ENVIRONMENTAL POLICY HARMONIZATION: COMMENT

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Patricia Lindsey and Mary Bohman have provided us with an excellent overview of the harmonization of environmental regulations directed at primary agriculture in the context of trade treaties. Harmonization has a considerable popular following (Esty, 1994). Concerns about differences in environmental regulations were an important obstacle to achieving a resolution to the NAFTA negotiations and to securing passage of the relevant legislation by the signatories. This paper begins to de-mystify the concept of harmonization. It raises important and as yet unresolved conceptual issues. It identifies some lessons from the limited experience with the harmonization of environmental policies related to agriculture in the context of trade treaties.

ON THE MEANING OF HARMONIZATION

Lindsey and Bohman's paper raises an important question about the meaning of harmonization. They differentiate between harmonization of environmental effects and harmonization of regulatory burden. These are not the same thing. What *does* harmonization mean? Does it mean common outcomes, common policy standards and instruments, equalization of compliance costs, or, something that is not often considered, common institutions? Does harmonization mean that the form of environmental protection policies must be the same or that different policies achieve the same function? In the context of pesticide regulations, harmonization has come to mean reciprocal acceptance of registrations based on equivalency of testing procedures and standards.[1] Lindsey and Bohman argue

[1] One limitation of this paper is its failure to analyse the process and the progress in the harmonization of pesticide registration and the reciprocal recognition of registrations both in the European Community and between Canada and the United States. My impression is that there has been more deliberation than actual substantive progress on this front, both in the Community and in the North American context. Nevertheless, the attention that this issue has received would

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persuasively that equalization of compliance costs of meeting environmental regulations is what most producer and environmental interest groups seem to have in mind. Not surprisingly, most economists (Bhagwati and Hudec, 1996) that have written about this issue have taken exception to the idea that regulatory compliance costs should be equalized across trading partners. The essence of their argument is that the expression of comparative advantage in absorbing emissions, driven by resource endowments, preferences, standards of living or technology, would be compromised by a requirement that all trading partners incur the same costs in protecting environmental resources. If trading partners enjoy substantially different standards of living, as is the case with Mexico compared to the United States or Canada, equalization of water or air quality standards could result in the poorer country consuming too much of a superior good and the richer country too little. If environmental resources have different values in different jurisdictions, why impose equal costs for the protection of those resources?

Economists' suggestions have not had much of an impact on the development of environmental agreements associated with trade treaties, however. And the public choice literature suggests that there may be good reasons for ignoring economists' musings in this area. The idea that national environmental regulations will be an accurate reflection of a country's comparative advantage in environmental services, including absorbing waste, makes heroic assumptions about the ability of the political process to discern preferences, resource availabilities and production possibilities. But we have realized at least since Arrow's impossibility theorem that collective decision making is problematical. It should, therefore, not be surprising that the North American Free Trade Agreement (NAFTA) and the related North American Agreement on Environmental Cooperation (NAAEC) encourages the recognition of equivalency of standards for protection of human and environmental safety as well as the use of the most cost effective (or least trade distorting) measures to protect environmental resources. In my judgement, the language of the NAFTA and of the NAAEC clearly indicates that environmental regulations are not to be used as disguised measures to protect domestic firms from foreign competition. Harmonization of the function but not necessarily the form of environmental policies seems to be encouraged.

The third and usually neglected sense in which environmental policies could be harmonized is at a comparative institutional level. For example, common institutions, such as anglo-american common law remedies against nuisance (see Rothbard, 1982 or Brubaker, 1995), can be operational in two different contexts and give different physical or financial outcomes. Common law remedies are animated by precedent and by actions initiated by plaintiffs. History is path dependent, especially the history of judicial decisions. A relatively poor country with an abundant endowment of natural resources and sparse population may not have experienced as many nuisance actions as a relatively wealthy and densely populated country. So, institutions could be harmonized but compliance costs, environmental outcomes and standards could be quite different. Harmonization of institutions across countries that

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make it a good case study of the pitfalls but also of the opportunities for environmental regulatory policy harmonization in an area that is of critical importance to primary agriculture.

follow a common law tradition that is different from anglo-american common law is a neglected issued within a neglected issue. If "environmental regulation" is conceived broadly as all institutions or measures that mitigate harm to water or air quality or indigenous plants and animals within a jurisdiction, then alternative institutions can jointly and severally support these aims. Most discussions of harmonization fail to recognize potential substitutions among institutions, such as common law remedies against trespass and nuisance, quantitative restrictions on inputs, outputs or emissions, taxes in inputs, outputs or emissions, the imposition of global emissions ceilings in a tradeable permits scheme or other measures. Harmonization of institutions that can substitute for one another is much more complex, but may be economically much more efficient, than harmonization of outcomes.

