Ozone Layer, June 29, 1990, UNEP/OzL. Pro. 2/3, Treaty Doc. 102-4, at XV [hereinafter London Amendments].

53. See *supra* note 9.

54. Under GATT precedent, the burden of justification is on the party invoking the Article XX exception. Tuna/Dolphin Panel Report, *supra* note 16, para. 5.22, at 1619 (citing *Report of the GATT Panel, Canada—Administration of the Foreign Investment Review Act*, para. 5.20, GATT Doc. L/5504 (Feb. 7, 1984), BISD 30th Supp. 140, 164; *Report of the GATT Panel, United States—Section 337 of the Tariff Act of 1930*, para. 5.27, GATT Doc. L/6439 (Nov. 7, 1989), BISD 36th Supp. 345, 393).

Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures . . .

(b) necessary to protect human, animal or plant life or health;

. . .

(g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption;

. . .⁵⁵

The Panel acknowledged that neither of these clauses is *expressly* limited to the protection of environmental interests within the territory or jurisdiction of the state, and that no panel had previously addressed the question of whether these clauses could be used to protect animal life outside the jurisdiction of the sanctioning state.⁵⁶ The Panel, therefore, decided to examine this Article's drafting history, its purpose, and the consequences of the interpretations urged by the parties to the dispute.

Turning first to the drafting history, the Panel noted that Article XX(b) is derived from a U.S. proposal for the Draft Charter of the International Trade Organization.⁵⁷ The U.S. proposal read: "Nothing [in the Draft Charter] shall be construed to prevent the adoption or enforcement by any Member of measures . . . necessary to protect human, animal or plant life or health."⁵⁸ In a later draft, the preamble was revised to read as it does at present, and exception (b) read: "For the purpose of protecting human, animal or plant life or health, *if corresponding domestic safeguards under similar conditions exist in the importing country.*"⁵⁹ According to the Panel, this proviso was designed to address concerns that importing nations might abuse sanitary regulations, but was later dropped as unnecessary.⁶⁰ From this scant history, the Panel concluded that "the concerns of the drafters of Article XX(b) focused on the use of sanitary measures to safeguard life or health of humans, animals or plants *within* the jurisdiction of the importing country."⁶¹

The drafting history cited by the Panel hardly compels—or even favors—the Panel's conclusion. To the contrary, although the drafting history indicates that the parties were concerned, *inter alia*, with sanitary provisions protecting their own citizens, no evidence exists in the negotiations the

55. GATT, *supra* note 13, art. XX, 61 Stat. at A61, 55 U.N.T.S. at 262.

56. Tuna/Dolphin Panel Report, *supra* note 16, para. 5.25, at 1619-20.

57. The International Trade Organization (ITO) was proposed as an international organization governing many areas of international economic activity. KENNETH W. DAM, *THE GATT—LAW AND INTERNATIONAL ECONOMIC ORGANIZATION 10-12* (1970). GATT's trade provisions were to be part of the ITO. *Id.* When it became evident that, due to domestic politics in the United States, the ITO would not come into existence, the GATT assumed the role with respect to trade that the ITO would have played. *Id.*

58. Tuna/Dolphin Panel Report, *supra* note 16, para. 5.26, at 1620.

59. *Id.* (emphasis added).

60. *Id.*

61. *Id.* (emphasis added).

Panel relies upon that even hints that nations are limited to protecting animal or plant life within its borders. Moreover, the additional proviso was dropped for two separate reasons. First, as the Chairman of the Preparatory Committee that drafted this Article stated, it is "not clear and practically impossible to explain in a satisfactory way."⁶² Second, the proviso was dropped because its meaning was "already covered in the headnote [i.e., the language prohibiting disguised restriction[s] on trade] to the Article."⁶³ This drafting history simply does not support the conclusion that the drafters of Article XX(b) intended to disable nations from protecting global commons resources through the use of green trade barriers.⁶⁴

A more accurate reading of the drafting history suggests that the drafters did not consider whether Article XX(b) authorized trade restrictions to protect human, plant or animal life located outside of the sanctioning state's jurisdiction. The drafters sought to ensure that Article XX(b) restrictions were not used to discriminate against imported products or to protect domestic producers.⁶⁵ This provision thus reflects the antiprotectionist principle that animates the GATT,⁶⁶ as well as the preamble to Article XX.

The Panel also analyzed the purpose of this exception. It noted that Article XX "allows each contracting party to set its [own] human, animal or plant health standards," subject to the conditions set forth in the preamble, namely that any trade measures be "necessary" and not constitute a disguised trade restriction.⁶⁷ This provision permits parties to utilize trade restrictive measures incompatible with the GATT to pursue "overriding public policy goals to the extent such inconsistencies [are] unavoidable."⁶⁸

Significantly, the Panel never expressly determined whether the MMPA's policy goal—to protect dolphins in the high seas—is "overriding" and therefore justifies the use of trade measures that would otherwise be

62. Second Session of the Preparatory Committee of the United Nations Conference on Trade and Employment, U.N. Doc. E/PC/T/A/PV/30, at 13 (remarks of Chairman). Commenting on the same clause, the United States delegate complained that "no one knows exactly what it means." *Id.* at 11.

63. DAM, *supra* note 57, at 194 (citation omitted).

64. An extended analysis of Article XX's drafting history can be found in Steve Charnovitz, *Exploring the Environmental Exceptions in GATT Article XX*, J. WORLD TRADE L., Oct. 1991, at 37.

65. See DAM, *supra* note 57, at 194 (arguing that Article XX headnote incorporates notion that "disguised protection" includes the failure to accord "national treatment" to imports).

66. As the GATT Secretariat has stated, "[t]he rules of the General Agreement are concerned primarily with preventing discrimination, that is, with limiting the extent to which countries can discriminate between home products and imports, [and] between imports from different countries, and between goods sold in the home market and those exported." GATT SECRETARIAT, *supra* note 4, at 7.

67. Tuna/Dolphin Panel Report, *supra* note 16, para. 5.27, at 1620.

68. *Id.* (citing General Agreement on Tariffs and Trade: Dispute Settlement Panel Report on Thai Restrictions on Importation of and Internal Taxes on Cigarettes, paras. 73-74, 30 I.L.M. 1122, 1137-38 (1991)).

inconsistent with the GATT.⁶⁹ Resolution of this issue would seem to turn, in the first instance, on whether any particular nation could have an "overriding" interest in the protection of human, animal or plant life or health outside of its borders. Although ignored by the Panel, the sheer volume of international agreements signed since the GATT, imposing obligations on states to protect human, animal or plant life or health outside its borders, suggests that the international community has answered this question in the affirmative.⁷⁰

Rather than address the issue of whether a nation can have an overriding interest in the life or health of beings outside its borders, the Panel determined that the U.S. tuna embargo was not "necessary" for purposes of Article XX(b). Earlier GATT panels had determined that a trade measure is not "necessary" "if an alternative measure which [the nation] could reasonably be expected to employ and which is not inconsistent with other GATT provisions is available to it."⁷¹ Utilizing this test, the Panel determined that the U.S. measure was not "necessary" for two independent reasons.

First, the United States had not demonstrated that it had exhausted all options reasonably available to it and consistent with the GATT to pursue its dolphin protection objectives. In particular, the United States had not demonstrated that it had attempted to negotiate an international cooperative agreement to protect the dolphins.⁷² Second, the permissible Mexican incidental dolphin taking rate for a particular period was linked to the actual taking rate of the U.S. fleet during that same period. Under this system, "the Mexican authorities could not know whether, at a given point in time, their policies conformed to the United States' dolphin protection standards" and could not adjust their conduct accordingly.⁷³ The Panel concluded that

69. In the context of a challenge to a measure designed to protect the health of a nation's own citizens, an earlier Panel had stated that Article XX(b) "clearly allowed contracting parties to give priority to human health over trade liberalization. . . ." General Agreement on Tariffs and Trade: Dispute Settlement Panel Report on Thai Restrictions on Importation of and Internal Taxes on Cigarettes, para. 73, 30 I.L.M. 1122, 1137 (1991) [hereinafter Thailand Cigarette Panel Report].

70. A partial listing of treaties imposing obligations to protect resources outside a state's jurisdiction is found at *infra* note 178.

Moreover, the GATT itself recognizes that such "extraterritorial" interests exist, and can be used to restrict international trade. Thus, for example, the GATT authorizes nations to adopt trade measures "relating to the products of prison labour." GATT, *supra* note 13, art. XX(e), 61 Stat. at A61, 55 U.N.T.S. at 262. Surely this provision reflects, in part, every nation's interest in using trade measures to curb actions harmful to the life or health of individuals outside of its jurisdiction.

71. *Report of the GATT Panel, United States—Section 337 of the Tariff Act of 1930*, para. 5.26, GATT Doc. L/6439 (Nov. 7, 1989), BISD 36th Supp. 345, 392-93. Although this panel was interpreting the term "necessary" for purposes of Article XX(d), a later panel utilized this definition in its interpretation of Article XX(b). Thailand Cigarette Panel Report, *supra* note 69, para. 74, at 1137-38.

72. Tuna/Dolphin Panel Report, *supra* note 16, para. 5.28, at 1620.

73. *Id.*

a restriction "based on such unpredictable conditions" was not "necessary" for purposes of Article XX(b).⁷⁴

Once again, the Panel's reasoning is less than persuasive. As a factual matter, the Panel's assertion that the United States had not engaged in multilateral efforts to address the tuna/dolphin problem is simply incorrect. In fact, through the Inter-American Tropical Tuna Commission (IATTC),⁷⁵ the United States has been involved in ongoing attempts to address this issue.⁷⁶ In 1977, the IATTC was given the responsibility of introducing measures to reduce the incidental taking of dolphins to the maximum extent possible.⁷⁷ The United States has actively pursued dolphin conservation programs in the IATTC. For example, in 1990, the United States proposed that the IATTC adopt international marine mammal quotas that would be progressively reduced over time to levels approaching zero.⁷⁸

The Panel's second reason for finding that the tuna embargo was not "necessary" is likewise not persuasive. The conclusion that the MMPA's method of determining the permissible taking rate for foreign fleets is "unpredictable" does not answer the question of whether it is "necessary." Significantly, neither Mexico nor the Panel suggested an alternative measure reasonably available to the United States that would effectively serve the MMPA's conservationist purposes. On this record, the Panel's conclusion that the embargo was not "necessary" is unsupported.

Finally, the Panel turned to an examination of the "consequences" of the positions advanced by the parties. The Panel feared that permitting trade restrictions designed to protect resources outside a nation's borders would undermine the international trading system. If such restrictions were permitted, then the GATT would "provide legal security only in respect of trade between a limited number of contracting parties with identical

74. *Id.*

75. The IATTC is an international body established in 1949 to make recommendations for the management and conservation of the tuna resources of the eastern Pacific Ocean. Convention for the Establishment of an Inter-American Tropical Tuna Commission, May 31, 1949, 1 U.S.T. 230, 80 U.N.T.S. 3; see also Donald L. McKernan, *World Fisheries—World Concern*, in *WORLD FISHERIES POLICY: MULTIDISCIPLINARY VIEWS* 35, 42-43 (Brian J. Rothschild ed., 1972) (summarizing of IATTC functions).

76. See MARINE MAMMAL COMMISSION, *supra* note 29, at 103; see also INTER-AMERICAN TROPICAL TUNA COMMISSION, 1977 ANNUAL REPORT 8-9 (1978); INTER-AMERICAN TROPICAL TUNA COMMISSION, 1987 ANNUAL REPORT 8-9 (1988) [hereinafter IATTC—1987 ANNUAL REPORT].

77. IATTC—1987 ANNUAL REPORT, *supra* note 76, at 38-39. Although Mexico withdrew from the IATTC in 1978, Jon Van Dyke & Susan Hefter, *Tuna Management in the Pacific: An Analysis of the South Pacific Forum Fisheries Agency*, 3 U. HAW. L. REV. 1 (1981), it will soon rejoin this organization. *Review of the Administration's Proposal to Promote Dolphin Protection: Hearing Before the Subcomm. on Fisheries and Wildlife Conservation and the Environment of the House Comm. on Merchant Marine and Fisheries*, 102nd Cong., 2d Sess. 7 (1992).

78. MARINE MAMMAL COMMISSION, *supra* note 29, at 103.

internal regulations.”⁷⁹ Eager to avoid such a result, the Panel concluded that nations could not restrict trade to protect global commons resources.

It is instructive to note the rhetorical strategy employed by the Panel. The Panel simply asserted, without analysis, that allowing this measure would permit any nation to dictate the environmental policies of other nations, upon pain of losing trade privileges. The Panel declared that “if the broad interpretation of Article XX(b) suggested by the United States were accepted, each contracting party could unilaterally determine the life or health protection policies from which other contracting parties could not deviate without jeopardizing their rights under the General Agreement.”⁸⁰ Once again, the Panel substituted assertion for analysis. As demonstrated below, it is possible—and desirable—to construct a legal framework that would permit the use of some green trade barriers without undermining the global trading system.

The Panel employed many of the same arguments in its discussion of the Article XX(g) exception. This exception permits trade measures “relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production. . . .”⁸¹ Under GATT precedent, a measure is deemed to be taken “in conjunction with restrictions on domestic production” only if it is “primarily aimed at rendering effective these restrictions.”⁸² The Panel determined that this test was not met for two reasons. First, because the permissible Mexican incidental dolphin taking rate was based on the actual United States incidental taking rate, the Mexicans could not know whether their fishing practices at any point in time conformed with the U.S. standards. According to the Panel, “a limitation on trade based on such unpredictable conditions could not be regarded as being primarily aimed at the conservation of dolphins.”⁸³

Again, the language of the exception and GATT precedent do not support use of a “predictability” test. Moreover, as noted above, the trade measure under challenge was enacted specifically to render effective the MMPA’s restrictions on domestic production of tuna.⁸⁴ Congress enacted the MMPA provisions regarding foreign fleets because it was concerned that, absent controls on foreign fleets, the decrease in takings by the U.S. fleet was being offset by an increase in takings by foreign fleets. As a Senate report states:

While the U.S. industry has made dramatic improvements since enactment of the MMPA, unregulated tuna fleets of foreign nations

79. Tuna/Dolphin Panel Report, *supra* note 16, para 5.27, at 1620.

80. *Id.*

81. GATT, *supra* note 13, art. XX(g), 61 Stat. at A61, 55 U.N.T.S. at 262.

82. Tuna/Dolphin Panel Report, *supra* note 16, para. 5.31, at 1620-21 (citation omitted).

83. *Id.* para. 5.33, at 1621.

