

Economic Freedom and Environmental Quality

Richard L. Stroup

Milton and Rose Friedman conclude their 1980 book *Free to Choose* with a chapter entitled “The Tide Is Turning.” It includes the optimistic statement that “we are waking up.” Americans are “again recognizing the dangers of an overgoverned society, coming to understand that good objectives can be perverted by bad means, that reliance on the freedom of people to control their own lives with their own values is the surest way to achieve the full potential of a great society” (310).

This hopeful statement foreshadowed much of what has happened since then. A president, more appreciative of markets than any in decades, was elected in the United States that year, followed in Great Britain by the choice of a market-oriented prime minister. Ten years after *Free to Choose* was published, the Berlin Wall fell. In many ways the tide has indeed turned. The work of the Friedmans was one of the reasons.

Their impeccably reasoned arguments in favor of economic freedom, starting in a big and lasting way with *Capitalism and Freedom*, helped to gradually bring people in the United States and elsewhere to recognize the importance of economic freedom. In the United States, beginning in the late 1970s, trucking deregulation and the freeing of airline prices from regulation both brought sizeable, well-recognized benefits, as did the deregulation of oil prices. In some places, the move toward economic freedom went further. For example, Roger Douglas, finance minister in New Zealand’s Labour government beginning in 1984, was able to cut income tax rates in half, deregulate wide sectors of the New Zealand economy, end farm and business subsidies, and privatize most state-owned enterprises there. The progress made in nations around the world was substantial, and in some respects—albeit in fits and starts—the trend continues. In England, the disasters of postwar socialism were, to a significant extent, reversed during the Thatcher era.

But today there is another, growing force at work in the opposite direction. Against the progress in the understanding of the importance of markets and economic freedom is running a worrisome tide: the growing impact of regulatory juggernauts stemming from environmental policy in the United States. Even as economic regulation in several cases declined, environmental regulation has increased.

ENVIRONMENTAL IMPACT

The role of the Friedmans and their books in promoting the public's understanding of property rights and markets specifically in the area of environmental policy is limited. They did begin their contributions early—with one of the first statements, perhaps, challenging the need for government support of a national park. In *Capitalism and Freedom* (1962, 31) they said about Yellowstone: "If the public wants this kind of an activity enough to pay for it, private enterprises will have every incentive to provide such parks." And they point out that unlike the case of city parks, to identify those who enjoy visiting them is not hard, nor is collecting revenue to support them. We at PERC—Terry Anderson and Don Leal in particular—and others have written extensively on how such a system can work and, as the Friedmans pointed out, has in fact been working.

But in 1962 environmental regulation was barely a blip on the radar screen of even most market-oriented economists. While the blip had grown larger by 1980, the year *Free to Choose* was published (and, by the way, the year PERC was founded), other concerns were still much greater for the Friedmans and most other economists. Yet Milton Friedman (no doubt with the help of Rose) made yet another contribution to the literature—a contribution that I believe is having a quiet but profound impact in helping us better recognize, demonstrate, and control the regulatory role of central governments, including—over time, I believe—the role of environmental regulation.

That contribution is the development of the Economic Freedom of the World (EFW) index. Milton Friedman's role in that project was, and is, a large one. Not yet fully recognized is its fundamental importance in helping us learn about the results of policy alternatives and to settle disagreements on the central government's proper role. One of these disagreements is the government's role in environmental policy.

For those of us interested in environmental policy options, the issue can be stated this way: Will environmental policy improve when experts from the central government control more of the nation's economy? Or will private property, protected in courts rather than by a central bureau and traded in markets, yield better environmental results? Put more appropriately, the question is this: *When* will each of these policy approaches work best? These questions on the

environment are hotly debated today. But they are not unlike a set of questions about prosperity and economic growth that were debated throughout much of the twentieth century. Now, as then, good economic analysis focuses on the role of information and on incentives to find and use that information wisely.

We can learn from that long “socialist calculation” debate, and we now have a tool, the EFW index, that should help us find answers much more quickly than those to the previously unsettled questions. When economists who have a good grasp of how theory can help us understand and answer the real-world questions at hand, the index and its components, applied country by country along with other information, have great potential. They can be used to clarify and quantify the impact of “freedom to choose” and other policy options as they influence not only economic growth but other measures of human well-being, including environmental indicators—from health and longevity to the disappearance of species.

