FEDERALISM AND REGULATION:
EXTRAPOLATING FROM THE ANALYSIS OF
ENVIRONMENTAL REGULATION IN THE
UNITED STATES

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ABSTRACT
This article extends the author’s prior work concerning how responsibility
over environmental regulation in the United States should be allocated
between the federal government and the states. It shows why the structure of
environmental regulation in the European Union is poorly suited for the con-
trol of interstate externalities, and exposes the weaknesses of arguments for
the European Union’s harmonization of process standards. It then explains
that in the international community the arguments differ in large part because
of the weak capacity for centralized environmental standard-setting. Trade
measures can therefore be a desirable way of combatting overly lax process
standards in exporting countries that lead to interjurisdictional spillovers. But
such trade measures should not be permitted merely because the exporting
country has less stringent environmental standards than the importing coun-
try. The article ends with an analysis of how race-to-the-bottom arguments
in different regulatory contexts deal with analytically distinct phenomena.

INTRODUCTION
Since the early 1990s, the legal academic literature has paid a great deal of
attention to how responsibility over environmental regulation in the United
States should be allocated between the federal government and the states.†

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Rethinking the “Race to the Bottom” Rationale for Federal Environmental Regulation’, 67 NYU L
ities’]; R. Revesz, ‘The Race to the Bottom and Federal Environmental Regulation: A Response to
eralism and Environmental Regulation: Lessons for the European Union and the International Com-
International Community’].
In prior work, I focused on the three most prominent justifications for vesting responsibility over environmental regulation at the federal level. The race-to-the-bottom rationale for federal environmental regulation posits that, in an effort to induce geographically mobile firms to locate within their jurisdictions, states will offer them suboptimally lax environmental standards so as to benefit from additional jobs and tax revenues. In an article published in 1992, I cast doubt on the validity of the race-to-the-bottom rationale as an across-the-board argument for justifying federal intervention.2

The problem of interstate externalities arises because a state that sends pollution to another state obtains the labor and fiscal benefits of the economic activity that generates the pollution but does not suffer the full costs of the activity.

In an article published in 1996, I showed how the federal environmental statutes had been ineffective in constraining interstate externalities in a desirable manner.3

More recently, advocates of federal regulation have devoted considerable attention to the public choice rationale for federal intervention.4 The public choice rationale maintains that federal regulation is necessary because state political processes lead to the systematic underprotection of environmental quality. Relative to the federal government, the claim goes, pro-environmental interests are underrepresented and/or anti-environmental interests are overrepresented at the state level. My preliminary work in this area takes issue with the public choice justification for federal intervention.5

1. THE EUROPEAN UNION

The legal issues concerning centralized environmental regulation are framed somewhat differently in the European Union than in the United States.6 The presence of interjurisdictional externalities has played a role in justifying centralized intervention in the European Union, as it has in the United States.7 By relying predominantly on ambient standards and emission standards as the primary tools of environmental policy, the European Union’s efforts to control interstate externalities are subject to the same criticisms as the federal

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2 See Revesz, ‘Race to the Bottom’, above n 1.
5 See id.
6 This Part relies heavily on Revesz, ‘Lessons for the European Union and the International Community’, above n 1, at 1338–41.
environmental statutes in the United States. As I have argued, federal emission standards do not effectively combat the problem of interstate externalities because they do not regulate the number of sources within a state or the location of the sources. Similarly, federal ambient air quality standards are not well targeted to address the problem of interstate externalities. They are over-inclusive because they require a state to restrict pollution that has only in-state consequences. But they are also under-inclusive because a state could meet the applicable ambient standards but nonetheless export a great deal of pollution to downwind states (through tall stacks or location near the interstate border). In fact, a state might meet its ambient standards precisely because it exports a large proportion of its pollution.

The other prominent justification offered in the European context for centralized regulation is that harmonization of environmental laws promotes the establishment of a common market; this justification has not been nearly as prominent in federalism debates in the United States.