84. There may have been other, less benign motives present as well. See text accompanying notes 273-79.

now present a far more serious source of porpoise mortality. . . . [As a result, t]ougher restrictions were determined to be necessary to ensure that nations seeking to import tuna into the United States required their own fishermen to adhere to standards for porpoise protection comparable to our own. Amendments adopted in 1984 [required foreign nations] to adopt a program for protecting porpoise tuna fishing operations comparable to the U.S. program.⁸⁵

Thus, the MMPA's trade measures regarding foreign fleets are, as the GATT requires, "in conjunction with restrictions on domestic production," and are "primarily aimed at rendering effective these restrictions." The restrictions would thus seem to fall squarely within the scope of the Article XX(g) exception.⁸⁶

The Panel also restated the "slippery slope" argument. According to the Panel, if this trade measure were permitted, then "each contracting party could unilaterally determine the conservation policies from which other contracting parties could not deviate without jeopardizing their rights under the [GATT]."⁸⁷ Relying on the "unpredictability" and the "slippery slope" arguments, the Panel rejected the "extraterritorial" application of Article XX(g).

The interest in liberalized trade is so deeply embedded in the GATT context that the Panel felt no need even to attempt to describe the benefits or interests served by the U.S. embargo, or to explain the embargo's detrimental effects on world trade. As the Panel believed it was staring down a slippery slope, it did not even consider whether any limiting principles could be found that both permit and constrain the use of green trade barriers. Thus, the Panel "stressed the all-or-nothing choice which Article XX presents."⁸⁸ The GATT Secretariat likewise has warned that permitting nations to condition market access on another state's environmental practices is "a big step down a slippery slope."⁸⁹

This Article will argue that the slippery slope argument is mistaken and will suggest a number of limiting principles that would permit protection of the global commons without destroying the international trading regime. The slippery slope argument represents an attempt to avoid the difficult enterprise of developing such a set of principles. However, by evading this issue, the Panel left unacknowledged the important environmental concerns at stake.

III. INTERESTS AT STAKE

To determine whether—and when—nations should be permitted to restrict trade to protect global commons resources, it is necessary to examine

85. S. REP. NO. 592, 100th Cong., 2d Sess. 7 (1988).

86. The Tuna/Dolphin Panel did not discuss the legislative history of the MMPA's foreign fleet provisions.

87. Tuna/Dolphin Panel Report, *supra* note 16, para. 5.32, at 1621.

88. GATT SECRETARIAT, *supra* note 4, at 15.

89. *Id.* at 25.

the interests served by the international trade regime as well as the interests served by international environmental law. I shall first explore the three primary interests served by the international trade regime: economic efficiency, sovereignty and political harmony.

A. Trade Interests

1. The Economic Interest

The economic argument underlying the international trade regime rests largely upon the theory of comparative advantage. As explained by David Ricardo:

Under a system of perfectly free [international] commerce, each country naturally devotes its capital and labour to such employments as are most beneficial to each. This pursuit of individual advantage is admirably connected with the universal good of the whole. By stimulating industry, by rewarding ingenuity, and by using most efficaciously the peculiar powers bestowed by nature, it distributes labour most effectively and most economically: while, by increasing the general mass of productions, it diffuses general benefit⁹⁰

That is, in the absence of barriers to trade, each nation will specialize in the production and export of goods and services that it can produce relatively more efficiently than other nations. This, in turn, increases the efficiency of international production and results in increased trade and greater aggregate welfare. As a result, consumers enjoy lower prices and greater availability of goods. Under this theory, trade restrictions are inefficient and divert resources from their most highly valued uses.

In the past few years the world has witnessed an extraordinary proliferation of multilateral efforts to reduce barriers to international trade. Perhaps the most visible of these efforts consists of the actions of several different groups of nations to create or expand various forms of economic integration, including "free trade areas" or "common markets." For example, the United States and Canada, which have entered into a Free Trade Agreement,⁹¹ recently reached agreement with Mexico to form a North American Free Trade Area.⁹² Similarly, members of the European Com-

90. DAVID RICARDO, *THE PRINCIPLES OF POLITICAL ECONOMY AND TAXATION* 81 (J.M. Dent & Sons 1911) (1817).

91. Free Trade Agreement, Jan. 2, 1988, U.S.-Can., 27 I.L.M. 293 [hereinafter FTA].

92. Keith Bradsher, *Economic Accord Reached by U.S., Mexico and Canada Lowering Trade Barriers*, N.Y. TIMES, Aug. 13, 1992, at A1. This treaty must be ratified by legislatures in each country before it enters into force. *Id.* This accord will liberalize trade in goods and services and create a trading bloc with a greater population and economic output than that of the European Economic Community. See generally M. Delol Baer, *North American Free Trade*, 70 FOREIGN AFF. 132 (1991).

munity and the European Free Trade Association (EFTA)⁹³ have negotiated the formation of the European Economic Area, which will create a free trade area consisting of nineteen nations and a market of 353 million producers and consumers, accounting for over one-quarter of the world's gross national product.⁹⁴

Nations with less developed economies are also attempting to enjoy the fruits of economic integration. Argentina, Brazil, Paraguay and Uruguay have, by treaty, agreed to create a "Southern cone" common market by December 31, 1994.⁹⁵ Under this treaty, these nations will eliminate barriers to the free movement of goods, services and factors of production between themselves and establish a common external tariff and a common trade policy in relation to third countries.

In addition, over fifty member nations of the Organization of African Unity have agreed to form an African Economic Community (AEC).⁹⁶ The AEC is designed to remove obstacles to the "free movement of persons, goods, services and capital and the right of residence and establishment," create a common African market, and establish a common external tariff.⁹⁷ The treaty provides that the AEC is to be formed progressively in six stages which shall occur over a period not to exceed thirty-four years.⁹⁸

Finally, 108 nations are engaged in intensive negotiations to expand the GATT itself.⁹⁹ These discussions started in Punta del Este, Uruguay in September, 1986, where representatives of seventy-four nations set an agenda for a new round of multilateral trade negotiations. Pursuant to this agenda, GATT parties are negotiating an increase or extension of GATT rules over trade in agricultural products and services and trade related to foreign investment. The belief that liberalized trade will increase economic efficiency and welfare underlies these various international initiatives.

2. The Sovereignty Interest

A second important interest is served by international trade rules: respect for the sovereignty of all nations. In this context, sovereignty refers to the basic legal status of a nation that is not subject, within its territorial jurisdiction, to the governmental or judicial jurisdiction of a foreign nation

93. Austria, Finland, Iceland, Liechtenstein, Norway, Sweden, and Switzerland are members of EFTA. See *Lest a Fortress Arise*, *ECONOMIST*, Oct. 26, 1991, at 81.

94. E.P.M. Gardner, *The European Free Trade Association and the European Community*, 25 *INT'L LAW* 187, 188 (1991).

95. Treaty Establishing a Common Market Between the Argentine Republic, the Federative Republic of Brazil, the Republic of Paraguay and the Eastern Republic of Uruguay, Mar. 26, 1991, 30 *I.L.M.* 1041; Nathaniel Nash, *Moving Closer to a \$500 Billion Dream*, *N.Y. TIMES*, July 5, 1992, at F8.

96. Organization of African Unity Member States: Treaty Establishing the African Economic Community, June 3, 1991, 30 *I.L.M.* 1241.

97. *Id.* art. 3, at 1252-53.

98. *Id.* art. 6, at 1254-55.

99. See, e.g., Jagdish Bhagwati, *Jumpstarting GATT*, 83 *FOREIGN POL'Y* 105 (1991).

or to foreign law other than public international law.¹⁰⁰ This principle forms one of the cornerstones of contemporary international law. As the International Court of Justice recently observed, "the whole of international law rests . . . [upon the] fundamental principle of State sovereignty . . ."¹⁰¹

Of course, by participating in the international trade regime, nations cede some degree of sovereignty. For example, nations largely surrender the ability to erect protectionist trade barriers. However, in exchange, the trade regime significantly furthers the interest in sovereignty in at least two respects. First, with certain limited exceptions, the trade regime severely limits the ability of one state to interfere in the internal or domestic affairs of another state by prohibiting states from conditioning market access upon another nation's domestic practices.¹⁰² For example, under the GATT one nation could not restrict trade with another nation simply because it disapproved of that nation's social welfare system, the structure of its education system, or its handling of other domestic affairs. Adopting this principle, Mexico argued to the Tuna/Dolphin Panel that it—rather than the U.S. government—should regulate the Mexican fishing fleet, and that the United States could not restrict trade in an effort to coerce changes in Mexico's fishing regulations. To the extent that green trade barriers represent an attempt by one state to change the environmental practices of another nation, they seem to conflict with this sovereignty interest.

Respect for sovereignty would also suggest that one nation should not be permitted to transfer the costs of its policies to another nation. A number of international decisions have emphasized the principle that one nation cannot transfer the costs of its pollution to other states.¹⁰³ The GATT Tuna/Dolphin Panel can be seen as extending this principle one step further, by implicitly finding that the United States impermissibly transferred the costs of its environmental protection policies to other states.

This principle has been asserted domestically under the dormant Commerce Clause in contexts involving the "tension" between liberalized trade and environmental protection. Dormant Commerce Clause cases can thus provide useful analytical tools for the international issues that are the focus of this article. Indeed, international tribunals have looked to dormant Commerce Clause cases that "deal[] with controversies between States of

100. Helmut Steinberger, *Sovereignty*, in 10 ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW 408 (Rudolph Bernhardt ed., 1987).

101. *Military and Paramilitary Activities (Nicar. v. U.S.)*, 1986 I.C.J. 14 (June 27). A leading international law text explains: "The sovereignty and equality of states represent the basic constitutional doctrine of the law of nations, which governs a community consisting primarily of states having a uniform legal personality." IAN BROWNLIE, *PRINCIPLES OF PUBLIC INTERNATIONAL LAW* 287 (4th ed. 1990).

102. One exception is the GATT provision permitting trade barriers "relating to the products of prison labour." GATT, *supra* note 13, art. XX(e), 61 Stat. at A61, 55 U.N.T.S. at 262.

103. See *infra* part III.B.3.

the Union . . . concerning the quasi-sovereign rights of such States" for guidance when resolving questions of international law.¹⁰⁴

Although the Commerce Clause is, by its terms, an affirmative grant of power to Congress to regulate interstate commerce,¹⁰⁵ the Supreme Court has long interpreted the clause to limit the power of states to restrict or prohibit interstate commerce.¹⁰⁶ In particular, courts have utilized the Commerce Clause to invalidate state measures that transfer the costs of environmental protection to the citizens of other states or nations by discriminating against products from that state or nation.¹⁰⁷

The U.S. Supreme Court applied this principle in *Philadelphia v. New Jersey*¹⁰⁸ and *Chemical Waste Management v. Hunt*.¹⁰⁹ The underlying dispute in the *New Jersey* case arose because that state was rapidly running out of useable landfill space.¹¹⁰ To conserve the existing space as long as possible, the state legislature prohibited the importation of wastes generated in other states for disposal in New Jersey.¹¹¹ This prohibition transferred to the citizens of other states the costs of preserving New Jersey's scarce landfill space, and the Supreme Court had little difficulty concluding that this conduct violated the dormant Commerce Clause.¹¹² By discriminating against wastes generated in other states, New Jersey impermissibly "impose[d] on out-of-state commercial interests the full burden of conserving the State's remaining landfill space."¹¹³ This transfer of costs violated other states' sovereignty interests in determining for themselves what environmental costs to shoulder, and in avoiding the imposition of costs resulting from a political process in which they did not participate.¹¹⁴ A similar result is

104. See, e.g., Trail Smelter Case, 3 United Nations Reports of International Arbitral Awards [R.I.A.A.] 1905, 1964 (1941).

105. The Constitution provides that "[t]he Congress shall have Power . . . To regulate Commerce . . . among the several States . . ." U.S. Const. art. I, § 8, cl. 3.

106. See, e.g., *Wyoming v. Oklahoma*, 112 S. Ct. 789, 800 (1992); *Healy v. Beer Inst., Inc.*, 491 U.S. 324, 325 n.1 (1989); *New Energy Co. of Indiana v. Limbach*, 486 U.S. 269, 273-74 (1988); *Raymond Motor Transp. Inc. v. Rice*, 434 U.S. 429, 440 (1978).

107. Of course, dormant Commerce Clause jurisprudence reflects other values as well. Some are similar to the values that underlie international trade law. For example, the Commerce Clause, like trade law, is designed to further "liberalized" trade and thus economic efficiency. See, e.g., *Hughes v. Alexandria Scrap Corp.*, 426 U.S. 794, 803 (1976) ("[T]his nation is a common market in which state lines cannot be made barriers to the free flow of both raw materials and finished goods in response to the economic laws of supply and demand"). By limiting the use of trade barriers, it is also intended to further political harmony among the states. See, e.g., *Hughes v. Oklahoma*, 441 U.S. 322, 325-26 (1979) (avoiding "economic Balkanization" was "central concern" of Commerce Clause).

108. 437 U.S. 617 (1978).

109. 112 S. Ct. 2009 (1992).

110. *City of Phila. v. New Jersey*, 437 U.S. 617, 625 (1978).

111. *Id.* at 618-19.

112. *Id.* at 626-27.

113. *Id.* at 628.

114. See *National Solid Wastes Management Ass'n v. Alabama Dep't of Env'tl. Management*, 910 F.2d 713, 720 (11th Cir. 1990) (holding that Alabama statute which prohibits

reached when states attempt to transfer the costs of environmental protection to citizens of other nations by discriminating against trade in products from those nations.¹¹⁵

Moreover, the same result obtains when the state merely *taxes*, rather than *prohibits*, the importation of wastes generated in other states. *Hunt* involved a challenge to an Alabama statute that imposed differential fees for the commercial disposal of in-state and out-of-state hazardous waste.¹¹⁶ Applying the principles articulated in *New Jersey*, the Court concluded that these differential fees were a form of "economic protectionism barred by the Commerce Clause."¹¹⁷

3. The Political Harmony Interest

A third, related interest is also served by the international trade regime. This is the interest in political harmony. The argument is that the elimination of trade restrictions creates economic interdependence and economic integration. Interdependence in turn promotes political cooperation. As Montesquieu summarized this argument, "peace is the natural effect of trade."¹¹⁸ In contrast, trade barriers can lead to distrust and retaliation, and trade wars can be a contributing cause of military wars.¹¹⁹

This political harmony argument has ancient roots. Aristophanes argued that a decree Pericles issued restricting entry of products from Megara played a major role in the start of the Peloponnesian War.¹²⁰ More recently,

importation of hazardous wastes generated in other states, unless these states met certain statutory requirements, violates dormant Commerce Clause as it "imposes on these generators the burden of conserving Alabama's remaining hazardous waste disposal capacity"); *Government Suppliers Consolidating Serv. v. Bayh*, 753 F. Supp. 739 (S.D. Ind. 1990) (holding that state statute that effectively bans importation of solid wastes from other states violates dormant Commerce Clause).