HISTORY AND ITS LESSONS

Beginning around 1920, a number of economists took part in what is now known as the socialist calculation debate over the productivity and, indeed, the feasibility of socialism. Ludwig von Mises and later F. A. Hayek were prominent in arguing that when governmental control replaced private property rights and markets, the quality of decisions would fall. Relative prices set in open markets would no longer be available to guide efficient production or even to identify the most appropriate goods to produce. Von Mises and Hayek questioned the ability of central planners to give rational guidance to the economy without the information generated and constantly updated by the price system that emerges from market trading of privately owned rights. Without true markets, how could planning really be rational?

It was not until decades later that many economists came to understand the importance of what von Mises and Hayek said. The centrally directed planning model seemed productive to many, perhaps most, economists until recently. For example, in 1985 the popular introductory economics textbook of Paul Samuelson and William Nordhaus put it this way: “The Soviet model had surely demonstrated that a command economy is capable of mobilizing resources for rapid growth and awesome military power.” They did note that it had been done “in an atmosphere of great human sacrifice—even loss of life—and political repression.” Whether the sacrifice was worth it, they said, was “one of the most profound dilemmas of human society” (Samuelson and Nordhaus 1985, 776). The basic lessons taught by von Mises, Hayek, and the Friedmans are slow to be absorbed, it would seem. Indeed, the teaching is tragically slow for people living under badly flawed systems—and for those of us living under governments that were importing some of those flaws.

After the fall of the Berlin Wall and the collapse of the Soviet Union (and with it the governments of many of its satellite nations), the same authors said much the same thing in the 1995 edition of their book, but the advantage of markets was now recognized. Samuelson and Nordhaus wrote that “it appears that in the modern world of open borders and high-quality manufactured goods, the blunt control of the command economy could not match the finely tuned incentives and innovation of a market economy” (716). The “finely tuned incentives,” of course, come from the price system. When costly but successful innovation brings personal rewards to those who make it happen, more innovation is encouraged. When higher quality products earn a higher price, higher quality goods become more available. These signals and incentives are systematically missing from the socialist system.

With the fall of the Iron Curtain, observers could see the devastation left by the central planning systems. Markets came to be more appreciated and thus more utilized in the production of goods and services in much of the world.

Throughout much of the twentieth century, however, market socialists were viewed as winners of the intellectual debates, and the tide of history seemed to be on their side. According to Robert Heilbroner, who favored the socialist viewpoint, the debate was seemingly settled in 1940 by Oskar Lange (whom Heilbroner calls a “brilliant young economist”). Lange contended that a central planning board could solve the problem of economic calculation by keeping an eye on inventories and changing prices in response to changes in inventories (Heilbroner 1990).

The bleak outlook for capitalism led to the formation in 1947 of the Mont Pelerin Society, with Hayek as the founding president. Milton Friedman was a founding member and served as president from 1970 to 1972. The goal of the society, according to its web page (see www.montpelerin.org), was to “facilitate an exchange of ideas between like-minded scholars in the hope of strengthening the principles and practice of a free society and to study the workings, virtues, and defects of market-oriented economic systems.” The society’s “statement of aims” laid out their urgent concerns:

Over large stretches of the earth’s surface the essential conditions of human dignity and freedom have already disappeared. In others they are under constant menace from the development of current tendencies of policy. The position of the individual and the voluntary group are progressively undermined by extensions of arbitrary power. (www.montpelerin.org)

Members of the Mont Pelerin Society set about trying to put their concerns into action. An important manifestation of this goal was the publication in 1962 of *Capitalism and Freedom*, an extraordinary book for the time. It stirred interest and built support for the idea that economic decisions should be made by individuals acting on their own initiative, not forced to follow the dictates of

governments. The major effects of *Capitalism and Freedom* were probably primarily on young people at the time and future leaders—including Ronald Reagan. However, the impact did not become fully visible until many years later. The logic was sound and convincing to many readers, but despite Milton Friedman's strong background in statistics, clear cross-country comparisons of the sort he was later to help make feasible were not yet available to make more obvious and more concrete the value of the points made in the book.

