The Perils of Free Trade

Economists routinely ignore its hidden costs to the environment and the community

by Herman E. Daly

No policy prescription commands greater consensus among economists than that of free trade based on international specialization according to comparative advantage. Free trade has long been presumed good unless proved otherwise. That presumption is the cornerstone of the existing General Agreement on Tariffs and Trade (GATT) and the proposed North American Free Trade Agreement (NAFTA). The proposals in the Uruguay Round of negotiations strengthen GATT's basic commitment to free trade and economic globalization.

Yet that presumption should be reversed. The default position should favor domestic production for domestic markets. When convenient, balanced international trade should be used, but it should not be allowed to govern a country's affairs at the risk of environmental and social disaster. The domestic economy should be the dog and international trade its tail. GATT seeks to tie all the dogs' tails together so tightly that the international knot would wag the separate national dogs.

The wiser course was well expressed in the overlooked words of John Maynard Keynes: "I sympathize, therefore, with those who would minimize, rather than those who would maximize, economic entanglement between nations. Ideas, knowledge, art, hospitality, travel—these are the things which should of their nature be international. But let goods be homespun whenever it is reasonably and conveniently possible; and, above all, let finance be primarily national." Contrary to Keynes, the defenders of the proposed Uruguay Round of changes to GATT not only want to downplay "homespun goods," they also want finance and all other services to become primarily international.

Economists and environmentalists are sometimes represented as being, respectively, for and against free trade, but that polarization does the argument a disservice. Rather the real debate is over what kinds of regulations are to be instituted and what goals are legitimate. The free traders seek to maximize profits and production without regard for considerations that represent hidden social and environmental costs. They argue that when growth has made people wealthy enough, they will have the funds to clean up the damage done by growth. Conversely, environmentalists and some economists, myself among them, suspect that growth is increasing environmental costs faster than benefits from production—thereby making us poorer, not richer.

A more accurate name than the persuasive label "free trade"—because who can be opposed to freedom?—is "deregulated international commerce." Deregulation is not always a good policy: recall the recent experience of the U.S. with the deregulation of the savings and loan institutions. As one who formerly taught the doctrine of free trade to college students, I have some sympathy for the free traders' view. Nevertheless, my major concern about my profession today is that our disciplinary preference for logically beautiful results over factually grounded policies has reached such fanatical proportions that we economists have become dangerous to the earth and its inhabitants.

The free trade position is grounded in the logic of comparative advantage, first explicitly formulated by the early 19th-century British economist David Ricardo. He observed that countries with different technologies, customs and resources will incur different costs when they make the same products. One country may find it comparatively less costly to mine coal than to grow wheat, but in another country the opposite may be true. If nations specialize in the

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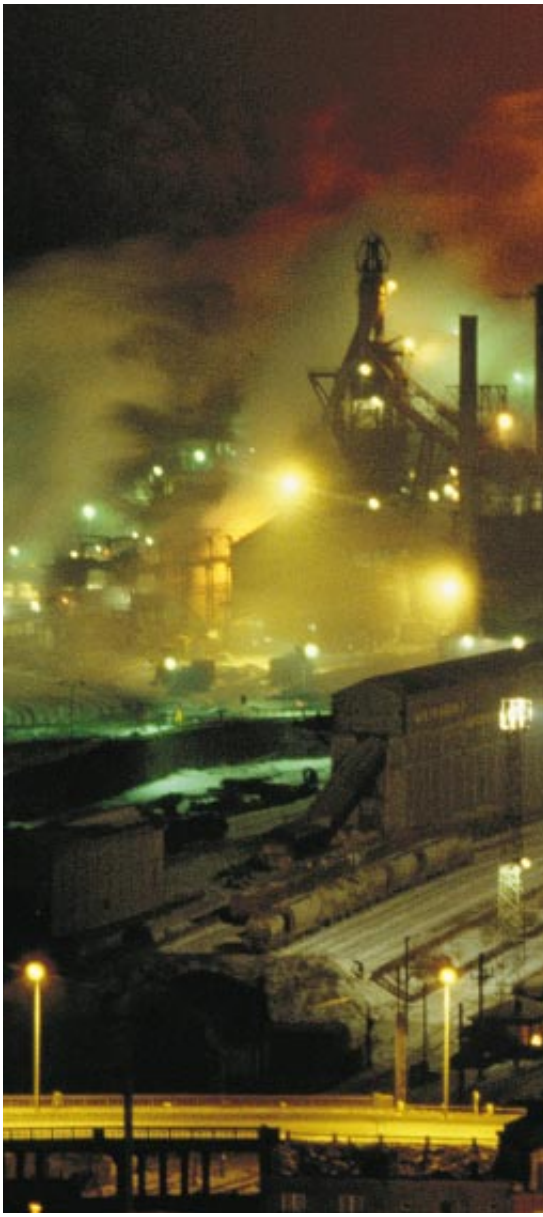