The harmonization rationale has some force in the case of product standards. A product cannot trade freely throughout a common market if states within the market can exclude it on environmental or health and safety grounds. Indeed, before the Single European Act in 1987 and the Maastricht Treaty in 1992 explicitly recognized environmental and health and safety protection as Community goals, the harmonization rationale embodied in Article 100 provided the basis for an extensive body of regulation in these areas.

Harmonization arguments, however, have also been invoked to justify the vesting of centralized responsibility over process standards, such as environmental ambient and emissions standards. There are several serious problems with extending the argument in this manner.

First, as long as product standards are harmonized, there can be a well-functioning common market regardless of the stringency of the process standards governing the products’ manufacture. Thus, more accurately, the argument must call for the harmonization of the products’ production costs, so as to deny a comparative advantage to states with lax environmental standards.

The second problem, however, is that the costs of complying with environmental regulation, or, for that matter, the costs of complying with any regulation, are only one component of the total costs of production. Other components include a state’s investments in infrastructure, health care, and education, as well as its wages, labor productivity, and access to raw materials. These factors, which can have a significant effect on production costs, are unlikely to be (or are incapable of being) the subject of the European Union’s harmonization efforts. Thus, rather than eliminating cost differences, the

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harmonization of environmental standards has the effect of conferring a competitive advantage on states with lower non-harmonizable components of costs.

Third, the harmonization argument cannot be used, as it has been in the European Union, to justify both uniform ambient standards and uniform emissions standards. A centralized regulatory regime consisting of only uniform ambient standards, which permits the states to allocate the pollution control burden among existing and new sources in any way they see fit, would confer a competitive advantage on the states with the smaller industrial base. Indeed, states with lower pollution output could offer their sources less stringent emissions standards without violating the ambient standards. The addition of centralized emissions standards moderates this comparative advantage but does not wholly eliminate it. Highly industrialized states, where the centralized ambient standards constrain further growth, would be unable to attract new sources without imposing additional costs on existing sources.

In light of these weaknesses, it is not surprising that recent European scholarship has sought to recharacterize the quest for harmonization in race-to-the-bottom terms. Commentators have argued, as have race-to-the-bottom advocates in the United States, that the goal of centralized intervention is to protect states from the pressure to impose suboptimally lax environmental standards as a means of attracting jobs and tax revenues. But, obviously, the analytical shortcomings of the race-to-the-bottom rationale for centralized environmental regulation are not confined to this side of the Atlantic. As I have argued, under conditions of perfect competition the state environmental regulations would be optimal, and that under conditions of imperfect competition, they could either be overly stringent or overly lax.

The legal status of the debates concerning the strength of the rationales for centralized environmental regulation is also different in the European Union than in the United States. In the United States, the choice between federal and state regulation (except when state regulation is coupled with trade restrictions) is, for the most part, a matter of policy. The constitutional constraints are extremely weak, even after the Supreme Court’s decisions in New York v. United States,10 United States v. Lopez,11 and Printz v. United States.12

In the European Union, in contrast, the subsidiarity principle adopted in the Maastricht Treaty in 1992 permits action at the federal level ‘only and

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10 505 US 144 (1992) (holding that Congress may not require states to enact or administer a federal program).

11 115 S Ct 1624 (1995) (holding, for the first time in over 50 years, that Congress exceeded its authority under the Commerce Clause).

12 117 S Ct 2365 (1997) (holding that Congress may not compel state officers to execute federal laws).
insofar as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the Community. Thus, in the European Union, the subsidiarity principle constitutionalizes the inquiry concerning the level of government at which responsibility for environmental regulation should be allocated. Although commentators are divided about the likely role of the European Court of Justice in enforcing the subsidiarity principle, some believe that the principle is fully justiciable. As a result, the debates concerning the proper allocation of authority over environmental regulation currently being waged primarily on this side of the Atlantic may well acquire an even greater salience in the European Union.