Decades later, after the fall of the Berlin Wall, however, the substance of what von Mises, Hayek, and the Friedmans had written became more obvious. By 1993, Heilbroner could write:

Socialism—defined as a centrally planned economy in which the government controls all means of production—was the tragic failure of the twentieth century. Born of a commitment to remedy the economic and moral defects of capitalism, it has far surpassed capitalism in both economic malfunction and moral cruelty. Yet the idea and the ideal of socialism linger on.

Later in the same article he recognizes the source of the problem and what is needed to solve it:

The main obstacle to real perestroika is the impossibility of creating a working market system without a firm basis of private ownership, and it is clear that the creation of such a basis encounters the opposition of the former state bureaucracy and the hostility of ordinary people who have long been trained to be suspicious of the pursuit of wealth.

The basic lesson of von Mises, Hayek, and the Friedmans had been learned by a formerly dedicated supporter of socialism. But without the availability of statistical tests and demonstrations using international data of the kind made available on a systematic basis today by the EFW index, the lessons had taken decades to be widely absorbed.

ECONOMIC FREEDOM OF THE WORLD INDEX

In the mid-1980s, Milton Friedman and Michael Walker, executive director of the Fraser Institute in Vancouver, Canada, began a project to help explain the various aspects of economic freedom. Most of all, the goal was to figure out ways to measure economic freedom and to determine the consistency of each government in providing or allowing them. Once the measures were identified, it would be possible to estimate the effects of the policies measured. Supported by the Liberty Fund, Friedman and Walker convened a series of six meetings of economists from 1986 to 1994. The goal was to devise ways to measure the economic freedom that was of such great concern to them, to the Mont Pelerin Society, and ultimately to all citizens—whether they recognized it or not. Many

distinguished economists participated, including Nobel laureates Gary Becker and Douglass North.

The key product at the end of the series of meetings was the Economic Freedom of the World index. The first version of the index was published in 1996 by James Gwartney, Robert Lawson, and Walter Block. With the help of classical liberal institutes worldwide, they are seeking more and better data. Aided by continued guidance from Michael Walker and Milton Friedman, Gwartney and Lawson regularly update, improve, and extend the index.

The EFW index ranks economic freedom in 123 nations on the basis of objective, published, and available data. These data are selected to determine the extent to which (in the words of the latest EFW report) each country has institutions and policies that “provide an infrastructure for voluntary exchange” and “protect individuals and their property from aggressors seeking to use violence, coercion, and fraud to seize things that do not belong to them” (Gwartney and Lawson 2003, 5). Those in a country who seize things that do not belong to them may—and often do—include the government. Some of the criteria for economic freedom, of course, involve restraining the powers of those in government. The EFW index includes criteria data in five areas: the size of government, the legal structure and the security of property rights, access to sound money, freedom to exchange with foreigners, and regulation of credit, labor, and business.

When a nation’s EFW index number is high, the market is playing a larger role relative to political control of the economy. More decisions are being made privately, coordinated in markets with less interference from government. This does not mean, however, that the government’s role is less important; it is merely less extensive in scope, exerting little direct control over economic decisions. An essential role for government in a market economy is its protective function: the protection of persons and their property from theft, fraud, and violence.

Where the legal structure and security of property rights are stronger, government is doing a crucial job well, and the EFW index reflects this in a higher measured degree of economic freedom. Thus, the EFW index is valuable in research to help settle the arguments of the sort that propelled the socialist calculation debate.

The EFW index enables researchers to examine, and to demonstrate convincingly, how the economic freedom of a country affects that country’s prosperity, growth, and poverty. A capsule view of the impact of economic freedom on these variables is given in the 2003 version of the index:

Economic freedom is highly correlated with per-capita income, economic growth, and life expectancy. Increased economic freedom does not lead to greater income inequality. The lowest 10% of income earners in nations in

the bottom quintile of economic freedom receive 2.27% of total income in their nations; in nations in the fourth quintile, the bottom 10% receive 2.66% of total income; in the third quintile, 2.25%; in the second quintile, 2.83%; and in the top quintile, 2.68%. The actual income of poor people increases as nations gain in economic freedom because of the increased wealth economic freedom generates. The average per-capita income of the poorest 10% of people in nations in the bottom quintile is US\$873 compared to US\$6,681 for those in the top quintile.