POLLUTING is one way in which industries can "externalize" some of the costs associated with production. Industries have profit incentives to produce goods

products for which they have a comparative advantage and trade freely to obtain others, everyone benefits.

The problem is not the logic of this argument. It is the relevance of Ricardo's critical but often forgotten assumption that factors of production (especially capital) are internationally immobile. In today's world, where billions of dollars can be transferred between nations at the speed of light, that essential condition is not met. Moreover, free traders encourage such foreign investment as a development strategy. In short, the free traders are using an argument that hinges on the impermability of national boundaries to capital to support a policy aimed at making those same boundaries increasingly permeable to both capital and goods!

That fact alone invalidates the assumption that international trade will inevitably benefit all its partners. Furthermore, for trade to be mutually beneficial, the gains must not be offset by higher liabilities. After specialization, nations are no longer free *not* to trade, and that loss of independence can be a liability. Also, the cost of transporting goods internationally must not cancel out the profits. Transport costs are energy intensive. Today, however, the cost of energy is frequently subsidized by governments through investment tax credits, federally subsidized research and military expenditures that ensure access to petroleum. The environmental costs of fossil-fuel burning also do not factor into the price of gasoline. To the extent that energy is subsidized, then, so too is trade. The full cost of energy, stripped of these obscuring subsidies, would therefore reduce the initial gains from long-distance trade, whether international or interregional.

in countries with permissive pollution, health and labor standards and then to sell the goods elsewhere. Yet that competitive pressure can drive down higher standards. Tariffs that eliminate these unfair advantages are therefore essential for protecting the global efficiency of resource use.

Free trade can also introduce new inefficiencies. Contrary to the implications of comparative advantage, more than half of all international trade involves the simultaneous import and export of essentially the same goods. For example, Americans import Danish sugar cookies, and Danes import American sugar cookies. Exchanging recipes would surely be more efficient. It would also be more in accord with Keynes's dictum that knowledge should be international and goods homespun (or in this case, homebaked).

Another important but seldom mentioned corollary of specialization is a reduction in the range of occupational choices. Uruguay has a clear comparative advantage in raising cattle and sheep. If it adhered strictly to the rule of specialization and trade, it would afford its citizens only the choice of being either cowboys or shepherds. Yet Uruguayans feel a need for their own legal, financial, medical, insurance and educational services, in addition to basic agriculture and industry. That diversity entails some loss of efficiency, but it is necessary for community and nationhood.

Uruguay is enriched by having a symphony orchestra of its own, even though it would be cost-effective to import better symphony concerts in exchange for wool, mutton, beef and leather. Individuals, too, must count the broader range of choices as a welfare gain: even those who are cowboys and shepherds are surely enriched by contact with countrymen who are not *vaqueros* or *pastores*. My point is that the community dimension of welfare is completely overlooked in the simplistic argument that if specialization and trade increase the per capita availability of commodities, they must be good.

Let us assume that even after those liabilities are subtracted from the gross returns on trade, positive net gains still exist. They must still offset deeper, more fundamental problems. The arguments for free trade run afoul of the three basic goals of all economic policies: the efficient *allocation* of resources, the fair *distribution* of resources and the maintenance of a sustainable *scale* of resource use. The first two are tradi-

tional goals of neoclassical economics. The third has only recently been recognized and is associated with the viewpoint of ecological, or steady-state, economics. It means that the input of raw materials and energy to an economy and the output of waste materials and heat must be within the regenerative and absorptive capacities of the ecosystem.