Moreover, the subsidiarity principle may affect the substantive nature of the federalism inquiry. In the European Union, in contrast, the subsidiarity principle could be read as giving rise to a presumption for decentralization grounded in positive law. In contrast, in the United States any argument in favor of such a presumption must rest on policy grounds, as no constitutional provision, statute, regulation, or judicial decision speaks to this question.

2. THE INTERNATIONAL COMMUNITY

In the international community, the issues concerning the interactions between environmental regulation and systems of economic integration are different than in federal systems. First, in the international community, there is only weak capacity for centralized environmental standard setting and virtually no capacity for centralized environmental enforcement. Second, the differences in wealth and economic development are far more salient in the international community than in federal systems. Third, environmental conditions in some countries are sufficiently dire to give rise to concerns that basic human rights are being violated.


14 Commentators are divided about the role of the European Court of Justice in subsidiarity inquiries. See, e.g., Lenaerts, above n 13, at 894 (Court could merely require reasons for federal action); A. Toth, ‘A Legal Analysis of Subsidiarity’ in D. O’Keefe (ed), Legal Issues of the Maastricht Treaty (1994) 37, 48 (subsidiarity principle raises political questions); J. Steiner, ‘Subsidiarity under the Maastricht Treaty’ in D. O’Keefe (ed), Legal Issues of the Maastricht Treaty, above at 49, 58 (subsidiarity principle is fully justiciable).


16 One might also worry about whether certain countries have the capacity (and sufficiently well functioning governments) to address environmental matters. But because sovereignty plays a far more
As a result of the lack of a viable system of environmental standard setting and enforcement, there are stronger arguments in the international community than in federal systems for allowing countries to impose environmentally based trade measures. Even where centralized regulation might be preferable, for example as a result of interjurisdictional externalities, state regulation coupled with trade measures might be the best available outcome if centralized regulation is not feasible, or if it is not feasible in an enforceable manner.

The different treatment of process standards in federal systems and in the international community is therefore not surprising. In both the United States and the European Union, state-imposed trade restrictions have been coupled with product standards but not with process standards. Instead, environmental regulation with respect to processes has been the domain of the federal government. There is little justification for allowing a state to impose a process standard designed to change the environmental behavior of another state when a centralized authority can do so directly.

In contrast, process standards have been coupled with trade restrictions in the international community – the United States’ restrictions on the import of certain tuna products at issue in the Tuna-Dolphin case is probably the best-known example. Even though the Secretariat of the General Agreement on Tariffs and Trade (GATT), the WTO’s predecessor, took a skeptical view with respect to the permissibility of such measures, the issue continues to draw the body’s attention. The recent Shrimp-Turtle decision may herald a more favorable reception on the part of the WTO to the enforcement of process standards by means of trade restrictions. In any event, in the coming years, this issue will be the subject of intense scrutiny in the context of the work of the WTO’s Committee on Trade and the Environment.

The second important difference between the systems of the United States and the European Union on the one hand and the international community on the other arises as a result of the more extreme differences in wealth and levels of economic development in the international community. This factor, coupled with the lack of a viable, widespread system for economic redistribution in the international community, implies that

central role in the international arena than in federal systems it would be more difficult at the international level to invoke this public choice concern to displace decentralized authority.

19 See GATT Secretariat, Trade and Environment, GATT/1529 at 10 (3 February 1992), in World Trade Materials (January 1992) at 37, 50 (“In principle, 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.”).
the distributional consequences of each policy ought to play a far more salient role in evaluating their relative desirability.