115. See, e.g., *Chemical Waste Management, Inc. v. Templet*, 770 F. Supp. 1142 (M.D. La. 1991) (holding that Louisiana statute prohibiting importation of hazardous waste generated in foreign countries violates Commerce Clause).

116. *Chemical Waste Management v. Hunt*, 112 S. Ct. 2009 (1992). The Act imposed a "base fee" of \$25.60 per ton on all hazardous waste, and an "additional fee" of \$72.00 per ton on all waste "generated outside of Alabama." *Id.* at 2012.

117. *Id.* at 2013.

118. ROBERT GILPEN, *THE POLITICAL ECONOMY OF INTERNATIONAL RELATIONS* 56 (1987) (quoting Montesquieu). John Stuart Mill similarly observed that international trade was "the principal guarantee of the peace of the world." JOHN STUART MILL, *Principles of Political Economy*, in III COLLECTED WORKS OF JOHN STUART MILL 594 (John M. Robson ed., 1965).

A fuller development of this argument in the post-World War II context can be found in DAVID A. BALDWIN, *ECONOMIC STATECRAFT* 206-10 (1985); JOHN L. GADDIS, *THE UNITED STATES AND THE ORIGINS OF THE COLD WAR 1941-1947*, at 18-23 (1972).

119. See J.B. CONDLIFFE, *THE COMMERCE OF NATIONS* 527 (1950). This argument is critically evaluated in GILPEN, *supra* note 118, at 56-58.

120. See BARRY E. CARTER, *INTERNATIONAL ECONOMIC SANCTIONS: IMPROVING THE HAP- HAZARD U.S. LEGAL REGIME* 8 n.2 (1988); see also PLUTARCH, *THE RISE AND FALL OF ATHENS 195-96* (Ian Scott-Kilvert trans., 1960); THUCYDIDES, *HISTORY OF THE PELOPONNESIAN WAR* 73 (Rex Warner trans., 1954).

the idea that liberalized trade enhances political harmony has played a prominent role in the development of the European Community.

In the aftermath of World War II, European leaders thought that the trade wars of the 1920s and 1930s—and resulting political friction—were partial causes of the war.¹²¹ Many leaders believed that European unity was essential to preserve peace, and that a liberalized trade regime would promote this unity.¹²² The initial French proposal for the formation of the European Coal and Steel Community (ECSC), known as the Schuman Declaration,¹²³ stated that France has long “champion[ed a] united Europe . . . in the service of peace.” However, “a united Europe was not achieved, and we had war.”¹²⁴ The proposal continued:

The gathering of the nations of Europe requires the elimination of the age-old opposition of France and the Federal Republic of Germany. . . . With this aim in view, the French Government . . . proposes to place Franco-German production of coal and steel under a common “High Authority”. . . . The solidarity in production thus established will make it plain that any war between France and the Federal Republic of Germany becomes not only unthinkable, but materially impossible.¹²⁵

That economic integration was designed not only to make war “materially impossible,” but also to advance political harmony was explicit: “The pooling of coal and steel production [is contemplated as] a first step in the federation of Europe. . . .”¹²⁶

The preamble to the ECSC Treaty incorporated much of the language quoted above and stated the expectation of the ECSC parties that “by

121. See, e.g., JOHN H. JACKSON, *THE WORLD TRADING SYSTEM* 10, 31 (1989). Contemporary writers make the same point. See, e.g., C. FRED BERGSON, *MANAGING INTERNATIONAL ECONOMIC INTERDEPENDENCE* 4 (1977); HARRY SHUTT, *THE MYTH OF FREE TRADE* 12 (1985); Clyde V. Prestowitz, Jr., *Beyond Laissez Faire*, 87 *FOREIGN POL’Y* 67 (1992).

122. The U.S. government took a similar view. Cordell Hull, who was Secretary of State from 1933 to 1944, strongly believed that liberalized trade was “the spear point of peace.” CORDELL HULL, *THE MEMOIRS OF CORDELL HULL* 525 (1948). Official State Department documents adopted this position. A 1944 State Department declaration stated: “Trade conflict breeds noncooperation, suspicion, bitterness. Nations which are economic enemies are not likely to remain political friends for long.” JACKSON, *supra* note 121, at 10. A 1945 Presidential message said: “The fundamental choice is whether countries will struggle against each other for wealth and power, or work together for security and mutual advantage The experience of cooperation in the task of earning a living promotes both the habit and the techniques of common effort and helps make permanent the mutual confidence on which the peace depends.” *Id.*

123. Robert Schuman was Foreign Minister of France at the time France first proposed the ECSC. Many scholars believe that the declaration was drafted by the French Economic Planning Commission, headed by Jean Monnet. STEPHEN GEORGE, *POLITICS AND POLICY IN THE EUROPEAN COMMUNITIES* 1 (3d ed. 1991).

124. Schuman Declaration, May 9, 1950, *reprinted in Thirty Years Ago: The Schuman Declaration*, 13 *BULL. EUR. COMMUNITIES* No. 5, at 14-15 (1980).

125. *Id.* at 15.

126. *Id.*

establishing an economic community, the basis for a broader and deeper community among peoples long divided by bloody conflicts" could be formed.¹²⁷ The "economic community" formed by this treaty incorporated many of the rules associated with liberal trade regimes, including prohibitions on (1) import and export duties, (2) means and practices discriminating against certain producers or consumers and (3) government subsidies.¹²⁸

The ECSC is a direct precursor of today's European Community (EC),¹²⁹ which likewise rests, in part, on the notion that economic integration serves political harmony. The preamble to the Treaty of Rome, establishing the EC, memorializes the parties' determination "to lay the foundations of an ever closer union among the peoples of Europe."¹³⁰ One of the primary mechanisms to advance these goals is the creation of a "common market" among the EC Member States. This common market is ensured by prohibitions on restrictions on the free flow of goods, services, people and capital among Member States. In this way, the EC seeks to use liberalized trade as a means of promoting political harmony.

Although limitations on the use of trade restrictions no doubt serve other important interests as well, the three discussed above—economic efficiency, respect for sovereignty, and political harmony—are probably the most prominent, and have been used to strike trade restrictions intended to preserve environmental resources.

B. Environmental Interests

As mentioned above, the Tuna/Dolphin Panel Report failed to consider the environmental interests served by the MMPA. For this reason, the Panel's analysis obscures, rather than illuminates, the relative weight of the conflicting values at stake in the tuna/dolphin dispute. Analysis of future conflicts between the interests in liberalized trade and in protecting the global commons will need to take account of all relevant international interests. Of course, different green trade barriers will be designed to protect different environmental interests. However, it is instructive to outline briefly the interests served by recent efforts to protect global commons resources.

1. Atmosphere

The earth's upper atmosphere is outside the jurisdiction of any single nation or group of nations, and hence is a global commons resource. Recent

127. Treaty Establishing the European Coal and Steel Community, Apr. 18, 1951, 261 U.N.T.S. 143.

128. *Id.* at 147.

129. Formally, there are three European Communities: the ECSC, the European Atomic Energy Community (Euratom) and the European Economic Community. Each has the same members, and in 1965 the Member States reached agreement to merge the institutions of the three Communities. This agreement took effect in 1967, and collectively they are now commonly called 'the European Community.' See GEORGE, *supra* note 123, at 1.

130. Treaty of Rome, *supra* note 14, pmbl., at 14. The recent treaties signed at Maastricht are designed to further economic integration and political union. Treaty on European Union, Feb. 7, 1992, 31 I.L.M. 247. A good summary of the Maastricht treaty is found in *The Deal Is Done*, ECONOMIST, Dec. 14, 1991, at 51.

international efforts to preserve this resource have focused on the problems of ozone depletion and global warming. Ozone is a trace gas that limits the amount of solar ultraviolet (UV) radiation reaching the earth. It is primarily found at altitudes of between twelve and twenty-five kilometers above the earth's surface.¹³¹ During the 1970s and 1980s, researchers learned that a variety of anthropogenic chemicals destroy the ozone in the earth's stratosphere. As a result of this thinning of the ozone layer, more UV radiation passes to the earth's surface.

The unchecked depletion of the earth's ozone layer and resulting increase in UV radiation reaching the earth's surface pose a number of risks to human health and the natural environment. Perhaps the most serious threat is that of increased skin cancer due to increased exposure to UV radiation. It is estimated that "a one percent decline in the ozone level may increase UV radiation by two percent and cause 200,000 more skin cancer cases" worldwide.¹³² In addition:

retinal eye damage, cataracts, and eventual blindness can be caused by insufficient protection from the sun's damaging rays by the ozone layer. Additional effects caused by a reduction in the ozone layer include alteration of the immune system through damaged immune cells, lowered resistance to infections, neurological damage, and the destruction of zooplankton, a key link in the food chain. Lower yields and stunted growth of crops are other serious possible consequences of the destruction of the ozone layer.¹³³

In response to the developing understanding of the processes leading to ozone depletion—and the nature and magnitude of the threats posed by ozone depletion—nations took unilateral acts¹³⁴ and entered into a series of multilateral treaties that control and limit the use of ozone-depleting chemicals.¹³⁵ These treaties, *inter alia*, call for phasing out the use of certain ozone-depleting chemicals and, in the meantime, limit international trade in such chemicals.

Another environmental threat involving the atmosphere is that of "global warming." The earth reflects approximately thirty percent of the solar radiation directed towards it into outer space. The remaining seventy percent

131. CYNTHIA SHEA, *PROTECTING LIFE ON EARTH: STEPS TO SAVE THE OZONE LAYER* 5 (1988); Daniel L. Albritton, *Stratospheric Ozone Depletion: Global Processes*, in *OZONE DEPLETION, GREENHOUSE GASES, AND CLIMATE CHANGE* 10, 11 (1989).

132. Christine B. Davidson, Note, *The Montreal Protocol: The First Step Toward Protecting the Global Ozone Layer*, 20 N.Y.U. J. INT'L L. & POL. 793, 807 (1988) (citations omitted).

133. *Id.* at 808 (citations omitted); see also Douglas M. Ogden, Note, *The Montreal Protocol: Confronting the Threat to Earth's Ozone Layer*, 63 WASH. L. REV. 997, 998-99 (1988).

134. For example, this country banned the use of CFCs, which contain ozone-depleting chemicals, in nonessential aerosol spray cans. See 40 C.F.R. Ch. 1 (1986).

135. Vienna Convention for the Protection of the Ozone Layer, Mar. 22, 1985, 26 I.L.M. 1529; Montreal Protocol, *supra* note 8; London Amendments, *supra* note 52.

is absorbed and reemitted outward as long-wave radiation. Certain gasses and particles in the atmosphere permit incoming radiation, but absorb the outgoing long-wave radiation. The greater the buildup of these "greenhouse gases" the higher the mean global temperature of the earth's surface.¹³⁶

Little doubt exists that emissions resulting from human activities have substantially increased the atmospheric concentrations of greenhouse gases, particularly carbon dioxide.¹³⁷ However, there is significant scientific debate over the nature, magnitude, and possible consequences of these increased concentrations. Scientists have developed a variety of computer models, based on different scientific assumptions and various predictions of future greenhouse gas emissions, and produced a number of possible models of the effects of climate change. Although there seems to be "some movement away from the more apocalyptic scenarios,"¹³⁸ it is clear that the possibility of significant climate change threatens dramatic consequences for mankind.

For example, some scenarios suggest that global warming can cause sea levels to rise due to thermal expansion of the oceans and melting of polar ice caps. These rising oceans could flood or submerge significant parts of various nations, threatening the nearly fifty percent of the world's population living on or near a coastline.¹³⁹ In addition to the permanent inundation of lowlands and increased flooding, rising sea levels could cause accelerated erosion, increased salinity of freshwater sources and threats to man-made structures.¹⁴⁰ Climate change also threatens to disrupt global food production.¹⁴¹

To address these threats, no fewer than 155 nations signed a climate change treaty at the United Nations Conference on Environment and De-

136. This brief description of global warming is adopted from a more complete account of the greenhouse phenomena found in JOSHUA EPSTEIN & RAJ GUPTA, *CONTROLLING THE GREENHOUSE EFFECT* 1 (1990).

137. See *CLIMATE CHANGE: THE IPCC SCIENTIFIC ASSESSMENT* 8-18 (J.T. Houghton et al. eds., 1990). It appears that the concentration of carbon dioxide in the atmosphere is approximately 25% higher than it was 100 years ago. Stephen Schneider & Norman Rosenberg, *The Greenhouse Effect: Its Causes, Possible Impacts, and Associated Uncertainties*, in *GREENHOUSE WARMING: ABATEMENT AND ADAPTATION* 19 (Norman J. Rosenberg et al. eds., 1989).

138. Andrew R. Solow, *Is There A Global Warming Problem?*, in *GLOBAL WARMING, ECONOMIC POLICY RESPONSES* 7, 25 (Rudiger Dornbusch & James M. Poterba eds., 1991); see also Robert C. Cowen, *Global Warming Study Remains Educated Guess*, *CHRISTIAN SCI. MONITOR*, June 9, 1992, at 8; *Estimates of Global Warming May be Exaggerated, IPCC Says*, 15 *Int'l Env't Rep. (BNA)* No. 2, at 35 (Jan. 29, 1992).

139. See STEPHEN H. SCHNEIDER, *GLOBAL WARMING* (1989); Jodi L. Jacobson, *Holding Back the Sea*, in *STATE OF THE WORLD 1990*, at 79-97 (Lester R. Brown et al. eds., 1990); David Wirth, *Climate Chaos*, 74 *FOREIGN POL'Y* 3, 9 (1989).

