

# The “Preference for Pollution” and other Fallacies, or Why Free Trade Isn’t “Progress”

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## A. Introduction

One of the most striking developments in international organization since Professor Manley O. Hudson published his collection of essays in 1932,<sup>1</sup> has been the dramatic expansion of international trade. That expansion has been accompanied by the emergence of a whole new set of international institutions. Bilateral and multilateral trade agreements have proliferated across the globe, and the World Trade Organization has steadily gained prominence and influence. But does this new breed of international organization—this new international free trade regime—represent “progress”? Another striking new development, largely unforeseen in Hudson’s day, has dramatically altered the way we view international relations and raised concerns about free trade. There is now widespread recognition of the capacity of unrestrained free markets to produce environmental harm and broad consensus about the need for government regulation to prevent such harm. In light of these new understandings, many people worry that unless the domestic environmental standards of the countries engaged in free trade are harmonized, trade will inevitably lead to a weakening of environmental protections around the world. They worry that in the absence of harmonization, when a country with stringent environmental standards engages in free trade with a country with lax standards, the stringent country will be faced with the Hobbesian choice of either lowering its standards or watching its industry go out of business. Yet the international institutions that govern trade relations currently require very little in the way of harmonization of environmental standards among trading partners.

Indeed, the argument that environmental standards must be harmonized among countries involved in free trade in order to ensure a “level playing field”<sup>2</sup> has been prominent in the recent political discourse surrounding globalization and the expansion of international trade. It formed the basis of much of the popular debate about the North American Free Trade Agreement (NAFTA) in the mid-1990s,<sup>3</sup> played a big role in galvanizing the environmental and labor movements that demonstrated against the WTO in Seattle in 1999, and has most recently emerged in the debates over the Central American Free Trade Agreement.<sup>4</sup>

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<sup>1</sup> MANLEY O. HUDSON, PROGRESS IN INTERNATIONAL ORGANIZATION (1932).

<sup>2</sup> See generally Robert Howse & Michael J. Trebilcock, *The Fair Trade-Free Trade Debate: Trade, Labor, and the Environment*, 16 Int’l Rev. L. & Econ. 61, 74 (1996) (discussing the “level playing field” argument).

<sup>3</sup> See McCaffrey in this volume.

<sup>4</sup> See, e.g., Statement of Senator Russ Feingold on Senate Floor, July 30, 2005, available at: <http://www.senate.gov/~feingold/statements/05/06/2005630A45.html>.

Given how thoroughly contemporary these harmonization debates seem from where we now stand, it is striking to read Professor Hudson's description of the ambitious international harmonization efforts that were already taking place a century ago with respect to labor standards. In *Progress in International Organization*, Professor Hudson devotes an entire chapter to describing the early efforts of the International Labor Organization to adopt international standards for the protection of workers.<sup>5</sup> As early as 1906, the Berne Convention prohibited the employment of women at night and the manufacture of matches using white phosphorous, which caused a disease called "phossy jaw" among workers.<sup>6</sup> These were labor standards, to be sure, but they were also environmental standards—or more specifically, occupational safety and health standards—though no one would have used those terms then.

For Professor Hudson, these early efforts at harmonization clearly represented "progress." In his view, there were two reasons to harmonize international standards in a world of free trade. One was humanitarian: the notion that there are certain absolute ethical norms that we simply do not want to abridge by, for example, trading for goods produced with slave labor.<sup>7</sup> The other was economic—the need to ensure a level playing field.<sup>8</sup>

Back in 1932, these two arguments made the need for harmonization seem almost self-evident to Professor Hudson. But seven decades later, we are far from consensus on these issues. While humanitarian norms are accepted as a legitimate basis for harmonization in extreme cases<sup>9</sup>—to prohibit forced labor or child labor, for example—the "level playing field" justification for harmonization has come to be viewed with considerable skepticism. While it still retains some traction in political discourse, among academic economists the level-playing-field argument has been widely rejected.<sup>10</sup> In their view, the whole point of free trade is to exploit inherent *differences* among countries. Differing environmental standards simply reflect the differing preferences for environmental protection among citizens of different countries and, like differences in natural resource endowments, can be exploited *via* free trade in order to increase overall social welfare.<sup>11</sup>

This economic point of view currently dominates international trade policy, and has been institutionalized in international trade treaties and the policies of the World Trade Organization (WTO).<sup>12</sup> Indeed, countries that attempt to prevent free trade from undermining environmental standards by, say, imposing countervailing duties on goods imported from countries with lax standards, run the risk of WTO sanction.<sup>13</sup> And while

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<sup>5</sup> See HUDSON, *supra* note 1, at 46-55.

<sup>6</sup> *Id.* at 46, 50.

<sup>7</sup> *Id.* at 50.

<sup>8</sup> *Id.* ("Some effort to equalize labor standards is therefore not merely humanitarian—it is also based on a sound economy.")

<sup>9</sup> See *infra* note 23.

<sup>10</sup> See, e.g., Jagdish Bhagwati & T.N. Srinivasan, *Trade and the Environment: Does Environmental Diversity Detract from the Case for Free Trade?* in 1 FAIR TRADE AND HARMONIZATION: PREREQUISITES FOR FREE TRADE? 159, 168-69 (Jagdish Bhagwati & Robert E. Hudec, eds. 1996).

<sup>11</sup> This argument dovetails neatly with environmental sovereignty arguments, which contend that countries and international organizations should not be able to interfere in the entirely domestic concerns of other countries with respect to setting their own environmental standards. See Andrew L. Strauss, *From Gattzilla to the Green Giant: Winning the Environmental Battle for the Soul of the World Trade Organization*, 19 U.Penn. J. Intl. Econ. L. 769, 783-84 (1998); David W. Leebron, *Lying Down with Procrustes: An Analysis of Harmonization Claims*, in 1 FAIR TRADE AND HARMONIZATION: PREREQUISITES FOR FREE TRADE? 41, 71-78 (Jagdish Bhagwati & Robert E. Hudec, eds. 1996).

<sup>12</sup> See Jeffrey L. Dunoff, *Rethinking International Trade*, 19 U. Pa. J. Int'l Econ. L. 347, 349-51 (1998).