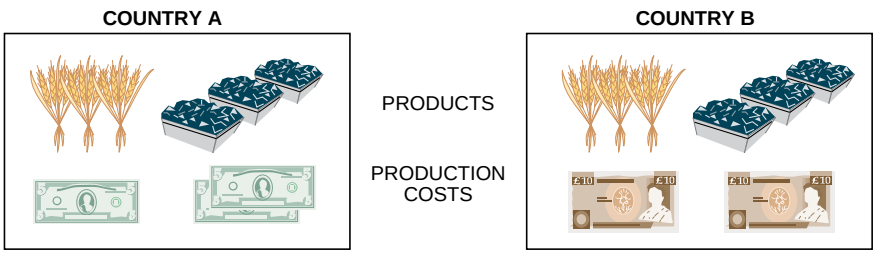
In neoclassical economics the efficient allocation of resources depends on the counting and internalization of all costs. Costs are internalized if they are directly paid by those entities responsible for them—as when, for example, a manufacturer pays for the disposal of its factory wastes and raises its prices to cover that expense. Costs are externalized if they are paid by someone else—as when the public suffers extra disease, stench and nuisance from uncollected wastes. Counting all costs is the very basis of efficiency.

Economists rightly urge nations to follow a domestic program of internalizing costs into prices. They also wrongly urge nations to trade freely with other countries that do not internalize their costs (and consequently have lower prices). If a nation tries to follow both those policies, the conflict is clear: free competition between different cost-internalizing regimes is utterly unfair.

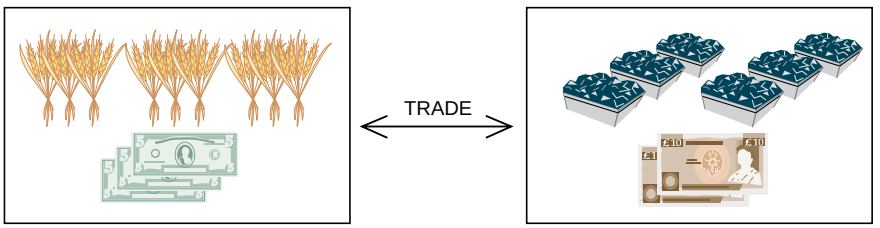
International trade increases competition, and competition reduces costs. But competition can reduce costs in two ways: by increasing efficiency or by lowering standards. A firm can save money by lowering its standards for pollution control, worker safety, wages, health care and so on—all choices that externalize some of its costs. Profit-maximizing firms in competition always have an incentive to externalize their costs to the degree that they can get away with it.

For precisely that reason, nations maintain large legal, administrative and auditing structures that bar reductions in the social and environmental standards of domestic industries. There are no analogous international bodies of law and administration; there are only national laws, which differ widely. Consequently, free international trade encourages industries to shift their production activities to the countries that have the lowest standards of cost internalization—hardly a move toward global efficiency.

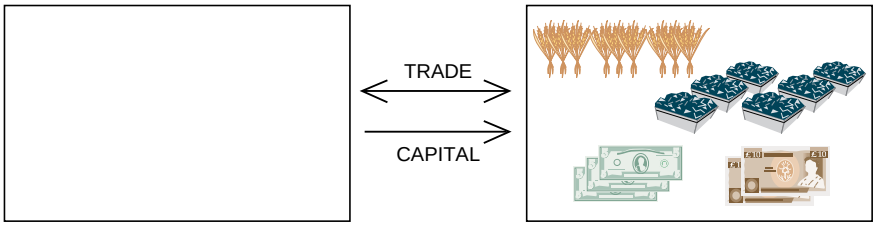
How Comparative Advantage Works



When there is no international trade, each country's production is limited entirely by its own capital and resources. Some products are comparatively less expensive to produce than others on a per unit basis.



When there is free trade, countries can specialize based on comparative advantage. All of a country's capital can be invested in making one product. Absolute cost differences between the countries do not matter. The hidden assumption is that capital cannot cross borders.



If capital is also mobile, capital can follow absolute advantage rather than comparative advantage. As in this example, one country may end up producing everything if it has lower absolute costs.

