Jean Monnet Chair Papers

The Relationship Between Environmental and Consumer Regulation and International Trade

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The Robert Schuman Centre at the European University Institute
Jean Monnet Chair Papers

Vogel: The Relationship Between Environmental and Consumer Regulation and International Trade
The Jean Monnet Chair

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I. Growing Linkages Between Trade and Regulatory Policies

Today, I will present a comprehensive description of the myriad ways in which the making of trade and regulatory polices influence one another. I will examine how international and regional trade negotiations, agreements, and disputes are affecting and being affected by national consumer and environmental regulations. I will then analyze the growing political linkages between the formerly distinctive policy areas of trade and protective regulation within the European Union, North America and globally. My main theoretical contribution is to link the comparative study of regulatory policy to that of international political economy. I make this contribution by demonstrating the connection among the domestic roots of national regulatory policies and preferences, national political and economic power, and regulatory outcomes.

Trade and regulatory linkages are not new. As long as protective regulations have existed, they have affected trade, either indirectly by influencing the composition of imports and exports, or directly by determining the standards that imported products must meet. Moreover, the use of regulations as trade barriers has a long history. For example, through 1927, the United States had enacted about a dozen federal laws that used trade restrictions to advance environmental objectives.¹ An 1897 statute prohibited the importation of wild animals or birds except under permit, while 1905 legislation forbade the importation of pests injurious to crops, forests or "shade trees". The following year, the US banned the import of sponges from the Gulf of Mexico that had been gathered by methods which harmed the sponge beds. The Underwood Tariff of 1913 prohibited the importation of plumes and feathers from specified wild birds while the Alaska Fisheries Act of 1926 made it unlawful to import salmon caught in ways that violated American fishing regulations.

Food production and processing standards have also long restricted international trade. For example, during the latter part of the 19th century, various American meats were banned from Italy, France and Germany because of inadequate American sanitary standards for meat processing. During the 1930s, anxious to protect the American cattle industry, the United States banned all imports of Argentine beef following an outbreak of hoof and mouth disease in that country. The country-wide ban remained in place even after the disease had been confined to a few local areas. Notwithstanding the trade liberalization of the post-war period, the use of regulatory standards as trade barriers has persisted. Innumerable Japanese product, certification and inspection standards have restricted access to the Japanese market. Likewise, European standards for products ranging from household appliances to bread, beer and pasta long functioned as import barriers within western Europe as well as internationally.

¹ This paragraph is based on Steve Charnovitz, "Exploring the Environmental Exceptions in GATT Article XX," *Journal of World Trade*, 25, no. 3 (October 1991): 40.
Yet it is only relatively recently that consumer and environmental regulations have emerged as an important and continuing focus of trade conflicts, negotiations and agreements. Why? The increasingly important contemporary linkages between trade and protective regulation reflect the convergence of four developments: the increase in regional and international efforts to promote economic integration, the growth in the number of health, safety and environmental regulations, the expansion of international trade itself, and the rise consumer and environmental organizations as potent political actors.

The seven rounds of GATT negotiations prior to the Uruguay Round reduced tariffs by nearly 75 per cent, while they have been eliminated within western Europe and are being phased out in North America. Accordingly, the relative importance of non-tariff trade barriers, (NTBs) such as health, safety and environmental regulation, has increased.

The greater the commitment to economic integration, the more trade agreements will intrude upon domestic policies. Efforts to limit the ability of protective regulations to restrict trade can thus be seen as part of a broader effort to address other NTBs such as public sector procurement, the protection of property rights and restrictions on direct foreign investment – each of which extends the scope of trade policies and agreements to policy areas that were formally controlled exclusively by national governments. Not surprisingly, this chipping away of national sovereignty over environmental and consumer protection policies is most advanced in the EU, whose member states have also made the most extensive effort to create a single market. But both NAFTA and the Uruguay Round GATT agreement also seek to reduce the role of national regulations as NTBs in order to promote trade.

The second development is an increase in health, safety and environmental regulations themselves. The last three decades have witnessed a significant expansion of government regulations which directly affect traded goods. These include regulations for automobile emissions; the content and disposal of packaging; chemical safety; the processing, composition and labeling of food; and the protection of wildlife and natural resources. The growth of protective regulation has frequently forced exporters to cope with a diverse array of product standards, while many national regulations, such as those governing the shipment of hazardous waste or recycling, are inherently trade restrictive. While in general national regulatory standards have become stronger, especially among the developed nations among whom most world trade and investment occurs, nations continue to vary in their regulatory goals and in their specific means of achieving them. Since nations generally want to maintain their own standards in spite of – or sometimes because of – the burdens they impose on imports, the continual growth of national regulatory standards represent an ongoing source of trade conflict.
Not only has the amount of protective regulation steadily increased, but
during the second half of the 1980s its scope broadened as well. A distinctive
feature of many of the environmental issues that emerged during the 1980s
was their global dimension. The protection of endangered species located in
different countries or in international waters, the protection of the ozone
layer, the reduction of environmental damage associated with the shipment and
disposal of hazardous waste and the preservation of tropical forests in less de-
veloped nations, all require nations to coordinate their regulatory policies.
And this coordination often includes restrictions on trade, either as a means of
preventing "free-riding" or because the harm itself is trade-related.

The disparity in national regulatory standards, especially between rich and
poor nations, has affected trade policies in another way: it has increased na-
tional differences in the costs of producing goods. Although these differences
have had little measurable impact on patterns of international trade and in-
vestment, nonetheless many environmentalists worry that producers in nations
with relatively strict standards will attempt to exploit these disparities in na-
tional regulatory standards by demanding that regulations be relaxed in order
to enable them to remain competitive. Accordingly, they want international
trade agreements to play a more active role in harmonizing national regula-
tions, especially in the area of environmental protection. Not surprisingly,
their proposals to "green the GATT" have been strongly opposed by less de-
veloped countries who fear the loss of export markets.

Thirdly, the nearly sixty-fold expansion of international trade since 1950
has itself significantly affected public health, safety and the physical environ-
ment. In a number of respects, this expansion has improved environmental
quality: it has promoted the dissemination of improved environmental tech-
nologies and encouraged the more efficient use of resources. Moreover, by in-
creasing growth rates, it has made possible increased expenditures to improve
environmental quality and expanded the market for "greener" products. Envi-
ronmental quality in wealthier nations is measurably better than in poorer
ones.2

But international trade has also exacerbated a number of environmental
problems. In particular, the expansion of trade directly causes environmental
damage; not only is the increased transportation of goods an important cause
of pollution, but some goods shipped across national boundaries are inherently
harmful, such as hazardous wastes. The expansion of international trade has
also made it more difficult for governments to protect the health of their citi-
zens, who are increasingly consuming goods produced in other countries. This
is an especially serious problem with respect to agricultural products, always a

2 According to a study by Gene Grossman and Alan Krueger, "environmental quality tends
to improve as a nation’s per capita gross domestic product approaches $8,000 in 1985
dollars on a purchasing-power basis." Gene Koretz, "A Robust Economy Can Help Cure
politically sensitive area. The nearly tenfold expansion of international trade in food between 1962 and 1993 has made the health of consumers much more dependent on the agricultural production and inspection practices of their nation's trading partners.

Moreover, as tariffs have declined and trade has increased, domestic regulatory policies are more likely to have international economic impacts. For example, in a relatively isolated domestic economy, a recycling regulation that encourages the use of bottles and discourages the use of cans makes domestic glass producers better off at the expense of domestic can manufacturers. But if both these commodities are freely traded, then this same regulation is also likely to affect the market share of producers in different nations. If foreign can producers have been disadvantaged, they will then complain to their governments, who in turn may challenge the recycling requirement as a trade barrier. The recycling requirement will, of course, be defended by both domestic bottle producers and environmentalists. Thus the expansion of trade has itself made regulations into a more important source of trade conflicts.

Fourth and finally, a new set of constituencies, namely consumer and environmental organizations, have become active participants in the making of trade policy. Unlike producers or workers, these non-governmental organizations (NGOs) are interested not in the economic impact of trade policies, but rather in the way they affect consumer health and safety and environmental quality in their own countries, and often in others as well. In many cases, NGOs have transferred their suspicion of domestic markets to global ones. Alliances between protectionist producers and NGOs have become commonplace in the United States, western Europe, and Japan, and these coalitions represent an increasingly important source of opposition to trade liberalization.

The increasing importance of trade and regulatory linkages is reflected in the evolution of international treaties and trade agreements. Neither the original 1947 General Agreement on Tariffs and Trade nor the 1957 Treaty of Rome which established the European Economic Community mentions the word "environment." By contrast, the 1987 Single European Act explicitly addresses the relationship between the creation of the single market and European environmental standards, as does the Maastricht Treaty.

