

Equity in cost-benefit analysis

One key way that many governments around the world incorporate scientific research into policy-making is through cost-benefit analysis (CBA). But despite well-established practices for rigorous estimation of the pros and cons of policies, there is room to improve, particularly in characterizing difficult-to-measure benefits and the distribution of the costs and benefits across different segments of society. In this regard, announcements by US President Biden, if brought to fruition, could have far-reaching implications for how CBA is used in government decision-making. But such promising (and familiar) rhetoric is no guarantee of real progress, and the devil, as always, is in the details. These details are where the scientific community has an important role to play to improve the use of CBA and to hold the administration accountable.

Some 40 years ago, President Reagan ushered in a regulatory “revolution” by requiring CBA for major regulations. Many other countries have since followed suit. Different US presidents have emphasized different parts of CBA. Republican presidents have tended to focus on the cost of regulation, or cost-benefit balancing. Democratic presidents have tended to place increasing emphasis on benefits and distribution. A Biden memo in January revisits many of these traditional Democratic priorities, but recognizing heightened awareness in society and politics, expands benefits and equity further. The memo could be construed as asking for a roadmap on how to address equity concerns that arise.

It is useful to divide this problem into three parts: getting better information on the likely winners and losers from a policy; examining how to include that information in a CBA; and specifying how the distributional impacts should enter into final regulatory decisions. Better information on the distributional aspects of regulation could be very useful but will not be free. If the administration is interested in learning more about equity, it should consider funding research. This can be broken down into two parts: research on benefits and research on costs by, say, socioeconomic grouping. On the benefit side, this could involve developing better information on “dose” and response by groups in the case of environmental regulations. Groups could be defined by income or race, for

example. On the cost side, it would be desirable to know more about which groups bear the most substantial costs of regulation. This is relatively straightforward in some cases where costs are highly concentrated (e.g., in the case of plant closures) but is more challenging when trying to estimate the impact of a regulation on wages or prices across different groups.

Interestingly, almost no CBAs of regulations provide quantitative assessments of the benefits and costs of a regulation by particular subgroups in the population. One reason is that it is challenging to develop such estimates. Yet, such calculations are critical for understanding the distributional impacts of a regulation. Scientists can play an important role in defining how best to develop such estimates and the likely costs and benefits of doing so.

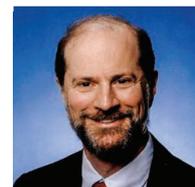
The current approach to factoring information on equity into a CBA is generally to exclude such information from the quantitative analysis altogether and only consider it in the final decision to regulate. One alternative is to introduce distributional weights in comparing benefits and costs across different socioeconomic groups. The precise formulation of these weights is likely to be highly contentious. Scientists may not have any higher authority in the determination of these weights, which is largely a question

of adjudicating conflicts among competing societal values, but scientists can play an important role in calculating how different weights could affect the estimation of net benefits

How then should the additional information on equity be used in the regulatory decision process? One approach would be to ask the decision-maker to try to maximize net benefits but leave latitude to consider a wide range of factors, including equity. At the same time, the basis for reaching the decision, and the role that quantitative analysis played in reaching that decision, should be stated clearly. Scientists have an important role to play in estimating how decision rules are likely to affect overall net benefits and the net benefits going to different groups.

The question ahead for academics and practitioners is how best to address equity concerns if the goal is to promote a regulatory agenda that actually does more good than harm.

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