Administrative Law & Regulation

Getting More Benefits From Benefit Cost Analysis

*By J. Kennerly Davis, Jr.**

Note from the Editor:

This article discusses the use of benefit cost analysis by federal regulatory agencies. As always, The Federalist Society takes no position on particular legal or public policy initiatives. Any expressions of opinion are those of the author. The Federalist Society seeks to foster further discussion and debate about the issues involved. To this end, we offer links below to other perspectives on the subject, and we invite responses from our audience. To join the debate, please e-mail us at info@fed-soc.org.

• Office of Information and Regulatory Affairs: http://www.whitehouse.gov/omb/oira

• Office of Management and Budget, Economic Analysis of Federal Regulations under Executive Order 12866, January 11, 1996: http://www.whitehouse.gov/omb/inforeg_riaguide

• Office of Management and Budget, Circular A-4, September 17, 2003: http://www.whitehouse.gov/omb/circulars_a004_a-4/

• Office of Information and Regulatory Affairs, Agency Checklist: Regulatory Impact Analysis: http://www.whitehouse.gov/sites/default/files/omb/inforeg/regpol/RIA_Checklist.pdf

• Office of Management and Budget, Memorandum on Executive Order 13563, "Improving Regulation and Regulatory Review," February 2, 2011: http://www.whitehouse.gov/omb/memoranda_2011

I. It All Depends on Who You Ask

Last June, the Environmental Protection Agency released a draft of its proposed rule to reduce carbon dioxide emissions from existing power plants.[1] The release marked a significant milestone in the ongoing national debate about global warming, the regulatory authority of the EPA, and the appropriate role of fossil fuels in electric power generation. The release also triggered another round in the long-running debate about the validity and usefulness of the benefit cost analysis performed by the EPA and other regulatory agencies during rulemaking.

The EPA estimates that the benefits resulting from the proposed rule will far exceed the cost of its implementation. The agency projects that in fifteen years climate and health benefits together will approach $80 billion per year, while annual compliance costs will amount to only about $9 billion.[2] Supporters of the proposed rule agree with the EPA that the benefits resulting from this initiative will surpass the cost of compliance by a wide margin. Critics of the initiative, on the other hand, argue that the EPA has greatly exaggerated the benefits of the proposed rule and greatly underestimated its costs. The debate about benefits and cost, papered with dueling reports and press releases, swelled around the time of the release of the draft proposal and has continued as the CO_2 proceeding unfolds.

This sort of debate about the projected benefits and cost sof a proposed regulation is all too typical of federal agency rulemaking. The issuing agency and supporters of the new regulation claim that the benefits of the proposal will far exceed the cost of its implementation, while critics complain that the agency's analysis inflates projected benefits and downplays the cost of implementation. Each side attacks the assumptions, analysis, and conclusions of the other at length and often with ferocious intensity, but without achieving any determinative analytical resolution of their disagreement. How much a proposed rule will cost and how much it will benefit society, the answers to those questions, depend on who you ask.

This is unacceptable. The results of the benefit cost analysis performed by a federal agency during rulemaking should not depend on who you ask. It is universally recognized that a sound assessment of the benefits and costs associated with alternative courses of action is essential to good decision making and the cost effective allocation of the resources that must be committed to pursue important goals such as the protection of human health and the environment. The recurring unresolved disputes about the projected benefits and costs associated with proposed regulations clearly demonstrate that the benefit cost analysis currently performed by federal regulatory agencies suffers from serious shortcomings that undermine public confidence in the rulemaking process. These recurring unresolved disputes, and the shortcomings they reveal, prevent benefit cost analysis from making the kind of contribution to the rulemaking process that it could, and should, make. Every new regulation, by its nature, further restricts the rights of the regulated and compels the forced reallocation of private resources. The shortcomings in the process must be addressed and corrected.

II. No Lack of Federal Commitment—In Principle

According to the old adage, you can't fix what you don't understand; you cannot successfully address and correct a problem, or improve a deficient process, unless you first correctly identify the source of the problem. What then, is the source of this problem? What is the origin, the root cause, of