This statement from the authors reflects the results of more than 135 papers (including several by Gwartney and Lawson), published in refereed journals, that use the EFW index or its components to explain various outcomes in the real world. The web site of the project (www.freetheworld.com) lists these publications along with several working papers and links directly to many of them. These articles and book chapters cover the impact of economic freedom on an even broader range of variables, from income to intellectual property and public health and the environment, typically accounting also for many other influences, sometimes including political freedom.

ECONOMIC FREEDOM AND THE ENVIRONMENT

Today, the importance of markets for prosperity and growth is being more widely recognized, but the role of markets in the environment is still often neglected. Economics principles texts most often discuss environmental problems as “market failure.” The problem, of course, is that markets perform their function only when property rights are well-defined, enforced, and tradable. When the property rights of individuals—their rights against anyone who would violate their rights by theft, fraud, violence, or pollution—are not properly defined or defended, the fault does not lie with the market (which in this case is non-existent). It may, instead, lie with the government that failed to protect citizens against rights violations by others in society.

Environmental harms occur when there is no protection for individuals and their property against damage, including environmental damage. Yet the “market failure” explanation for environmental problems is common, and much environmental policy in the United States and around the world today is destructive both of property rights and of the market approach. Control by the government, especially the central government, is more and more the policy approach adopted.

Just as the economists of the twentieth century debated the question of collective vs. private control, a key debate today is over the question of whether increased governmental control helps or harms the environment in which we live. Fortunately, we have more tools and more experience today to help us settle

the question, without relying entirely on trial and error, which took many decades in the case of socialism in the last century.

One way to research options for answering this question is to examine the effects of decreased economic freedom (that is, more government control) on the condition of our environment. A large number of articles and books with case studies have been published in the past, but more recently, data series such as the EFW index offer insight.

So far, only a few studies have been done on environmental questions using the EFW index. It is an area ripe for additional study. But studies have examined the effects of economic freedom, or some of its components, on some environmental measures in some groups of nations. These are statistical studies using economic freedom and an independent or explanatory variable. For example, in a chapter in *Who Owns the Environment?* economist Seth Norton (Norton 1998a) found that in nations where property rights (as measured by the EFW component) are strong, various measures of environmental quality (as measured by World Bank data) are higher than in nations in which property rights are weak.

Norton used three other measures of property rights that led to similar results and the same conclusion, and the results were statistically significant. Access to clean water, sanitation measures, life expectancy, and deforestation all are more favorable in nations with stronger private property rights. When property rights were well protected, for example, about 90 percent of the population had access to safe water; but in nations with weak property rights, only about 60 percent of the people had that key health advantage.

Norton (1998b) has also examined the impacts of property rights on the poorest people of the world. One measure of poverty he used was the United Nations' Human Poverty Index (HPI), which includes the environmentally related elements of longevity as well as access to safe water, among other measures of well-being. The HPI is a distinctive database that considers the conditions of only the most deprived people in a nation's communities. Using this database, Norton finds that the influence of stronger property rights is substantial and positive: "Where property rights are strong, the HPI is substantially reduced," he writes, and "weak rights are associated with greater deprivation for the world's impoverished" (239). For poor people in poor nations (as Norton had found across nations in general), stronger property rights, an important component of economic freedom, improve the environment, health, and other aspects of citizens' lives.

POLITICAL FREEDOM AND THE ENVIRONMENT

The EFW index and similar databases have allowed researchers to provide evidence that economic freedom leads to higher environmental quality. Even in modern democracies with largely free markets, there is evidence that reducing

economic freedom in favor of political control of environmental decisionmaking can reduce environmental quality. Indeed, a number of case studies have shown that moving away from property rights protected by the common law toward statutory pollution policy with environmental regulations administered bureaucratically has allowed special interests to capture parts of the regulatory regime for their own advantage, sometimes to the detriment of the environment.

In 1981, Ackerman and Hassler showed in *Clean Coal, Dirty Air* that the Clean Air Act Amendments of 1977 were shaped by Eastern high-sulfur coal interests. These companies and miners' unions successfully pressured Congress to specify the use of scrubbers, which virtually required the use of high-sulfur coal in coal-fired electric power plants—even where lower-sulfur coal would have been cheaper and would have reduced sulfur emissions by greater amounts. Economic freedom was reduced in the name of air quality improvements, and in some cases the air was made dirtier as well. Even with scrubbers in place, high-sulfur coal could produce more sulfur oxides than a new plant burning clean coal would have done. The democratic process had changed environmental policy, but not for the better.