140. Noel Brown, *Global Change and Global Warming: Framing the Issues*, 1 *COLO. J. INT'L ENVTL. L. & POL'Y* 11, 14 (1990); James G. Titus, *Greenhouse Effect, Sea Level Rise and Barrier Islands: Case Study of Long Beach Island, New Jersey*, 18 *COASTAL MGMT.* 65, 66-67 (1990).

141. See *THE IMPACT OF CLIMATIC VARIATIONS ON AGRICULTURE* (M.L. Parry et al. eds., 1988).

velopment (UNCED) in Brazil in June, 1992.¹⁴² This treaty sets guidelines for cutting national emissions of greenhouse gases. It provides that developed nations shall aim to return "individually or jointly to their 1990 levels of . . . anthropogenic emissions of carbon dioxide and other greenhouse gases" by the end of this decade.¹⁴³ The treaty will enter into force after it has been ratified by fifty signatories.¹⁴⁴ At some point, nations will likely utilize economic or market based incentives to further the goal of reducing the greenhouse gas emissions.¹⁴⁵

2. Biodiversity

Biodiversity is an umbrella term for the degree of nature's variety, including ecosystem diversity, species diversity and genetic diversity.¹⁴⁶ Biological resources provide the essential materials for life on the planet.¹⁴⁷ These resources provide for humanity's food, shelter, clothing, medicine and other needs. In addition, they provide indirect benefits such as watershed protection, production of soil, photosynthesis and climate regulation.¹⁴⁸ However, human activities "are reducing biological diversity at a rate that may be unprecedented in the history of life" on this planet.¹⁴⁹

Much of this diversity is being lost through extinction caused by loss of natural habitats, especially in the tropics.¹⁵⁰ Moreover, much of the loss in these areas is due to massive deforestation. Although tropical forests cover approximately seven percent of the earth's land surface, they contain at least fifty percent—and perhaps up to ninety percent—of the world's species.¹⁵¹ These tropical forests are being destroyed at a rate of 20-25 million hectares every year.¹⁵² If present trends of habitat destruction caused

142. *155 Nations Sign Climate Change Treaty*, 15 Int'l Env't Rep. (BNA) No. 12, at 421 (June 17, 1992).

143. United Nations Conference on Environment and Development: Framework Convention on Climate Change, May 9, 1992, art. 4(2)(b), 31 I.L.M. 849.

144. *Reilly Says U.S. Will Accelerate Scheme to Address Climate Change*, 15 Int'l Env't Rep. (BNA) No. 12; at 422 (June 17, 1992).

145. For example, the European Community has considered the imposition of a "carbon tax." *EC Environment Ministers Agree on Idea of New Energy Tax to Address Climate Change*, 14 Int'l Env't Rep. (BNA) No. 21, at 562 (Oct. 23, 1991). A U.N. report has advocated creation of a global market in carbon emission permits. *U.N. Agency Proposes Global Pollution Trading System to Control Global Warming*, 15 Int'l Env't Rep. (BNA) No. 3, at 61 (Feb. 12, 1992).

146. JEFFREY McNEELY ET AL., *CONSERVING THE WORLD'S BIOLOGICAL DIVERSITY* 17 (1990).

147. *Id.* at 25.

148. *Id.* at 27.

149. GEORGE LEDEC & ROBERT GOODLAND, *WILDLANDS: THEIR PROTECTION AND MANAGEMENT IN ECONOMIC DEVELOPMENT* 7 (1988).

150. EDWARD O. WILSON, *BIODIVERSITY* 3 (1988).

151. Kenton R. Miller et al., *Deforestation and Species Loss*, in *PRESERVING THE GLOBAL ENVIRONMENT* 78, 83 (Jessica T. Mathews ed., 1991).

152. *Id.* at 82; see also *The State of the Environment 1985*, U.N. Environment Programme, at 30-32, U.N. Doc. UNEP/GC.13/4 (1985) (noting that rate of deforestation is approximately 15 million hectares per year). A hectare is approximately 2.43 acres.

by this rate of deforestation continue, between five and fifteen percent of the world's species could become extinct in the next thirty years.¹⁵³

This process represents an unprecedented raid on the planet's biological wealth. Many species of wild plants and animals are undeveloped resources and can potentially be used to improve agriculture, forestry and ranching. They are important to industry as sources of tannins, resins, gums, oils, dyes, and other commercially useful products.¹⁵⁴ The potential for new industrial products is significant, but impossible to quantify; indeed, just over one hundred years ago, "even the rubber tree was just another Amazonian tree species of unknown economic value."¹⁵⁵

Biological resources are also important for modern medicine. At least forty percent of all prescriptions written in this country contain drugs that originate from wild species.¹⁵⁶ The recent discovery of anticarcinogenic properties in taxol, which is found in the bark of the yew tree, illustrates the untapped medicinal potential of wild plants and animals.¹⁵⁷

Nations have recognized the myriad values associated with biodiversity and have entered into a number of conventions to preserve habitat, flora and fauna.¹⁵⁸ The overwhelming majority of the world's nations signed a biological diversity treaty at the UNCED conference. This treaty requires national inventories of plants and wildlife, as well as plans to protect endangered species.¹⁵⁹ It also provides for a system to compensate developing nations whose biological resources are used in developing new drugs, products and other biotechnologies.¹⁶⁰

Other than the UNCED treaty, perhaps the most prominent international attempt to protect biodiversity is the Convention on International Trade in Endangered Species (CITES).¹⁶¹ This treaty prohibits commercial trade in

153. Miller et al., *supra* note 151, in PRESERVING THE GLOBAL ENVIRONMENT, *supra* note 151, at 84.

154. LEDEC & GOODLAND, *supra* note 149, at 12.

155. *Id.*

156. *Id.*

157. See, e.g., Jessica Mathews, *The Medicine No One Knew Was There*, WASH. POST, June 17, 1991, at A9.

158. See, e.g., Convention on Wetlands of International Importance Especially as Waterfowl Habitat, Feb. 2, 1971, 996 U.N.T.S. 245; African Convention on the Conservation of Nature and Natural Resources, Sept. 15, 1968, 1001 U.N.T.S. 3; ASEAN Agreement on the Conservation of Nature and Natural Resources, July 9, 1985, reprinted in INTERNATIONAL PROTECTION OF THE ENVIRONMENT (Second series) 41 (Bernd Rüster & Bruno Simma eds., 1992) [hereinafter ASEAN].

159. United Nations Conference on Environment and Development: Convention on Biological Diversity, June 5, 1992, art. 7, 8(k), annex I, 31 I.L.M. 818.

160. The United States did not sign the biodiversity treaty, arguing that it would weaken patent protection for U.S. biotechnology companies, and thus discourage future research and development. Steven Greenhouse, *A Closer Look: Ecology, the Economy and Bush*, N.Y. TIMES, June 14, 1992, § 4, at 1; Michael Weisskopf & Ann Devroy, *World Leaders Set Course for Protecting the Earth*, WASH. POST, June 13, 1992, at A1.

161. The Convention on International Trade in Endangered Species of Wild Fauna and Flora, Mar. 3, 1973, 27 U.S.T. 1087, 993 U.N.T.S. 243 [hereinafter CITES].

species threatened with extinction.¹⁶² It also regulates trade in listed species with nonparty states.¹⁶³

3. The Duty Not to Harm the Global Commons

Once lost, the global commons resources discussed above, as well as many others, are all but impossible to recover. Our understanding of these dangers is still evolving. However, even now, it is clear that nations have a vital interest in environmental resources—and practices—beyond their borders.

The field of international environmental law recognizes the interests nations have in the preservation of global commons resources. In this developing field, nations have the duty to ensure that activities within their jurisdiction or control do not cause damage to the environment beyond the limits of national jurisdiction, including the global commons.

This duty finds root in several international decisions. For example, in the *Corfu Channel* case,¹⁶⁴ the International Court of Justice declared as a general and well-recognized principle "every State's obligation not to allow knowingly its territory to be used contrary to the rights of other states."¹⁶⁵ In this case, the Court held that Albania was responsible for damage caused when British warships struck Albanian mines placed in the North Corfu Channel. Scholars have seized upon the language quoted above as establishing a principle of state responsibility for transfrontier pollution.¹⁶⁶

Similarly, in the *Lac Lanoux* arbitration,¹⁶⁷ an international arbitral tribunal held that states cannot exercise their sovereign rights in a manner that ignores the rights of other states. In this case, France proposed to divert water from the Carol River, which flows from France into Spain. Spain argued that this diversion violated customary international law (*droit international commun*), as well as treaties between it and France. The arbitrators apparently accepted the principle that it is unlawful to change the condition of a river to the serious injury of a downstream state without taking account of the rights and interests of that state.¹⁶⁸

These principles have been applied in international environmental disputes. For example, in the celebrated *Trail Smelter* case,¹⁶⁹ the United States initiated international arbitration against Canada in response to damage caused when sulfuric and other fumes from a smelter in British Columbia

162. *Id.* art. III, 27 U.S.T. at 1093-95, 993 U.N.T.S. at 246-47.

163. *Id.* art. X, 27 U.S.T. at 1104, 993 U.N.T.S. at 251.

164. *Corfu Channel* (U.K. v. Alb.), 1949 I.C.J. 4 (Apr. 9).

165. *Id.* at 22.

166. See, e.g., JAMES BARROS & DOUGLAS M. JOHNSTON, *THE INTERNATIONAL LAW OF POLLUTION* 75 (1974); *Developments in the Law—International Environmental Law*, 104 HARV. L. REV. 1484, 1497 n.31 (1991).

167. *Lake Lanoux* (Fr. v. Spain), 12 R.I.A.A. 281 (1957).

168. *Id.* Nevertheless, France's efforts to make full restitution to the river were such that France's acts did not constitute a violation of international law. *Id.*

169. *Trail Smelter Case*, 3 R.I.A.A. 1905 (1941).

drifted over the border into Washington state and caused property damage. After reviewing decisions involving air and water pollution, the panel declared that:

[U]nder the principles of international law . . . no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.¹⁷⁰

Australia relied upon this principle in the *Nuclear Tests* case.¹⁷¹ In that action, Australia and other Pacific nations argued that they would suffer the effects of radioactive fallout resulting from France's nuclear testing. Significantly, they also argued that the tests violated international law because they caused pollution of the global commons.¹⁷² In response to Australia's application for provisional relief, the International Court of Justice entered an interim order instructing France to desist from testing that would deposit fallout on Australian territory.¹⁷³

There can be little doubt that the *Trail Smelter* rule is a generally accepted principle of international law.¹⁷⁴ The obligation not to harm the environment outside a nation's borders has received expression in a number of United Nations resolutions and treaties. The Stockholm Declaration, issued at the 1972 U.N. Conference on the Human Environment, provides that "States have . . . the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction."¹⁷⁵ The U.N. General Assembly has declared that this principle is one of the fundamental rules governing the international obligations of states with respect to the environment,¹⁷⁶ and it has been incorporated into the Charter of Economic Rights and Duties of States¹⁷⁷ and any number of international environmental treaties.¹⁷⁸

170. *Id.* at 1965.

171. *Nuclear Tests (Austl. v. Fr.)*, 1974 I.C.J. 253 (Dec. 20).

172. *Nuclear Tests (Austl. v. Fr.)*, 1973 I.C.J. 99, 103-04 (Interim Order of June 27, 1973).

173. *Id.* at 106. Thereafter, the ICJ ruled that France's unilateral public declarations to cease testing rendered the Pacific nations' claims moot. *Nuclear Tests (N.Z. v. Fr.)*, 1974 I.C.J. 457, 472-78 (Dec. 20). A criticism of the Court's reliance on France's pledges is found in Alfred Rubin, *The International Legal Effects of Unilateral Declarations*, 71 AM. J. INT'L L. 1 (1977).

174. See, e.g., RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW § 601 (1987); REPORT OF THE SIXTEENTH CONFERENCE 163 (Int'l Law Comm'n) (collecting citations).

175. Stockholm Declaration, *supra* note 6, Principle 21, at 1420.

176. *International Responsibility of States in Regard to the Environment*, G.A. Res. 2996, U.N. GAOR 27th Sess., Supp. No. 30, at 42-43, U.N. Doc. A/8730 (1972).

177. *Charter of Economic Rights and Duties of States*, *supra* note 6.

178. See, e.g., ASEAN, *supra* note 158, art. 20(1), reprinted in INTERNATIONAL PROTECTION

This well-established duty not to harm areas outside national jurisdiction is supplemented by international treaties and declarations imposing obligations on nations to enact measures to preserve the global commons. For example, the Montreal Protocol requires states to reduce their consumption of chemicals that destroy the ozone layer.¹⁷⁹ Several treaties oblige nations to take steps to protect marine life and to prohibit the pollution of the marine environment.¹⁸⁰ Parties to the Ramsar wetlands convention¹⁸¹ arguably have obligations to promote the conservation of protected wetlands located in other countries.¹⁸² The International Convention on Oil Pollution Preparedness, Response and Cooperation¹⁸³ requires parties to provide advice, technical support and equipment in the event of serious oil spills in the high seas.

Significantly, in a number of international environmental treaties, the measures authorized to protect the global commons are green trade barriers.¹⁸⁴ For example, the Montreal Protocol expressly requires trade measures

OF THE ENVIRONMENT at 54; Vienna Convention for the Protection of the Ozone Layer, May 2, 1985, 26 I.L.M. 1529; United Nations Convention on the Law of the Sea, Dec. 1, 1982, art. 194(2), U.N. Doc. A/CONF.62/122 (1982), 21 I.L.M. 1261, 1308 [hereinafter UNCLOS III].

This principle also appears in treaties outside the strictly environmental context. For example, the Helsinki Final Act provides that "each of the participating States in accordance with the principles of international law, ought to ensure . . . that activities carried out on its territory do not cause degradation of the environment in another State or in areas lying beyond the limits of national jurisdiction." Conference on Security and Co-operation in Europe: Final Act, Aug. 1, 1975, 14 I.L.M. 1292, 1307. Similarly, the Nuclear Test Ban Treaty prohibits nuclear explosions in global commons areas such as the atmosphere, the oceans, and outer space, as well as in "any other environment if such explosion causes radioactive debris to be present outside the territorial limits of the State under whose jurisdiction or control such explosion is conducted." Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water, Aug. 5, 1963, art. I(b), 14 U.S.T. 1313.