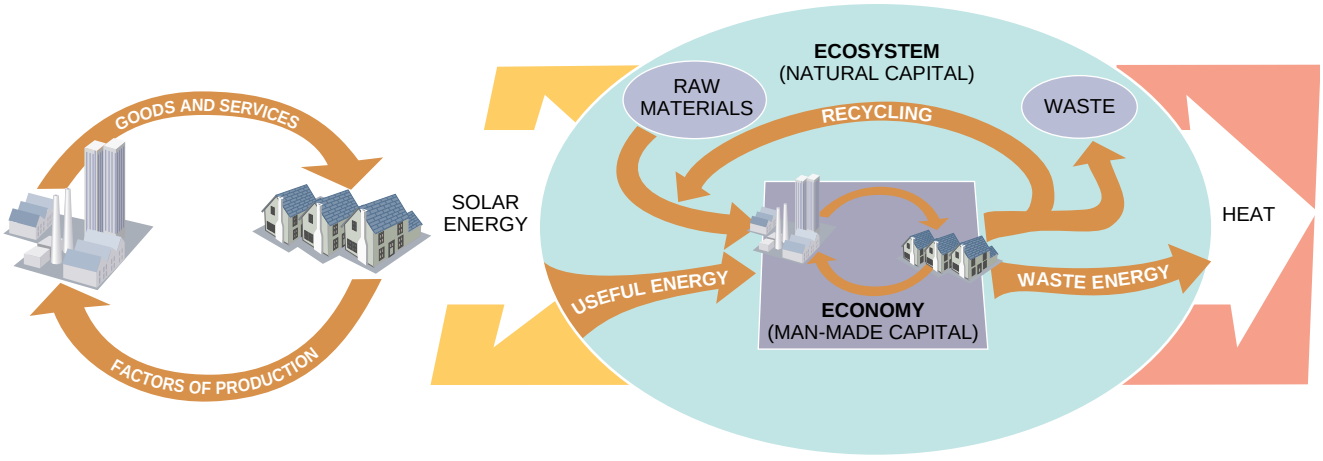
Attaining cheapness by ignoring real costs is a sin against efficiency. Even GATT recognizes that requiring citizens of one country to compete against foreign prison labor would be carrying standards-lowering competition too far. GATT therefore allows the imposition of restrictions on such trade. Yet it makes no similar exception for child labor, for uninsured risky labor or for subsistence-wage labor.

The most practical solution is to permit nations that internalize costs to levy compensating tariffs on trade with nations that do not. "Protectionism"—shielding an inefficient industry against more efficient foreign competitors—is a dirty word among economists. That is very different, however, from protecting an efficient national policy of full-cost pricing from standards-lowering international competition.

Such tariffs are also not without precedent. Free traders generally praise the fairness of "antidumping" tariffs that discourage countries from trading in goods at prices below their production costs. The only real difference is the decision to include the costs of environmental damage and community welfare in that reckoning.

This tariff policy does not imply the imposition of one country's environmental preferences or moral judgments on another country. Each country should set the rules of cost internalization in its own market. Whoever sells in a nation's market should play by that nation's rules or pay a tariff sufficient to remove the competitive advantage of lower standards. For instance, under the Marine Mammal Protection Act, all tuna sold in the U.S. (whether by U.S. or Mexican fishermen) must count the cost of limiting the kill of dolphin associated with catching tuna. Tuna sold in the Mexican market (whether by U.S. or Mexican fishermen) need not include that cost. No standards are being imposed through "environmental imperialism"; paying the costs of a nation's environmental standards is merely the price of admission to its market.

Indeed, free trade could be accused of reverse environmental imperialism. When firms produce under the most permissive standards and sell their products elsewhere without penalty, they press on countries with higher stan-



DIFFERENT VIEWS OF ECONOMIES distinguish neoclassical and steady-state economics. Neoclassical economics pictures the economy as an isolated system (*left*) in which exchange value circulates between industries and households. Neither matter nor energy enters or leaves the system, so the economy can be of any size. In the steady-state view (*right*) the economy is only one component of a larger ecosystem in which materials are transformed and energy is converted to heat. As the economy grows larger, its behavior must conform more closely to that of the total ecosystem.