In his book *The Political Limits of Environmental Regulation* (1989), Bruce Yandle showed how pressure to replace common law with statute-based regulations came not primarily from victims of pollution but from special interest groups often seeking advantage over their competitors. Such regulations are brought about politically in a democracy, but they cannot be expected to be efficient or cost-effective in improving environmental quality.

Elizabeth Brubaker (1998) has revealed that in Canada, too, rent-seeking special interests used the democratic process to gain for themselves at the expense of the environment. In an earlier book (1995), she compiled impressive evidence that Canada's movement away from property rights and common law to government regulation under statute had, on balance, degraded that nation's air and water resources.

Michael Stroup, in a recent working paper, affirms the environmental benefits of economic freedom for industrialized countries, using data from the thirty Organisation for Economic Co-operation and Development (OECD) nations. His paper has an interesting twist that lends support to the idea that political control can hurt the environment on balance, not only in the case of poor and socialist nations, but also in a modern democracy. Stroup studied the impact of economic freedom on each OECD nation's emissions (measured per unit of economic activity) of four air pollutants: sulfur oxides, oxides of nitrogen, visible particulates, and carbon dioxide. Using multiple regression analysis to account for other factors, and studying four time periods from 1980 to 1995, he finds that these measures of environmental performance improve when economic freedom, as measured by the EFW index, is greater.

Stroup's analysis also includes political freedom, using measures indicat-

ing the ability of citizens democratically to influence the nation's policies, including environmental policies. He finds that for more than half of all OECD countries, more political freedom (that is, more democratic political influence) leads to more air emissions per unit of output, not less. Indeed, he points out that "a greater level of political freedom within an OECD country tends to decrease the level of all four types of air pollution per dollar of GDP only when the level of economic freedom in that country is relatively low" (23).

Worldwide, political freedom gives all citizens an influence over government, including policy on the environment. Usually, this is a force for a better environmental outcome because governmental leaders are being held politically accountable for their actions. But when economic freedom is high, then there is much to lose, and more political freedom can work to the advantage of special interests. If the environment already is relatively clean, then democracy leaves a good deal of room for mischief by rent-seekers. It appears both from case study data and from Stroup's results that while the effect of economic freedom on environmental quality is consistently positive, the positive environmental effect of political freedom is conditional on the absence of a high level of economic freedom. When elected officials are not constrained by strong constitutional limits, the democratic political system can be used to transfer rents at the cost of other goods, including environmental quality.

GOVERNMENTAL INVOLVEMENT

Although the relative roles of economic freedom and political freedom on environmental quality are beginning to be understood, the evidence is limited in quantity and coverage. At this point, few are knowledgeable and even fewer are persuaded that property rights and markets have strong advantages over the regulatory state in the case of the environment. The situation cries out for more complete and more thorough research, as evidenced by the fact that environmental policies continue to move away from reliance on property rights and economic freedom, toward regulatory decisions and control.

To conduct this research properly, it is necessary to have a more complete theoretical treatment of the problems than we see in most classrooms, where the "market failure" paradigm so often rules. The importance of property rights is becoming better known in the context of the environment, but public choice insights are seldom integrated into discussions of the environment, and the same is true of the information problem that was the focus of Austrian economists von Mises and Hayek. The better-informed theory is needed both to formulate testable hypotheses and to help researchers identify and assemble the necessary databases, just as the EFW process did over many years with the help of dozens of accomplished and experienced economists. This section seeks to explain parts of the puzzle: Why do regulatory policies, even when carried out

by intelligent, hard-working public servants dedicated to their missions, turn out to be so costly and yet, too often, actually harm the environment? If property rights and markets are the basic policy in a nation like Canada or the United States, why might more involvement by democratic government lead, arguably, to worse results? Several factors can help explain this.

1. As in the problem of socialist calculation in the former Soviet Union, regulators face the problem of information that is missing due to the lack of market trading. They also lack incentives to find and utilize the information needed for effective, cost-efficient regulation, especially when finding it is difficult and using it is costly.

To begin with, resources are limited, so regulators must decide how to prioritize environmental problems. Identifying the worst chemical risks or determining which species should be protected first is complex and difficult. Opinions will differ, and there is no market in which people who feel strongly about one position or another can bid for what they want.