While the 1979 Tokyo Round GATT negotiations did address the role of technical standards as nontariff barriers through the Standards Code, the latter was not made part of the General Agreement itself; compliance remained voluntary. However, the Uruguay Round GATT agreement both expanded the scope of the Standards Code and incorporated it into the provisions of the World Trade Organization. "Long a stubborn redoubt of national autonomy,
health and environmental standards are finally being reigned in."³ Finally the 1994 North American Free Trade Agreement among the United States, Mexico and Canada, unlike the Free Trade Agreement between the United States and Canada which went into effect six years earlier, includes a Supplementary Agreement on the Environment. Thus, while conflicts between trade and regulation are becoming both more numerous and more important, the policy goals of liberal trade and more effective protective regulations are not incompatible. In this talk, I will demonstrate that trade liberalization and agreements to promote it, rather than undermining effective regulatory standards, have in a number of cases served to strengthen them. This phenomenon, which is called the "California effect," will be explored in detail later in this talk.

The Internationalization of Regulation

Protective regulations are important for three reasons. Most obviously, they represent efforts to achieve a number of important public goals, such as protecting public health and improving environmental quality. Secondly, protective regulations have important macro-economic consequences; they affect national rates of productivity growth, price and investment levels, and wage rates. Thirdly, they politicize economic competition. Regulations rarely affect all firms equally; they usually make some better off and some worse off relative to their competitors. "This simple fact is at the heart of the Iron Law and Public Policy: while government action may increase the costs of doing business, these cost increases are not the same for all competitors ... differential costs of regulatory compliance can – and do – affect the competitiveness of individual firms."⁴ Accordingly, firms often participate in the regulatory process in order to gain competitive advantages, or to resist the efforts of their competitors to do so.

Each of these three critical components of the regulatory process has an increasingly important international dimension. To begin with, many national regulatory policies also affect the health and welfare of other countries, or even the entire globe, thus blurring the distinction between domestic and international regulatory policies. Secondly, to the extent that national regulations affect the volume and composition of world trade, they influence the performance of the global as well as the domestic economy. Thirdly, many national regulations, especially for traded goods, affect not only the competitive position of firms within a country, but also between or among different countries. "Regulation is as much a tool of statecraft as military defenses ever were ...

the logic of state regulation is in part the logic of conflict."5 Because national protective regulations often represent important sources of competitive advantage and disadvantage for firms competing in the global marketplace, national regulations also affect international competition and competitiveness.

For these reasons, the rules established by international institutions, treaties and agreements that seek to govern the impact of national regulations on trade play a critical role in mediating between the domestic and international economy. They help determine the conditions under which both producers and non-governmental organizations are able to influence the regulatory policies of their trading partners.

What Is A Nontariff Barrier?

The definition of a nontariff barrier is critical to understanding the relationship between regulation and trade. Tariffs, by definition, distinguish between imported and domestic goods: a tariff is a product tax that only applies to imports. Many of the most economically important nontariff barriers also discriminate explicitly on the basis of the national origin of products or firms. These include quotas, "voluntary" import and export controls, restrictions on foreign investment, and public procurement policies that favor domestic firms. By contrast, relatively few environmental and consumer regulations explicitly distinguish between producers or products on the basis of national origin. At least on the surface, most do not violate the key principle of free trade, which is non-discrimination or "national treatment." However, many of these regulations do have the effect of creating barriers or obstacles to imports. But does this automatically make them nontariff barriers? How can trade agreements and treaties distinguish between necessary and unnecessary obstacles to trade? The answer to this question is essentially a political one.

An analogy can be made to the ongoing debate over the interpretation of American civil rights laws. Should only those laws or policies that explicitly distinguish among individuals on the basis of their race be considered discriminatory? Or should a law or policy also be defined as discriminatory if it has the effect of disadvantaging a particular group of people? Broadening the definition of a nontariff barrier represents an effort by supporters of trade liberalization to reduce the disadvantages currently experienced by many foreign producers in the same way that broadening the definition of discrimination represents an effort by civil rights activists to remedy the disadvantages experienced by various racial minorities.

And just as the definition of discrimination has important implications for the way American civil rights laws are enforced, so does the definition of a nontariff barrier have important consequences for both trade and regulatory policies. Proponents of trade liberalization tend to define NTBs relatively broadly, while proponents of stricter regulatory standards want them defined more narrowly. The former want to strengthen the ability of producers to challenge the regulatory policies of their trading partners, while the latter want to preserve the ability of nations with stricter standards to maintain them and, in some cases, impose them on their trading partners as well.

Consider the following extreme positions: if all regulations that disadvantaged importers were classified as nontariff barriers, then virtually all regulations could be considered protectionist. For example, the United States could not require that all product labels be printed in English, since this requirement clearly imposes additional costs upon foreign producers, (or at least those from non-English speaking countries.) Likewise, Singapore would be forced to rescind its ban on the sale of chewing gum, since this regulation clearly serves as a barrier to the import of Wrigley's products. In short, defining NTBs very broadly would have the effect of subjecting virtually all national regulatory standards to those of the least stringent exporting country. At the same time it would probably significantly expand international trade.

The consequences of defining nontariff barriers very narrowly are equally significant. A nation could demand that all imported products be produced according to the same standards to which domestic producers are required to adhere. Thus the European Union could refuse to permit the imports of any cars, steel or chemicals produced in facilities that violated EU standards for factory emissions, land-use controls, or, for that matter, family leave policies. If such a regulation were not considered a nontariff barrier, and were widely adopted, international trade would decline significantly. On the other hand, many nations might be forced to upgrade their regulatory standards to match those prevailing in countries to whose markets they wanted access.

Few would consider the first group of regulations to be nontariff barriers, while most would consider the latter to be. However, none of these hypothetical examples explicitly discriminates between imported and domestic products; they hold both to identical standards. But where then should treaties and trade agreements draw the line? How should they distinguish between protective regulations that are actually disguised trade barriers and protective regulations which may have the same effect as disguised trade barriers, but which nonetheless are necessary to protect the public's health, safety and the physical environment? In other words, how can international institutions and trade agreements permit or promote environmental and consumer protection while limiting consumer and environmental protectionism?
The range of responses to these questions comprises much of the current debate over the impact of trade agreements and regulatory standards on one another. Different trade agreements answer these questions differently, and their answers have changed over time. Consider the following actual regulations, each of which led to a major trade dispute under an international agreement or treaty:

- A German regulation bans the sale of liqueur with an alcoholic content of less than 25 per cent. (Treaty of Rome)

- A regulation by the Canadian Province of Ontario imposes a 10 cent tax on beer sold in cans. (FTA)

- An American regulation prohibits the sale of tuna fish caught in ways that also kill large numbers of dolphins. (GATT)

- An EU regulation bans the sale of beef from cattle which have been fed growth hormones. (GATT Standards Code)

Each of these regulations has two things in common: they do not discriminate on the basis of national origin and they do impose greater burdens on some importers. Specifically, these regulations disadvantaged producers of French liqueur, whose product had a low alcoholic content; American beer brewers, who shipped beer to Canada in cans because of transportation costs; Mexican tuna fishermen, whose fishing techniques and geography caused more dolphin deaths than American fishermen; and American cattlemen, who rely heavily on hormones to produce meat and meat products. Correspondingly, these regulations benefited German liquor producers, whose product contained a higher alcoholic content; Canadian brewers, who produced beer in bottles; American tuna fishermen, who had adopted fishing methods that reduced dolphin mortality; and European cattle farmers and beef producers, whose beef and beef products were produced without hormones.

In each case, the issue was not whether these regulations interfered with trade. It was rather the extent to which their interference was necessary to achieve a legitimate domestic policy objective. Thus the Germans claimed that their alcoholic content regulation helped prevent German consumers from developing an increased tolerance for alcohol; the Canadians argued that their tax promoted the use and reuse of glass containers, which both reduced littering and saved energy; the Americans contended that their restrictions on sales of "dolphin-unfriendly" tuna were necessary to protect the lives of intelligent marine mammals; and the EU justified its hormone ban on the grounds of consumer health and safety.
These and similar trade disputes have often led to a heated debate regarding the criteria for classifying regulations as nontariff barriers. This debate has revolved around a number of issues.

First, what standards of scientific proof should be required to justify a regulation that interferes with trade? In the case of the EU hormone ban, should the EU be obligated to prove that the consumption of meat from cattle which have been fed hormones is unsafe, or must the United States prove that meat from hormone-fed cattle is safe? In other words, what makes a regulation that restricts trade "necessary?" And on whom does the burden of proof of demonstrating that it necessary or unnecessary fall? Many protective regulations make no demonstrable contribution to either consumer or environmental protection, and they therefore can readily be rescinded or revised without adversely affecting public health or environmental quality. But in many other cases, there is legitimate disagreement as to whether a regulation actually is necessary to protect public health or environmental quality.

Secondly, should the intention behind a regulation affect whether it is considered a nontariff barrier? While each of these regulations did benefit domestic producers, that was not necessarily the only or even the primary reason they were adopted. In the case of the American ban on imports of tuna from Mexico, American tuna fishermen neither asked for nor required import protection, since dolphin-safe tuna already commanded a substantial premium in the American market. The ban on tuna imports from Mexico came about as a result of a lawsuit filed by an American environmental organization. On the other hand, Ontario's beer can tax was strongly backed by that province's beer bottlers as part of their long-standing effort to restrict imports of American beer, though it was supported by Canadian environmentalists as well.