<sup>13</sup> See Robert E. Hudec, *Differences in National Environmental Standards: The Level-Playing-Field Dimension*, 5 Minn. J. Global Trade 1, 14-18 (1996). WTO rules allow member countries to impose countervailing duties on subsidized goods, but the concept of "subsidy" has been narrowly defined. In order to be countervailable, subsidies must be "specific to an enterprise or industry or group of enterprises or industries." See Uruguay Round Agreement on Subsidies and Countervailing Measures, Art. 2.1 (1994), available at [www.wto.org/English/docs\\_e/legal\\_e/24-scm\\_01\\_e.htm](http://www.wto.org/English/docs_e/legal_e/24-scm_01_e.htm). Thus, countervailing duties are not permissible where the subsidy takes the form of some "generally applicable" benefit, like weak or under-enforced environmental laws. See Hudec, *supra* at 18.

political pressure from environmental groups did result in the execution of an environmental side agreement to NAFTA, intended to foster cooperation between the three countries with respect to environmental policy, it stopped short of requiring harmonization. In fact, the side agreement explicitly “recognize[es] the right of each Party to establish its own levels of domestic environmental protection.”<sup>14</sup>

To be sure, the economic worldview has been persistently opposed by those who argue for a level playing field under the banner of “fair trade.”<sup>15</sup> But, for the most part, the economists and the “fair traders” have talked past each other in an all too familiar pattern, with the former talking economic efficiency and the latter protesting “but it’s not fair!” In my view, the economists are wrong in rejecting the level playing field argument, but shouting about fairness is not the best way to show it. Fairness arguments rarely carry much weight with economists, who tend to see fairness as beside the point and prefer to focus on expanding the pie, with the hope that more “pie” will make the elusive goal of “fairness” more politically attainable. Furthermore, in this context they argue with considerable persuasiveness that when it comes to free trade, it may be difficult, if not impossible to define fairness or “levelness.”<sup>16</sup>

If we put aside the fairness issue, however, and examine the economists’ argument on its own terms, it collapses of its own weight. While it may be true that free trade without harmonization will increase social welfare in the ideal world of economic theory, there is little reason to think that it will do so in the real world. In particular, the economists’ claim depends on the untenable assumption that the countries involved in free trade all set and enforce environmental standards at economically optimal—or efficient—levels.<sup>17</sup> If we instead assume that environmental standards in one or more countries either are set too low to begin with or are under-enforced, the economists’ claim—that free trade increases social welfare—no longer holds. Yet, as I will argue below, the second assumption is far more likely to reflect actual conditions than the first.

Rather than organizing trade policy on such unrealistic assumptions, we should base it on what we know about how markets and politics actually operate in the real world. Basic tenets of political and economic theory make clear that political and market dynamics tend systematically to skew environmental standard-setting and enforcement to sub-optimal<sup>18</sup> levels. But where that is true, I argue, free trade between countries with differing standards is likely to decrease overall social welfare. Therefore, in order to avoid the potential negative welfare effects associated with free trade in a world of imperfect domestic standards, upward harmonization of environmental standards should be a pre-requisite to free trade.

Such an approach will not guarantee precisely optimal standards in each country. Indeed, to the extent that the

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<sup>14</sup> North American Agreement on Environmental Cooperation, 32 I.L.M. 1480, Art. 3 (1993). See Jeffrey Atik, *Environmental Standards within NAFTA: Difference by Design and the Retreat from Harmonization*, 3 Ind. J. Global Legal Stud. 8 (1995).

<sup>15</sup> See, e.g., Robert F. Housman, *A Kantian Approach to Trade and the Environment*, 49 Wash. & Lee L. Rev. 1373 (1992); Strauss, *supra* note 11; Hillary F. French, *Costly Tradeoffs: Reconciling Trade and the Environment*, Worldwatch Paper 113 (March 1993).

<sup>16</sup> The playing field of international trade will never be completely “level.” No one would argue that natural resources should be redistributed so that at the outset of free trade each country begins with an equal allotment of forests, farmland, rainfall, and minerals. See Hudec, *supra* note 13, at 21-22. Accordingly, to argue for a level playing field on fairness grounds, one needs to be able to distinguish these kinds of advantages in natural resource endowments from advantages conferred by government regulation. Such a distinction is difficult to draw, since the economic advantages and disadvantages of industry are so wrapped up with government regulation and policy in ways that are difficult, if not impossible, to untangle. How should we categorize, for example, a state’s tax policy, as well as its investments in infrastructure, health care, or education? See *id.* at 10-12; Richard B. Stewart, *International Trade and Environment: Lessons From the Federal Experience*, 49 Wash. & Lee L. Rev. 1329, 1356 (1992).

<sup>17</sup> This is only one of a number of unrealistic assumptions on which the economists’ claim rests. For a survey of other longstanding critiques of the economic theory of free trade, see Frank Ackerman, *An Offer You Can’t Refuse: Free Trade, Globalization, and the Search for Alternatives*, in *THE FLAWED FOUNDATIONS OF GENERAL EQUILIBRIUM: CRITICAL ESSAYS ON ECONOMIC THEORY* 149 (Frank Ackerman & Alejandro Nadal, eds. 2004).

<sup>18</sup> By “optimal” I mean “efficient” in an economic sense. See *infra* notes 34 to 39 and accompanying text.

theoretically optimal standard varies from country to country, harmonization must necessarily result in some deviance from optimality in at least some instances.<sup>19</sup> But a perfect fit between actual standards and theoretic optima is not achievable in any case. What international organization based on upward harmonization can do in an imperfect world is increase the likelihood that each country's standards move closer to the elusive goal of optimality and decrease the likelihood that free trade will produce perverse, welfare-diminishing effects.

This chapter proceeds in five parts. Part B. narrows the issue, distinguishing the level-playing-field argument from other common arguments in favor of the harmonization of environmental standards. Part C. describes the economists' response to the level-playing-field argument—that, even where environmental standards differ between trading partners, free trade will increase overall social welfare. Part D. demonstrates that this claim depends on two key assumptions—that standards in both countries are optimal, and that standards remain static after free trade commences. If we instead assume sub-optimal standards and/or that the country with higher standards responds to free trade by lowering its standards, free trade will likely decrease social welfare. Part E. shows that the latter set of assumptions are far more realistic, both as a matter of empirical evidence and of political and economic theory. Finally, Part F. concludes that the upward harmonization of environmental standards should be a pre-requisite to free trade.

## **B. The Arguments for Harmonization**

This chapter addresses only a narrow slice of the broad range of issues that have come to be identified with the “trade and environment debate.” First, my analysis is confined to environmental “process standards”—those standards that govern the process by which a product is made, by, for example, limiting the amount of pollution a manufacturing plant was allowed to emit when the good being traded was produced. Environmental “product standards,” on the other hand, which relate to the characteristics of the product itself—requiring, for example, that beef sold within a country's borders to be free of hormones—are outside the scope of this discussion.<sup>20</sup>

Second, by focusing on the level-playing-field argument, I am leaving aside a whole set of other arguments that can be made for the international harmonization of environmental process standards. As Professor Hudson recognized a century ago, humanitarian or ethical concerns may motivate citizens of one country to want to ensure that the processes by which goods they purchase are produced comply with certain minimum ethical norms<sup>21</sup>—that they are not, for example, produced by child labor, or by killing dolphins or sea turtles. Additionally, as our understanding of ecological processes has increased over the past century, we have come to recognize the extent to which activities within one nation can directly affect people and natural resources in other countries through spillover effects and impacts on the global commons. In such instances, it may be reasonable for those countries affected by such activities to insist on harmonization in order to protect their own citizens.<sup>22</sup>

The ethical argument has generated a fair degree of consensus for the extreme cases—like child labor or forced labor<sup>23</sup>—but its resonance in the environmental context is more ambiguous. Spillovers, product standards, and

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<sup>19</sup> Even putting aside the problematic notion that preferences for environmental quality may vary from country to country, *see infra* note 77, optimal standards may vary from country to country because of differences in the assimilative capacities of the natural environment, *see infra* note 33.

