

Like it or not, quantitative cost-benefit analysis has been a key part of the regulatory process for forty years and seem likely to stay that way. Yet even economists admit that they don't (yet) know how to put numbers on the value of some important regulatory benefits. But how can those qualitative assessments be combined with a quantitative analysis?

One possible answer is that how to combine those factors is basically a value judgment that the President and his appointees must make. There's no doubt that the final decision ultimately rests with those political actors. The question is whether analysts can do anything to help make those tough calls.

One approach is called breakeven analysis. I'll use adapt an example of Cass Sunstein's to explain this approach. Suppose we have a project that will produce \$60 million of benefits and the quantifiable costs are \$55 million. However, the project will also kill a thousand sea otters. Breakeven analysis says that we would have to value those sea otters at least \$5000 apiece to tip the balance away from the project. Then we ask whether we think it's worth spending at least \$5000 to save a sea otter.

Suppose a regulation has quantifiable costs exceeding its benefits but has good distributional consequences - it helps the poor whereas the costs will fall on the rich. Are these desirable consequences worth the costs? How can we answer that question? There's a technique called equity weighing economists favor for making this decision, but there are practical and legal problems with using it as a standard feature of cost-benefit analysis. On the other hand, it may be much easier just to use it as one useful indicator in making the ultimate qualitative judgment about whether the distributional effect is worth the cost. At least it would help the decision maker understand just how big the distributional effects are likely to be.

One problem with using breakeven analysis is that the intuitive answer to the question may depend on how its asked. If you're asked whether it's worthwhile to spend \$5 million to save a thousand sea otters, you might give one answer. If the cost is going to be spread ten million people, you might get a different answer by asking whether the average person would be willing to contribute fifty cents to save a sea otter. And you might get yet a different response if you phrased the question in terms of stewardship of nature.

Of course, in the end, decision makers will have to decide what framing of the question feel right to them. But again, analysts may be able to provide some help. One source of expertise could come from the economists who design contingent valuation studies. A contingent valuation study is basically a way of asking the same kind of question to the public. For

instance, people being surveyed might be given detailed information about sea otters and then asked how much it would be worth to save one. Some ways of asking these questions have proved to give more meaningful answers, and regulators could use similar framing to guide their own decisions.

Cost-benefit analysis basically treats statutes as inconvenient limitations on the government's ability to maximize regulatory benefits. But we might instead actually care about statutory priorities when thinking about unquantifiable benefits. I'm not sure whether there's an applicable statute relating to the sea otter situation that would be much assistance. In other situations, however, congressional policies may be clearer. For instance, in a recent regulation, EPA relied on a congressional policy of protecting the most vulnerable members of the population as support for a policy where some of the risks were unquantified.

I have one final caveat. Adding analytical complexity to the regulatory process adds to its cost in terms of staff time and budget, both of which are constrained, so the ability to do other regulations is reduced. It also adds to delay, which is a significant cost if a regulation in a specific area is likely to have large net benefits. We need to balance those costs against the possible improvement in regulatory decisions that more careful analysis could produce.