In both the tuna and beer cases, the American position was that the purpose behind the regulation did matter. Based on this criterion, the Marine Mammal Protection Act was not a nontariff barrier because its primary objective was to protect dolphins, while the Ontario tax was because its primary purpose was to protect the local beer bottling industry – as evidenced by the fact that the tax on cans did not extend to either soft drinks or food. Not surprisingly, their trading partners argued that the objectives of the regulations were not relevant for assessing their status as nontariff barriers. While some regulations are simply disguised forms of protectionism, in many cases the motives behind a particular regulatory policy are complex. Thus the EU's ban on the use of growth hormones was intended to protect small, inefficient farmers as well as European consumers.

Thirdly, in enacting a regulation that affects trade, is a nation obligated to select the method of regulation that least restricts it? Thus if the United States could demonstrate that Ontario could accomplish the goals of its recycling program in a way that imposes fewer burdens on American beer exporters,
does the tax on cans then constitute a nontariff barrier? Or is Ontario only obligated to demonstrate that its regulation is effective in achieving its goals? Similarly, if the United States could demonstrate that the health of European consumers could be adequately protected by a labeling requirement, does the EU ban then constitute an illegitimate interference with trade?

Fourth, should a nation be allowed to restrict the sale of a product on the basis of how it was produced outside its legal jurisdiction? Or is a nation only permitted to impose regulations on imports in order to protect its citizens or domestic environment? In other words, must a nation only hold imported products to the same standards as domestically produced ones, or can it also restrict or tax an imported product on the basis of how it was produced, i.e., harvested, extracted, manufactured or shipped, by the citizens of another country?

This question was a central point of contention in the tuna/dolphin dispute between the United States and Mexico. On one hand, the tuna sold to American consumers that were caught by foreign fishing vessels using methods that also killed dolphins were identical in every respect to the tuna caught using dolphin-safe methods. On the other hand, the tuna differed in terms of the impact of their production methods on dolphin mortality. In its complaint against the United States, Mexico argued that the American regulation constituted an illegitimate interference with the domestic policies of a sovereign state; it claimed that the United States should not be permitted to restrict the imports of products from countries whose ways of producing them differed from its own. The United States in turn countered that its tuna processing standard was necessary to fulfill a legitimate conservation objective of the United States, namely dolphin protection. Accordingly, the nationality of the fishing vessels that injured dolphins was irrelevant.

Outcomes and Significance

These four trade disputes were brought under four different trade treaties and agreements and this affected the way they were resolved. The German liqueur regulation was struck down by the European Court of Justice in *Cassis de Dijon* on the grounds that it was not needed to protect Germany consumers, the Canadian beer can tax was allowed to stand under the Free Trade Agreement between the United States and Canada, the American ban on imports of Mexican tuna was judged by a GATT dispute settlement panel to be inconsistent with American obligations under the General Agreement, and the EC hormone ban stands in part because the EC refused to submit it to dispute settlement procedures under the GATT Standards Code.

Not only do international institutions and agreements define nontariff barriers in different ways, but those definition are in a state of flux. The GATT
Panel ruling in the tuna/dolphin case is the most controversial case in the nearly forty year history of the General Agreement. It led environmentalists to demand a revision of GATT rules to permit nations to restrict imports produced in ways that harm the environment – especially the global commons. This proposal in turn alarmed many less developed countries, as well as GATT officials, who feared that it would legitimate eco-protectionism. While this issue was not addressed in the Uruguay Round, it will be high on the agenda of next round of trade negotiations to be conducted under the auspices of the newly established World Trade Organization.

However, the Uruguay Round agreement, while not addressing the issues raised by the tuna/dolphin dispute, did address one of the critical issues raised by the EC hormone ban. The Agreement on Sanitary and Phytosanitary Standards, which is now part of the GATT, limits the ability of signatories to use health protection measures in the areas of food safety and agriculture, as trade barriers. If a nation's standards are stricter than those established by the Codex Alimentarius, an international standards setting body established under the auspices of the United Nations, it must demonstrate that they are both necessary to protect the health of its citizens and that its standards interfere with trade as little as possible.

Cassis (1979) also had an important impact on trade policy. One of the most important cases ever decided by the ECJ, Cassis defined as a trade barrier any national regulation that has the effect of making imports from another member more costly. It then established the critical principle of mutual recognition: no member state of the Community can restrict the sale of a product lawfully produced and marketed in another member state, unless it can demonstrate that the imported product threatens the health of its citizens. Furthermore, in enacting regulations to protect consumers, nations must select the means of doing so that least interfere with trade. The ECJ ruled against Germany because there was no evidence that Cassis threatened the health of German consumers. Moreover, the legitimate interests of German consumers could be equally protected by a labeling requirement, which was also less trade restrictive. By freeing the EC from the need to harmonize literally thousands of national regulations, Cassis significantly contributed to European integration; the concept of mutual recognition helped make possible the passage of the Single European Act and the EC's 1992 program.

Regulations and Trade Agreements

The concept of "proportionality" has frequently been employed to assess the legitimacy or legality of a regulation which restricts trade. This approach subjects national regulations that hamper the free movement of goods to a "balancing" or minimum-means test: it requires nations to select the means of achieving their regulatory objectives that do not "disproportionately" interfere
with the free movement of goods. Accordingly, the benefits of a regulation must be weighed against the burdens it imposes on international commerce. This approach has been employed by the Supreme Court of the United States to interpret the interstate commerce clause of the Constitution and the European Court of Justice to interpret the Treaty of Rome and the Single European Act; variants of it have been incorporated into the texts of both NAFTA and the Uruguay Round GATT agreement which established the WTO.

Proportionality can be regarded as the international application of cost-benefit analysis, which governments have frequently employed to assess the value or legality of domestic health, safety and environmental laws. Both concepts seek to judge the value of a regulation by balancing its goals with its costs: cost-benefit analysis focuses on the costs of compliance to the domestic economy, proportionality on its costs to foreign producers and thus indirectly to domestic consumers as well.

Like cost-benefit analysis, the concept of proportionality is often difficult to apply in practice. For while the burdens imposed by a regulation on importers are readily apparent, assessing the value of a consumer or environmental regulation to the citizenry of the nation which enacted it often involves a more subjective judgement. How safe should processed beef be? How much recycling is necessary? How much protection should dolphins be accorded? And how much of a burden on commerce is each worth?

Since there is rarely a consensus on the answers to these questions within nations, it is not surprising that there has often been substantial disagreement among the governments, firms and citizens of different countries. Many trade disputes reflect the different values nations attach to different policy objectives as well as their willingness to interfere with markets to achieve them. As Martin Shapiro writes in connection with the European Community: "There is simply no objective way of weighing the two pounds of reduced cancer risk to Frenchmen against the eight pounds of salami that Italy is blocked from selling to France. Proportionality is by its very nature in the eye of the beholder."6

These four examples also illustrate the kinds of consumer and environmental regulations that have frequently become the focus of trade disputes. Differences among national regulations for food label, processing and composition represent a particularly important source of trade friction both within the EU and globally. National conservation policies in general and recycling requirements in particular are becoming an increasingly important source of trade conflicts within both the EU and North America. Finally, a number of trade disputes, such as the tuna/dolphin case, stem from the efforts of "greener" governments to make access to their domestic markets contingent upon

changes in the environmental practices of their trading partners. Many, but by no means all, of these disputes pit developed against undeveloped nations.

**Baptists and Bootleggers**

One important consequence of the growing linkages between trade and regulatory policies has been to create additional opportunities for alliances between producers and environmental and consumer organizations, or "Baptist-bootlegger" coalitions. This phrase comes from the study of politics of prohibition in the United States: political support for keeping certain Southern counties "dry" has come from both Baptists, who favor prohibition on moral grounds, and bootleggers, whose business depends on keeping alcohol sales illegal. Prohibition not only affects public morality but the market shares of legitimate and illegal alcoholic beverage producers and distributors. The battle over the rules governing the sale of alcoholic beverages thus has to do with both morality and markets.

Baptist-bootlegger alliances have long been a staple of domestic regulatory policy-making. For example, during the battle over the 1977 Clean Air Act Amendments, both environmentalists and eastern coal producers supported sulphur emission regulations that disadvantaged western coal companies. They have also, on occasion, affected regulatory and trade policies. The passage of the Federal Meat Inspection Act of 1906 was due to the combined efforts of American consumers, who were outraged by the meat processing practices they learned about from reading Sinclair's *The Jungle*, and large American meat processing firms, who wanted stricter federal meat inspection in order to convince the Europeans to reopen their markets — an early example of the role of international trade in strengthening product standards for traded goods.

Some protective regulations disadvantage domestic producers vis-a-vis their international competitors who don't face the same regulations. This is most likely to occur in the case of production standards which may raise the relative costs of producing goods or harvesting crops and natural resources. These regulations present domestic producers with two political choices: they can either demand that the regulations be relaxed, or they can seek to impose them on their foreign competitors through international agreements or import restrictions.

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7 This phrase was coined by Bruce Yandle, "Bootleggers and Baptists," *Regulation* 7 (May/June 1982): 12-16.