<sup>20</sup> For a discussion of some of the issues raised by product standards, see John J. Barcelo III, *Product Standards to Protect the Local Environment—The GATT and the Uruguay Round Sanitary and Phytosanitary Agreement*, 27 Cornell Int'l L. J. 755 (1994).

<sup>21</sup> See HUDSON, *supra* note 5, at 49-50.

<sup>22</sup> See Steve Charnovitz, *Environmental Harmonization and Trade Policy*, in TRADE AND THE ENVIRONMENT: LAW, ECONOMICS, AND POLICY 267 (Durwood Zaelke, Paul Orbuch, & Robert Housman, eds. 1993).

<sup>23</sup> The General Agreement on Tariffs and Trade (GATT) creates an exception to free trade rules for bans on the importation of products

global commons concerns are clearly implicated by a broad range of environmental issues, and provide a relatively uncontroversial justification for harmonization, at least where the external effects are clear.<sup>24</sup> But I am concerned here with the difficult case—that is, with process standards regulating environmental harms that either cause no spillover or global commons effects, or where such effects are difficult to prove.

The level-playing-field argument is closely related to the argument that harmonization is necessary to avoid a “race to the bottom” among countries involved in free trade.<sup>25</sup> Both address the incentives faced by government officials to lower their own environmental standards below optimal levels in order to protect domestic industries. The extensive literature on the “race to the bottom,” however, has tended to focus on the movement of capital among countries.<sup>26</sup> In this scenario, capital is assumed to move to the country with the lowest standards. This triggers a “race to the bottom” in which each country progressively lowers its standards below those of its trading partners in order to attract industry.

With its focus on capital mobility, the race-to-the-bottom literature has tended to get bogged down in the empirical question of whether capital actually does move in response to differing environmental standards. (A number of studies indicate that it does not.<sup>27</sup>) The level-playing-field argument, however, contends that, even if capital does not move from one country to another, free trade between countries with differing environmental standards is bad because it will force the country with more stringent standards to either watch its industry go out of business or lower its own standards. Accordingly, free trade will not lead to “progress” unless the international organizations governing trade either require upward harmonization of environmental standards as a prerequisite to free trade or allow countries with more stringent standards to compensate for the extra costs those standards impose on their domestic industries by imposing countervailing duties (“eco-duties”) on goods imported from countries with less stringent standards.<sup>28</sup> This is the argument that I focus on.

### **C. The Economists’ Response: Why Free Trade without Harmonization Increases Social Welfare**

Standard welfare economics is frequently invoked to reject the level-playing-field argument on the grounds set forth below. As a short-hand, I will refer to this as “the economists’ argument,” though, of course, it does not necessarily reflect the view of all economists or even all of those who subscribe to welfare economics as a useful

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produced by prison labor. General Agreement on Tariffs and Trade, Oct. 30, 1947, art. XX(e), 61 Stat. 5, A3, T.I.A.S. 1700, 55 U.N.R.S. 187, available at <http://www.wto.org>.

<sup>24</sup> See DANIEL C. ESTY, GREENING THE GATT: TRADE, ENVIRONMENT, AND THE FUTURE 157 (1994); Richard B. Stewart, *Environmental Regulation and International Competitiveness*, 102 Yale L. J. 2039, 2061 (1993).

<sup>25</sup> Michael J. Trebilcock & Robert Howse, *Trade Policy and Labor Standards*, 14 Minn. J. Global Trade 261, 270 (2005) (discussing the relationship between the two standards).

<sup>26</sup> See, e.g., Richard L. Revesz, *Rehabilitating Interstate Competition: Rethinking the “Race to the Bottom” Rationale for Federal Environmental Regulation*, 67 N.Y.U. L. Rev. 1210 (1992); Daniel C. Esty, *Revitalizing Environmental Federalism*, 95 Mich. L. Rev. 570 (1996); Kirsten H. Engel & Scott R. Saleska, *Facts are Stubborn Things: An Empirical Reality Check in the Theoretical Debate Over the Race-to-the-Bottom in State Environmental Standard-Setting*, 8 CORNELL J. L. & PUB. POL’Y 55, 64 (1998).

<sup>27</sup> J.D. Friedman, A. Gerlowski, and J. Silberman, *What Attracts Foreign Multinational Corporations? Evidence from Branch Plant Locations in the United States*, 32 J. Reg. Science 403 (1992); A. Levinson, *Environmental Regulations and Manufacturers’ Location Choices: Evidence from the Census of Manufacturers*, 62 J. Pub. Economics 5 (1996); V.D. McConnell & R.M. Schwab, *The Impact of Environmental Regulation on Industry Location Decisions: The Motor Vehicle Industry*, 66 Land Economics 67 (1991).

<sup>28</sup> A number of bills have been introduced in the U.S. Congress over the years that would have imposed such “eco-duties” on goods imported from countries with less stringent environmental standards. See Robert E. Hudec, *Differences in National Environmental Standards: The Level-Playing-Field Dimension*, 5 Minn. J. Global Trade 1, 3-6 (1996).

explanatory or normative tool.<sup>29</sup>

First, from the point of view of welfare economics, the notion that there should be a “level playing field” is entirely incoherent.<sup>30</sup> There is no such thing. In fact, if there were such a thing, free trade would be pointless. The whole point of international trade is to exploit differences between countries. If Country A has fertile soil, but its fishermen have to sail far out to sea at great expense and danger to catch any fish, and Country B has lousy soil but a productive near-shore fishery, then free trade between the two will (so to speak) lift all boats. To be sure, agricultural products from Country A will undersell those in Country B and thus put Country B’s farmers out of business. But, the labor of Country B’s farmers can be better put to use fishing in their productive fishing grounds and contributing to the take-over of the market in Country A for fish.<sup>31</sup> So free trade will ultimately create a market in which Country A produces all the agricultural goods and Country B produces all the fish, and consumers in both countries pay a lot less money to eat. Because both agricultural goods and fish are being produced more efficiently under a free trade regime, social welfare is increased, both within each country and in the aggregate.

It is these differences in “comparative advantage” between countries then, that drive the welfare enhancing engine of free trade.<sup>32</sup> And, for the economists, differing levels of environmental regulation are no different from differing natural resource endowments. They simply reflect differing *preferences* of citizens in different countries for environmental protection.<sup>33</sup>

It is important at this point to understand how economists conceptualize environmental regulation. First, welfare economics teaches that a perfectly functioning free market will produce an “efficient” (welfare maximizing) result.<sup>34</sup> Intervention in the free market, in the form of environmental regulation is therefore only necessary where some market failure prevents this efficient outcome—where, for example, pollution produces externalities. In such instances, economists argue, government should calibrate regulation to mimic the economically efficient outcome that a (hypothetical) perfectly functioning market (one without externalities) would have produced. This is done by means of a cost-benefit test. A pollution control regulation, for example, is efficient if it limits pollution to the level at which the net social benefits of pollution control (overall benefits minus overall costs) are maximized.<sup>35</sup> Costs and benefits are measured in terms of citizens’ preferences—that is,

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<sup>29</sup> See, e.g., Ackerman, *supra* note 17; Herman Daly, *Problems with Free Trade: Neoclassical and Steady-State Perspectives* in TRADE AND THE ENVIRONMENT: LAW, ECONOMICS, AND POLICY 147 (Durwood Zaelke, et al., eds. 1993)

<sup>30</sup> See Hudec, *supra* note 13, at 10-12; Leebron, *supra* note 11, at 60-61; Robert Howse & Michael J. Trebilcock, *The Fair Trade-Free Trade Debate: Trade, Labor, and the Environment*, 16 Int’l Rev. L. & Econ. 61, 74-75.