179. Montreal Protocol, *supra* note 8.

180. *See, e.g.*, UNCLOS III, *supra* note 178, art. 192, at 1308; Convention for the Prevention of Marine Pollution from Land-Based Sources, June 4, 1974, 13 I.L.M. 352; Convention for the Protection of the Mediterranean Sea Against Pollution, Feb. 16, 1976, 1102 U.N.T.S. 45.

181. Convention on Wetlands of International Importance Especially as Waterfowl Habitat, Feb. 2, 1971, 996 U.N.T.S. 245.

182. *See* SIMON LYSTER, INTERNATIONAL WILDLIFE LAW 195 (1985) (suggesting that parties' obligations "extend to all listed sites irrespective of where they are situated").

183. International Convention on Oil Pollution Preparedness, Response and Cooperation, Nov. 30, 1990, 30 I.L.M. 733.

184. In addition to the treaties discussed *infra*, multilateral treaties with trade provisions include: Convention Relative to the Preservation of Fauna and Flora in their Natural State, Nov. 8, 1933, 172 L.N.T.S. 242; Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, Oct. 12, 1940, 56 Stat. 1354, 161 U.N.T.S. 193; International Convention For the Protection of Birds, Oct. 18, 1950, 638 U.N.T.S. 186; International Plant Protection Convention, Dec. 6, 1951, 150 U.N.T.S. 68; Convention on Conservation of North Pacific Fur Seals, Feb. 9, 1957, 314 U.N.T.S. 106; Agreement Concerning Co-operation in the Quarantine of Plants and Their Protection against Pests and Diseases, Dec. 14, 1959, 422 U.N.T.S. 34; Benelux Convention on the Hunting and Protection of Birds, June 10, 1970,

to protect the atmosphere by requiring states to prohibit the import and export of ozone-depleting chemicals from and to nations that have not signed the treaty.¹⁸⁵

Similarly, treaties designed to protect and conserve flora and fauna utilize trade restriction to encourage other states to join these treaties and to further the ends of the treaties. For example, CITES requires states to impose trade barriers to protect animals and plants outside its borders.¹⁸⁶ The Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere obligates states to regulate trade in certain species of fauna and flora.¹⁸⁷ The African Conservation Convention¹⁸⁸ is designed to conserve plant and animal resources and requires all contracting parties to prevent trade in flora or fauna that have been illegally captured, killed or obtained within the territory of another party.

Similar green trade barriers are found in treaties that address international trade in hazardous waste. For example, under the Basel Convention, "[a] Party shall not permit hazardous wastes or other wastes to be exported to a non-Party or to be imported from a non-Party."¹⁸⁹ Under the auspices of the Organization of African Unity, a number of African nations have entered into a treaty banning the importation of hazardous wastes into Africa from a noncontracting party.¹⁹⁰

There are strong policy and political arguments supporting the use of trade measures to protect the global commons, and it is likely that the use of such measures will continue. Such measures are one way of addressing many of the "collective action" problems associated with multilateral efforts.¹⁹¹ Nations that take action to preserve global commons resources pursuant to an environmental treaty create a "public good" from which

reprinted in 5 INTERNATIONAL PROTECTION OF THE ENVIRONMENT 2127 (Bernd Rüster & Bruno Simma eds., 1975). The Rio Declaration, signed at the Earth Summit, discourages but does not prohibit the unilateral use of green trade barriers. Rio Declaration on Environment and Development, June 14, 1992, Principle 12, 31 I.L.M. 874, 878.

185. Montreal Protocol, *supra* note 8, arts. 4, 10, at 1554-55, 1557.

186. CITES, *supra* note 161.

187. Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, Oct. 12, 1940, art. IX, 56 Stat. 1254, 161 U.N.T.S. 193.

188. African Convention on the Conservation of Nature and Natural Resources, Sept. 15, 1968, 1001 U.N.T.S. 3.

189. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, Mar. 27, 1989, art. 4(5), U.N. Doc. UNEP/IG.80-3 (1989), 28 I.L.M. 657. To the extent this treaty reflects concerns that the improper handling, transportation or disposal of hazardous wastes threatens to pollute the atmosphere or oceans, this treaty seeks to protect global commons resources.

190. Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes Within Africa, Jan. 29, 1991, 30 I.L.M. 773.

191. Collective action problems arise when individual parties can, without taking any actions that impose costs on themselves, enjoy the benefits created by the collective efforts of other parties. See generally RUSSELL HARDIN, COLLECTIVE ACTION (1982); MANCUR OLSEN, THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS (2d ed. 1971).

they cannot exclude noncooperating states. Imposing trade restraints against "free riders"—nations that have not joined the treaty—is one way of minimizing or eliminating the benefits enjoyed by nonparties, and of thereby encouraging the nonparties to join the treaty regime.

In addition, the industries of nations that assume certain costs to protect the environment as a result of national treaty obligations may find themselves at a competitive disadvantage vis-à-vis their competitors in other nations that have not assumed the same obligations. Trade measures can seek to eliminate this comparative advantage.

In other circumstances, action by a group of states may be rendered ineffective if other nations do not cooperate. For example, if a number of countries agree to halt commercial whaling in the high seas, their efforts will be undermined if one or more major whaling nations continues to hunt whales to the point of extinction.¹⁹² Similarly, the efforts of a nation or group of nations to reduce their output of greenhouse gases can be rendered ineffective if these reductions are "replaced" by increased emissions from other nations. Trade measures are one means of "encouraging" reluctant states to join an international environmental regime, and thus increase the possibility that the regime's goals will be met.

Finally, a nation may properly decide that it does not wish to "aid and abet" the harmful environmental practices of another nation. Countries should be under no obligation to provide markets for products whose use or production contributes to the destruction of a global commons resource. In particular, nations should be permitted to refuse local complicity in the destruction of wildlife or other resources located outside its borders. The contrary position—requiring nations to provide markets for products produced in environmentally destructive ways—arguably forces those states to violate their responsibility to ensure that "activities within their jurisdiction or control do not cause damage to the environment . . . beyond the limits of national jurisdiction."¹⁹³ The international trade regime should not obligate nations to violate the duties imposed by international environmental law.

The principle that one state need not aid and abet the environmentally harmful acts by persons in other states has been endorsed by the United States Supreme Court in an analogous domestic context. Thus, the authority of states to establish local prohibitions with respect to out-of-state wildlife has long been upheld by the courts.¹⁹⁴ In particular, prohibiting the import

192. Although the International Whaling Commission has imposed a moratorium on commercial whaling, Norway recently announced that it will resume commercial whaling activities next year, and Iceland has announced plans to withdraw from the Commission. Glenn Frankel, *Norway, Iceland Defy Ban, Will Resume Whale Hunts*, WASH. POST, June 30, 1992, at A14; Craig Whitney, *Norway is Planning to Resume Whaling Despite World Ban*, N.Y. TIMES, June 30, 1992, at A1.

193. Stockholm Declaration, *supra* note 6, Principle 21, at 1420.

194. *See, e.g., New York ex rel. Silz v. Hesterberg*, 211 U.S. 31, 41-43 (1908).

or sale of wildlife to protect out-of-state animals is a legitimate state interest and does not violate the dormant Commerce Clause.¹⁹⁵

These arguments in favor of the use of green trade barriers are buttressed by the fact that, as a practical matter, nations have few other means of encouraging other states to protect global commons resources. Less coercive measures, such as diplomatic pressure, generally are insufficient to persuade nations to change their environmental practices. Moreover, nations are understandably reluctant to employ more coercive measures, such as the threat or use of force, against another country simply because it trades in an endangered plant or an ozone-depleting chemical.¹⁹⁶ In addition, for better or worse, powerful domestic constituencies often support the use of trade barriers against the products of foreign competitors. This conjunction of domestic and international political realities makes trade measures to protect the global commons an increasingly attractive policy tool.¹⁹⁷

IV. LIMITING PRINCIPLES

The tuna/dolphin dispute illustrates one way in which "[e]cology and economy are becoming ever more interwoven—locally, regionally, nationally, and globally—into a seamless web of cause and effects."¹⁹⁸ This dispute forced the realization that differing environmental rules in different nations significantly affects world trade—and that the international community lacks meaningful rules for constraining these effects. The relationship between international trade and the environment is extremely complex. One nation may view another nation's vigorous environmental protection policy as an unjustified barrier to trade. Conversely, producers in states with strict environmental regulations may be concerned that foreign competitors operating under more lax environmental regimes enjoy comparative advantages. Indeed, differences in environmental regulations may, in part, prompt industries or plants to relocate.¹⁹⁹ Finally, some argue that the failure to impose strict environmental regulations constitutes an implicit governmental subsidy to industry.²⁰⁰

195. See, e.g., *Cresenzi Bird Importers, Inc. v. New York*, 658 F. Supp. 1441 (S.D.N.Y. 1987); *Palladio Inc. v. Diamond*, 321 F. Supp. 630, 635 (S.D.N.Y. 1970), *aff'd*, 440 F.2d 1319 (2d Cir.), *cert. denied*, 404 U.S. 983 (1971); *A.E. Nettleton Co. v. Diamond*, 264 N.E.2d 118, 123-24 (N.Y.), *appeal dismissed*, 401 U.S. 969 (1970).

196. See CAIRNCROSS, *supra* note 4, at 152.

197. A review of recent legislative activity illustrates this point. In the 101st Congress, there were at least 33 environmental bills introduced that would either restrict international trade or affect trade policy. In each of these bills, import or export restrictions would be used to achieve environmental goals. See U.S. INT'L TRADE COMM'N, *supra* note 3. A summary of bills introduced in the 102d Congress related to the trade and environment issue is found in OTA REPORT, *supra* note 4, at 91-92.

198. WCED, *supra* note 1, at 5.

199. H. JEFFREY LEONARD, *POLLUTION AND THE STRUGGLE FOR THE WORLD PRODUCT* 64-74 (1988); OTA REPORT, *supra* note 4, at 59, 97-100; Hilary French, *A Most Deadly Trade*, WORLD WATCH, July-Aug. 1990, at 11.

200. Legislation was recently introduced in the United States Senate which would permit the imposition of duties on imports produced under environmental standards less strict than those in this country. S. 984, 102nd Cong., 1st Sess. (1991).

Just as environmental policies have effects on trade, trade policies can channel economic behavior in environmentally benign or destructive directions.²⁰¹ Trade regimes formed by commodity agreements and preferential trade agreements can promote environmentally unsound activities. For example, the Multi-Fiber Arrangement²⁰² severely reduces developing nation exports of textiles and other products made from fibers. The agreement creates incentives for developing nations to substitute resource intensive economic activities—such as timber exports—for a more environmentally benign fiber-based industry.²⁰³

Similarly, tariff and subsidy policies can have environmentally destructive effects. For example, many developed nations utilize “tariff escalation”—the imposition of greater duties on finished goods than on raw materials.²⁰⁴ This practice encourages the increased export of natural resources from developing nations and discourages the use of local manufacturing and production facilities. Developed nations also encourage agricultural production through subsidized water and energy prices. This encourages overproduction in developed nations and decreases export markets for developing nations. As a result, small-scale farming in developing nations is discouraged, and economic behavior is shifted to activities that are more harmful to the environment.²⁰⁵ Developing nations have used government subsidies in environmentally destructive ways as well. Many tropical nations with large forest resources have provoked unsustainable timber harvests through taxes and other subsidies.²⁰⁶

Import and export controls can have environmental effects. As the tuna/dolphin dispute illustrates, nations can use import controls to attempt to affect the environmental practices of other nations. In addition, export controls in industrialized nations can inhibit the transfer of environmental technologies and services to developing nations.²⁰⁷ A lack of controls likewise

201. See, e.g., OTA REPORT, *supra* note 4, at 38-42; *System-Wide Medium-Term Environment Programme for the Period 1990-1995*, U.N. Environment Programme, at 83-89, U.N. Doc. UNEP/GCSS.1/7 (1988).

202. Arrangement Regarding International Trade in Textiles, Dec. 20; 1973, 25 U.S.T. 1001. This agreement is ably described in Ram Khanna, *Market Sharing Under Multifiber Arrangement: Consequences of Non-Tariff Barriers in the Textile Trade*, J. WORLD TRADE L., Feb. 1990, at 71.

203. Tom H. Tietenberg, *Managing the Transition*, in PRESERVING THE GLOBAL ENVIRONMENT, *supra* note 151, at 187, 200; WCED, *supra* note 1, at 154.

204. WCED, *supra* note 1, at 81-82.

205. Teitenberg, *supra* note 203, in PRESERVING THE GLOBAL ENVIRONMENT, *supra* note 151, at 199-200; WCED, *supra* note 1, at 122-23; J. Hugh Faulkner, *Toward Simultaneously Achieving Economic Growth and Improving the Global Environment*, 2 INT'L ENVTL. AFF. 287, 290 (1990).

206. WCED, *supra* note 1, at 153-54; OTA REPORT, *supra* note 4, at 41-42.

207. In recognition of this issue, the United Nations Environment Programme has called upon “[g]overnments to promote the commercial exchange and transfer of environmental protection technology, and direct industrial contacts in the field of environmental protection technology.” U.N. GAOR 42nd Sess., Supp. No. 25, at 67, U.N. Doc. A/42/25 (1987). See generally WCED, *supra* note 1, at 87-88.

has environmental consequences. International trade is the mechanism whereby toxic wastes and other dangerous products are transferred from one nation to another.²⁰⁸ Trade liberalization can increase production and other forms of economic activity in contexts where adequate environmental safeguards are lacking.