For example, in a federal system of relatively homogenous states, it might be desirable to adopt policies that lead to the maximization of social welfare without undue concern about how the costs and benefits of such policies are distributed across different geographic subdivisions. Indeed, federal governments regulate in many areas, and the distributional consequences may well even out across programs. Thus, it may not be sensible to compromise the social welfare properties of each program in order to achieve a better program-specific distribution. Moreover, even if such evening out of the aggregate distributional consequences does not occur, it is likely to be more desirable to redistribute through a system of taxes and subsidies than by compromising the efficiency of the various regulatory programs. The situation is different in the international community with its larger differences in wealth and economic development, and lesser opportunities for redistribution.

Third, because a sufficiently egregious disregard for human health and the environment can be equated with a violation of basic human rights, the use of trade restrictions might be seen as a desirable mechanism for combating such violations. The example of child labor is somewhat analogous.

The following taxonomy seeks to provide a useful way to begin the analysis of when trade measures (either restrictions or sanctions) would be a desirable way of combating overly lax process standards in exporting countries. The emphasis here is on what would be desirable policy; other contributors to this volume are far better able to analyze what the treaty language actually would allow under current interpretations.

The first element of this taxonomy is defined by reference to the geographic scope of the physical effects of the pollution that gives rise to call for the trade measure. Six situations are relevant:

1. purely domestic effects in the exporting country;
2. physical spillovers into the importing country;
3. physical spillovers into third countries;
4. impairment of existence values in the importing country;
5. impairment of existence values in third countries; and
6. effects on the global commons.

In the first situation, if the effects of the pollution are confined to the exporting country, trade measures are hardest to justify. Producers in the importing country may be upset that one factor of production is cheap in the exporting country, but restrictions imposed for this reason are unlikely to be welfare enhancing. Moreover, given that the costs of production have many non-harmonizable components, such as wages, labor productivity, infrastructure, and educational systems, it is not clear why a single factor should be singled out for special treatment. Finally, just because the exporting country
might subject its people to less desirable health and environmental conditions than does the importing country does not necessarily imply that a violation of a basic human right has occurred. (If conditions are sufficiently dire to give rise to such a violation, however, there might be an independent ground for action on the part of the importing country.)

In the second situation – the case of physical spillovers – trade measures might be the only way for the importing country to protect itself. In the United States, the permissibility of such restrictions is sometimes determined by comparing the welfare gains in the importing state with the corresponding welfare losses in the exporting state. In the international community, however, the distributional concerns discussed above should complicate the inquiry.

In the third situation – where the physical spillovers affect third countries – the importing country’s trade measure might nonetheless increase the global social welfare. Because the importing country is not affected by the pollution, however, one might be concerned that the asserted environmental reason for the restriction is a mere subterfuge, masking a protectionist motivation.

With respect to the fourth and fifth situations, there is no analytical reason for treating existence values, also known sometimes as non-use values, differently from physical spillovers. Citizens of the importing country might suffer a real loss in utility from learning about the destruction of a valuable natural resource abroad, even if they never planned to visit it. The claims of citizens of wealthy countries for trade measures to protect their existence values might not seem particularly sympathetic if the costs fall on citizens of far poorer countries, whose very livelihood might be at stake. Moreover, the controversy surrounding the use of the contingent valuation methodology, which is used to value existence values, makes problematic any attempt to weigh the interests of the various jurisdictions. As a result, trade measures motivated by the impairment of existence values are likely to be viewed as less legitimate than trade measures motivated by physical spillovers.

Finally, with respect to impacts on the global commons, in some cases trade measures will be expressly permitted by international treaties. Such treaties, however, often take a long time to negotiate (and an even longer time to result in the imposition of specific obligations). In the interim, unilateral trade measures may well be the best available way to protect the global commons.

The second element of the classification system is defined by reference to how the environmental standards in the exporting and importing countries

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22 See Revesz, ‘Interstate Externalities’, above n 1, at 2405–08.
compare to those that would maximize social welfare in the respective jurisdictions. The relevant categories are set forth in Table 1.