** J. Kennerly Davis is a former Deputy Attorney General for Virginia, and currently focuses his practice on energy law and economic regulation. He is a former finance executive at a Fortune 500 electric power and gas company, and past President of the Richmond Lawyers Chapter of the Federalist Society. He currently serves on the Chapter's steering committee. Contact him at j.kendavis@verizon.net.*

the recurring unresolved disputes surrounding the benefit cost analyses performed by regulatory agencies? The source of the problem is certainly not any lack of commitment in principle to such analysis. The commitment of the executive branch of the federal government to the importance of benefit cost analysis in agency rulemaking has been clear and consistent for more than thirty years. Beginning with the Reagan administration, a series of Executive Orders have directed each cabinet department and independent agency, including the EPA, to assess the benefits and costs associated with its regulatory actions and, in the case of economically significant actions, to support its proposals with formal regulatory impact analysis that includes an estimate of the quantitative benefits and costs associated with the proposal and its alternatives. The Executive Orders direct the department or agency to select the alternative that maximizes net benefits, and to take final action only upon a reasoned determination that its analysis justifies the action to be taken. In 2011, President Obama was merely summing up and reaffirming the long-standing bipartisan executive branch commitment to the principle of benefit cost analysis when he declared, "If we don't think there are more benefits than costs to … [a rule], … we're not going to do it."[3] What then, is the problem if there is no lack of commitment to the principle?

The fundamental problem with the benefit cost analysis currently performed by federal agencies is that the process lacks at its heart anything like the clearly defined, systematic methodology that is so strongly, but incorrectly, suggested to be present by the term "benefit cost analysis." In common understanding, that term refers to a process that is defined by quantitative ratio analysis performed using a clearly defined, systematic, universally accepted methodology.

III. The Firmly Anchored Private Sector Approach

Consider, for example, a business enterprise trying to decide how best to allocate its limited resources. Typically, the management of any such enterprise will engage in "benefit cost analysis" by calculating the benefit cost ratio, commonly called the Profitability Index, of each proposed project. The Profitability Index is calculated using a clearly defined, systematic, universally accepted methodology. Following this methodology, the quantified benefits of a proposed project are captured in the numerator of the ratio, and they equal the discounted present value of the cash flows that management estimates will be generated by the proposed project. The quantified costs of the proposed project are captured in the denominator of the ratio, and they equal the total initial cash investment presently needed to implement the project. Thus, the benefit cost ratio is calculated as:

$$\text{Profitability Index} = \frac{\text{Present Value of Future Cash Flows}}{\text{Initial Investment}}$$

If the value of the benefit cost ratio, or Profitability Index, for the proposed project exceeds 1.0, i.e., if the estimated benefits of the proposed project exceed its cost, then the analysis supports a decision to invest in the project.

Whatever the results of the analysis, the clearly defined methodology, based on computational techniques that are universally understood and accepted, provides a powerful decision tool to the management of the enterprise. Of course, a decision tool is just that. It supports a disciplined decision making process; it does not necessarily dictate the outcome. With each potential investment, management will consider a host of factors in addition to the Profitability Index of the proposed project. Many of these may be non-quantitative. These additional non-quantitative factors may determine the decision in some cases. That said, quantitative benefit cost ratio analysis defines the anchoring core of the decision making process. Its results establish a clear, if rebuttable, presumption to support the proposed project or not. If management wishes to invest in a project that has a calculated Profitability Index less than 1.00, they will be obliged to make a persuasive case for their proposal that is sufficient to rebut the clear presumption established by the quantitative ratio analysis. If they proceed with their project they can be held accountable for their decision by reference to the results of the analysis they overrode.

IV. No Anchor For The Agencies

The fundamental problem with the benefit cost analysis currently practiced by federal regulatory agencies is that there is no such clearly defined, systematic, universally accepted quantitative methodology that defines the core of the process. There is no such anchoring methodology that must be adhered to as a rule and clearly confronted and persuasively rebutted by regulatory decision makers who decide to take some course of action not supported by its results. Measured against private sector benefit cost analysis, a close reading of the Executive Orders and circulars dealing with regulatory analysis leads to the regrettable conclusion that there is simply "no there there."

The Executive Orders, and the related OMB Circular A-4, are written as directives. They contain numerous provisions stating what an agency "shall" do, "should" do or "must" do. But these directives are illusory. The actions directed to be taken are themselves described using only the most general and non-specific terms, often with significant qualifications. As a result, the Executive Orders and A-4 Circular offer only very general guidance that leaves the agency free to follow almost any approach it may choose to assess, and come to conclusions about, the benefits and costs of a proposed regulation. Consider the following examples of provisions contained in the Executive Orders and OMB Circular A-4:

> Each agency shall base its decisions on the best reasonably obtainable scientific, technical, economic, and other information concerning the need for, and consequences of, the intended regulation.

