



By Robert N. Stavins

Reflections on a Personal Milestone

My essay for this issue represents a departure from my usual columns about a contemporary environmental policy issue. Rather, it is of a more personal nature, and stems from the fact that the second volume of my collected papers has just been published by Edward Elgar, *Economics of Climate Change and Environmental Policy: Selected Papers of Robert N. Stavins, 2000–2011*, a successor to the first volume, published by Edward Elgar in 2000, *Environmental Economics and Public Policy: Selected Papers of Robert N. Stavins, 1988–1999*.

Over the past two decades, environmental and resource economics has evolved from what was once a relatively obscure application of welfare economics to a prominent field in its own right. The number of articles on the natural environment appearing in mainstream economics periodicals has continued to increase, as has the number of economics journals dedicated exclusively to environmental and resource topics. Likewise, the influence of environmental economics on public policy has increased significantly, particularly as greater use has been made of market-based instruments for environmental protection.

Selecting the essays for the second volume of my papers permitted me to take note of some common themes that emerge from two decades of research and writing. First, there is the value —

or at least, the potential value — of economic analysis of environmental policy. The cause of virtually all environmental problems in a market economy is economic behavior (that is, imperfect markets affected by externalities), and so economics offers a powerful lens through which to view environmental problems, and therefore a potentially effective set of analytical tools for designing and evaluating environmental policies.

A second message, connected with the first, is the specific value of benefit-cost analysis for helping to promote efficient policies. Economic efficiency ought to be one of the key criteria for evaluating proposed and existing environmental policies. Despite its limitations, benefit-cost analysis can be useful for consistently assimilating the disparate information that is pertinent to sound decisionmaking. If properly done, it can be of considerable help to public officials when they seek to establish or assess environmental goals.

Third, the means governments use to achieve environmental objectives matter greatly, because different policy instruments have very different implications along a number of dimensions, including abatement costs in both the short and the long term. Market-based instruments are particularly attractive in this regard.

Fourth, an economic perspective is also of considerable value when reflecting on the use of natural resources, whether land, water, fisheries, or forests. Excessive rates of depletion of these resources are frequently due to the nature of the respective property rights regimes, in particular, common property and open access. Economic instruments — such as individual transferable quota systems in the case of fisheries — can and have been employed to bring harvesting rates down to socially efficient levels.

Fifth and finally, policies for addressing global climate change — linked

with emissions of carbon dioxide and other greenhouse gases — can benefit greatly from the application of economic thinking. On the one hand, the long time-horizon of global warming, the profound uncertainty in links between emissions and actual damages, and the possibility of catastrophic climate change present significant challenges to conventional economic analysis. But, at the same time, the ubiquity of energy generation and use in modern economies means that only market-based policies — essentially carbon pricing regimes — are feasible instruments for achieving truly meaningful emissions reductions. Hence, despite the challenges, an economic perspective on this grandest of environmental threats is essential.

The professional path I have taken suggests both that research can influence public policy and that involvement in policy can stimulate new research.

Research can influence policy, and involvement can stimulate research

The quest that took me from my undergraduate years studying philosophy at Northwestern University in Evanston, Illinois, to Peace Corps service in Sierra Leone, West Africa, to a master's degree in agricultural economics at Cornell University, to work with the Environmental Defense Fund in Berkeley, California, and finally to a Ph.D. degree in economics at Harvard University suggests some consistency of purpose and function.

During this time, I have continued to learn about environmental economics and related policy from colleagues, collaborators, students, friends, and inhabitants of the “real world” of public policy, individuals from government, private industry, advocacy groups, and the press. I hope that my learning will continue.

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Robert N. Stavins is the Albert Pratt Professor of Business and Government at the John F. Kennedy School of Government, Harvard University, and director of the Harvard Environmental Economics Program. He can be reached at robert_stavins@harvard.edu.