Table 1: Comparison of the stringency of environmental standards in Countries A (exporting) and B (importing)

<table>
<thead>
<tr>
<th></th>
<th>Laxer than optimal</th>
<th>Optimal</th>
<th>More stringent than optimal</th>
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<tbody>
<tr>
<td>A</td>
<td>a</td>
<td>b</td>
<td>c</td>
</tr>
<tr>
<td></td>
<td>d</td>
<td>e</td>
<td>f</td>
</tr>
<tr>
<td></td>
<td>g</td>
<td>h</td>
<td>i</td>
</tr>
</tbody>
</table>

To illustrate Table 1 by means of an example, consider the following situation, which is consistent with the box labelled ‘g’. In A, the exporting country, the actual standard is 10 parts per million (ppm) of a pollutant, whereas its optimal standard is 12 ppm; thus, A’s actual standard is more stringent than its optimal standard. In turn, in B, the importing country, the actual standard is 8 ppm (more stringent than A’s actual standard) but its optimal standard is 6 ppm; thus, B’s standard is less stringent than its optimal standard.

Should B’s use of trade measures be appropriate merely because its standards are more stringent than A’s? Such an approach was embodied in the proposed International Pollution Deterrence Act,25 which would have authorized the imposition of countervailing duties equal to the amount that the foreign firm would have to expend in order to comply with the US standards.26 Similarly, Vice President Gore wrote, while he was still a Senator: ‘Just as government subsidies of a particular industry are sometimes considered unfair under the trade laws, weak and ineffectual enforcement of pollution control measures should also be included in the definition of unfair trading practices.’27

The problem with this approach is that it would authorize the erection of trade barriers even when the disparity in the environmental standards is justified by differences in the preferences for environmental protection, differences in the costs of pollution control, and differences in the extent to which pollution produces adverse health and environmental effects in the two countries.

Alternatively, should trade measures be appropriate only in situations a, b, and c, in which A’s standards are laxer than optimal? Such an approach would recognize the reasons why it is desirable for different countries to have different levels of environmental protection.

26 Ibid at 3–4.
Or, should B be barred from using trade measures in situations a, d, and g because its own standards are laxer than optimal, even though A’s are laxer still? Such an approach would create incentives for B to adopt socially desirable standards.

In situations c, f, and i, where B’s standards are more stringent than optimal, should B be permitted to use trade measures only if its optimal standards are more stringent than A’s standards? An affirmative answer might be predicated on the undesirability of allowing B to penalize other countries as a result of its own public choice problems that lead it to adopt suboptimally stringent standards.

A full analysis of this issue cannot be undertaken here. It ought to be clear, however, that trade measures ought not to be permitted merely because the importing country has more stringent environmental standards than the exporting country.

3. IMPLICATIONS FOR OTHER REGULATORY CONTEXTS

The race-to-the-bottom label has been applied in a wide variety of regulatory contexts.28 My focus here is to show how these contexts are analytically distinct—an issue that has not received the attention of the relevant literatures. As a result, for example, how one comes out on the existence of a race-to-the-bottom over environmental regulation should say virtually nothing about the analysis of the so-called races to the bottom caused by interstate competition over corporate and banking charters, and over programs of economic redistribution. My analysis with respect to environmental problems, however, applies more generally whenever states impose costs on the physical assets of mobile firms to promote the welfare of their citizens.

Competition over corporate charters: principal-agent problems

In the corporate area, the problem alleged by race-to-the-bottom advocates is the principal-agent problem that arises between managers and shareholders when managers make decisions about where to incorporate. The claim is that managers, who effectively are the decision-makers on this issue, will choose states of incorporation that maximize their interests at the expense of those of their company’s shareholders.29 The corporate literature, however, does

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28 This Part relies in part on Revesz, ‘Race to the Bottom’, above n 1, at 1247–53.
not generally point to any problems caused by the competition for corporate charters among the states themselves; the problem, instead, is internal to the decision-making structure of the firms. In contrast, race-to-the-bottom arguments in the environmental area do not refer to any principal-agent problems between managers and shareholders in deciding where to locate a plant (or to any other internal decision-making problems of firms deciding where to locate their plants). Instead, the focus is on a posited prisoner’s dilemma in the relationship among the states themselves.

