

Should regulators take into account harm to people in other countries? What about harm to future generations? Should we give special attention when the disadvantaged are harmed? These questions are central to climate policy and some other important environmental issues. I'll use cost-benefit analysis as a framework for discussing these issues. You probably don't need my help in thinking about the ethical issues, so instead I'll focus on legal and economic considerations.

**Other countries.** When the Trump Administration estimated the harmfulness of climate change, its answer was about a tenth of the Obama Administration's estimate. The main difference is that Trump counted only impacts within the borders of the United States. There's been considerable discussion of this issue among academics. Generally, cost-benefit analysis of government regulations has focused on harm within the United States.

On the other hand, it's quite common for U.S. regulators to coordinate with regulators in other countries and to take the benefits of coordination into account in issuing their own regulations. The case for doing so is especially strong regarding climate change in legal terms. The U.S. has signed and ratified the United Nations Framework Convention on Climate Change, a binding agreement to cut emissions and to cooperate with other countries.

Putting that aside, a consistent focus on U.S. economic welfare would require ignoring regulatory costs that are passed on to foreign investors or foreign consumers. It would also require taking into account the ways that climate impacts abroad might harm Americans who invest or live in foreign countries as well as those who benefit from foreign imports and exports. So far as I know, there are no good models along those lines.

**Future generations.** In cost-benefit analysis, the weight given to future generations is controlled by something called the discount rate. A low discount rate puts much more weight on future generations than higher one. The Trump Administration, not surprisingly, used a substantially higher discount rate in the context of climate change — another reason its estimate of the harms caused by climate change was so low. Economists generally think the discount rate should be low in assessing long-term climate impacts. However, there is significant disagreement about the proper rate.

Environmental statutes are largely silent on this issue. However, the National Environmental Policy Act (NEPA) does provide some guidance. According to section 102 of NEPA, "It is the continuing responsibility of the Federal Government to use all practicable means, consist with other essential considerations of national policy, to . . . fulfill the responsibilities of each generation as trustee of the environment for succeeding generations." Although the Supreme Court has held that this provision is not legally

enforceable, it does signal Congress's desire to take that regulators take the interests of future generations into the account. Using too high a discount rate would fly in the face of this legislative guidance.

**The disadvantaged.** Many environmental issues have their most serious impacts on disadvantaged communities. Cost-benefit analysis is in principle concerned only with monetized costs, not on where they fall. Moreover, the "cost" to a non-financial harm is based on what an individual would be willing to pay to avoid it. In assessing impacts on health and mortality, however, cost-benefit analysis in practice has used uniform figures for everyone. This is questionable in terms of economic theory, however, since presumably the poor would be less willing to pay to reduce those risks than the rich would be. In this respect, cost-benefit analysis in practice has a tilt toward protecting the disadvantaged. An increasing number of economists believe that it would better to use "equity weighting" of monetized risks, which puts more weight on the same cost if the person in question is poor. The use of the same cost figure for the rich and the poor may accomplish something similar indirectly. In effect, it deflates the valuation of risks to the rich and inflates those to the poor, just as equity weighting would do.

The Clean Air Act does not speak specifically to this issue. The approach currently taken seems permissible. The Clean Air Act's central focus is protecting public health, which has traditionally been thought to give equal weight to everyone's life and health. The statute also repeatedly risk levels which are inherently indifferent to which individuals suffer harm. There is no indication anywhere in the statute that the lives and health of the rich deserve greater attention.

There's no gainsaying that there are profound ethical issues in play with all these issues. But regulators are not left completely on their own in addressing those issues. The law does provide at least a bit of guidance. We should not be too quick to label such questions as purely political.