<sup>31</sup> One of the assumptions incorporated into the economists’ model is that involuntary unemployment is impossible. That is, it assumes that all of the farmers in Country A will be instantaneously re-employed in the fishing industry. This assumption has been extensively critiqued as unrealistic. See *infra* note and accompanying text.

<sup>32</sup> The term “comparative advantage” was originally coined in the nineteenth century by David Ricardo to describe a far more subtle and specific phenomenon—the fact that it may be beneficial for two countries to trade even where one can produce all goods more cheaply than the other, as long as there are differences in the *ratio* between the production costs of different goods in each country. See Alan O. Sykes, *Comparative Advantage and the Normative Economics of International Trade Policy*, 1 J. Int’l Econ. L. 49, 49-56 (1998). Ricardo used the term “absolute advantage” to denote the simpler concept described above of a country’s ability to exploit a superior endowment through trade. Nonetheless, in recent decades, use of the term “comparative advantage” in the looser sense to mean simply any exploitation of a country’s superior capacities through trade has become widespread in academic literature, and I follow that parlance here.

<sup>33</sup> See Bhagwati, *supra* note 10, at 168; Leebron, *supra* note 11, at 67-71, 75-78. Where standards are based on discharge levels rather than ambient quality, differing environmental standards among countries may also reflect in part different assimilative capacities of the natural environment. Thus, a country with high winds or big fast-flowing rivers will be able to assimilate larger amounts of pollution than a country with stagnant air or small bodies of water. See Stewart, *supra* note 24, at 2052-53. Countries in which existing pollution levels are relatively low may also have more capacity to absorb additional pollution.

<sup>34</sup> See PAUL A. SAMUELSON & WILLIAM D. NORDHAUS, *ECONOMICS* 158 (17<sup>th</sup> ed. 2001).

<sup>35</sup> See TOM TEITENBERG, *ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS* 73-74 (3d ed. 1992). The point at which net benefits are maximized is also the point at which marginal costs equal marginal benefits. See *id.*

what they would have been willing to pay in a perfect free market for the benefits of pollution control on the one hand and the costs of pollution control on the other.<sup>36</sup>

For economists, then, the optimal or efficient (welfare maximizing)<sup>37</sup> level of pollution control in a particular country is tied to the preferences of that country's citizens.<sup>38</sup> In some countries (usually rich countries) the citizens' preferences, or willingness to pay, for environmental protection are high. In those countries the efficient level of environmental regulation as determined by a cost-benefit test is relatively stringent because the benefits of pollution control—measured by citizen willingness to pay—are relatively large and therefore outweigh the costs even at relatively stringent (and costly) levels of control. In other countries (usually poor countries) the citizens' willingness to pay for environmental protection is low. In those countries the efficient level of environmental regulation as determined by a cost-benefit test is relatively lax. In the economists' view, it is not that the citizens in the countries with lax environmental regulation are worse off. It is just that they have less of a *preference* for environmental protection.<sup>39</sup> They like vanilla ice cream better than chocolate.

Therefore, the argument goes, just as it is okay for the fishermen in Country A and the farmers in Country B to go out of business, if lax environmental regulation in one country allows its manufacturers to undersell and put out of business manufacturers that are subject to more stringent regulations in another country, that's okay too. In fact, that is the economically efficient result—just as it was for Country A and Country B.

In order to isolate the welfare-enhancing effects that economists attribute to differing environmental standards between trading partners, imagine a very simple two-country, two-product model. Two countries, Stringentland and Laxland, each have two industries: one that is highly polluting—cement—and one that is not—computer software. Both countries are exactly identical with respect to factor endowments, assimilative capacities, social conditions, and all other relevant conditions, except that Stringentland imposes a relatively stringent emissions limit on air pollution from cement factories and Laxland imposes a relatively lenient emissions limit on such pollution. The effects of this pollution in each country are entirely domestic. That is, there are no spillover or global-commons effects.

The economists contend that when free trade is opened between these countries, efficiency gains will ensue. Citizens of Stringentland will be better off trading some of their software for cement from Laxland because they will be able to get more Laxlander cement per unit of software than Stringentlander cement. The producers of cement in Laxland will also be better off with this trading arrangement, because they will have opened up a new lucrative market—Stringentlanders are willing to pay more software per ton of cement than are Laxlanders. Thus, under free trade, Laxland's cement industry will expand while its software industry shrinks, Stringentland's cement industry will shrink while its software industry expands, and overall social welfare will

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<sup>36</sup> Cost-benefit analysis raises a host of intractable theoretical difficulties, which have been thoroughly elaborated in a rich and extensive literature. See e.g., FRANK ACKERMAN & LISA HEINZERLING, PRICELESS: ON KNOWING THE PRICE OF EVERYTHING AND THE VALUE OF NOTHING (2004); MARK SAGOFF, THE ECONOMY OF THE EARTH (1988); Thomas O. McGarity, *A Cost-Benefit State*, 50 ADMIN. L. REV. 7 (1998); Matthew D. Adler & Eric A. Posner, *Rethinking Cost-Benefit Analysis*, 109 YALE L. J. 165 (1999). For present purposes, I will set these critiques aside and assume that—in theory at least—cost-benefit analysis can provide a coherent standard for conceptualizing the idea of optimal environmental regulation. This is not to say that in practice, cost-benefit analysis can ever be expected to deliver meaningful results. As I have elaborated elsewhere, and as will become relevant in Parts E. and F. below, any attempt to implement cost-benefit analysis in any particular set of circumstances will inevitably yield results that are hopelessly indeterminate. See Amy Sinden, *In Defense of Absolutes: Combating the Politics of Power in Environmental Law*, 90 IOWA L. REV. 1405, 1425-30 (2005); Amy Sinden, *Cass Sunstein's Cost-Benefit Lite: Economics for Liberals*, 29 COLUMB. J. ENVL. L. 191 (2004).

<sup>37</sup> I am using the terms "optimal" and "efficient" interchangeably.

<sup>38</sup> The country is usually assumed to be the appropriate geographic unit within which to measure social welfare, although welfare economics offers no coherent theoretical justification for that approach. See Sykes, *supra* note 32, at 59.