Finally, the attempts by developing nations to meet international debt obligations may lead to environmentally destructive economic activities. Many of these nations are forced to utilize a substantial portion of their export earnings to service foreign debt.²⁰⁹ The diversion of resources from the poorer countries to the richer nations to service this debt "has taken a toll not only on the people of developing lands, but on the land itself. Forests have been recklessly logged, mineral deposits carelessly mined, and fisheries overexploited, all to pay foreign creditors."²¹⁰ Clearly, the present level of debt service of many poorer countries is inconsistent with sustainable development.²¹¹

At present, the international trade and environmental regimes are on a collision course. The world community needs a conceptual framework that will enable it to reconcile the various international interests at stake in the conflict between the environment and trade. This framework should include principles that permit a harmonization of the use of trade measures to protect the global commons with the strong interest in liberalized trade. In particular, the framework should both permit and constrain the use of green trade barriers.²¹² It should also ensure that these barriers are not used to close markets to developing nations, to avoid what some call "ecoimperialism."²¹³

208. WCED, *supra* note 1, at 226-28.

209. In 1987, 57% of the Gross Domestic Product of Africa was used to service debt. U.N. DEP'T OF INT'L ECONOMICS & SOCIAL AFFAIRS, U.N. ECONOMIC AND SOCIAL SURVEY OF ASIA AND THE PACIFIC 1988, at 4, U.N.Doc. ST/ESCAP/678, U.N. Sales No. E.89.II.F.3 (1988). In Latin America, the figure was 46.8%. *Id.*

210. Alan B. Durning, *Ending Poverty*, in STATE OF THE WORLD 1990, *supra* note 139, at 135, 140.

211. WCED, *supra* note 1, at 18, 74-5.

212. The International Court of Justice has made clear that not all forms of economic sanctions violate customary international law. In its case against the United States, Nicaragua complained that the United States had violated international law by imposing a total trade embargo. Although the Court ruled that other U.S. acts against Nicaragua violated international law, it refused to hold that the economic sanctions were violative of international law. *Military and Paramilitary Activities (Nicar. v. U.S.)*, 1986 I.C.J. 14, 126 (June 27). Indeed, as state practice demonstrates, the use of economic sanctions for political ends is widespread. *See, e.g.*, GARY HUFBAUER & JEFFREY SCHOTT, *ECONOMIC SANCTIONS IN SUPPORT OF FOREIGN POLICY GOALS 14-22* (1983) (providing lengthy and nonexhaustive list of use of economic sanctions in 20th century).

213. Many people fear that the environmental regulations of industrialized nations are a mechanism to perpetuate their economic advantage vis-à-vis the developing world. *See, e.g.*, William Aron, *The Commons Revisited: Thoughts on Marine Mammal Management*, 16 COASTAL MGMT. 99, 108 (noting that extraterritorial reach of U.S. environmental laws creates perception that United States "is trying to press its moral and ethical standards on others");

A. Description of the Limiting Principles

Application of a number of principles can properly limit the use of green trade barriers. A legal test that properly balances the interest in liberalized trade with the interest in preserving the global commons would examine: the type and strength of the interest being protected, whether the trade barrier discriminates between foreign nations or between foreign and domestic products, and, finally, whether the trade restriction is related to and proportionate to the environmental goal.²¹⁴

1. Type of Interest

First, the nature of the interest being protected must be identified. Is the measure truly designed to protect the global commons—an area or resource outside the jurisdiction of any nation or group of nations? This question may be more subtle than appears at first glance. For example, the Netherlands has proposed a measure banning the import of tropical timber harvested in an unsustainable manner.²¹⁵ On one level, this measure is clearly aimed at certain developing nations, such as the Philippines and Indonesia,

Kathryn Fuller et al., *Wildlife Trade Law Implementation in Developing Countries: The Experience in Latin America*, 5 B.U. INT'L. L.J. 289, 292 (1987) (stating that some Latin American officials "view CITES as an imperialistic effort by foreigners to conserve species at the exporting countries' expense"); Carolyn D. Greenwood, Note, *Restrictions on the Exportation of Hazardous Products to the Third World: Regulatory Imperialism or Ethical Responsibility?*, 5 B.C. THIRD WORLD L.J. 129 (1985).

214. This paper does not address the question of which is the most appropriate institution to conduct this balancing test. The environmental community is understandably reluctant to see a trade institution such as the GATT adjudicate disputes between trade interests and environmental interests. However, as Richard Stewart points out, there is no reason in principle why future GATT dispute resolution panels would not be able to utilize a balancing test similar to that proposed in this article. Richard B. Stewart, *International Trade and Environment: Lessons from the Federal Experience*, 49 WASH. & LEE L. REV. 1329, 1349 (1992). Moreover, environmental expertise may be inserted into the GATT dispute settlement process in several different ways. First, individuals serving on the dispute settlement panels might be chosen, in part, because of their environmental expertise. Second, panels can request input from international organizations with environmental expertise. See Thailand Cigarette Panel Report, *supra* note 69, para. 50, at 1134 (requesting information from World Health Organization on public health effects of cigarettes, in resolving challenge to restrictions on importation of cigarettes). Finally, panels could permit environmental nongovernmental organizations (NGOs), or others, to file *amicus* submissions.

A variety of other institutional fora have been proposed for resolutions of this type of dispute. For example, some people advocate expanded environmental jurisdiction for the International Court of Justice. See UNITED NATIONS ASSOCIATION OF THE UNITED STATES & SIERRA CLUB, UNITING NATIONS FOR THE EARTH 16-17 (1990). Others have argued for the creation of a new World Environmental Court. See, e.g., Amedeo Postiglione, *A More Efficient International Law on the Environment and Setting Up an International Court for the Environment Within the United Nations*, 20 ENVTL. L. 321 (1990). As this article seeks to shift the debate from one over institutional form to one over the appropriate analytic framework that ought to be used in resolving such disputes, it takes no position on the desirability or practicality of any of the institutional proposals that have been advanced.

215. See CAIRNCROSS, *supra* note 4, at 315.

which are destroying their forests at an alarming rate.²¹⁶ One could therefore argue that this measure is aimed at a resource within another country and not at a global commons resource. However, tropical forests act as important "sinkholes" for greenhouse gases, and thus help preserve the atmosphere, a global commons resource. In addition, these forests serve as a home for a significant number of animal and plant species. Conserving forests helps to preserve biodiversity.²¹⁷ Given the interrelatedness of environmental resources, I would urge a liberal interpretation of whether a particular trade measure is aimed at protecting the global commons, as opposed to a local resource.²¹⁸

2. Strength of the Interest

If the measure at issue is designed to protect the global commons, it is necessary to determine the strength of the interest in the resource being protected. This can be accomplished in two different ways. One approach would involve a determination of whether the specific environmental interest at stake is protected by customary or treaty law.²¹⁹ Thus, to evaluate the U.S. law at issue in the tuna/dolphin case, one could look at whether the dolphins protected by the MMPA are protected by CITES, the United Nations Convention on the Law of the Sea (UNCLOS), or other applicable international environmental laws.

Measures concerning resources not protected by international environmental law—which is a relatively new field—could be justified by scientific evidence regarding the specific environmental threat. For example, in the

216. See *id.* at 38-41.

217. For these reasons, I would consider measures designed to save tropical forests as aimed at protecting a global commons resource. The U.S. government has taken the same position. William Stevens, *U.S., Trying to Buff Its Image, Defends the Forests*, N.Y. TIMES, June 7, 1992, at A20. Many developing nations reject this view. See *id.* For example, Malaysia has argued that "[f]orests are clearly a sovereign resource—not like atmosphere or oceans, which are global commons." James Brooke, *Delegates from 4 Nations Warm to High-Profile Role: Global Powerbroker*, N.Y. TIMES, June 12, 1992, at A10 (quoting Malaysian diplomat Wen Lian Ting). An interesting exploration of this issue from a developing nation perspective is presented in José Goldemberg & Eunice Ribeiro Durham, *Amazonia and National Security*, 2 INT'L ENVTL. AFF. 22 (1990).

218. Of course, this argument can be stretched beyond its breaking point. At a meeting under the auspices of the OECD in late 1991, a Japanese delegate argued that Japan's ban on importation of a certain unnamed agricultural product—which one might assume to be rice—was justified as protecting a global commons resource. He argued that permitting imports of this product would cause certain unnamed nations—which one can assume includes the United States—to convert undeveloped land to agricultural uses, with resulting soil erosion, runoff into rivers and oceans, and environmental degradations. Private communication with U.S. government official (Nov. 1991).

219. Of course, reliance on international law in this manner may raise a series of difficult questions: Is the asserted norm relied upon to restrict trade really international law? If so, is the norm sufficiently determinate to, in some sense, authorize or justify the trade measure at issue? Does the international norm set a floor or ceiling with respect to unilateral action? These and other questions would have to be answered in each particular case.

tuna/dolphin case, the United States might be able to justify the MMPA's trade measures if scientific evidence regarding dolphin population, mortality rates, reproduction rates, and incidental taking rates revealed a threat to the continued existence of dolphins in the ETP.

This analysis raises the controversial question of the level of scientific certainty required before trade measures are justified. This issue was prominent in the debate over ozone depletion.²²⁰ The European Community initially opposed the inclusion of trade measures against nonparties in the Montreal Protocol, in part because of scientific uncertainty over the effects of CFCs on the ozone layer.²²¹ Similarly, there are at present outstanding scientific questions over the magnitude and rate of climate change.²²²

These examples suggest that two separate issues need to be addressed. First, is there sufficient information to arrive at an accurate assessment of risk? Second, how does one distinguish between an acceptable level of risk and a risk that justifies trade restrictions? Neither of these issues admits of a precise or universal answer; ultimately the global community will exercise political judgments when resolving these issues.

The international community has made impressive strides in learning how to work cooperatively to enhance scientific research and to narrow ranges of scientific uncertainty. The United Nations Environmental Programme (UNEP) used scientists from different nations to create international committees that facilitated agreement in the negotiations leading to the Basel Convention.²²³ When scientific uncertainty threatened to derail attempts to control ozone-depleting chemicals, different international groupings of scientists were able to pool resources and expertise to become the driving force behind ozone diplomacy.²²⁴

A determination of the acceptable level of risk will turn, in large part, upon judgments reflecting a particular society's values. Different nations can legitimately have different tolerances for risk.²²⁵ However, with respect to risks that threaten irreversible ecological damage, common sense would suggest that we err on the side of caution.²²⁶ To wait for irrefutable scientific

220. LYDIA DUTTO & HAROLD SCHIFF, *THE OZONE WAR* (1978).

221. Richard E. Benedick, *Protecting the Ozone Layer: New Directions in Diplomacy*, in *PRESERVING THE GLOBAL ENVIRONMENT*, *supra* note 151, at 112, 125-37.

222. *See, e.g.*, Jane S. Shaw & Richard L. Stroup, *Global Warming and Ozone Depletion*, in *ECONOMICS AND THE ENVIRONMENT: A RECONCILIATION* 159, 159-79 (1990). The Wall Street Journal recently suggested, with slight overstatement, that "whether temperatures will rise that much and when are the subjects of brawls at scientific conferences." Bob Davis, *The Outlook*, WALL ST. J., Apr. 20, 1992, at A1.

223. Christopher Hilz & Mark Radka, *The Basel Convention on Transboundary Movement of Hazardous Wastes and Their Disposal*, in *NINE CASE STUDIES IN INTERNATIONAL ENVIRONMENTAL NEGOTIATION* 79, 101-02 (Lawrence E. Susskind et al. eds., 1990).

224. RICHARD E. BENEDICK, *OZONE DIPLOMACY* 5, 9-22, 204 (1991).

225. *Id.* at 23-25 (outlining differences between U.S. and European approaches to risk in context of ozone depletion).

226. The notion that states should not engage in acts posing a potential threat to the environment, even if there is no conclusive scientific evidence that the acts cause environmental

proof that, for example, the ozone layer is being depleted, may be to prohibit action until the problem becomes worse or irreversible.²²⁷ As a recent World Bank paper stated in the context of global climate change: "When confronted with risks which could be menacing, cumulative, and irreversible, uncertainty argues strongly in favour of prudent action and against complacency."²²⁸

In evaluating this prong of the balancing test, the nation imposing the trade restriction ought to have the burden of producing evidence to demonstrate that the restriction has a scientific foundation. The nation challenging the measure can introduce evidence that the resource protected by the trade barrier is not threatened, or that the regulated trade does not threaten the resource. It is likely that nations will be able to demonstrate at least some scientific evidence in support of their trade restrictions, and setting this relatively minimal standard runs the risk that nations might seek to cloak protectionist measures in scientific garb. However, the proffered scientific rationale would be subject to challenge, and nations that enact blatantly protectionist measures will not be able to demonstrate the requisite interest in the environmental resources they purport to protect.²²⁹

damage, is known as the precautionary principle. Commentators are starting to argue that the precautionary principle is emerging as a principle of customary international law. See, e.g., James Cameron & Juli Abouchar, *The Precautionary Principle: A Fundamental Principle of Law and Policy for the Protection of the Global Environment*, 14 B.C. INT'L & COMP. L. REV. 1 (1991).

227. International legal instruments have adopted this approach. *Id.* at 4-18 (collecting sources).

The U.S. Supreme Court has endorsed this type of approach in the domestic context. The Court has recognized that states have a legitimate interest in protecting against imperfectly understood environmental risks. "The constitutional principles underlying the commerce clause cannot be read as requiring the [States] to sit idly by and wait until potentially irreversible environmental damage has occurred . . . before it acts to avoid such consequences." *Maine v. Taylor*, 477 U.S. 131, 148 (1986) (quoting *United States v. Taylor*, 585 F. Supp. 393, 397 (D. Me. 1984)).

228. MICHAEL GRUBB, *THE GREENHOUSE EFFECT: NEGOTIATING TARGETS* 8 n.15 (1989) (quoting E. ARRHENIUS & T. WALTZ, *THE GREENHOUSE EFFECT: IMPLICATIONS FOR ECONOMIC DEVELOPMENT* (forthcoming)).

229. One example of a trade barrier that would appear to lack a scientific foundation is the EC's ban on the sale or importation of meat treated with growth hormones. Council Directive 85/649, arts. 5, 6(1), 1985 O.J. (L 382) 229-30. These hormones had been approved for use by the U.N. Food and Agriculture Commission as well as the U.S. Food and Drug Administration. Elizabeth Ross, *U.S. Challenges EC Plan to Ban Treated Beef*, CHRISTIAN SCI. MONITOR, Nov. 21, 1988, at 3. An inquiry commissioned by the EC "was disbanded when it became clear it would find no evidence beef-fattening steroids were damaging to humans." Christiana Mackenzie, *European Community Beefs About Use of U.S. Meat Hormones*, CHRISTIAN SCI. MONITOR, Mar. 24, 1988, at 14. An extended discussion of this trade barrier, and the U.S. response, is found in Werner P. Meng, *The Hormone Conflict Between the EEC and the United States Within the Context of GATT*, 11 MICH. J. INT'L L. 819 (1990); Adrián R. Halpern, Comment, *The U.S.-EC Hormone Beef Controversy and the Standards Code: Implications for the Application of Health Regulations to Agricultural Trade*, 14 N.C. J. INT'L L. & COM. REG. 135 (1989); Steven J. Rothberg, Note, *From Beer to BST: Circumventing the GATT Standards Code's Prohibition on Unnecessary Obstacles to Trade*, 75 MINN. L. REV. 505 (1990).