8 For an account of the enactment of this law, see Gabriel Kolko, *The Triumph of Conservatism*, Chicago: Quadrangle Paperbacks, 1963, pp. 99-108. For Kolko, the support of beef processors for federal meat inspection reveals that this legislation was not a "genuine" example of consumer protection. My interpretation differs.
If they choose the first strategy, environmental and consumer groups will oppose them; this is the classic pattern of much of domestic regulatory politics. But if they choose either of the second alternatives, they are likely to be supported by NGOs. The latter have tended to be sympathetic to the arguments of domestic producers that it is "unfair" for them to be forced to compete with foreign competitors who are subject to less stringent production standards. Moreover, environmental organizations often support the use of trade restrictions as a way of pressuring other countries to strengthen their regulatory standards.

However, many protective regulations make domestic producers better off vis-a-vis their foreign competitors, since they are more readily able to comply with them; this is most likely to occur in the case of product standards. In this case, domestic producers and NGOs also have similar interests. Both want to defend domestic product regulations that also serve as obstacles to importers. Consequently, many trade disputes over regulatory issues pit coalitions of NGOs and domestic producers against foreign producers.

For producers who wish to maintain or increase trade barriers, the convergence of trade and regulatory policies provides them with two significant political benefits. First, it furnishes them with an argument for trade restrictions which has relatively wide political appeal: consumer or environmental protection. They can argue against the removal of trade barriers on similar grounds. Secondly, it provides them with an important new source of political support as consumer and environmental organizations enjoy considerable political influence in a number of capitalist nations.

At the same time, the convergence of trade and regulatory policies also provides an important political benefit for environmental and consumer organizations: it provides them with allies from the business community in their effort to promote stricter regulatory standards. Domestic producers are more likely to support more stringent regulations if the costs of complying with them fall disproportionately on their international competitors, or if they can be imposed on foreign producers as well. In short, "Baptist-bootlegger" coalitions can not only increase bootleggers' profits, they can also save Baptists' souls.

The "California Effect"

Agreements and treaties to promote liberal trade policies have contributed to limiting the role of national regulations as trade barriers. And their authority over national regulatory standards is increasing. But thanks in part to Baptist-bootlegger alliances, trade liberalization can just as easily be achieved by forcing nations with lower standards to raise them as by forcing nations with higher standards to lower them. While both have in fact occurred, the former
has been more common than the latter. To the extent that trade liberalization has affected the level of consumer and environmental protection, it has more often strengthened than weakened it. There is, however, nothing automatic about this process. The impact of trade liberalization on regulatory standards is primarily dependent on the preferences of wealthy, powerful states, and the degree of economic integration among them and their trading partners.

The notion that economic competition among political jurisdictions will lead to a regulatory "race to the bottom" has been labeled the "Delaware effect." This derives from the experience of the United States with corporate chartering. Because corporate charters are given by an individual state and all states are legally required to recognize the legitimacy of each others' charters (an American version of mutual recognition), states have tended to compete with each other by liberalizing their chartering requirements. The state which has been most successful in this competition has been Delaware, whose corporate chartering law is generally considered the most responsive to the interests of management.

However, I will demonstrate that regulatory competition can lead to a rather different outcome. A number of national patterns of health, safety and environmental regulation illustrate the "California effect," named for the state that has been on the cutting edge of environmental regulation, both nationally and globally, for nearly three decades. The "California effect" is meant to convey the critical role of powerful and wealthy, "green" political jurisdictions in promoting a regulatory "race to the top" among their trading partners. Thus just as California's relative size and wealth within the American economy has helped drive many American environmental regulations upward, so has Germany, the EU's largest and wealthiest member state, contributed to the strengthening of the European Union's regulatory standards. Globally and regionally, this role has been played primarily by the world's two largest markets, namely the United States and the European Union.

The "Delaware effect" assumes stricter standards represent a source of competitive disadvantage. But, in contrast to labor standards, the costs of complying with stricter consumer and environmental standards has not been sufficiently large enough to force political jurisdictions to lower their standards in order to keep domestic firms or plants competitive. On the contrary: in the case of many environmental and consumer regulations, stricter standards represent a source of competitive advantage for domestic producers, in part because it is often easier for them to comply with them. Hence they often


compete with firms from other political jurisdictions by raising standards rather than lowering them.

Equally significantly, when rich nations with large domestic markets such as the United States and Germany enact stricter product standards, their trading partners find themselves under pressure to meet them in order to maintain market access. This in turn often encourages consumer or environmental organizations in the exporting country to demand similar standards for products sold in their domestic markets – a demand that internationally oriented producers are now more willing to support since their exports to "greener" markets already meet them.

Thus the disparity in national regulations is not only an ongoing source of trade tensions; it also represents a mechanism by which national product standards can be driven upward. However, the role of "greener" markets in raising the regulatory standards of the nations with whom they trade is primarily confined to product standards. Trade liberalization, by itself, is less likely to strengthen domestic regulations governing how goods and natural resources are produced.

The impact of trade liberalization on regulatory standards is also affected by another factor: the degree of economic integration. The stronger the role of international institutions in promoting liberal trade policies, the more extensive the leverage of rich, powerful states over the regulatory powers of their trading partners. Thus it is precisely the EU's commitment to the creation of a single European market that has enabled Germany and its influential green pressure groups to exercise so much influence over the environmental policies of other member states. By contrast, because the GATT is a much weaker institution, the ability of a "greener" nation like the United States to affect the domestic regulatory policies of its trading partners has been much more limited. Unlike the EU, neither the GATT nor the newly established WTO contains any mechanisms for enabling its most powerful members to strengthen the regulatory standards of other signatories.

NAFTA falls roughly in between. Like the EU, it subjects national environmental standards to extra-national scrutiny: a nation can be disciplined either for not enforcing existing regulatory standards or for lowering them to attract investment. But compared to the EU, the institutions established by NAFTA have much less authority to harmonize regulatory standards within North America; NAFTA is essentially a trade agreement, albeit a relatively "green" one. It thus provides the United States with more opportunity to affect Mexican regulatory policies than America had under the GATT, but less than Germany has been able to exercise within the EU.

But it is important not to equate stricter standards with more effective regulations. Many environmental and consumer regulations contribute little or
nothing to enhancing consumer or environmental protection. To the extent that these regulations have been successfully challenged through trade agreements and treaties, public welfare has been enhanced. However efforts to remove trade barriers to promote economic integration have at times prevented "greener" nations from establishing regulations as strict as its citizens and producers would prefer. This talk describes a number of such cases, primarily within the EU, but within the GATT has well.

At the same time, trade liberalization has also helped increase the leverage of NGOs and producers in "greener" countries over the regulatory policies of their trading partners. Thus the EU has significantly strengthened Germany's ability to shape the regulatory standards of Greece and Italy. A similar dynamic is likely to occur, albeit less dramatically, in North America. As a result of NAFTA, Mexican regulatory standards and their enforcement increasingly will be shaped by the preferences and influence of American producers and NGOs. Indeed, this has already occurred: American environmental organizations forced Mexico to strengthen both its environmental regulations and their enforcement as a condition for supporting trade liberalization.

Trade liberalization is most likely to strengthen consumer and environmental protection when a group of nations has agreed to reduce the role of regulations as trade barriers and the most powerful among them has influential domestic constituencies that support stronger regulatory standards. Thus the stronger the commitment of nations to coordinate their regulatory policies, the more powerful is the "California effect." Likewise, the weaker the institutions created by regional or international trade agreements or treaties, the weaker the "California effect." Accordingly, the "California effect" has been relatively important within the EU and much less important within the GATT, with NAFTA falling in between.
II. The Impact of Trade Liberalization on Regulatory Standards

The tensions between protective regulation and free trade described in this talk might be leading to one of two outcomes: either free trade or protective regulation would triumph at the expense of the other. According to one scenario, trade liberalization might be steadily undermining national regulatory standards. Finding that the costs of compliance with the strict standards demanded by their citizens had made their products uncompetitive on global markets, and no longer able to protect their industries by tariffs, national governments would be forced to progressively weaken their consumer and environmental regulations. Their competitors would then respond by lowering their standards still further, thus producing a downward spiral of regulatory standards. Likewise, the increasingly powerful international institutions established by trade agreements and treaties would have become progressively more vigilant in their scrutiny of protective regulations that "interfered" with trade, thus inhibiting many nations from enforcing regulatory standards stricter than those of their trading partners. Consequently, the influence of consumer and environmental organizations over regulatory policies would be declining.

Alternatively, precisely the opposite outcome might be taking place. Nations would be enacting an increasing number of regulatory standards that disadvantaged importers, including making access to their domestic markets contingent upon other nations adopting production standards similar to their own. Dispute settlement mechanisms would have become toothless in the face of these eco-protectionist challenges to trade liberalization. Correspondingly, protectionist producers and environmental and consumer groups would have increased their political influence over both trade and regulatory policies.