<sup>39</sup> Bhagwati, *supra* note 10, at 168; Richard L. Revesz, *The Race to the Bottom and Federal Environmental Regulation: A Response to Critics*, 82 Minn. L. Rev. 535, 536 (1997); Stewart, *supra* note 24, at 2052.

increase within each country as well as globally.<sup>40</sup>

While shareholders and employees of the cement industry in Stringentland will no doubt suffer welfare losses after free trade, the economists contend that those losses will be outweighed by the welfare gains to the shareholders and employees of Stringentland's software industry, added to the welfare gains to cement consumers in Stringentland, who now get to buy cheaper cement. Similarly, in Laxland, welfare losses to the software industry will be offset by gains to the cement industry and the consumers of software. Moreover, pollution will be shifted from Stringentland to Laxland, where it will impose lower social costs because the citizens of Laxland, who have less of a "preference" for a clean environment, suffer less harm from pollution.

#### **D. The House of Cards, or How the Economists' Model Teeters Atop the Assumptions of Optimal, Static Standards**

The economists' model assumes that the environmental standards in each country are efficient—that is, that they reflect the results that would be reached by a perfect cost-benefit analysis that accurately accounted for the preferences of that country's citizens.<sup>41</sup> Indeed, as this section will show, their claim that free trade enhances efficiency depends on that assumption. If we assume instead that environmental regulations in Laxland are suboptimal, the economists' efficiency claim no longer holds.<sup>42</sup> Yet, as the next section will explore, these are unrealistic assumptions.

Imagine, for example, a Laxland in which a few oligarchs control the political system such that environmental standards for cement manufacturers are set at a level clearly below that which would result from a cost-benefit test based on the preferences of its citizens. Before free trade, imagine that the cement industry in Laxland produces one million tons of cement per year and the aggregate pollution from cement plants in Laxland causes 100 people to die each year from respiratory diseases, but that the benefits of cement production to consumers and the owners of the cement industry are not nearly enough to compensate for that loss of life under a cost-benefit test. Because opening the borders to free trade with a country with more stringent standards would have the effect of increasing the size of the cement industry in Laxland, it is easy to see that free trade would also have a negative welfare effect in Laxland. If producing a million tons of cement results in a net decrease in social welfare, then producing say two million tons of cement after free trade would result in even more deaths and an even larger decrease in social welfare.<sup>43</sup>

This negative welfare impact in Laxland is not something the economists take into account in their models, since they assume efficient standards and therefore that increased cement production will have a positive rather than a negative impact on Laxlander welfare.<sup>44</sup> And while it is possible that the gains from trade will be large enough to compensate for the increased environmental harm in Laxland, this will not necessarily be so. In any event, it is unlikely that compensating gains will accrue within Laxland itself. Since the benefits of increased cement production to owners and employees of Laxland's cement industry are by definition insufficient to compensate for the increased environmental harm, cheaper software prices would have to provide sufficient benefit to Laxland's consumers to compensate for the additional deaths caused by the expanded cement industry.

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<sup>40</sup> See Sykes, *supra* note 32, at 63-64; Bhagwati, *supra* note 10, at 166.

<sup>41</sup> See *id.* at 167-68.

<sup>42</sup> See Daniel A. Farber, *Environmental Federalism in a Global Economy*, 83 Va. L. Rev. 1283, 1303-06 (1997).

<sup>43</sup> See Ackerman, *supra* note 17, at 159.

<sup>44</sup> See *id.* (assuming efficient domestic standards in each country). See also Ackerman, *supra* note , at 159 (noting this deficiency in the standard economic model)



Alternatively, sufficient compensating benefits might conceivably accrue to cement consumers and owners and employees of the software industry in Stringentland to offset the environmental harms in Laxland and produce an aggregate welfare gain. But under such a scenario, the economists' claim of welfare gains to each country individually would fail. Instead, free trade would be producing welfare gains for Stringentland at the expense of Laxland's welfare loss, raising significant equity concerns. A primary justification for free trade is that poor countries benefit as well as rich countries. But if wealthy, developed countries generally have more stringent environmental standards and developing countries have less stringent standards, free trade in such a scenario would end up effecting a transfer of welfare from the poor to the rich.

What if the environmental standards for cement manufacturers also begin at sub-optimal levels in Stringentland? Before free trade, the cement industry produces a social welfare loss in Stringentland. To the extent that free trade results in the elimination of Stringentland's cement industry, that welfare loss would also be eliminated, producing a welfare gain for the citizens of Stringentland. That welfare gain (in conjunction with any economic gains from trade) could be large enough to offset the welfare loss to Laxland's citizens caused by free trade, thus producing an aggregate welfare gain, but, as above, the economists' claim that free trade benefits each country individually would fail and a redistribution of welfare to wealthy countries as the expense of poor countries would result.

Moreover, whether Stringentland begins at optimal or suboptimal standards, there is reason to believe that it may well react to free trade with Laxland by lowering its standards rather than losing its cement industry to Laxland. If Stringentland were to lower its standards to Laxland's level, comparative advantage would be eliminated, and there would be no welfare gains from trade. At the same time, however, this loosening of environmental standards, however, would lead to a welfare loss in Stringentland. Because there would be no offsetting welfare gains from trade in either country, social welfare would decrease both within Stringentland itself and in the aggregate.

Thus, if we assume that environmental standards in Laxland begin at suboptimal levels, the economists' claim of welfare gains from trade no longer holds.<sup>45</sup> Under such circumstances, if we assume that each country retains its standards before and after free trade, free trade may well result in welfare losses within Laxland as well as in the aggregate. Even if Laxland's losses are offset by welfare gains in Stringentland, such a scenario raises significant equity concerns, involving essentially a transfer of welfare from the poor to the rich. Alternatively, Stringentland may react to free trade by lowering its standards, resulting in a welfare loss both within Stringentland and in the aggregate. As the next section explores, this set of alternative assumptions—suboptimal standards in Laxland and a loosening of standards in Stringentland—are far more likely to accurately reflect real-world conditions than those employed by the economists.

## **E. Questioning the Assumptions: The Reality of Sub-Optimal Standards and Downward Pressure**

The above analysis has shown that the economists' efficiency claim depends on the assumptions that standards in both countries are both optimal and static and that if we assume instead either sub-optimal standards in Laxland or that Stringentland responds to free trade by lowering its standards, free trade is likely to produce a negative welfare impact in one or both countries. This part will argue that these alternative assumptions are far more likely to reflect actual conditions and therefore provide a far more useful model.

### *I. Sub-Optimal Standards*

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<sup>45</sup> See Daly, *supra* note 29, at 148-49.