> [A]gencies should assess *all* costs and benefits of available regulatory alternatives, including … both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nonetheless essential to consider. (emphasis added)

> The analysis of … [regulatory] … alternatives may also consider, where relevant and appropriate, values such as equity, human dignity, fairness, potential distributive impacts [across social and economic groups], privacy and personal freedom.
>
> [Agency benefit cost assessments] should include any important ancillary benefits … unrelated or secondary to the purpose of the action … [and any]… countervailing risk … not already accounted for in the direct cost of the action....
>
> [E]ach agency must … select, in choosing among alternative regulatory approaches, those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts [across social and economic groups]; and equity) ….
>
> Each agency shall … recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation *justify* its costs. (emphasis added)

Clearly, there is no controlling specification of either the data or the methodology the agency is to use in its assessment of benefits and costs projected to result from a proposed regulatory action. The agency is free to use whatever information it feels is the "best reasonably obtainable" relevant information. The agency is free, indeed it is directed, to aggregate apples and oranges in its assessment and to include every sort of quantitative and qualitative benefit and cost it feels is relevant, including in benefits even those that are "unrelated or secondary" to the purpose of the proposed action. Moreover, the agency is not even required to base its action on any sort of determination that the benefits of the proposed action will exceed its cost. The agency is only directed to proceed on the basis of its "reasoned determination" that the benefits of the action will "justify" its cost.

Nowhere in this indefinite agency process is there anything like the clearly defined methodology that defines the core of private sector benefit cost analysis. In stark contrast to private sector analysis, the agency process essentially amounts to a discretionary rumination on the aggregated and partially quantified pros and cons that the agency feels might be associated with the action it proposes to take.

The indefinite nature of the agency process might be acceptable if the government accurately characterized the process and effectively qualified the results of the process with appropriately modest disclaimers. But this does not happen. To the contrary, once the agency publishes its aggregate estimate of total benefits and cost, that single comparison takes on a vibrant public life of its own. It becomes a headline in the news, and a powerful talking point for the agency and its supporters in the ensuing debate. In the case of the EPA proposal to reduce carbon dioxide emissions from existing power plants, the agency estimate of $80 billion in annual benefits and $9 billion in annual costs is just such a powerful talking point. Unfortunately, the EPA estimate derives much of its power from the generous application of the term benefit cost analysis to the agency's estimation process and the understandable but unsupported implication that the numbers were arrived at using anything like the clearly defined, universally accepted methodology that should characterize benefit cost ratio analysis. In the absence of such a methodology, the proponents and critics of this and other agency actions are left to endlessly debate their differing estimates of benefits and cost based upon their respective data sets and divergent methodologies. In the absence of such a methodology, such technical debates can never be resolved. Indeed, they cannot even be framed.

This is unacceptable. The regulations promulgated by federal agencies have an enormous impact on the lives and livelihoods of Americans. The cost of compliance with federal regulations is now estimated to approach $2 trillion per year. We deserve something far better from federal rulemaking than the current indefinite process followed to estimate the benefits and costs associated with proposed regulations.

V. Reform By Analogy?

If some core methodology, analogous to the quantitative benefit cost ratio analysis performed in the private sector, could be formulated and gain acceptance for use in regulatory analysis, then the rulemaking process would be greatly improved. Of course, such a core methodology would not automatically determine the outcome of a rulemaking, any more than the calculation of the Profitability Index of a proposed project automatically determines the outcome of management deliberations in a business enterprise. Such a methodology would, however, provide a reference point and focus for the rulemaking and related policy debate that is sorely lacking today. Such a methodology could be used to capture certain benefits and costs associated with a proposal, as those are defined by the terms of the methodology, and then to calculate a ratio of those benefits and costs. This ratio, analogous to the Profitability Index calculated in the private sector, could be called the Benefits Index of the proposed regulation.

Calculation of the Benefits Index of a proposed regulation would provide a powerful decision tool for agency officials, while also improving the transparency of the rulemaking process and thus the accountability of the agency. It would support a more disciplined process of regulatory analysis, while not dictating the outcome of the rulemaking. Agency officials would continue to be free to consider, in addition to the Benefits Index, all the statutory, policy related and other factors they consider today when contemplating the pros and cons of a proposed regulation. Some of these factors may be non-quantitative. In some cases, these non-quantitative factors may determine the agency's decision about whether or not to adopt a proposed regulation. In every case, however, the calculated Benefits Index would provide a transparent anchoring core to the overall rulemaking process. The quantitative results of the Benefits Index calculation would establish a clear, if rebuttable, presumption to support the regulatory proposal, or not. If the agency wishes to adopt a regulation that has a Benefits Index less than 1.00 it will, like private sector management, be obliged to

make and defend a case for its proposal based on other grounds.