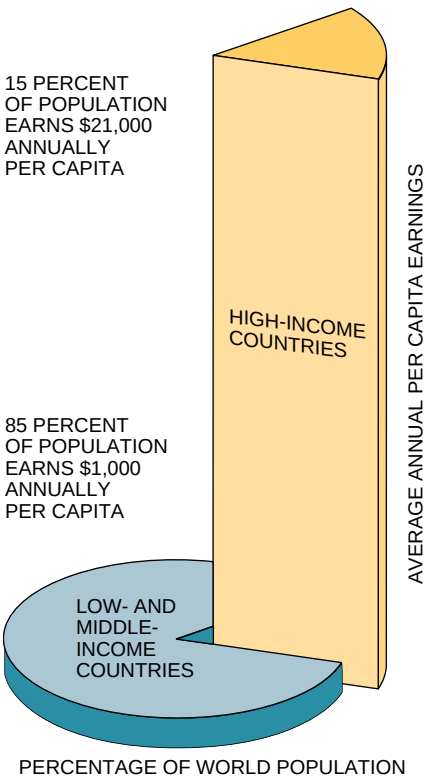
dards to lower them. In effect, unrestricted trade imposes lower standards.

Unrestricted international trade also raises problems of resource distribution. In the world of comparative advantage described by Ricardo, a nation's capital stays at home, and only goods are traded. If firms are free to relocate their capital internationally to wherever their production costs would be lowest, then the favored countries have not merely a comparative advantage but an absolute advantage. Capital will drain out of one country and into another, perhaps making what H. Ross Perot called "a giant sucking sound" as jobs and wealth move with it. This specialization will increase world production, but without any assurance that all the participating countries will benefit.

When capital flows abroad, the opportunity for new domestic employment diminishes, which drives down the price for domestic labor. Even if free trade and capital mobility raise wages in low-wage countries (and that tendency is thwarted by overpopulation and rapid population growth), they do so at the expense of labor in the high-wage countries. They thereby increase income inequality there. Most citizens are wage earners. In the U.S., 80 percent of the labor force is classified as "nonsupervisory employees." Their real wages have fallen 17 percent between 1973 and 1990, in significant part because of trade liberalization.

Nor does labor in low-wage countries necessarily gain from free trade. It is likely that NAFTA will ruin Mexican peasants when "inexpensive" U.S. corn (subsidized by depleting topsoil, aquifers, oil wells and the federal treasury) can be freely imported. Displaced peasants will bid down wages. Their land will be bought cheaply by agribusinesses to produce fancy vegetables and cut flowers for the U.S. market. Ironically, Mexico helps to keep U.S. corn "inexpensive" by exporting its own vanishing reserves of oil and genetic crop variants, which the U.S. needs to sustain its corn monoculture.

Neoclassical economists admit that overpopulation can spill over from one country to another in the form of cheap labor. They acknowledge that fact as an argument against free immigration. Yet capital can migrate toward abundant labor even more easily than labor can move toward capital. The legitimate case for restrictions on labor immigration is therefore easily extended to restrictions on capital emigration.



RAISING THE INCOMES in the more populous, less wealthy nations will be difficult. Over the next 40 years, the population will double. To reach the higher level of per capita income, the low- and middle-income countries would have to increase their use of resources by a factor of almost 36 ($21 \times 2 \times 0.85$). To avoid augmenting the damage to the environment, they would need to boost resource-use efficiency by the same factor.

When confronted with such problems, neoclassical economists often answer that growth will solve them. The allocation problem of standards-lowering competition, they say, will be dealt with by universally "harmonizing" all standards upward. The distribution problem of falling wages in high-wage countries would only be temporary; the economists believe that growth will eventually raise wages worldwide to the former high-wage level and beyond.

Yet the goal of a sustainable scale of total resource use forces us to ask: What will happen if the entire population of the earth consumes resources at the rate of high-wage countries? Neoclassical economists generally ignore this question or give the facile response that there are no limits.

The steady-state economic paradigm suggests a different answer. The regenerative and assimilative capacities of the biosphere cannot support even the current levels of resource consumption, much less the manyfold increase required to generalize the higher stan-

dards worldwide. Still less can the ecosystem afford an ever growing population that is striving to consume more per capita. As a species, we already preempt about 40 percent of the land-based primary product of photosynthesis for human purposes. What happens to biodiversity if we double the human population, as we are projected to do over the next 30 to 50 years?