A number of the developments described in this talk are consistent with each of these scenarios. In some cases, increased international scrutiny of domestic regulatory policies has expanded, while in others international institutions have proven unable or unwilling to exert effective discipline over national regulatory standards that restrict trade. The decisions of the GATT dispute panels in the dolphin/tuna cases, the GATT's success in preventing restrictions on imports of hardwoods from South Asia, and the EU's Luxembourg and food additive directives illustrate the role of trade agreements in weakening national regulations, while Ontario's beer can tax, Denmark's recycling law, the American restrictions on sales of under-sized lobsters, the inability of the EU to harmonize the recycling requirements of its member states, and the EU's hormone ban demonstrate the increasing role of regulations as nontariff barriers.

Clearly there are important conflicts between trade and regulatory policies. The number and significance of these conflicts will undoubtedly increase as a result of regional and international efforts to promote economic integration on
one hand and the continued disparity of national consumer and environmental regulations on the other. But there exists a broader and rather counter-intuitive pattern. True, the steady growth of regulation has interfered with trade while trade agreements are increasingly interfering with regulation. But what is more significant is that, on balance, economic integration has increased while consumer and environmental standards have become stronger. Given the reasonable expectation that the strengthening of one should result in the weakening of the other, what has made this non-zero-sum outcome possible?

The Impact of Regulation on Trade

National and, in the case of the EU, regional environmental and consumer regulations do continue to represent important obstacles to trade. It is likely that in the absence of the substantial expansion of health, safety and environmental regulation over the last three decades, the current level of both regional and international trade would be greater. In addition, the growing participation of consumer and environmental organizations in the making of trade policies has increased political support for producers who oppose trade liberalization. However the impact of both developments on liberal trade policies has been limited by three factors: the political influence of internationally-oriented producers, the commitments of institutions to trade liberalization, and the ability of states to agree on common rules to curb trade in as well as the production of collective "bads."

First, producers who operate in many markets have a strong interest in making national product standards more similar.11 "Uniform product standards reduce the cost of adopting production runs at a lower unit cost."12 For this reason, agreements reducing the disparity of regulatory standards for the production and marketing of chemicals, automobile emissions, and health protection measures for agricultural products has been strongly supported by the export-oriented producers in these sectors. Correspondingly, the reduction of nontariff barriers in these sectors constitutes a political defeat for more domestically-oriented producers for whom distinctive national product standards represented a way of restricting imports.


This dynamic helps explain not only the important decision of the European Community to harmonize emission requirements for automobiles in the late 1980s, but why the harmonized standards the EU selected were the ones preferred by Europe's most export-oriented producers, namely the German manufacturers of medium and large cars. These standards not only made it easier for German manufacturers to sell their vehicles throughout the EU, but equally importantly, because these standards were similar to those of one of their major export markets, they enabled the Germans to produce vehicles for sale in the United States without major design changes.

The power and preferences of internationally-oriented producers also accounts for both the EU's relatively rapid progress in harmonizing regulations for the marketing of chemicals within Europe as well as the subsequent agreement between the EU and the United States to harmonize their respective testing procedures for chemicals under the auspices of the OECD. None of the major chemical producers in Germany, Britain or the United States stood to benefit by national regulations that restricted trade. On the contrary, all had a common stake in assuring access to each others' market. As one study of chemical regulation in the United States and Europe notes, "the global integration of chemical markets cautions governments against imposing regulatory burdens that would ... throw up harmful barriers to trade."13

The influence of producers also played a critical role in the EU's success in reducing nontariff barriers to trade in food and food processing. This effort has been strongly supported by Europe's export-oriented food producers, processors and distributors, all of whom hoped to benefit by the removal of national regulatory barriers to trade in animals, plants, food and beverages. The same dynamic accounts for the decision to restrict the use of sanitary and phytosanitary measures as nontariff trade barriers in the Uruguay Round GATT agreement. The initial pressure for incorporating an agreement on S&P standards into the GATT came from American grain processors, among the world's most important agricultural exporters. But their initiative was supported by a number of other nations, whose food producers and processors also wanted enhanced access to each others' market, including that of the United States. Likewise, the restrictions on the use of food processing standards as nontariff barriers in the North American Free Trade Agreement reflected the interests of both Mexican and American agricultural exporters.

Moreover, the limited success of impact of NGOs in the United States, acting either alone or in cooperation with producers, on restricting American exports of various "hazardous" product was largely due to the greater political influence of American exporters. Thus it was the opposition of the American chemical industry which prevented Congressional passage of the "circle of poi-

son" legislation. And the influence of export-oriented American manufacturing and service firms helped defeat proposals to "tax" imports of manufactured products produced according to laxer regulatory standards.

The interests of particular firms or the structure of particular economic sectors is not, however, sufficient to explain the extent to which the use of national regulations as trade barriers has been constrained. For example, the decision of the European Court of Justice in *Cassis de Dijon* can hardly be attributed to the political or economic influence of the French liqueur industry, let alone the German alcoholic beverage importer whose complaint initiated the case. Moreover *Cassis* preceded the Single European Act, which did have substantial business support. And while export-oriented European firms undoubtedly played a critical role in the passage of the SEA, their influence does not adequately explain the EU's subsequent progress in reducing nontariff barriers for so many products in so many sectors.

The second explanation for the compatibility between trade expansion and protective regulation has to do with the structure and authority of international institutions. Thus the success of the EU's 1992 program owes much to the fact that the Community created a set of institutions, in which norms, legal principles and decision-making rules have significantly facilitated both the harmonization of national regulatory standards and the reduction of national protective regulations that restrict trade. In particular, the European Court of Justice has emerged as a powerful institution, comparable in many respects to the Supreme Court of the United States. Its articulation of the principle of mutual recognition, and its application of this principle to strike down numerous national product regulations, have made an immeasurable contribution to European economic integration. Likewise, the EU's decision to establish a system of weighted voting for directives affecting the single market has played a critical role in facilitating the adoption of Union-wide regulatory standards.

Moreover, the EU's 1992 program helped change the outlook of both large and small firms throughout Europe. By encouraging them to think about markets in regional rather than national terms it affected the way they defined their interests. Instead of focusing on the maintenance of domestic regulations and standards that restricted imports, they increasingly began to challenge the regulations of other member states which limited their exports. The result was


to create a degree of business support that did not exist before for the idea of
the single market and the removal of trade barriers.16

The GATT is a much weaker institution than the EU. But nonetheless it too
has played a role in limiting the use of regulations as trade barriers. Signifi­
cantly, no GATT signatory has yet imposed a tax on imported products which
are produced accorded to laxer environmental standards, in spite of substantial
domestic political support for such a measure from protectionist producers
and environmentalists in a number of countries, including the United States.
Governments have resisted such a tax — and domestic pressures for it — because
it would undermine the logic of liberalized global trade, and threaten the
broad range of benefits provided by open markets.

The response of the international community to the decision of the
tuna/dolphin dispute panel provides another indication of the importance of
institutional rules. Although this panel's ruling was widely criticized on both
environmental and legal grounds, and not officially adopted by the GATT
Council, it nonetheless has affected a number of national policies. Even the
United States, which chose to ignore the panel's ruling with respect to Mexican
tuna imports, has since hesitated to impose additional trade restrictions which
would be inconsistent with the panel ruling. Moreover, when the EU subse­
sequently issued its own directive to reduce dolphin deaths caused by tuna fish­
ing methods, in deference to the ruling of the GATT dispute panel it did not
extend its scope to non-EU owned fishing vessels. Likewise, it was the Euro­
pean Commission's unwillingness to be subject to GATT dispute settlement
proceedings that led it to resist the pressures of the European Parliament to
impose restrictions on imports of wood from tropical forests. Austria also
withdrew its labeling requirement for imports of tropical wood because of
pressure from the GATT. And the U.S. carefully structured its ban on exports
of unprocessed logs to make it GATT consistent.

The FTA has had less impact on removing regulatory barriers to trade be­
tween the United States and Canada in part because these barriers were not
significant to begin with. However, NAFTA is likely to play a much more im­
portant role in reducing national regulations that restrict trade in large mea­
sure because of the relative importance of existing regulatory trade barriers
between Mexico and the United States.

The third reason why the increase in regulation has not been more disrup­tive
of trade has to do with the increasing importance of international envi­
ronmental treaties and agreements.17 These accords establish minimum, rela-

16 This analysis is consistent with the neofunctionalist explanation of European economic
17 For a discussion of the increasing importance of international environmental institutions,
see Institutions for the Earth; Sources of Effective International Environmental Protection
tively uniform regulatory standards for both products and processes, thus en-
abling nations to cooperate in addressing common environmental problems
while preventing free-riding. They now encompass a wide range of regulatory
policies formerly under the control of national governments, including trade
in endangered species of both plants and animals, hazardous waste, fishing
methods and fisheries management, the production of CFCs, sulphur emissions
(acid rain), and the pollution of international waters. While their enforcement
is uneven, they have established rules which have significantly contributed to
reducing trade conflicts stemming from divergent domestic environmental
standards and cross-national environmental spillovers.18 Although these
treaties and agreements are most important at the international level, they have
also played an role in the coordination of environmental standards and their
enforcement in North America.

Finally, it is important to note that freer trade does not require that nations
adopt uniform production standards since differences in national production
costs are an important reason why trade occurs in the first place. Nor does it
require that nations adopt identical product standards for traded goods. Rather
the compatibility of trade and regulation primarily requires that national regu-
latory standards for traded products be written in such a way as to minimize
the obstacles they impose on imports.