If the calculation of a Benefits Index, pursuant to a clearly defined systematic accepted methodology were part of each rulemaking, the inevitable debate about the benefits and cost, and overall merits, of the proposed regulation would be much more clearly framed than it is today and, because of that, such debate could be much more constructive than it is today. With a standardized methodology, stakeholders could replicate the agency's calculation of the Benefits Index and identify any errors in the agency's estimates of benefits and costs that need to be corrected. If the agency did calculate the Benefits Index correctly, then the debate could focus on the additional factors articulated by the agency to support its decision to adopt a regulation. These additional factors will be especially important in those cases where the agency elects to adopt a regulation with a Benefits Index less than 1.00. In those cases, the debate could and should focus on the question of whether or not the agency has successfully rebutted the presumption against the proposal established by a Benefits Index less than 1.00.

VI. A First Step

Of course, it is one thing to form the concept of a Benefits Index and quite another to actually identify terms to populate its numerator and denominator that will have sufficient credibility to be accepted for use in regulator analysis and rulemaking. That will take real work. Over the years, a great number of very capable people have devoted significant professional attention to the issues surrounding the benefit cost analysis performed by federal agencies. Over the same period of time, many others have developed considerable experience and expertise related to benefit cost analysis as it is performed in the private sector. The country could benefit greatly from a serious dialogue among the most knowledgeable of these people, and from a concerted effort by them to see if it is possible to devise a Benefits Index that could gain acceptance for use in agency rulemaking.

To maximize the productive potential of such an undertaking, it must attract the interest and efforts of those most likely to make a meaningful contribution. The undertaking should be organized and led by persons, and sponsored by organizations, already recognized for the quality and objectivity of their work on issues surrounding the benefit cost analysis currently performed by federal agencies. The dialogue needs to be well structured, with a timeline of specified duration, and exacting criteria for participation. Perhaps the organizers could call for papers, to be submitted by a deadline, in which the authors would propose and defend a specific Benefits Index. The organizers could publish the papers, adding their own commentary, and perhaps convene a conference for discussion of the papers and debate of the relative merits of the best proposals.

The details of such an undertaking can vary. The important thing is that an effort be made to provide the best market place for the best ideas on the feasibility of a Benefits Index. If, as a result of such an undertaking, there were to emerge something of a consensus about the elements of an acceptable Benefits Index, something analogous to the private sector's Profitability Index, that could represent an enormously significant contribution to the rulemaking process and related political discourse. Of course, no such consensus may emerge. The dialogue called for here may not be able to identify for rulemaking any such index analogous to the Profitability Index. But we should try. The effort is worthy. As free citizens, we all have an urgent and continuing obligation to address the shortcomings of our government and to work to improve things as best we can. Recalling Benjamin Franklin's famous remark, we have been given the priceless gift of a free republic, if we can keep it.

Endnotes

1 *See* United States Environmental Protection Agency, Carbon Pollution Emissions Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Proposed Rule, 79 Fed. Reg. 34,830 (June 18, 2014), http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule

2 *See* United States Environmental Protection Agency, Regulatory Impact Analysis for the Proposed Carbon Pollution Guidelines for Existing Power Plants and Emissions Standards for Modified and Reconstructed Power Plants, http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-regulatory-impact-analysis

3 Editorial, *Obama on the Farm*, Wall St. J, Aug. 18, 2011, at A12.

4 Exec. Order No. 12866, 58 Fed. Reg. 51735, 51736 (October 4, 1993), http://www.whitehouse.gov/omb/oira/eo12866_10041993.pdf.

5 *Id.* at 51735.

6 Office of Information and Regulatory Affairs, *Regulatory Impact Analysis: a Primer* at 3 (August 15, 2011), http://www.whitehouse.gov/sites/default/files/omb/inforeg/regpol/circular-a-4_regulatory-impact-analysis-a-primer.pdf.

7 *Id.* at 7.

8 Exec. Order No. 13563, 76 Fed. Reg. 3821 (January 21, 2011), http://www.whitehouse.gov/omb/oira/eo13563_01182011.pdf.

9 Exec. Order No. 12866, 58 Fed. Reg. 51735, 51736 (October 4, 1993), http://www.whitehouse.gov/omb/oira/er12866_10041993.pdf.

10 *See* Competitive Enterprise Institute, Ten Thousand Commandments 2014: An Annual Snapshot of the Federal Regulatory State (April 29, 2014),https://cei.org/publication-type/studies/ten-thousand-commandments-2014.