Once a priority is set, regulators must decide how best to reach the goal. But once again, there is no lineup of offers from competing suppliers—to clean up at a given cost, say, or to provide habitat for a given animal or suite of species. And because we cannot compare the cost of offers to supply against offers to pay for what is supplied, there is no way to identify a stopping point where further action toward that goal is too costly to be warranted by the benefits produced.

There is, however, a regulator who, like his counterpart in a socialistic system, orders people to do something—to clean up chemicals or provide habitat without payment. Of course, a regulatory order that simply stops a proven violation of someone else's rights is an appropriate order without payment. But unlike a complainant asking relief against a polluter under common law, the typical regulator normally faces no burden of proof in determining whether a person's rights have been violated. The regulator often operates with what Justice Stephen Breyer has called "tunnel vision" (Breyer 1993). The regulator sees clearly only the task at hand, not the costs imposed on others by a regulation. This regulator has little incentive to hold back on using regulatory authority even though more costly responses are required to produce still more safety (or more habitat). The cost is usually borne by the regulated party, so the regulator has an incentive to seek even small improvements with high costs. Excessive regulation can result. On the other hand, if a politically organized special interest demands that the regulator divert his attention to other issues, regulators may well go along. Why pay a high cost to fight back? Better, perhaps, from the regulator's viewpoint to seek other margins to reduce the risk being regulated, to avoid conflict with a politically important regulated party. In such cases, regulation may be too lax to protect the public from serious risks.

A well-documented case where tunnel vision leads to regulations tight enough to harm the environmental mission is the case of land-use regulations under the Endangered Species Act (ESA). As currently applied, the ESA can be quite costly to landowners, giving them negative incentives to protect species. The possibly draconian penalties that landowners will experience as a result of using their land while having endangered species on the property lead them to change their land management. They can usually find easy ways to modify their habitat to reduce the likelihood that the listed species will find it attractive and thus be present.

Landowners naturally prefer to maintain management authority. Under the current rules, the populations affected are likely to be seriously harmed by such preemptive habitat modification. Each landowner has reason to learn what a listed species in the area likes or needs, to tweak land management practices to make what that species likes largely unavailable, and to inform neighbors about these practices. A resident population of an endangered species can lead the Fish and Wildlife Service to impose land management controls under the ESA. Both anecdotal (Stroup 1995) and statistical evidence (Lueck and Michael 2003) support this conclusion. The penalties of the ESA give landowners an incentive to manage their land *against* the listed species.

2. In a private setting, Coasian bargaining reduces the costs of reaching objectives, but such opportunities are typically lacking in a regulatory setting.

Once a regulatory decision is made, there is typically no legitimate way to bargain around it. A regulatory decision that costs the regulated party \$10,000 but produces just \$1,000 worth of benefits to the regulator's mission is wasteful, but it is likely to stand because the regulator achieves the benefit and doesn't pay the cost. Contrast this with the private sector. After a disputed property right is adjudicated and the right is determined, that right will still tend to flow to the highest-valued user—even if the right was not awarded to the highest-valued user. If the polluter owes a duty to stop the polluting activity, but stopping costs \$10,000 while accepting the pollution would only cost the receptor \$1,000, then we can expect the polluter to buy permission to pollute from the receptor at a bargained price higher than \$1,000 but lower than \$10,000. Neither inefficient pollution nor inefficient control need occur, if polluter and receptor find trading to be mutually beneficial. And when values later change, then the retrading of rights can allow peaceful and efficient adjustment. But under statutory regulation, when such exchange is typically not allowed, even the most inefficient order must be followed. That follows in part from the fact that even citizens not materially affected by the pollution may be allowed to enter the case as "stakeholders." In this case, trading to reduce the cost of pollution plus the cost of control is not likely to be feasible because there are too many stakeholders for whom stopping

the pollution has some value, however small, but their voices may have public policy impacts out of proportion to any damages they might suffer.

Because in a market ownership rights can be traded or retained at will, there is little incentive in a market for either a buyer or a seller to posture or adopt sanctimonious attitudes and condemn other user demands as frivolous, as so often happens in discussions over the use of politically controlled lands, such as federal lands in the United States. An experience of the National Audubon Society illustrates the contrast between the constructive nature of private negotiations and the contentious nature of political discussions.