These limits put a brake on the ability of growth to wash away the problems of misallocation and maldistribution. In fact, free trade becomes a recipe for hastening the speed with which competition lowers standards for efficiency, distributive equity and ecological sustainability.

Notwithstanding those enormous problems, the appeal of bigger free trade blocs for corporations is obvious. The broader the free trade area, the less answerable a large and footloose corporation will be to any local or even national community. Spatial separation of the places that suffer the costs and enjoy the benefits becomes more feasible. The corporation will be able to buy labor in the low-wage markets and sell its products in the remaining high-wage, high-income markets. The larger the market, the longer a corporation will be able to avoid the logic of Henry Ford, who realized that he had to pay his workers enough for them to buy his cars. That is why transnational corporations like free trade and why workers and environmentalists do not.

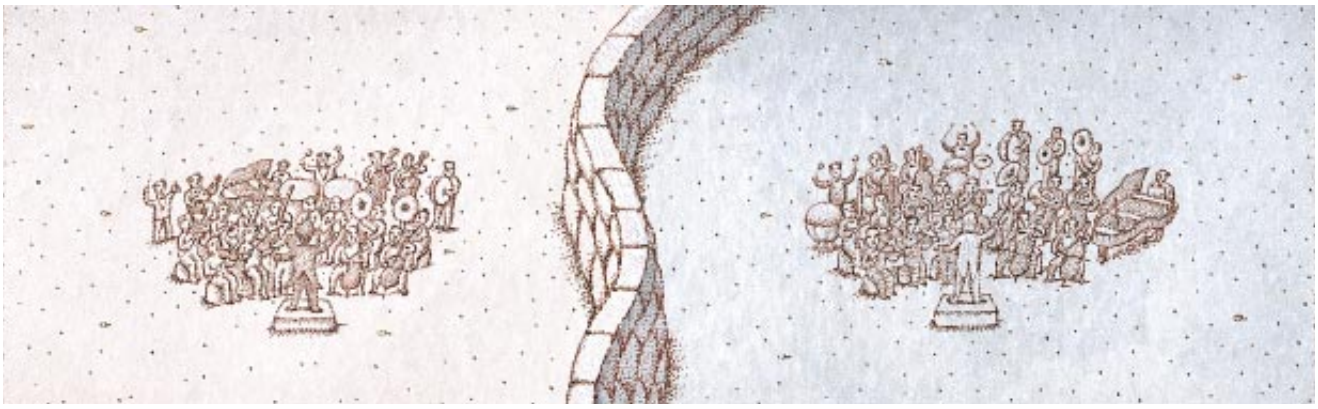
In the view of steady-state economics, the economy is one open subsystem in a finite, nongrowing and materially closed ecosystem. An open system takes matter and energy from the environment as raw materials and returns them as waste. A closed system is one in which matter constantly circulates internally while only energy flows through. Whatever enters a system as input and exits as output is called throughput. Just as an organism survives by consuming nutrients and excreting wastes, so too an economy must to some degree both deplete and pollute the environment. A steady-state economy is one whose throughput remains constant at a level that neither depletes the environment beyond its regenerative capacity nor pollutes it beyond its absorptive capacity.

Most neoclassical economic analyses today rest on the assumption that the economy is the total system and nature is the subsystem. The economy is an isolated system involving only a circular flow of exchange value between firms and households. Neither matter nor energy enters or exits this system. The economy's growth is therefore unconstrained. Nature may be finite, but it is seen as just one sector of the economy, for which other sectors can substitute without limiting overall growth.

Although this vision of circular flow is useful for analyzing exchanges between producers and consumers, it is actively misleading for studying scale—the size of the economy relative to the environment. It is as if a biologist's vision of an animal contained a circulatory system but not a digestive tract or lungs. Such a beast would be independent of its environment, and its size would not matter. If it could move, it would be a perpetual motion machine.