The Impact of Trade on Regulation

This in turn raises a second, equally important issue. What has been the im-
pact of trade liberalization and agreements to promote it on national regula-
tory standards? Has the reduction in both tariff and nontariff barriers under-
dined national efforts to protect consumers and improve the environment?

International trade as a proportion of GNP has significantly increased in ev-
ery industrial nation since the late 1960s.19 Yet during this same period, envi-
ronmental and consumer regulations have become progressively stricter. All
industrial nations and a number of industrializing ones now devote substan-
tially more resources both in absolute and relative terms to environmental and
consumer protection than they did in 1970.

18 See for example, International Environmental Diplomacy, John Carroll, ed. (Cambridge:
Press, 1993), Lawrence Susskind, Environmental Diplomacy (New York: Oxford
University Press, 1994), and Oran Young, International Cooperation (Ithaca: Cornell
19 Michael Piore and Charles Sabel, The Second Industrial Divide New York: Basic Books,
1994, p. 185
Since the early 1970s few major economies have experienced a greater increase in their exposure to international competition than that of the United States: between 1970 and 1980, both imports and exports as a share of GNP more than doubled.\textsuperscript{20} And yet American regulatory standards have become substantially stronger during the last quarter-century. The proportion of American GNP devoted to pollution control stood at 1.5\% in 1972; it has been higher every year since, averaging more than 1.7\% between 1980 and 1986 and increasing to 2.2\% in 1992.\textsuperscript{21} Annual expenditures on compliance with federal environmental regulations totaled $90 billion in 1990 and increased by approximately $30 billion following passage of the 1990 Clean Air Act Amendments.\textsuperscript{22}

Similarly, across the Atlantic the Single European Act’s goal of creating a single European market was in large measure motivated by the interests of European business managers and political leaders in strengthening the ability of European industry to compete successfully in the global economy. Yet this same amendment to the Treaty of Rome also authorized and has contributed to a significant strengthening of EU environmental and consumer regulations. Likewise, since the early 1970s Japan has both emerged as a major international exporter and has significantly increased its environmental expenditures.\textsuperscript{23}

The compatibility between increased exposure to the global economy and the strengthening of domestic regulatory efforts is also borne out by the experience of Mexico, a developing nation. Since 1986, Mexico has significantly opened up its economy to foreign competition, while between 1988 and 1991, government spending on environmental protection increased ten fold.\textsuperscript{24} The approval of NAFTA will to re-enforce both, especially to the extent that Mexico’s per capita GNP moves above the level at which the World Bank estimates that national per capita emission levels begin to decline due to an increase in resources devoted to pollution control.\textsuperscript{25}

\textsuperscript{20} ibid
The United States itself provides the clearest example of the compatibility of strict regulatory standards and extensive economic interdependence. As a union of member states, the United States itself is a highly integrated market whose Constitution permits few restrictions on interstate commerce, especially for traded goods. While many regulatory standards are set by the federal government, a number of federal regulatory statutes only set minimum standards. For example, states are permitted to enact stricter controls on automobile emissions than those required for the nation as a whole. States also are free to impose tougher standards on stationary sources of pollution and additional restrictions on land use. Additionally, recycling requirements are primarily set by state and local governments.

While states do compete with one another to attract investment, they have generally not chosen to do so by lowering their standards for environmental or consumer protection. On the contrary, many state standards are stricter than federal ones. A number of states have enacted more stringent controls over the use of pesticides, beef hormones, and CFCs than the federal government. Several state and local governments have also established ambitious recycling programs, bans on the use of specific materials in packaging and strict standards for solid waste disposal and incineration. A number of states also have established their own, stricter air pollution control standards; those imposed on both individuals and businesses by the Southern California Air Quality Management District are among the strictest in the world.

Nor is the United States unique. Subnational governments in other federal systems, including Canada and Australia, have enacted consumer and environmental regulations stricter than those required by their central governments. Indeed, it was precisely the increasing propensity of local governments to establish their own tougher regulatory standards that led the drafters of the GATT Agreement on sanitary and phytosanitary standards to include a provision holding central governments responsible for the regulatory standards of subnational political units.

The Costs of Compliance

To be sure, some national regulatory standards have been lowered or delayed as a result of international competitive pressures. For example, in the United States the automobile emission standards of the 1977 Clean Air Amendments were modified by Congress as a response to the American automobile industry's competitive difficulties, while in the early 1980s automobile safety requirements were delayed for similar reasons.26 And in 1993, the German Government agreed to modify its recycling requirements following

complaints from German firms that some of these requirements were placing them at a competitive disadvantage. There is also growing concern in Europe that some Union environmental standards have reduced the international competitiveness of European firms and this may well temper the EU's willingness to impose new regulations on industry.27

There are undoubtedly trade-offs between international competitiveness and domestic expenditures mandated by protective regulations. Global competition does constrain domestic regulatory policies as it constrains both national fiscal and monetary policies. But these constraints have still left governments with substantial discretion to enact regulations stricter than those of their trading partners. Thus in spite of several cases of trade/regulation conflict, over the long run economic interdependence has been positively associated with the strengthening of regulatory standards.

Why should this be true? Why hasn't increased regional and international competition led regions, nations, or sub-national governments to compete with one another by enacting less stringent consumer and environmental regulations? In other words, why don't national health, safety and environmental regulations exhibit the "Delaware effect?" In light of recent trends in labor markets, it seems puzzling that regulatory policies have not followed the same pattern as wages – which have been adversely affected by increased international competition in most industrial nations. To take one important example, why have real wages, fringe benefits and employment security for American automobile workers declined, in part due to increased international competition, while over the same time period automotive safety, emission and fuel economy standards have been progressively strengthened?

One important reason is that for all but a handful of industries, the costs of compliance with stricter regulatory standards have not been sufficient to force relatively affluent nations, or sub-national governments to choose between competitiveness and consumer or environmental protection. For in marked contrast to labor costs, the costs of compliance with protective regulations have been modest. According to Martin Houldin, the environmental director at the consulting firm KPMG Peat Marwick in London, "The international differences in the cost of labor are generally so much more important that the environment pales into insignificance.28 This is not to say they are non-existent: many expenditures to improve environmental quality do reduce output and lower the rate of productivity growth. But in the aggregate increases in national levels of pollution-control expenditures have had little effect on the growth of economic output.29 Nor have American states with stronger envi-

ronmental policies experienced inferior rates of economic growth and development.30

While production standards obviously can and do affect corporate plant location decisions, for all but a handful of industries the effects are not significant.31 Within the United States, differences in environmental standards have not been a major factor in plant siting or expansion decisions.32 Studies of international corporate location decisions reach similar conclusions: only a relatively few heavily polluting industries have shifted their production from the United States "mostly because pollution control expenses alone are generally not large enough a share of total costs to make it worth a company's while to relocate."33 Environmental control costs comprise less than 2 percent of total production cost for most US industries, even though American standards are relatively stringent.34

Likewise, studies of the composition of American imports and exports conclude that while "environmental compliance outlays have some impact on trade performance ... the impact is not significant for most industries."35 Significantly, "Japan, with which the U.S. has its principal trade deficit, is not known for its lax environmental standards."36 The OECD reports that "very little evidence exists of firms being transferred abroad in order to escape the more

34 Stewart, "Environmental Regulation" p. 2077.
stringent environmental regulations at home." According to the OECD, the fears that poorer countries would "deliberately keep environmental standards lax in order to attract investment by becoming pollution havens has [not] materialized ... mostly because pollution control expenditures are generally not a large enough share of total costs to make it worth a company's while to relocate." In fact, "multinational companies are increasingly adopting the same environmental standards for their plants, regardless of the country in which they operate." Accordingly, "there is no reason to suppose that international competition for comparative advantage will lead nations to adopt inappropriately low environmental standards."

Finally, just as industrial production often imposes public costs, so do protective regulations produce public benefits. Thus expenditures on reducing air pollution may increase agricultural output while improvements in water quality may result in better fishing yields or increased tourism. Equally importantly, improvements in environmental quality and product safety can improve the health, and thus the productivity, of a nation's work-force and thus reduce national health-care expenditures. They can also create opportunities for export markets for pollution-control equipment. In short, while the economic benefits of regulation are difficult to measure, and have often been exaggerated, they are far from inconsequential.

This does not mean that nations are free to impose whatever environmental regulations they wish on firms engaged in international competition. For while stricter environmental standards may not make a nation poorer, neither do they make it richer; greater wealth leads to a preference for strong regulatory standards, not the reverse. But the fact that laxer regulatory standards are not, for all but a handful of industries, an important source of competitive disadvantage, only helps explain why the reduction of tariff and other trade barriers has not resulted in a movement toward lower regulatory standards. It does not explain why or how trade liberalization and agreements to promote it has contributed to raising them.

The "California Effect" Revisited

The "Delaware effect" does apply to some public policies, but the evidence presented in this talk suggests that protective regulations have not usually been among them. On the contrary, a number of national consumer and environmental regulations exhibit what can be described as the "California effect": they have moved in the direction of political jurisdictions with stricter regulatory standards.