Table 2: Environmental and corporate races to the bottom

<table>
<thead>
<tr>
<th>Firm decision-making process</th>
<th>Interstate competitive process</th>
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<tbody>
<tr>
<td></td>
<td>Defective</td>
</tr>
<tr>
<td>Box 1</td>
<td>Box 2: Corporate race</td>
</tr>
<tr>
<td>Box 3: Environmental race</td>
<td>Box 4</td>
</tr>
</tbody>
</table>

The two literatures can be classified by reference to the two-by-two matrix in Table 2. It shows that the defects to be corrected by federal regulation can arise in the locational decision-making process of private actors or in the competitive process among states. Race-to-the-bottom advocates in the corporate literature fit in Box 2: they believe that locational decisions are defective but that the competitive process among the states is not. Race-to-the-bottom advocates in the environmental literature fit in Box 3: they believe that the competitive process among the states is defective but that locational decisions of private actors are not. Thus, the two literatures do not deal with analogous issues.

**Competition over bank charters: interstate externalities**

Henry Butler and Jonathan Macey argue that state chartering of banks gives rise to a ‘destructive “race to the bottom”’. They maintain that the major

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References:

32 Competition among the states can exacerbate the principal-agent problem by increasing the opportunity for managerial enrichment. Nonetheless, if the principal-agent problem could be corrected, interstate competition would not have undesirable effects.
cause for this race is that the Federal Deposit Insurance Corporation (FDIC) charges banks a deposit insurance premium that is independent of the bank’s risk of default.34

For two distinct reasons, states then have an incentive to set suboptimally lax regulatory regimes. First, a state seeking to attract banks, and thereby obtain chartering fees and legal business, will offer the regulatory regime most attractive to bank shareholders (or managers35), who will naturally prefer to make risk choices that are unconstrained by a regulatory regime.

Second, a state seeking to promote the interests of in-state depositors will also provide a lax regulatory regime. If the bank can engage in riskier activities, it may pay depositors higher interest rates. If the risky projects fail, the depositors are protected by FDIC insurance. Thus, depositors capture the benefits of higher risk but do not bear any of the costs. In any event, given the possibility of making deposits across state lines, depositors would bank in the state that offered the laxest provisions, independent of their state of residence.36

The undesirable effects in both instances are caused by the presence of an interstate externality. Bank shareholders and depositors capture the benefits of increased risk, but the corresponding cost is borne by the FDIC, and, indirectly, by the nation’s taxpayers. While some of these taxpayers will be residents of the state that adopted the suboptimally lax regulatory structure, most will not.

In the environmental context, I showed why race-to-the-bottom justifications for federal regulation should be seen as distinct from externality-based justifications. I thus use the term ‘race to the bottom’ in the environmental area to refer exclusively to the destructiveness of interstate competition for industry that is alleged to occur even in the absence of interstate pollution externalities. The banking literature, in contrast, uses the race-to-the-bottom label to refer to a problem that would be corrected by eliminating the interstate externality, for example through the imposition by the FDIC of risk-adjusted rates.37

The distinction between the problems addressed in the two literatures is illustrated in Table 3. The table shows that the defects to be corrected by federal regulation can arise from interstate externalities or from the competitive process among states. Banking race-to-the-bottom advocates fit in Box 2:

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34 Ibid at 680, 714.
35 In principle, the divergence between the interests of shareholders and managers that preoccupies the corporate law literature could also affect bank chartering decisions.
37 See Butler and Macey, above n 33, at 715.
Table 3: Environmental and banking races to the bottom

<table>
<thead>
<tr>
<th>Interstate externality</th>
<th>Interstate competitive process</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>Box 1</td>
<td>Box 2: Banking race</td>
</tr>
<tr>
<td>Absent</td>
<td>Box 3: Environmental race</td>
<td>Box 4</td>
</tr>
</tbody>
</table>

they believe that there are interstate externalities but that the competitive process among the states is not otherwise flawed. The environmental race to the bottom, as distinguished from the problem of interstate pollution externalities, fits in Box 3. These literatures therefore do not deal with analogous issues, even though they both invoke the race-to-the-bottom label.