This relatively deferential standard toward the determination of the interest in a global commons resource is appropriate for at least two reasons. First, as reflected in the precautionary principle, the nature and magnitude of global environmental threats counsels special deference to measures enacted to preserve global environmental resources. Second, global commons resources fall within the jurisdiction of no particular nation. Thus, "those political processes ordinarily to be relied upon"²³⁰ will tend to systematically undervalue global commons resources.

The allusion to *United States v. Carolene Products Co.*²³¹ is intended to suggest a loose analogy between traditionally underrepresented interests that receive heightened judicial solicitude in U.S. courts, and the global commons resources that are unrepresented in the international political arena. Nations can trigger a tragedy of the commons²³² as surely as domestic political majorities can trample the fundamental interests of political minorities. Thus, there is little reason to suspect that nations will tend to overprotect global commons resources. Moreover, the international community enjoys a generalized benefit as the result of unilateral acts to protect global commons resources. Therefore, when considering the strength of the environmental interest, it is appropriate to adopt a relatively deferential approach to the sanctioning state's evaluation of that interest. The other prongs of the balancing test will ensure that the use of green trade barriers is properly limited.

3. Nondiscrimination Principles

Restrictions on trade should not discriminate among foreign products, or between foreign and domestic goods. These principles are already deeply embedded in international trade law.²³³ For example, under GATT Article I, all contracting parties are required to extend most-favored-nation treatment (MFN) to all other parties. Under this principle, any advantage or concession regarding conditions of trade extended to one nation must be immediately and unconditionally extended to all GATT parties. The most-favored-nation principle is also found in other treaties dealing with inter-

230. *United States v. Carolene Prods. Co.*, 304 U.S. 144, 152 n.4 (1938).

231. 304 U.S. 144 (1938).

232. Garrett Hardin's argument that resources in a commons will be overexploited is applicable to global commons resources. See Garrett Hardin, *The Tragedy of the Commons*, 162 SCIENCE 1243 (1968).

233. The most-favored-nation clause dates back to the twelfth century, see STAFF OF SENATE COMM. ON FINANCE, 93D CONG., 2D SESS., THE MOST FAVORED NATION CLAUSE PROVISION, EXECUTIVE BRANCH GATT STUDY No. 9 (Comm. Print 1974), while the obligation to extend national treatment to imported goods is part of customary international law. See BROWNIE, *supra* note 101, at 518-51.

Similar nondiscrimination principles run through dormant Commerce Clause jurisprudence. State statutes that facially discriminate against interstate commerce are subject to a "virtually per se rule of invalidity," and are routinely held to violate the dormant Commerce Clause. See, e.g., *Chemical Waste Management, Inc. v. Hunt*, 112 S. Ct. 2009, 2015 (1992); *City of Phila. v. New Jersey*, 437 U.S. 617, 624 (1978).

national economic law, such as the International Monetary Fund (IMF) Articles of Agreement²³⁴ and many bilateral treaties of friendship, commerce and navigation.²³⁵ The obligation not to discriminate between foreign and domestic goods is found in GATT Article III, which requires "national treatment" for imports. Under this Article, parties must treat imported products no less favorably than like or competing domestic products.

These principles further the interests in sovereignty and political harmony by requiring a sanctioning state to treat all other nations equally. Moreover, by requiring the sanctioning state to treat imports no less favorably than domestic products, these principles force that state to absorb its share of any costs generated by its trade barrier.

In addition, these principles favor developing and less powerful states.²³⁶ A trade "deal" between two large nations may, through application of the MFN principle, create economic benefits for smaller nations.²³⁷ Absent the obligation to extend most-favored-nation status, some nations might "be tempted to form particular discriminatory international groupings."²³⁸ It is likely that the discriminatory effects of such groupings would fall on states not powerful or rich enough to ensure their participation in the grouping.²³⁹ Similarly, the national treatment obligation is designed to preclude protectionist legislation. As developing nations are often more dependent than developed nations upon exports,²⁴⁰ this principle provides important assurances of market access for their products.²⁴¹

Application of the nondiscrimination principle is well-illustrated by a GATT dispute between Canada and the United States.²⁴² During the 1970s, the United States rejected Canada's assertion of a 200 mile exclusive economic zone. During the course of this disagreement, Canada seized nineteen U.S. fishing vessels within this 200 mile zone.²⁴³ Shortly thereafter, the United States prohibited the importation of certain fish products from Canada.²⁴⁴ This trade barrier was implemented pursuant to the 1976 Fishery Conservation and Management Act, which directed the Secretary of the

234. Articles of Agreement of the International Monetary Fund, Dec. 27, 1945, 60 Stat. 1401, 2 U.N.T.S. 39.

235. See, e.g., Treaty of Friendship, Commerce and Navigation, Apr. 2, 1953, U.S.-Japan, arts. XIV, XVI, 4 U.S.T. 2063.

236. PETER MOSER, *THE POLITICAL ECONOMY OF THE GATT* 28 (1990).

237. JACKSON, *supra* note 121, at 277.

238. *Id.* at 135.

239. Nevertheless, some developing nations have argued against the MFN principle and in favor of a regime that grants special privileges to developing nations. *Id.*

240. WCED, *supra* note 1, at 67.

241. On the other hand, some developing nations have argued that they should be able to utilize internal taxes and regulations as a form of protection necessary for economic development. JOHN H. JACKSON, *WORLD TRADE AND THE LAW OF GATT* 278 (1969).

242. *Report of the GATT Panel, United States—Prohibition of Imports of Tuna and Tuna Products from Canada*, GATT Doc. L/5198 (Feb. 22, 1982), BISD 29th Supp. 91 [hereinafter *Canadian Tuna Panel Report*].

243. *Id.* para. 2.1, at 92.

244. 44 Fed. Reg. 53,118 (1979) (general notice).

Treasury to prohibit the importation of fish and fish products from any nation that seizes U.S. vessels in waters that the other state claimed as territorial, where the United States did not recognize that claim.²⁴⁵

Canada initiated dispute resolution proceedings, and the United States argued that the import ban was justified under the GATT Article XX(g) exception for measures "relating to the conservation of exhaustible natural resources."²⁴⁶ Under GATT jurisprudence, a measure can be justified under this article only if it is applied in conjunction with restrictions on domestic production.²⁴⁷ However, the Panel noted that there were no similar restrictions on U.S. products.²⁴⁸ For this reason, the embargo could not be justified under Article XX(g), and was deemed to violate the GATT.²⁴⁹

Application of the nondiscrimination principle urged here would support the Panel's result. In this dispute, the U.S. import ban violated two branches of the nondiscrimination principle. First, by singling out tuna imported from Canada and not addressing tuna imported from any other nation, this embargo violated the MFN principle. Second, the differential treatment of Canadian and domestic tuna violated the "national treatment" principle. For these reasons, the U.S. ban would violate the nondiscrimination prong of the balancing test set forth here.

4. Means Should Be Related and Proportionate to the Environmental Goal

Two other limiting principles should be used. The means employed should be related to and proportionate to the environmental interest to be protected. Again, these principles are well established in international law. For example, the doctrine of proportionality acts as a limit on state action in several different contexts. Significantly, in the context of economic sanctions, it is well settled that sanctions causing disproportionate effects violate international law.²⁵⁰ Similarly, the principle of proportionality acts as a restraint on state action in the divergent areas of use-of-force and self-defense,²⁵¹ humanitarian law,²⁵² human rights

245. 16 U.S.C. § 1825 (1988).

246. *Canadian Tuna Panel Report*, *supra* note 242, para. 3.5., BISD 29th Supp. at 97.

247. *Id.* para. 4.9, at 108.

248. *Id.* para. 4.12, at 109.

249. *Id.* para. 4.15, at 109.

250. See, e.g., Richard B. Bilder, *Comments on the Legality of the Arab Oil Boycott*, 12 TEX. INT'L L.J. 41, 44 (1977); Jost Delbrück, *Proportionality*, in 7 ENCYCLOPEDIA OF INTERNATIONAL LAW 396, 399 (Rudolph Bernhardt ed., 1984).

251. Military and Paramilitary Activities (Nicar. v. U.S.), 1986 I.C.J. 14, 103, para. 194 (June 27); see also D.W. GREIG, INTERNATIONAL LAW 886-87 (2d ed. 1976); MYRES S. MCDUGAL & FLORENTINO P. FELICIANO, LAW AND MINIMUM WORLD PUBLIC ORDER 211-14 (1961).

252. Applying the principle of proportionality, international humanitarian law prohibits, *inter alia*, the use of weapons causing unnecessary suffering and military actions causing excessive collateral damage to civilian populations or objects. Protocol Additional to the Geneva Conventions Relating to the Protection of Victims of International Armed Conflicts, June 10, 1977, arts. 35, 48-67, 16 I.L.M. 1391. See generally MICHAEL BOTHE ET AL., NEW RULES FOR VICTIMS OF ARMED CONFLICTS (1982).

law,²⁵³ and the law of treaties.²⁵⁴

The notion that a state sanction or action must be related to the offensive activity that it seeks to halt is also rooted in international law. As Jost Delbrück ably summarized this idea in the context of economic sanctions, "a due relation between means and ends has to be observed, lest the coercive measures become illegal as a prohibited act of intervention into the internal affairs of the State addressed by the measures."²⁵⁵

The use of the doctrines of proportionality and relatedness as limiting principles in this context is intended to act as a check on the protectionist impulse. If the use of purse seine nets to catch tuna is a major cause of dolphin deaths, then it is sensible—under the relatedness test—to restrict the imports of tuna caught in this manner. However, under the relatedness test, the United States could not seek to further its interest in dolphin conservation by banning the importation of Mexican beer or textiles. The proportionality principle suggests that if catching tuna in this way is a relatively minor cause of dolphin deaths, and more serious causes of such deaths had gone unaddressed,²⁵⁶ then a ban on tuna which restricted a great deal of trade might not be justified.²⁵⁷

5. The Trade Measure Need Not Be the Least Trade Restrictive Measure Available

Finally, in sharp distinction from the legal test utilized by GATT panels, the balancing test urged here does not require that the green trade barrier be the "least trade restrictive" measure available.

GATT panels have incorporated a "least trade restrictive" test when considering whether trade measures are justified under Article XX. As a panel stated when considering whether a trade barrier could be justified on health and safety grounds:

a contracting party cannot justify a measure . . . as "necessary" in terms of Article XX[d] if an alternative measure which it could reasonably be expected to employ and which is not inconsistent with other GATT provisions is available to it. . . . [I]n cases where a [GATT consistent measure] is not reasonably available, a con-

253. See, e.g., MYRES S. MCDUGAL ET AL., HUMAN RIGHTS AND WORLD PUBLIC ORDER 813-14 (1980).

254. Delbrück, *supra* note 250, in ENCYCLOPEDIA OF INTERNATIONAL LAW, *supra* note 250, at 399; 2 LASSA OPPENHEIM, INTERNATIONAL LAW 141 (Hersch Lauterpacht ed., 7th ed. 1952).

255. Delbrück, *supra* note 250, in ENCYCLOPEDIA OF INTERNATIONAL LAW, *supra* note 250, at 399.

256. For example, the use of large-scale pelagic driftnets causes a significant number of marine mammal deaths. See, e.g., Leslie A. Davis, *North Pacific Pelagic Driftnetting: Untangling the High Seas Controversy*, 64 S. CAL. L. REV. 1057, 1067, 1071-75 (1991).

257. Use of these principles may well limit the effectiveness of trade restrictions. Unless a nation provides a major market for the product at issue, trade restrictions may not be an effective tool. However, failure to limit the use of trade barriers in this way invites protectionism and retaliatory measures.

tracting party is bound to use, among the measures reasonably available to it, that which entails the least degree of inconsistency with other GATT provisions.²⁵⁸

In application, this test has been almost impossible to meet. For example, in the Thailand Cigarette case, the Thai government restricted the importation of foreign cigarettes to protect the health of its citizens. The GATT Panel found that this measure was not "necessary" because the Thai government's goals could be met by measures that were less restrictive of trade. The Panel reasoned that the government could have employed labeling and product disclosure regulations—which enhance public knowledge of the content of cigarettes²⁵⁹—and a ban on cigarette advertising—which would curb demand for cigarettes.²⁶⁰ These measures would have been less trade restrictive than the import ban utilized by the Thai government. Significantly, the Panel did not consider the relative effectiveness of the import ban as opposed to labelling and advertising regulations.

The balancing test urged here does *not* incorporate a "least trade restrictive" standard for several reasons. First, such a test creates a hierarchy where trade interests take precedence over global environmental interests. This universal privileging of trade interests over ecological interests can, in certain instances, seriously devalue the international environmental interest at stake.²⁶¹ Since certain green trade barriers may serve paramount environmental interests—at minimal cost to the trade regime—it makes little sense to, a priori, privilege one set of interests over the other. A well-designed balancing test will be sensitive to the varying strengths of the various interests in any particular clash between trade and environmental interests.²⁶²

Moreover, as a practical matter, green trade barriers will not survive scrutiny under a legal test that employs such a hierarchy of trade over environmental interests. Creative counsel challenging a green trade barrier should always be able to posit a less trade restrictive alternative than the means employed by a government. As the Tuna/Dolphin and Thailand Cigarette cases illustrate, green trade barriers will systematically fail a least trade restrictive test.

Instead of a *hierarchy*, I urge a *balancing* of the interest in preservation of the global commons with the interests in economic efficiency, sovereignty, and political harmony. I advocate this balancing framework, rather than

258. Thailand Cigarette Panel Report, *supra* note 69, para. 74, at 1137-38 (citation omitted).

259. *Id.* para. 77, at 1138.

260. *Id.* para. 78, at 1138-39.

261. For example, the GATT Secretariat has recently indicated that the trade restrictions found in the Montreal Protocol are not consistent with GATT obligations. See GATT SECRETARIAT, *supra* note 4, at 11-12. This observation, based on a formalistic reading of the GATT, utterly fails to account for the significant environmental interests served by this groundbreaking treaty.