First, as a purely empirical matter, it is clearly problematic to assume that all of the nations involved in free trade are governed by well-functioning democratic political systems that implement policies even roughly reflecting the preferences of their citizens.<sup>46</sup> Indeed, a quick perusal of the WTO's membership list suffices to demonstrate how untenable such an assumption is. Current WTO members include a number of non-democratic states—for example, Bahrain, China, Cuba, Jordan, Kuwait, and Zimbabwe.<sup>47</sup> Furthermore, in many post-communist and developing countries, the superficial trappings of democracy—what Susan Marks has called “low intensity democracy”—may actually mask the continuing dominance of pre-existing authoritarian power structures.<sup>48</sup>

Second, even putting aside the obvious problem of non-democratic or weakly democratic governments, there are a whole host of problems with assuming, even as a theoretical matter, that a well-functioning democracy will produce optimal environmental standards. We can begin with the problem of market failure. Because environmental harms are usually externalized, an unregulated free market will produce levels of environmental degradation that are higher than optimal.<sup>49</sup> So, in order to assume an optimal level of pollution control in a free market economy, economists must assume a regulatory scheme that successfully internalizes the externalities.<sup>50</sup> But such regulation is exceedingly difficult for any government to implement.

Even if we assume that a reasonable approximation of an optimal, welfare-maximizing environmental policy is possible,<sup>51</sup> public choice theory has cast considerable doubt on the capacity of democratic institutions to produce such outcomes.<sup>52</sup> Indeed, there is plenty of reason to believe that political failure occurs fairly regularly with respect to environmental regulation, even in reasonably well-functioning democracies.<sup>53</sup> It has long been recognized that in virtually all environmental disputes the pressure brought to bear on government decision-makers is asymmetrical, weighted against environmental protection.<sup>54</sup> This is because the interests that favor environmental protection tend to be broadly shared among a large group of individuals, non-economic in character, and often of relatively minor consequence to each member of the group.<sup>55</sup> Accordingly, those who hold such interests face formidable collective action problems in trying to organize to form pressure groups. On the other side, the interests that stand to lose from environmental regulation tend to be held by a much smaller set of corporate rather than individual actors, tend to be economic in character, and tend to have the capacity to impact each actor to a far larger degree.<sup>56</sup> The interests that oppose environmental regulation therefore face fewer collective action barriers to effective organization, have access to substantial corporate wealth, and are able to take advantage of the special access to government decision makers that industry often enjoys.<sup>57</sup>

This power disparity tends to distort government decision-making toward less stringent than optimal regulation. This distortion is exacerbated by other political dynamics as well. First, politicians and public

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<sup>46</sup> See Stewart, *supra* note 24, at 2054.

<sup>47</sup> See U.S. Department of State, *2005 Country Reports on Human Rights Practices*, available at <http://www.state.gov/g/drl/rls/hrrpt/2005/>.

<sup>48</sup> See SUSAN MARKS, *THE RIDDLE OF ALL CONSTITUTIONS: INTERNATIONAL LAW, DEMOCRACY, AND THE CRITIQUE OF IDEOLOGY* 50-75 (2000).

<sup>49</sup> See TOM TIETENBERG, *ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS* 51-54 (1992).

<sup>50</sup> See Bhagwati, *supra* note 10, at 166 (assuming internalization through optimal pollution taxes).

<sup>51</sup> Many would view this in itself a problematic assumption. See *supra* note 36.

<sup>52</sup> See generally, MAXWELL L. STEARNS, *PUBLIC CHOICE AND PUBLIC LAW: READINGS AND COMMENTARY* (1997); See also Daniel A. Farber & Philip P. Frickey, *The Jurisprudence of Public Choice*, 65 *Tex. L. Rev.* 873, 907 (1987) (counseling caution in relying on “[t]he easy generalizations and reductionist models found in the early [public choice] literature [, which] have not fared well empirically”).

<sup>53</sup> Esty, *supra* note 26, at 633; Leebron, *supra* note 11, at 72.

<sup>54</sup> See Richard B. Stewart, *Pyramids of Sacrifice: Problems of Federalism in Mandating State Implementation of National Environmental Policy*, 86 *YALE L. J.* 1196, 1213 (1977).

<sup>55</sup> See *id.*

<sup>56</sup> See *id.*

<sup>57</sup> See *id.*; Sinden, *supra* note 36, at 1436-39; Shi-Lng Hsu, *Fairness Versus Efficiency in Environmental Law*, 31 *ECOL. L. Q.* 303, 356 (2004); See Esty, *supra* note 26, at 597-98.

officials tend to respond more readily to immediate harms—like the economic harms that tend to be caused by environmental regulation—than to the benefits of environmental regulation, which often do not accrue until far off in the future.<sup>58</sup> Second, the benefits of environmental regulation often accrue to future generations, who are not represented in the political process.<sup>59</sup> Third, the “tragedy of the regulatory commons” may prevent well-meaning regulators with overlapping or mismatched regulatory jurisdictions from producing adequate levels of regulation.<sup>60</sup> All these dynamics tend to distort government decision making toward less-stringent-than-optimal standards.

Finally, these same dynamics tend to dampen enforcement efforts as well. Even if standards are set at optimal levels, they have no effect unless they are adequately enforced. But under-enforcement of environmental standards is widely recognized to be a pervasive problem throughout the world.<sup>61</sup>

In sum, the assumption that environmental standards in countries engaged in free trade are set and enforced at optimal levels is both theoretically and empirically problematic. An assumption that one or both countries begin with sub-optimal environmental standards and/or enforcement is far more likely to reflect actual conditions.

## *II. Downward Pressure on Stringentland’s Standards*

Although the economists’ model assumes that both countries retain their respective standards both before and after free trade,<sup>62</sup> an understanding of the real-world mechanics of environmental standard setting and the political dynamics that underlie those processes reveals this assumption of stable standards to be unwarranted.

Under free trade, competition from Laxland’s industry will put downward pressure on Stringentland’s environmental standards *via* two distinct mechanisms: directly by altering the cost calculus that goes into the standard-setting formula; and indirectly by increasing political pressure for loosening standards. Yet, if Stringentland’s standards start out at or below optimal levels, then any lowering of its standards will lead to a net welfare loss. Furthermore, any lowering of Stringentland’s standards will reduce the difference in comparative advantage between the two countries and thus reduce the potential for any welfare gains from trade.

### *1. Direct Impact on the Standard Setting Cost Calculus*

Economists acknowledge that opening the borders to free trade between Stringentland and Laxland will impose social costs on Stringentland’s cement industry in the form of plant closings and mass layoffs. Because they do not have to pay as much for pollution control equipment, Laxland’s cement manufacturers will be able to sell cement at a lower price. Cement manufacturers in Stringentland will have to lower their prices to compete. Facing lower profit margins, some Stringentland factories will be forced to close and lay off workers.

Economists acknowledge these costs but contend that they will be offset by gains in other sectors of the economy. Stringentland’s consumers will enjoy cheaper prices for cement; the owners of Stringentland’s software companies will enjoy higher profits, and the displaced employees from Stringentland’s cement

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<sup>58</sup> See Esty, *supra* note 26, at 632.

<sup>59</sup> See Edith Brown Weiss, *Environmentally Sustainable Competitiveness: A Comment*, 102 Yale L. J. 2123, 2127 (1993).

<sup>60</sup> See William W. Buzbee, *Recognizing the Regulatory Commons: A Theory of Regulatory Gaps*, 89 Iowa L. Rev. 1 (2003).