The "California effect" can be illustrated by the history of American automobile emission standards. The 1970 Clean Air Act Amendments specifically permitted California the option of enacting stricter emissions standards than those required for the rest of the United States, an option which California chose. Consequently its standards remained stricter than those of any other state. In 1990, Congress brought national emission standards up to California's and once again permitted California to impose stricter standards. It also gave other states the option of choosing either national or California standards.42 In 1994, 12 eastern states requested that the federal government to permit them to adopt California's new standards.43 These standards in turn are likely to become the basis for the next round of minimum federal requirements. California has now had America's strictest automotive pollution control standards for more than three decades. Thus instead of states with laxer standards undermining those with stricter ones, in the case of automobile emissions precisely the opposite has occurred: California helped make American mobile emissions standards steadily stronger.

The term "California effect" is meant to connote a much broader phenomenon than the impact of American federalism on state regulatory standards. The general pattern suggested by this term, namely the ratcheting upwards of regulatory standards in competing political jurisdictions, applies to many national regulations as well. This pattern has three components: two relate to market forces and the third has to do with politics. First, to the extent that stricter regulations represent a source of competitive advantage for domestic firms, the latter may be more likely to support them. Secondly, rich nations which have enacted "greener" product standards force foreign producers to adjust to them in order to continue to enjoy market access, thus helping in turn to raise foreign product standards. Thirdly, agreements to reduce trade barriers can provide richer and more powerful "greener" nations with the opportunity to pressure other nations into adopting stricter product and production standards.


The Interests of Domestic Producers

How can international competition turn industrial opponents of tougher standards into self-interested promoters of them? First, knowing or anticipating that the burdens of compliance will fall disproportionately on their international competitors may well make domestic producers more willing to support stricter regulations than they would have in the absence of foreign competition. For example, the beer bottlers of both Denmark and Ontario would probably not have supported stricter recycling requirements had not these regulations also served to help protect their domestic markets. Similarly, the success of European consumer groups in persuading the EU to completely ban the use of growth hormones in beef production was facilitated by the support the ban received from Europe's small, relatively inefficient, but politically powerful cattle farmers. Likewise, Germany's willingness to support stricter domestic and EU standards for automobile emissions stemmed in part from the extent to which these standards benefited domestic producers. And the Thai government would not have imposed such severe restrictions on cigarette marketing in the absence of competition from American cigarette companies.

From this perspective, more liberal trade policies, rather than pressing nations to lower their regulatory standards, may actually provide nations with an economic incentive for strengthening them. By contrast, since relatively closed economies can rely on tariffs and quotas to restrict imports, they have less need to adopt protective regulations that advantage domestic producers. In some cases, these regulations may amount to little more than disguised forms of protectionism. Nor do stricter standards necessarily improve consumer or environmental protection. Nonetheless, the self-interest of producers can play a role in strengthening regulatory standards for a number of internationally traded products. In short, Baptist-bootlegger coalitions can serve to advance the legitimate interests of both Baptists and bootleggers.44

The Lure of Green Markets

The second way in which international trade can drive national regulatory standards upward has to do with market access. The argument that trade promotes the strengthening of environmental standards has primarily rested on the impact of trade on promoting domestic economic growth, hence increasing both the demand for regulation and the ability to pay for it. The evidence pre-

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44 Baptist-bootlegger coalitions have also played an important role in strengthening international environmental agreements. For example, the strong support of the United States for the Montreal Protocol reflected a convergence of interests between American environmental organizations and Dupont. The latter supported international restrictions on the production of CFCs because it was more easily able produce a substitute product than its European competitors. See Richard Elliot Benedick, Ozone Diplomacy (Cambridge: Harvard University Press, 1991).
sented in this talk takes this argument another step: it demonstrates that another important factor enabling greener countries to promote the export of stricter standards to less green countries has to do with the size and importance of the former's domestic markets.

Political jurisdictions which have developed stricter product standards force foreign producers in nations with weaker domestic standards, either to design products that meet those standards or sacrifice export markets. This, in turn, encourages those producers to make the investments required to produce these new products as efficiently as possible. But having made these initial investments, they now have a stake in encouraging their home markets to strengthen its standards as well since their exports are already meeting those standards.45

Thus the willingness of Germany's automobile manufacturers to support stricter EU standards was in part due to their previous experience in producing vehicles for the American market. It was precisely the firms supplying the largest, wealthiest automobile market in Europe who took the lead in pressuring the EU to adopt the product standards already set by the world's largest, richest market, namely the United States. They made common cause with German environmentalists to demand the adoption of "US 83" standards by the EU. Significantly, half of German automobile sales in the United States are in California, the political jurisdiction with the world's strictest automotive emission standards.

Indeed, German producers stood to benefit from the EU's adoption of American standards, since they could then produce similar vehicles for both markets at lower costs. Likewise, the subsequent willingness of the French and Italian manufacturers to support the stricter standards of the Small Car Directive stemmed in part from the experience they had gained in producing cars for export to "greener" markets in Europe and the United States as well as their fear of losing additional export markets to their "greener" competitors. Significantly, the one European country whose bottlers welcomed Germany's strict packaging law was Denmark, whose producers enjoyed a competitive advantage in recycling their own products due to Denmark's previously enacted recycling legislation.

The pull of "greener" markets has also served to drive regulatory standards upward in North America. The expansion of trade between the United States and Canada following the Free Trade Agreement between the two countries prompted Canada in 1993 to establish automobile emission requirements similar to those imposed on vehicles sold in America three years earlier. As barriers to imports of Mexican products to the United States gradually decline as a result of NAFTA, Mexican producers will be forced to redesign their prod-

45 This latter point is made by John Braithwaite in "Transational Regulation of the Pharmaceutical Industry," ANNALS, AAPSS Vol. 525, January 1993, p. 29.
ucts to meet American regulatory standards. And those producers who do so will then have an interest in pressuring the adoption of similar standards by Mexico, since this will provide them with a competitive advantage over their more domestically-oriented competitors. At the same time, American exporters to Mexico may also become a source of political support for making Mexican regulatory standards more similar to those of the United States since that will enable them to design similar products for both markets.

The pattern of chemical regulation also illustrates the role of international trade and competition in strengthening regulatory standards. It was the enactment of the Toxic Substances Control Act by the United States that prompted the European Union to enact the Sixth Directive. The EU feared that unless its standards were comparable to those of the United States, it would be deprived of access to one of the world's largest chemical markets. As a result it established a much stricter system for the introduction and marketing of chemical products. Once again, stricter American standards drove those of its major trading partner upward.

In the area of conservation, both the United States and the EU have repeatedly used restrictions, or the threat of restrictions, on access to their large domestic markets to force their trading partners to upgrade their regulatory standards. It was the economic pressure of the EU which forced Canada to end its killing of baby seals and which persuaded both the United States and Canada to end the use of leg-traps to catch fur bearing animals. Likewise the large size of its domestic market has provided the United States with the leverage to influence the fishing practices of several of its trading partners thus helping to protect a variety of species, including whales, turtles and dolphins.

The impact of both these effects of trade liberalization is limited. Specifically, trade liberalization is most likely to encourage a nation to raise its domestic regulatory standards when doing so provides domestic producers with a competitive advantage. This is often the case, but not always. Likewise, the impact of "greener" markets on promoting the export of stricter standards primarily applies to product standards. While this encompasses virtually all consumer protection regulations as well as those environmental regulations which apply to products, it excludes those environmental standards that seek to address the harms caused by how products are produced. And the latter are extremely significant: thus there are a number of environmental practices in less developed nations, ranging from deforestation to hazardous levels of urban air pollution, which are unlikely to be affect by the demands of consumers in "greener" markets.

This is, however, another mechanism by which trade liberalization can raise standards, one capable of affecting a much broader range of regulatory policies. This has to do with the terms of trade agreements and treaties.
The Politics of Standard Setting

To the extent that treaties or trade agreements provide formal mechanisms for establishing harmonized or equivalent standards, they provide an opportunity for richer, more powerful countries to play a greater role in setting those standards. If the world's five major trade treaties and agreements were ranked in terms of the extent to which their signatories have agreed to reduce the use of regulation as trade barriers, the most powerful would be the Single European Act, followed by the Treaty of Rome, the North American Free Trade Agreement, the Free Trade Agreement and the various rounds of the General Agreement on Tariffs and Trade. If these same five treaties and agreements were to be ranked in terms of the extent to which they contain provisions designed to either maintain or strengthen the regulatory standards of their signatories or members, the rankings would be identical. Paradoxically, the more authority nations concede over the making of national regulatory standards, the more likely these standards will be strengthened.

The reason for this relationship is not that international agreements to promote trade liberalization automatically strengthen regulatory standards; in principle, they can just as easily weaken them. It is politics that makes the difference. Specifically, trade agreements and treaties maintain or raise regulatory standards when a powerful and wealthy nation insists that they do. In turn, the powerful nation's willingness to demand that trade liberalization be accompanied by the maintenance or strengthening of health, safety and environmental standards is in large measure due to the influence of its domestic NGOs, and, in many cases, its domestic producers as well. But the ability of a powerful nation to impose its preferences on its trading partners is also dependent on the degree of integration: the more integration, the greater its influence.