262. Cf. William K. Stevens, *Economists Strive to Find Environment's Bottom Line*, N.Y. TIMES, Sept. 8, 1992, at C1.

rigid rules, because definite rules are inappropriate in this area. Global environmental protection and liberalized trade are both legitimate and important values that states can advance. For this reason, one should not—as the trade regime does—create a hierarchy where one set of interests always trumps the other set. Some trade measures serve more pressing interests than others do, and different trade restrictions impose different costs upon the global trading order. There should be no a priori winner in any particular conflict between the interests in liberalized trade and the interests in environmental protection.

B. *Application to the GATT Dispute*

How does the U.S. tuna embargo fare under the balancing test urged above? It seems clear that this green trade barrier was designed to protect a global commons resource—dolphins in the high seas.²⁶³ However, what is the strength of the interest in conserving these dolphins? International law does not provide a strong justification for this trade barrier. The dolphins protected by the MMPA are not protected by the Convention on International Trade in Endangered Species, and the United Nations Convention on the Law of the Sea (UNCLOS III)²⁶⁴ provides, at best, only weak support.

Under UNCLOS III, “States have the obligation to protect and preserve the marine environment.”²⁶⁵ Article 119 of this treaty authorizes nations generally to protect the living resources of the high seas. More particularly, Article 120 authorizes states to take measures to protect marine mammals in the high seas. By reference, Article 120 permits states to “prohibit, limit or regulate the exploitation of marine mammals” found in the high seas. Thus, at best, it seems that UNCLOS III authorizes, but does not require, limitations or prohibitions on the taking of marine mammals in the high seas.

However, the authority granted by UNCLOS III is not unlimited. First, while it is clear that nations are permitted to protect the resources of the high seas by regulating the conduct of their own citizens,²⁶⁶ no express authorization exists to protect these resources by regulating the conduct of non-nationals. Thus, UNCLOS III provides no express authorization for the United States to attempt to regulate the environmental practices of the Mexican fishing fleet in the high seas.²⁶⁷

263. Although the definition of the ETP for MMPA purposes does cover some waters within the exclusive economic zones of other nations, neither the parties nor the panel addressed this issue.

264. UNCLOS III, *supra* note 178. Although UNCLOS III has not entered into force, this treaty represents customary international law with respect to the principles relating to conservation of the living resources of the high seas.

265. *Id.* art. 192, at 1308.

266. Article 117 provides that states “have the duty to take . . . such measures for their respective nationals as may be necessary for the conservation of the living resources of the high seas.” *Id.* art. 117, at 1291 (emphasis added).

267. Indeed, the express provision of authority to regulate conduct of a state’s own citizens may be read as an implicit rejection of authority to regulate the conduct of non-nationals.

Moreover, under UNCLOS III, States are further obliged to "ensure that conservation measures and their implementation do not discriminate in form or in fact against the fishermen of any State."²⁶⁸ As explained more fully below, it appears that the MMPA in fact discriminates against foreign fleets. Thus, UNCLOS III does not appear to provide significant support to a unilateral U.S. trade measure to govern the conduct of Mexican fishermen.

Can scientific evidence justify the U.S. tuna embargo? Not on the record before the tuna/dolphin panel.²⁶⁹ The United States conceded that there was no substantial evidence demonstrating that dolphin populations found in the Eastern Tropical Pacific—the only part of the ocean covered by the regulations at issue—were threatened with extinction.²⁷⁰ In fact, substantial evidence existed that the number of dolphins in the ETP had remained constant in recent years.²⁷¹ In addition, those species of dolphins that are endangered are not even found inside the areas of the ocean covered by the MMPA regulations.²⁷² These factors suggest that the international environmental interest being protected by the tuna embargo was not especially strong.

Nor did the United States demonstrate that the statute is clearly related to an interest in dolphin conservation. Obviously, at some level the number of dolphin takings will threaten the population. However, there was absolutely no showing before the GATT panel that the number of incidental takings permitted by the U.S. regulations bore any relation to this number. Thus, the United States failed to establish the relation between the trade measure and the interest it sought to protect.

Moreover, on the record before the GATT Panel, there was strong evidence of protectionist elements behind this particular measure. The regulations at issue apply only to tuna caught in one portion of the Pacific ocean.²⁷³ However, these waters are primarily fished by foreign fleets and

268. UNCLOS III, *supra* note 178, art. 119, at 1291.

269. Under GATT dispute resolution rules, the submissions to and the proceedings before a GATT panel are considered confidential. GATT panel reports are also considered confidential; however, the Tuna/Dolphin Panel Report was released by GATT after it had been leaked to the media in various nations. See *GATT Understanding*, *supra* note 37, annex (6)(iv), BISD 26th Supp. at 217-18.

270. The Federal Register notice announcing the final rule regarding the MMPA import restrictions states: "[The National Oceanic and Atmospheric Administration] agrees that no substantial evidence exists which indicates that dolphin populations in the ETP are threatened with extinction." 55 Fed. Reg. 11,921, 11,922 (1990) (proposed Mar. 30, 1990).

271. Research conducted by the Inter-American Tropical Tuna Commission and by the U.S. National Marine Fisheries Service indicates that the dolphin stocks are healthy and sustaining current mortality rates. *Id.*; see also NATIONAL RESEARCH COUNCIL, REDUCING DOLPHIN MORTALITY FROM TUNA FISHING 43-54 (1992) (reviewing numerous studies which reveal no statistically significant trends in last five years with respect to dolphin population in ETP) [hereinafter DOLPHIN MORTALITY].

272. Tuna/Dolphin Panel Report, *supra* note 16, para. 3.44, at 1607.

273. See 50 C.F.R. § 216.3 (1991) (setting out latitudinal and longitudinal boundaries of portion of ETP affected).

the majority of the U.S. tuna fleet fishes in other waters.²⁷⁴ In fact, as of the time of the Panel report, only four U.S. tuna boats fished in this portion of the ocean.²⁷⁵ As a result of the announcement by U.S. tuna canners that they would no longer buy tuna caught in association with dolphins in the ETP, it is likely that the remaining U.S. tuna operators in the ETP will either abandon the area or sell their vessels.²⁷⁶

There is also evidence that the U.S. fleet kills significant numbers of dolphins off the Alaskan coast without operating under special regulations similar to those applied to the ETP.²⁷⁷ Thus, it appears that the regulation is primarily designed to control the behavior of foreign fleets, rather than as an evenhanded regulation of foreign and domestic fleets.

In addition, there is a strong argument that the MMPA discriminates against foreign fleets in another way. Foreign fleets must have an incidental taking rate that is "comparable" to that of the U.S. fleet. However, there is no way for these fleets to know in advance what the U.S. incidental taking rate will be, so they cannot know in advance how to structure their conduct so that they do not run afoul of the relevant regulations.²⁷⁸

Additionally, under the MMPA, there are different formulas for calculating the average rate of incidental takings of marine mammals per set (ARITMM), of U.S. and foreign fleets. Although it is not clear whether this discriminates in favor of or against any particular foreign fleet,²⁷⁹ there is no dispute that foreign and domestic fleets are treated differently. Finally, the MMPA arguably discriminates against foreign fishermen because it imposes a ban on the importation of *all* Mexican tuna, even if a particular

274. In 1989, tuna taken in association with dolphins in the ETP was caught by 123 vessels from nine nations. Twenty-nine of these vessels flew the U.S. flag. DOLPHIN MORTALITY, *supra* note 271, at 24.

275. Tuna/Dolphin Panel Report, *supra* note 16, para. 3.22, at 1604.

276. U.S. INT'L TRADE COMM'N, TUNA: COMPETITIVE CONDITIONS AFFECTING THE U.S. AND EUROPEAN TUNA INDUSTRIES IN DOMESTIC AND FOREIGN MARKETS 2-5 (1990) [hereinafter COMPETITIVE CONDITIONS]. Indeed, by 1991, only two U.S. vessels were using purse seine nets to catch yellowfin in the ETP. 56 Fed. Reg. 50,672 (1991) (proposed Oct. 8, 1991).

277. Tuna/Dolphin Panel Report, *supra* note 16, para. 3.28, at 1606. Although the United States argued before the Panel that tunas associate with dolphins only in the ETP, this assertion is belied by a subsequent government report stating that "this association has been observed—and used by fishermen—in other oceans." DOLPHIN MORTALITY, *supra* note 271, at 38 (listing citations).

278. This is not the argument adopted by the GATT Panel. The Panel relied on the "unpredictability" of the MMPA's quota system to conclude that the embargo was not the least trade restrictive measure available, and hence not "necessary" for purposes of Article XX. Tuna/Dolphin Panel Report, *supra* note 16, para. 5.28, at 1620. The "nondiscrimination" test urged here does not require that the trade barrier be the least trade restrictive measure available. Rather, it demands that foreign fleets not be treated less favorably than the domestic fleet. When the domestic fleet knows—in advance—how to structure its activities to comply with the statute, but it is impossible for the foreign fleet to know—in advance—how to structure its activities so as to comply with the statute, the statute treats foreign fleets less favorably than the domestic fleet.

279. Tuna/Dolphin Panel Report, *supra* note 16, paras. 3.22-23, 3.25, at 1604-05.

Mexican vessel caught its tuna outside the ETP and did so in a manner that did not threaten dolphins.

Turning to the final factor to be evaluated, it appears that the ban on Mexican tuna has a minimal impact on the global trading order. Mexican tuna exports totalled approximately 56 million dollars in 1990.²⁸⁰ However, sales to the United States account for only about 1.5 million dollars per year, about three percent of Mexico's total tuna exports.²⁸¹ Thus, exports to the United States are not a significant portion of the Mexican export market. Similarly, Mexican imports do not constitute a significant portion of the U.S. tuna market. Mexican imports represent, in dollar figures, less than one percent of total U.S. tuna consumption.²⁸² Thus, whether in absolute terms, as a percentage of Mexican exports or as a percentage of U.S. imports, the ban on yellowfin from Mexico does not have a disproportionate effect on the world trading system.²⁸³

Based solely upon the record before the GATT Panel, one is forced to conclude that (1) there was a relatively weak international environmental interest at stake; (2) the United States failed to show the requisite relation between the MMPA's trade measures and the environmental interests they sought to further; and (3) the MMPA's trade restrictions appear to violate the nondiscrimination principle. Therefore, on this record, the tuna embargo should not be permitted.²⁸⁴

280. Mark A. Uhlig, *U.S.-Mexico Pact Faces Hurdle on Tuna Fishing*, N.Y. TIMES, Apr. 4, 1991, at D2.

281. Damian Fraser, *Mexico Condemns US Ban on Its Tuna*, FIN. TIMES (London), Feb. 26, 1991, at 30; David Clark Scott, *Mexico Chafes as US Revisits Ban on Tuna Imports Involving Dolphin*, CHRISTIAN SCI. MONITOR, Feb. 27, 1991, at 6.

282. U.S. tuna consumption totalled \$1.6 billion in 1989. COMPETITIVE CONDITIONS, *supra* note 276, at 1-1.

283. At first glance, the proportionality prong of the balancing test might appear to support perverse results. Would it tend to permit an embargo against a nation that catches and exports relatively few tuna—and presumably kills relatively few dolphins—but cut against a trade barrier directed at a nation that exports a great deal of tuna—and therefore presumably kills a greater number of dolphins? In other words, does the proportionality prong permit trade barriers that will have relatively little effect, and strike barriers designed to counter greater ecological harms?

This paradox is more apparent than real. Under the balancing test urged here, a green trade barrier should be evaluated by reference to its total effect on trade, and not by its effect on just one trading partner. Practically, this means that tribunals applying this test must have access to world trade data. Analytically, the use of *global* trading data parallels the evaluation of the *global* environmental interest at stake, rather than the environmental interest of just one nation or another. Thus, the test urged here seeks a balancing of the global interest in liberalized trade and the global interest in various environmental resources, rather than the more difficult enterprise of balancing the trade interests of one nation or group of nations against the environmental interests of one or several different nations.

284. It appears that the tuna/dolphin dispute between the United States and Mexico may be settled by an international treaty. The United States, Mexico and Venezuela have entered into a tentative agreement to impose a five-year moratorium on purse-seine fishing in the ETP. Michael Parrish, *Pact May Stop Dolphin Deaths in Tuna Fishing*, L.A. TIMES, June 17, 1992, at A1. The House of Representatives recently passed legislation, H.R. 5419, that would implement such an agreement. See *House Approves Bill That Would End Tuna Embargoes Against Mexico, Venezuela*, BNA INT'L ENVTL. DAILY, Sept. 28, 1992.

V. CONCLUSION

This article has attempted to address the argument that permitting green trade barriers would undermine the international trade regime. In particular, I have attempted to articulate a legal test that would both permit and constrain the use of green trade barriers to protect global commons resources. This balancing test undermines the "slippery slope" argument by identifying a set of principles that can be used to distinguish legitimate from illegitimate forms of green trade barriers. The analysis presented above also represents—at least with respect to resources in the global commons—a partial response to the question posed by this Symposium: Are free trade and environmental quality interdependent goals or in irreconcilable conflict?

Unlike many of the other authors contributing to this Symposium, I do not focus on questions of institutional reform. Although these questions are important and perplexing, I believe that an exclusive scholarly focus on these issues at this time is misplaced. Scholars and policymakers are just starting to explore the relationship of the international trade and environmental regimes. The common point of departure is that liberalized trade and environmental protection are appropriate ends to be pursued. The question is how to do so.

The task of first-generation scholarship, like that published in this Symposium, ought to be "to provide an analytical structure for thinking through the issues of law and policy" presented by this relationship.²⁸⁵ Absent an analytical structure to identify the relevant issues—to frame the appropriate questions—it is surely difficult to make informed recommendations regarding institutional reform. Thus, as an analytic matter, the initial task for scholars ought to be to identify the underlying interests and policy preferences in this area. Once this task is completed, it will be possible to suggest institutional reforms designed to further these interests and preferences.

This article seeks to further this preliminary task. Others may disagree with the limiting principles I recommend, or with my application of these principles to the tuna/dolphin dispute. However, such objections would spark a debate that is more sensitive to the underlying interests than the current debate over whether and how to reform the GATT.

I recognize that the balancing test proposed above will please neither the environmental community, which is outraged over the tuna/dolphin decision, nor the trade community, for it may well uphold measures that restrict more trade than the MMPA embargo. However, a balancing test like that proposed here represents a significant advance over the legal tests presently used and institutional reforms others urge, because it attempts to identify explicitly the various interests at stake and to provide a balanced and pragmatic response to these competing interests.

285. Stewart, *supra* note 214, at 1329.