<sup>61</sup> See Durwood Zaelke, Matthew Stillwell, & Oran Young, *Compliance, Rule of Law, and Good Governance* in MAKING LAW WORK: ENVIRONMENTAL COMPLIANCE AND SUSTAINABLE DEVELOPMENT 47-51 (Durwood Zaelke, et al., eds. 2005); Daniel A. Farber, *Taking Slippage Seriously: Noncompliance and Creative Compliance in Environmental Law*, 23 Harv. Envtl. L. Rev. 297 (1999).

<sup>62</sup> See Bhagwati, *supra* note 10, at 169.

industry will be instantaneously re-employed in the software industry. This last assumption is, of course, entirely unrealistic and has been extensively critiqued.<sup>63</sup> It is unlikely that employees of the cement industry would have the training or live in a location that would allow them to be immediately re-employed in the software industry.

Another problem with the economic model that has not been widely recognized, however, is the feedback loop that these new social costs will create with respect to Stringentland's environmental standard-setting process. Assuming that the standard-setting formula in Stringentland is one that takes the costs of regulation into account in some way, then as free trade causes the social costs associated with cement manufacture to change (e.g., by causing plant closings and mass layoffs), the level at which Stringentland's environmental standards are set under the formula will also change.

In an economist's ideal world, of course, the standard-setting formula would be cost-benefit analysis. Whether the changes brought about by free trade would cause the standard calculated by cost-benefit analysis to rise or fall is difficult to say in the abstract. The added social costs of plant closings and mass layoffs would themselves tend to loosen the standard. But these increased costs might well be offset by the gains to consumers brought about by free trade in the form of lower cement prices. If these consumer gains outweighed the social costs associated with plant closures, overall costs might fall and the standard called for by cost-benefit analysis might rise.

The real world, however, looks nothing like the economists' ideal world. In the real world, cost-benefit analysis is rarely the formula by which environmental standards are set. Particularly since the benefits of environmental protection typically involve non-economic values like human life, ecosystem health, or aesthetic values, attempts at cost-benefit analysis in this context often become highly contestable and uncertain.<sup>64</sup> In part because of these difficulties, the feasibility principle is far more commonly used in setting environmental standards.<sup>65</sup> Numerous environmental statutes embody this principle, which essentially instructs agencies to set standards at the most stringent level that is economically and technologically feasible. That is, the agency must reduce pollution levels as much as it can without crossing the threshold of "infeasibility." The precise location of this infeasibility threshold is of course a little ambiguous, but generally, courts and agencies have set the threshold just shy of the point at which further reductions in pollution would cause widespread plant closings.<sup>66</sup>

Because the feasibility principle is cost-based, if the social costs associated with a particular level of pollution control change, then the level at which the principle sets the standard will also change. In general, increasing the costs associated with a particular pollution control standard will eventually cause the standard to cross the threshold from feasible to infeasible thus triggering a move to a less stringent standard. Because the feasibility threshold is pegged to widespread plant shutdowns, when the increased social costs come in the form of plant closings caused by overseas competition, it is particularly likely that the feasibility threshold will be crossed, thus resulting in a loosening of the standard.

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<sup>63</sup> See Ackerman, *supra* note 17, at 158-59.

<sup>64</sup> See Sinden, *In Defense*, *supra* note 36, at 1418-20, 1423-30.

<sup>65</sup> See David M. Driesen, *Distributing the Costs of Environmental, Health, and Safety Protection: The Feasibility Principle, Cost-Benefit Analysis, and Regulatory Reform*, 32 B.C. ENVTL. AFF. L. REV. 1, 20-26 (2004); Wendy E. Wagner, *The Triumph of Technology-Based Standards*, 2000 U. ILL. L. REV. 83; Neil Gunningham, *Environmental Management Systems and community Participation: Rethinking Chemical Industry Regulation*, 16 U.C.L.A. J. ENVTL. L. & POL'Y 319, 327 (1997-98) ("Governments throughout Western Europe and North America, have relied heavily on a regulatory standards approach involving the establishment of technology-based standards."); Oliver A. Houck, *Clean Water Act and Related Programs*, ALI-ABA Course of Study, SB52 ALI-ABA 241, 258 n. 166 (1997) ("The European Community . . . has adopted technology-based standards for water toxins for all of its member countries with the exception of Great Britain.").

<sup>66</sup> See Driesen, *supra* note 65, at 9-20.

At this point, the economists will protest that I have only told half the story. While it may be true that free trade will impose extra costs on Stringentland's cement industry in the form of plant shutdowns and worker layoffs, the economists will point out that free trade will also bring benefits to Stringentland. The increased costs to Stringentland's cement industry will be offset by the welfare gains to Stringentland's consumers who will enjoy cheaper prices for cement imported from Laxland.<sup>67</sup> Therefore, free trade will not result in a net increase in costs to the citizens of Stringentland.

The problem with the economists' argument here is that it assumes that these two values are fungible. Free trade essentially has the effect of substituting one kind of cost for another—the pre-free-trade cost of higher consumer prices is replaced by the post-free-trade cost of plant shutdowns and layoffs. And yet it is not clear that the diffuse and individually minor harm caused by many consumers paying incrementally higher prices for goods is equivalent to the concentrated harm of plant shutdowns, which tend to impose severe, sometimes catastrophic, costs on a relatively small, cohesive group of individuals.<sup>68</sup>

These two types of costs are unlikely to be accorded equivalent treatment by the feasibility principle. Thus, costs in the form of plant shutdowns may well trigger a loosening of standards under the feasibility formula even where the same or higher costs in the form of increased consumer prices would not. Accordingly, even if the dollar value of the gains to Stringentland's consumers are equal to or greater than the dollar value of the losses occasioned by plant closings, the change in the nature of the costs imposed (from diffuse consumer costs pre-free-trade to concentrated plant shutdown costs post-free-trade) will put downward pressure on the feasibility formula and thus produce a loosening of environmental standards in Stringentland.<sup>69</sup>

## 2. Increased Political Pressure for Weakening Standards

Free trade between Stringentland and Laxland will also put downward pressure on Stringentland's environmental standards by increasing the political pressure on Stringentland's agencies to weaken those standards. As elaborated above, government decision making on environmental issues tends to be systematically skewed against environmental protection as a result of the endemic power imbalance between the concentrated, corporate interests that stand to lose from environmental regulation and the diffuse, individual interests that stand to gain from it. Free trade between Stringentland and Laxland will tend to exacerbate that dynamic with respect to Stringentland's domestic standard-setting process by increasing the political strength of those lobbying in favor of weaker standards.<sup>70</sup> By thus altering the political dynamic, free trade will put downward pressure on environmental standards in Stringentland.

To see why this is so, recall that under our simple two-country, two-product model, free trade between Stringentland and Laxland will have two effects on the cement market in Stringentland: 1) it will cause

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<sup>67</sup> It will also be offset by gains to the owners and employees of Stringentland's software industry.