Thus the most important factor driving EU environmental standards steadily, if unevenly, upward has been the power and preferences of Germany, the member state with the largest economy and Europe's most powerful environmental movement. By strengthening the power of the Union over the regulatory policies of its member states, the SEA has in turn increased the leverage of Germany, along with the Netherlands and Denmark, over the environmental policies of the rest of the Union. The SEA could have attempted to promote integration at the expense of stricter consumer and environmental standards. That it did not do so was a reflection of the political and economic of those member states which wanted the Community to simultaneously achieve both policy objectives.

Similarly, NAFTA is a much "greener" trade agreement than the FTA for one simple reason: the United States insisted upon a Supplementary Agreement which extends international supervision over the enforcement of Mexican domestic production standards as well as over the content of a wide range of
product standards. It did so primarily for one reason: powerful domestic environmental constituencies whose support the Clinton Administration needed to persuade Congress to support NAFTA demanded it. But the US in turn was able to insist upon this condition because it was wealthier and more powerful than Mexico. The impact of NAFTA on Mexican regulatory policies and preferences will continue to be strongly influenced by the United States, the North American nation with both the largest economy and the most influential environmental pressure groups. However, because the international institutions established by NAFTA are weaker than those of the EU, the US will have less influence over Mexican regulatory policies than Germany, Denmark and the Netherlands have had over those of Italy or Greece. But at the same time, NAFTA gives the United States more leverage over Mexican regulatory policies than it had under the GATT.

The frustration of environmentalists with the GATT stem in large measure from the extent to which GATT rules limit the ability of nations in which green pressure groups are especially influential from using their economic power to change the environmental policies of their trading partners. Accordingly, "greening" the GATT essentially means increasing the ability of the GATT's greener signatories, primarily the United States but also the EU and a number of individual countries, to influence the environmental policies of countries with a weaker commitment to environmental protection. This however has not yet occurred. For in marked contrast to both the EU and NAFTA, the most powerful members of the GATT — the US, the EU and Japan — have not agreed to revise its rules so as to increase their ability to shape the domestic regulatory policies of other signatories. Accordingly, the scope of the "California effect" remains weakest at the global level. But at the same time, compared to both NAFTA and the EU, the GATT also has much less authority to weaken national regulatory standards.

International agreements and treaties to reduce the role of regulatory standards as trade barriers have constrained the ability of greener countries to establish and enforce regulatory standards as strict as their NGOs and some domestic producers have preferred. But what is striking is how infrequently this has occurred and how little it has adversely affected consumer or environmental quality. With the partial exception of British Columbia's fish landing requirements, the Free Trade Agreement between the United States and Canada has not required either nation to weaken its domestic regulatory policies. In the case of every other trade dispute, including the American restriction on sales of lobsters below a certain size, Puerto Rico's milk processing standards, the American asbestos ban and Ontario's tax on beer cans, the nation with the stronger regulation was allowed to maintain it.

In the case of the GATT, dispute panels have issued decisions in only six cases involving the use of regulations as nontariff trade barriers. In one case, the dispute over America's Superfund tax, the national regulation was found to
be GATT consistent. In the case of the five other disputes that came before dispute settlement panels, national rules were successfully challenged. But two of these essentially involved commercial disputes between Canadian and American fishermen with few environmental consequences. In the case of the complaint brought by the United States against Thailand's restriction on sales of American cigarettes, the dispute panel found the import ban to be inconsistent with the GATT, but it upheld Thailand's much more important marketing restrictions on all cigarettes.

This leaves the two cases involving American restrictions on imports of tuna, both of which were decided against the United States, along with a variety of other more informal efforts on the part of the GATT to discourage import restrictions based on production standards. But the GATT's constraints have as much to do with the unilateral nature of these restrictions as with their extra-jurisdictional scope. In practice, it is highly unlikely that the newly established World Trade Organization would uphold a complaint against an environmentally-related trade restriction that was strongly supported by both the United States and the European Union, let alone one taken pursuant to an international environmental treaty. Moreover trade restrictions represents only one mechanism that countries can employ to influence the regulatory policies of other nations. They are much less effective than international environmental agreements, especially when the latter include subsidies.

The international institution that has played the most important role in limiting national environmental and consumer regulations has been the European Union. EU Directives have frequently prevented the Community's "greener" member states, most notably Germany, the Netherlands, and Denmark from enacting stricter regulations for traded products on the ground that these threaten the single market. But these "ceilings" have been more than counter-balanced by the Union's role in progressively strengthening the regulatory standards of the EU's other member states. On balance, the EU has strengthened both environmental and consumer standards within western Europe. Equally importantly the EU's regulatory directives cover all consumer and environmental standards which directly affect the health, safety or environment of its member states and their citizens.

Moreover, any assessment of the impact of trade agreements and treaties on national regulatory standards must distinguish between regulations that actually protect the public and those which are actually disguised forms of protectionism. Virtually all of the protective consumer regulations which have actually been eliminated or modified as a result of national obligations under an international agreement or treaty fall into the latter category. This is true of the literally thousands of food labeling and composition standards of the member states of the EU as well those Japanese S&P standards that have been modified as a result of pressures from its trading partners. Subjecting these regulations to international scrutiny has made consumers better not worse off.
It is true that as the authority of international institutions over national regulatory standards increases, so does the possibility that legitimate national regulatory policies will be undermined. The distinction between consumer and environmental protection and consumer and environmental protectionism is not always clear cut. Thus both NAFTA and the WTO's Agreement on Sanitary and Phytosanitary Standards could result in weakening some regulations that arguably do enhance consumer protection. But if the experience of the EU is any guide, on balance, they are much more likely to improve public welfare by forcing the elimination or modification of the large number of national regulations which mainly benefit producers. And if the experience of the FTA is any guide, national regulations that are strongly supported by both producers and NGOs are less likely to be subject to international review.

**Regulation and Political Power**

The argument that rich, powerful countries can drive the regulatory standards of their trading partners upward through both economic and political mechanisms is premised on the association between national wealth and power, and national preferences for stricter environmental and consumer regulations. The "California effect" requires both that political jurisdictions with stronger regulations be rich and powerful and that rich and powerful political jurisdictions have stronger regulatory standards. Accordingly, it is unlikely that Delaware would have been able to insist on its own stricter automobile emission standards, let alone serve as a model for the rest of the United States. California's impact on both American and European regulatory standards is a function of the size of its "domestic" market.

Thus had Portugal been the EU's "greenest" member state and Germany been indifferent to stronger regulatory standards, the impact of the EU on European environmental standards would have been rather different; they might well have been driven downward. A similar outcome might be expected to occur in North America if Mexican environmental pressure groups were relatively strong and those in the United States relatively weak. Likewise, relatively few of their trading partners would care if India or Finland, rather than the US or the EU, had made access to their domestic market contingent on improvements in the international or domestic conservation practices of their trading partners. Likewise, if support of Germany and the United States for stronger regulatory standards were to diminish, their trading partners would find themselves under less pressure to raise their regulatory standards.

Nor is there anything automatic about the commitment of richer countries to improve the regulatory standards of their trading partners. The former's policies preferences are dependent on the preferences of domestic constituencies. For example, it is unlikely that an Asian common market or free trade zone dominated by Japan, a rich nation with a weak environmental movement,
would exhibit the same pattern of regulatory policy-making that has occurred in Europe or is beginning to occur in North America. While Japan does have extremely strict domestic product standards which its trading partners have to meet, it has not played a leadership role in seeking to address global environmental issues. Nor has it attempted to use its considerable economic and political leverage to link Asian economic integration to the strengthening of environmental standards in other Asian nations. Indeed, it is Japan itself which has been subject to pressures from its trading partners, most notably the United States, to improve its environmental practices, especially in the area of wildlife protection.46

Accordingly, the future impact regulatory impact of an organization such as the Asia-Pacific Economic Cooperation group will primarily depend on whether Japan chooses to use its political and economic influence to improve the environmental practices of its trading partners. And this in turn will depend on the preferences and political influence of Japanese environmental organizations which, to date, have been both less influential and less interested in environmental problems outside of their nation's borders than their counterparts in the US and the EU. By like token, were China to replace the United States as the world's largest economy and its regulatory policies to remain unchanged, the dynamics of global regulatory policy-making would be altered significantly. In sum, the impact of increased integration on regulatory standards depends on the policy objectives of powerful nations, which are largely determined domestically.

To date, increased economic integration has, on balance, contributed to strengthening national regulatory policies, especially for traded goods and in the case of the EC, and to a lesser extent NAFTA, for domestic production standards as well. Whether or not it continues to do so depends on the preferences of the world's powerful nation states. The increased integration of regional and global markets in a "borderless world" has not led to a decline in the importance of national power. On the contrary, the globalization and regionalization of regulatory policy-making has extended the influence of both producers and NGOs in rich and powerful countries over the regulatory policies of nations with whom they trade and with which their economies have become integrated. In the final analysis, the impact of trade and trade agreements on regulatory standards is determined by the interaction of domestic and international politics.

Biographical Note

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