Officials of the Audubon Society are outspoken and hostile in their arguments against oil drilling on a federal wildlife refuge in Alaska. Yet they have worked comfortably and peaceably with the private oil company that they have allowed to produce natural gas on the Paul J. Rainey Preserve, which the National Audubon Society owns in Louisiana (Snyder and Shaw 1995). Gas was extracted only after the producers met Audubon's strict stipulations. Audubon used the resulting revenue to enhance its mission on the refuge and elsewhere. Audubon has the right to determine what happens on its land, and it has strong incentives to avoid risking the loss of support from its members by allowing damage to the habitat it owns; but it also has the right to gain support for its mission by producing petroleum. Audubon's mission can be given a net gain by natural gas revenues that contribute more than the tiny losses to existing habitat resulting from the careful petroleum extraction procedures.

Without trade, results are less efficient. This reduced efficiency harms environmental quality and environmental policy in two ways. First, less efficiency reduces wealth, and when wealth declines, the willingness and ability of those affected to demand environmental quality decline. This income or wealth effect has been estimated by Donald Coursey to be 2.5 times as strong as the change in income causing the income effect. The estimated income elasticity of demand, that is, is 2.5. Second, an environmental policy that is less efficient has a price effect, too. The policy delivers less "bang for the buck," and voters will demand less of a policy when the cost of that policy's results costs them more (Coursey 1993).

3. Public decisions are public goods: Accountability in the public sector is largely missing as a result, and free riders are evident at every level.

Gordon Tullock made this point more than thirty years ago (Tullock 1971, Stroup 2000). The most fundamental reason for poor accountability in government and the presence of free riders is that voters are rationally ignorant. An individual, knowing that one person does not determine the outcome of an election, is likely to spend more time and attention deciding which car to buy—or even which tennis racket—than on which candidate to support. This is a rational choice for the individual, but it also means that voters are not able to hold government responsible in an informed way.

The impact on environmental policy can be seen through some interesting research about how people respond to risks. It is well known in the risk analysis community that members of the general public systematically underestimate common and significant risks but overestimate small environmental risks of the sort commonly regulated. But this bias disappears when the risks that each person is asked to estimate are the specific kind that person faces, as when an elderly person is asked to estimate the risk of death from a slip and fall, a common danger only for older people (Benjamin and Dougan 1997). People know much more about risks commonly faced by themselves, their families, or their friends. In contrast, as voters they affect government decisions about many matters on which they are largely ignorant. Thus, putting voters in general in charge of environmental risks guarantees that the risk management system—voters are ultimately in charge of the system—will be “flying blind” much of the time.

The “free rider” problem of public policy has many implications. With the public largely uninformed, special interests and “stakeholders” can use activist tactics and the resulting publicity to stop a policy they do not like. The Environmental Protection Agency, for example, has been shown to make decisions influenced by press coverage of its proposed rules (Yates and Stroup 2000). Similarly, federal regulators respond to media coverage when deciding about public lands. In contrast, if the stakeholders had some true ownership, so they could sell their interests and other stakeholders could not step in, then quite possibly the stakeholders could reach a mutually beneficial result. But instead, non-owners are allowed to usurp some of the rights of “owners,” and almost anyone is considered a “stakeholder” and has the standing needed to bring on a *de facto* veto of use. In the case of the Alaskan wildlife reserve, the National Audubon Society gives up nothing when it helps to stop trade and prevent drilling and production by oil producers. Unlike the case of a preserve it owns, it does not give up money or other value when it acts to stop drilling on federal lands.

Decisions will be wiser when they are made privately by individuals who gain personally and substantially from their own resource conservation and pay the major cost personally when they waste resources. Where regulation is the only realistic option, however—think of auto air pollution in the Los Angeles basin—devolution of regulation to the lowest possible level can concentrate both benefits and costs closer to where the decisionmakers live and the knowledge base of the relevant citizens is better, enabling them to hold their local government more accountable. Relying on common law—using the courts to protect individual rights—will also lead to better information, when reliance is feasible. Because common law demands a burden of proof and follows standards of evidence, information that will stand up to cross-examination is necessary to bring the force of the law to bear. In contrast, the publicity campaigns that affect governmental regulatory decisions have no such burdens of proof. Instead, cheap talk may rule. The environment is likely to be one of the victims in such a case.

4. A good produced in the private sector is likely to be better, as judged by its users, than the same good produced in the public sector.