<sup>68</sup> In a normative scheme like welfare economics that measures welfare in the aggregate and ignores distributional inequalities, these two costs are equivalent. And indeed, a cost-benefit analysis would treat them that way. David Driesen has argued that the feasibility principle is based on a different normative scheme—one that is grounded in fairness concerns and that views distributional equity as an important goal. See Driesen, *supra* note 65, at -. Cf., Graham Mayeda, *Developing Disharmony? The SPS and TBT Agreements and the Impact of Harmonization on Developing Countries*, 7 J. Int'l Econ. L. 737, 741-42 (2004).

<sup>69</sup> An economist would, of course, argue as a normative matter that the feasibility test is not the correct standard-setting formula, and that cost-benefit analysis should be used instead. Under cost-benefit analysis the plant closing costs would be offset by the consumer gains. But my point here is not to make a normative argument in favor of the feasibility formula over cost-benefit analysis (though I am sympathetic to such arguments, see Driesen, *supra* note 65, at -). My point is simply to make a descriptive claim based on the fact that the feasibility principle is in actuality more likely to be used in setting environmental standards.

<sup>70</sup> See Daniel C. Esty & Damien Geradin, *Environmental Protection and International Competitiveness: A Conceptual Framework* J. World Trade, June 1998, at 5, 19-20 (examples of proposed environmental legislation in several developed countries defeated due to lobbying citing international competitiveness concerns).

Stringentland's cement industry to close plants, and 2) it will lower the price that consumers in Stringentland pay for cement. Another way to conceptualize this is to think of free trade as essentially causing Stringentland to swap the social costs of higher consumer prices for cement (pre-free trade) for the social costs of plant shutdowns (post-free trade).

As noted in the last section, these are two very different sorts of costs. And among other things, they can be expected to trigger very different sets of political dynamics. The diffuse set of consumers who bear the costs of stringent environmental standards before free trade face classic collective action problems and thus are unlikely to form an effective pressure group.<sup>71</sup> (Their interests in seeing environmental standards weakened, however, are unlikely to go unheeded by regulators and lawmakers since they are more than adequately represented by the powerful corporate lobbyists who also favor weakened standards.) After free trade, however, this diffuse and relatively powerless set of interests is replaced by a far more powerful lobby: those who stand to lose from plant closings. This is a small, discrete group of people, each of whom stands to suffer significant economic loss and who may already be organized in unions. This post-free-trade group does not face nearly the collective action problems of the consumers who are harmed by stringent regulation before free trade. This group is therefore likely to form a strong and effective pressure group pushing for a loosening of environmental standards in Stringentland after free trade is implemented.<sup>72</sup> This pressure group joins forces with the powerful corporate interests already lobbying for weaker environmental standards both before and after free trade.

One might wonder how free trade agreements ever get ratified to begin with if those who stand to benefit from free trade (consumers) are so politically powerless and those who stand to lose are so powerful. In the free trade debate, however, the powerless consumer constituency is joined by a far more powerful political force—the export industry. These corporate interests stand to gain substantially from free trade and expend enormous resources lobbying for the removal of trade restrictions, in opposition to trade unions and others who stand to lose from plant closings.<sup>73</sup> The export industry has no particular stake in the environmental standards debate, however. Accordingly, when it comes to that debate, the trade unions and others lobbying for weakened standards have no such powerful opponent.

In sum, by swapping the diffuse costs of higher consumer prices for the concentrated costs of plant shutdowns, free trade fundamentally alters the political dynamic underlying environmental standard setting in Stringentland. By redistributing the costs of environmental protection from the relatively diffuse harms caused by increased consumer prices to the concentrated, sometimes catastrophic, harms of plant closings, free trade tends to foster the creation of a highly motivated, organized lobbying group pushing for a loosening of environmental standards.

## **F. Conclusion: The Upward Harmonization Solution**

If we substitute realistic assumptions for the unrealistic assumptions that economists employ, it becomes clear that free trade between countries with differing environmental standards may well have a negative impact on social welfare. The solution is to return to the principle of international organization that seemed self-evident to Professor Hudson seventy-five years ago—to make upward harmonization of environmental standards a pre-

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<sup>71</sup> The same people who have an interest as consumers in lower prices may also have (opposing) interests as citizens in environmental protection. See SAGOFF, *supra* note 36.

<sup>72</sup> Cf. Stewart, *supra* note 16, at 1330-31 (superior organizational strength and political power of producer interests over consumer interests explains the imposition of welfare-reducing trade barriers in some instances).

<sup>73</sup> See Stewart, *supra*, note 24, at 2047.

requisite to free trade.<sup>74</sup> Harmonization must be upward, rather than downward, in order to help to counteract the market and political dynamics that already skew standard setting below optimal levels.

Some will argue that harmonization is a bad solution because by taking a one-size-fits-all approach, it will inevitably lead to the imposition of inefficient standards on some countries. They argue that even in a perfect world, we should still expect even optimal levels of environmental regulation vary across countries. Optimal standards in developing countries, for example, should be less stringent than in developed countries because the citizens of developing countries are likely to be less willing to trade income for environmental protection.<sup>75</sup> Upward harmonization, then, is likely to impose inefficient, higher-than-optimal standards on developing countries.

But this argument contains several erroneous assumptions. First, it assumes that “the environment is an amenity—a luxury for which there is significant demand only when basic needs have been satisfied.”<sup>76</sup> Numerous environmental problems in the developing world, however, threaten the very necessities of human existence, like adequate food and clean drinking water.<sup>77</sup> Second, it assumes that standards in Stringentland are themselves optimal to begin with and higher than perfectly optimal standards in Laxland would be. Yet political and market dynamics may well push standards in Stringentland below the theoretic optimum for both countries. Finally, and perhaps most importantly, the argument erroneously assumes that a country’s optimal standard can be pinpointed with precision. The long laundry list of theoretical and practical obstacles to the implementation of cost-benefit analysis makes it clear that the notion of a precise, optimum standard is illusory.<sup>78</sup> In practice, the best we can hope for under any standard-setting formula is a rough approximation of optimality. We may not know where the optimal level of regulation is, but we do know for sure that political and market failures can be expected to push standards well below that theoretic level. Given that reality, a free trade regime that truly seeks progress in international organization should be set up to counteract this dynamic rather than to exacerbate it. Upward harmonization pushes in the right direction.

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<sup>74</sup> While this may seem a radical proposal to some, it is consistent with general trends in U.S. and European Union law—two “free trade” regimes with more long-standing and well-established pedigrees than the still nascent international free trade system. See Farber, *supra* note 42, at 1307-19.

<sup>75</sup> See, e.g., Bhagwati, *supra* note 10, at 166-68.

<sup>76</sup> See Weiss, *supra* note 59, at 2125 (criticizing this view); Carmen G. Gonzalez, *Beyond Eco-Imperialism: An Environmental Justice Critique of Free Trade*, 78 Denv. U. L. Rev. 979 (2001)(same)

<sup>77</sup> See *id.* at 983-1000. The idea that the poor might have less of a preference for clean drinking water than the rich confuses willingness to pay with ability to pay and ignores the well-known problem of wealth effects—that is, because a dollar provides more utility to a poor person than a rich person, measuring preferences in terms of dollars necessarily undercounts the preferences of the poor relative to those of the rich.

<sup>78</sup> See *supra* note 36.