THERE ARE ENVIRONMENTAL REGULATIONS AND *THEN*...

Much of the literature on the harmonization of environmental regulations seems to have a deeper appreciation of the categories of market failure than it does of the categories of non-market or policy failure.[2] A more balanced perspective would beg the question "Are all 'environmental regulations' created equal?" Coase (1960, 1988) suggests that environmental regulations on the part of government may be a transaction cost economising alternative to individual negotiation or civil litigation. But some environmental regulations would seem to stretch these Coasian limits. An example of such a regulation that is discussed in Lindsey and Bohman's paper is the requirement that food packaging in the European Community meet pre-determined standards for ease of recycling. Another current case involves potential trade barriers for livestock products produced with the aid of synthetic hormones. They also refer to human health risks from exposure to nitrate nitrogen in drinking water.[3] The case of electric cars in California is another example that comes to mind. To my eye, the "environmental" benefits of some environmental regulations are far from clear. The NAFTA and the NAAEC both encourage the adoption of environmental policy measures that minimally distort trade.[4] I am not aware of any accepted procedure to

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[2] Wolf (1979) has furnished a general theory of non-market failure that indicates that regulation may end up having effects that were not intended by its creators. Any framework to analyse harmonization of regulations needs to be able to accommodate the insights of the economic theory of regulation (i.e., Peltzman, 1976) and the rest of the Public Choice (Mueller, 1979) literature.

[3] Giraldez and Fox indicate that the epidemiological and toxicological literature is equivocal regarding human health risks from such exposure at concentrations that exceed the 10 ppm standard by modest margins.

[4] The issue of using environmental protection as a disguised trade barrier is mentioned at several points in the paper. But it is not clear to me that trade policy analysts currently are in possession of the apparatus necessary to unmask disguises. In 1995, Luther Tweeten told me that the economist who can achieve this will have made his (or I would add her) career. How do

evaluate policy options on this basis, but I am confident that environmental and trade economists will soon be applying their tools to this question.

INTEGRATION OF GAINS FROM TRADE AND GAINS FROM ENVIRONMENTAL REGULATION

The trade policy literature, like the environmental economics literature, has not yet resolved how to compare and ultimately to integrate, measures of environmental benefits with measures of gains from trade. As James Buchanan (1969) pointed out almost thirty years ago, many environmental harms and benefits are not objectively observable. They occur as losses or gains in utilities and these gains and losses are subjective. This is one of the main reasons that the results obtained from models are ambiguous, although Lindsey and Bohman do not explicitly acknowledge this point in their review of this literature. We continue to wait for an acceptable process to translate these subjective magnitudes into objective ones.

LESSONS FROM EXPERIENCE

Lindsey and Bohman's discussion of the admittedly limited track record of harmonization of environmental regulations indicates considerable variation in that experience. There is substantial variation across actual attempts at policy harmonization on matters such as the timing of implementation of common standards, whether these standards are compulsory or voluntary or applied within each country with some discretion to reflect local environmental problems. Overall, their conclusion is not encouraging to advocates of harmonization of environmental regulations among trading partners. They point out that neither Canada nor the United States have yet achieved harmonization of environmental regulations directed at agriculture within their own borders. And jurisdiction is split between

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we protect against the "New Protectionism?" Lindsey and Bohman acknowledge that the Iron Triangle of environmental lobbyists, who have often been suspicious of trade liberalization generally, Labour Unions seeking to protect their members from competition from what they perceive to be lower cost labour abroad and managers and shareholders of firms currently operating with the benefit of protection from import competition can create pressure for harmonization of environmental regulations not for its own sake, but as a means to another end. Trade economists need to devise a framework to help separate the spurious arguments for harmonization from the legitimate ones.

the two senior levels of government, and the specific allocation of jurisdiction over particular emissions or resources is different in each country.[5]

POLLUTION HAVENS

One of the findings from the empirical literature that Lindsey and Bohman quote with apparent approval is that differences in environmental regulations have not been an important factor determining the location of emission intensive industries. But I wonder if it is appropriate to apply that generalization to the NAFTA context. Here we have three countries with two significantly different levels of economic and general institutional development that are contiguous. The geographic proximity of Mexico to large markets for consumer goods in the western United States could mean that what is generally true if one looks at the empirical literature globally may not hold in this particular instance. And isn't the allegation that the sum of lower wages, land costs and less stringent environmental regulations, acting in concert, might effect the location of firms?

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[5] As an aside, Lindsey and Bohman's discussion of environmental policies regarding livestock waste management are offered as examples of the harmonization of environmental outcomes, but I fail to see what is being harmonized, at least in the NAFTA context.

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