The Friedmans were right when, as noted above, they wrote about Yellowstone: “If the public wants this kind of an activity enough to pay for it, private enterprises will have every incentive to provide such parks.” Not only do private enterprises have an incentive to provide goods and services such as parks, but private provision tends to provide greater benefits as well. That is because those who pay—and in the private sector, visitors usually pay the full cost of the services they receive—will control. Where customers pay, we can expect the goods and services to be better targeted to those who want them most and to be provided more cost-effectively. Evidence from state parks, where customers pay a much larger portion of the total costs than in national parks, supports this expectation.

Research at PERC by Donald Leal and Holly Fretwell has shown that fiscal difficulties have been causing both national and state parks to move toward more reliance on revenues received from user fees and from ancillary suppliers to users—such as concessionaires. “New Hampshire and Vermont state parks are already self-supporting, and a growing number of others are headed in that direction. An entrepreneurial spirit has taken hold in Texas, South Dakota, and Arkansas. Park managers have developed a myriad of new programs, activities and events for which they charge affordable fees. The response has been positive. Visitation has increased, and so have revenues” (PERC 2003). When park managers derive their support from visitors and other voluntary supporters, they are motivated to provide those supporters with good services and products at a low cost.

A large natural experiment was conducted two centuries ago that is relevant to this discussion of private versus public provision, even though it was not directly related to environmental policies. Economist Kelly Olds, in a 1994 *Journal of Political Economy* article, discussed the impact of “disestablishment” of state churches in the United States. Around 1800, one state at a time, the young nation turned away from state churches. All tax support of churches was ended. A surprising thing happened—surprising to many of us, anyway: Church attendance, church budgets, and the number of preachers did not shrink; instead, all grew substantially. (Olds examined Connecticut and Massachusetts in detail.)

To this day, America is one of the few industrial democracies without a state-supported church. America is also far and away the *leader* in church attendance in this group of nations and the *leader* in religiosity. When society turned to the market order rather than government support, preachers, church leaders, and small groups of those most concerned and most faithful swung into action. Religion lost government support but gained far more. There is no mystery about why. A private church or a club is not run by the average voter or by the deliberations of a legislature. It is run by those who care most about the church

or club and its mission. As a result, churches are more diverse and better operated, and the survivors thrive.

CONCLUSION

The four points made above on government involvement should help us to see the pitfalls in turning more and more authority over to centralized government as nations become richer and demand ever-increasing environmental quality. While regulation often seems to be a way to obtain what we want at low cost, these points suggest that the actual results of new regulations may run counter to their stated intentions, as happened with socialism in the twentieth century and as happens today with environmental regulation. Accountability for costs and rewards for benefits generated are hard to achieve in government.

We at PERC are dedicated to the belief that while policy is seldom made by economists, nor made just as they would recommend, economists and their ideas do have serious consequences over time. It is worth doing the economic research, doing it well, and doing it extensively in policy-relevant areas. The EFW index and the research based on it are models for what is needed in the new intellectual wars over the socialist model of centralized control now being applied in the name of the environment.

Today, we must ask whether the tide is turning back from the progress brought on after many decades of intellectual battle by von Mises, Hayek, and the Friedmans. After decades of suffering by millions of people—suffering noticed by most of the world only after the fall of the Berlin Wall and the failure of socialist nations—nations became more free; but will that freedom continue to grow?

On the bright side, there is evidence of continuing progress. The EFW 2003 annual report states: “Economic freedom continues to gain ground around the world” (Gwartney and Lawson 2003). Lessons learned from the painful decades of abuse heaped on citizens by socialist leaders, plus the knowledge from research based on the EFW index and similar indices, are having a real and continuing effect.

One place where the picture is not so bright, however, and where the tide is probably running the other way, is environmental policy. The claim is made that market failure is at the root of environmental problems and that market replacement by tighter governmental controls is the best solution.

These claims must be answered. Even at these early stages, the results from research based on the EFW index and its components, and on similar indices, are heartening. They verify what Milton and Rose Friedman, as well as other classical liberals including the researchers at PERC, have been saying about the usefulness of private property rights and the markets. Environmental protection and conservation depend upon the incentives provided by private

property rights and the exchange of rights through markets. To spread this message widely, much more work must be done, of just the sort done so well by the Friedmans over the past several decades.

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