Long ago the world was relatively empty of human beings and their belongings (man-made capital) and relatively full of other species and their habitats (natural capital). Years of economic growth have changed that basic pattern. As a result, the limiting factor on future economic growth has changed. If man-made and natural capital were good substitutes for one another, then natural capital could be totally replaced. The two are complementary, however, which means that the short supply of one imposes limits. What good are fishing boats without populations of fish? Or sawmills without forests? Once the number of fish that could be sold at market was primarily limited by the number of boats that could be built and

MAQUILADORAS, **or factories near the border between the U.S. and Mexico, have become a troublesome source of pollution for that area. Some U.S. manufacturers have built such factories in Mexico to take advantage of that country's lower labor costs and pollution-control standards. If commerce becomes less regulated, such problems may become more common. Mexican environmentalists closed this plant after showing that it was contaminating its vicinity with lead.**



NATIONAL SELF-SUFFICIENCY is a good commonly overlooked by free traders. Just as nations are better off having their own symphony orchestras and other cultural offerings, they should also keep their vital industries local.

manned; now it is limited by the number of fish in the sea.

As long as the scale of the human economy was very small relative to the ecosystem, no apparent sacrifice was involved in increasing it. The scale of the economy is now such that painless growth is no longer reasonable. If we see the economy as a subsystem of a finite, nongrowing ecosystem, then there must be a maximal scale for its throughput of matter and energy. More important, there must also be an optimal scale. Economic growth beyond that optimum would increase the environmental costs faster than it would the production benefits, thereby ushering in an antieconomic phase that impoverished rather than enriched.

One can find disturbing evidence that we have already passed that point and, like Alice in *Through the Looking Glass,* the faster we run the farther behind we fall. Thus, the correlation between gross national product (GNP) and the index of sustainable economic welfare (which is based on personal consumption and adjusted for depletion of natural capital and other factors) has taken a negative turn in the U.S.

Like our planet, the economy may continue forever to develop qualitatively, but it cannot grow indefinitely and must eventually settle into a steady state in its physical dimensions. That condition need not be miserable, however. We economists need to make the elementary distinction between growth (a quantitative increase in size resulting from the accretion or assimilation of materials) and development (the qualitative evolution to a fuller, better or different state). Quantitative and qualitative changes follow different laws. Conflating the two, as we currently do in the GNP, has led to much confusion.

Development without growth is sustainable development. An economy that is steady in scale may still continue to develop a greater capacity to satisfy human wants by increasing the efficiency of its resource use, by improving social institutions and by clarifying its ethical priorities—but not by increasing the resource throughput.

In the light of the growth versus development distinction, let us return to the issue of international trade and consider two questions: What is the likely effect of free trade on growth? What is the likely effect of free trade on development?

Free trade is likely to stimulate the growth of throughput. It allows a country in effect to exceed its domestic regenerative and absorptive limits by "importing" those capacities from other countries. True, a country "exporting" some of its carrying capacity in return for imported products might have increased its throughput even more if it had made those products domestically. Overall, nevertheless, trade does postpone the day when countries must face up to living within their natural regenerative and absorptive capacities. That some countries still have excess carrying capacity is more indicative of a shortfall in their desired domestic growth than of any conscious decision to reserve that capacity for export.

By spatially separating the costs and benefits of environmental exploitation, international trade makes them harder to compare. It thereby increases the tendency for economies to overshoot their optimal scale. Furthermore, it forces countries to face tightening environmental constraints more simultaneously and less sequentially than would otherwise be the case. They have less opportunity to learn from one another's experiences with controlling throughput and less control over their local environment.

The standard arguments for free trade based on comparative advantage also depend on static promotions of efficiency. In other words, free trade in toxic wastes promotes static efficiency by allowing the disposal of wastes wherever it costs less according to today's prices and technologies. A more dynamic efficiency would be served by outlawing the export of toxins. That step would internalize the disposal costs of toxins to their place of origin—to both the firm that generated them and the nation under whose laws the firm operated. This policy creates an incentive to find technically superior ways of dealing with the toxins or of redesigning processes to avoid their production in the first place.

All these allocative, distributional and scale problems stemming from free trade ought to reverse the traditional default position favoring it. Measures to integrate national economies further should now be treated as a bad idea unless proved otherwise in specific cases. As Ronald Findley of Columbia University characterized it, comparative advantage may well be the "deepest and most beautiful result in all of economics." Nevertheless, in a full world of internationally mobile capital, our adherence to it for policy direction is a recipe for national disintegration.

FURTHER READING

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