**Competition over programs of economic redistribution: mobility of individuals**

The standard account of the effects of interstate competition over programs of economic redistribution, principally welfare programs, focuses heavily on the mobility of individuals across jurisdictions. The idea is that wealthy individuals, who would bear the burden of paying the bulk of the cost of economic redistribution, would move to jurisdictions with low taxes, and consequently low welfare payments. In turn, welfare beneficiaries would move to jurisdictions that imposed high taxes in order to finance generous programs. But in the end the jurisdiction with the high tax rates would lose all its wealth individuals, its tax base would be destroyed, and there would be no funds with which to pay the welfare recipients. This phenomenon has been described in race-to-the-bottom terms. Interestingly, preliminary studies of the impact of the recent devolution of responsibility over welfare programs do not present a clear picture consistent with race-to-the-bottom claims.

In the environmental context, in contrast, the asserted race-to-the-bottom occurs in the absence of the mobility of individuals, and the standard models

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in the area generally assume that individuals are immobile. The defect in the competitive processes necessary to support race-to-the-bottom claims is independent of the mobility of individuals. Table 4 shows the analytical differences between the two contexts.

Table 4: Environmental and redistribution races to the bottom

<table>
<thead>
<tr>
<th>Mobility of individuals</th>
<th>Interstate competitive process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>Defective: Box 1</td>
</tr>
<tr>
<td></td>
<td>Not defective: Box 2: Redistribution race</td>
</tr>
<tr>
<td>Absent</td>
<td>Box 3: Environmental race</td>
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<td></td>
<td>Box 4</td>
</tr>
</tbody>
</table>

Generalizing from the environmental experience

The environmental, corporate, banking, and redistribution races to the bottom deal, respectively, with the following distinct types of problems: (1) defects in the interstate competitive process, (2) divergence of interests over locational decisions between principals and their agents, (3) interstate externalities, and (4) mobility of individuals. Little is gained, and a great deal of analytical clarity is lost, by attaching the race-to-the-bottom label to these three disparate problems.

There are ways, however, in which one can generalize from the environmental experience. The assessment of race-to-the-bottom arguments in the environmental context is relevant whenever states impose costs on the physical assets of mobile plants, through regulatory programs or through taxes, in order to promote the interests of their citizens. From the preceding analysis of environmental regulation one would expect that under models of perfect competition the interstate interactions would be welfare enhancing, and that under models of imperfect competition the result of the interstate competition would be overregulation in certain instances and underregulation in others.

CONCLUSION

This essay explains why the strong push toward harmonization in the European context is undesirable. Moreover, harmonization will not provide the level playing field that its supporters so fervently seek. In fact, the effect of

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harmonization is to advantage countries that already have stringent environmental standards. Moreover, the whole notion of a level playing field is essentially unattainable and, if attained, would go a long way toward destroying the very comparative advantage that makes trade (and, to a large extent European integration) desirable.

The essay also has implications for the treatment of environmental matters in international trade disputes. It explains why trade measures might be a desirable means of punishing certain countries with suboptimally lax environmental standards. It also stresses, however, why it would not be desirable to permit such trade measures merely because the importing country has environmental standards that are more stringent than those of the exporting country.

The essay ends with a discussion of why the so-called races to the bottom in the environmental, corporate, banking, and economic redistribution areas are all analytically distinct. Thus, the conclusions that one reaches with respect to one of these areas have essentially no implications for how one views the other areas.