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A Review of the Office of Management and Budget's Draft Guidelines for Conducting Regulatory Analyses

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Executive Summary

The Office of Management and Budget recently released draft guidelines to federal agencies describing how they should conduct analyses to support regulatory decisions. Such guidelines can make the regulatory process more transparent and also help in devising policies that are economically sensible.

In general, we think OMB's draft guidelines represent a step forward. The introduction of a requirement to provide a table summarizing the economic impacts of a regulation, and a requirement that uncertainty be handled more rigorously are welcome innovations. At the same time, we suggest that OMB emphasize that benefit-cost analysis is preferred to cost-effectiveness analysis when information on monetized benefits and costs can be obtained at a reasonable cost. Although both tools are useful, we suggest that regulatory agencies strive to acquire enough information to perform benefit-cost analyses. We also recommend that OMB provide more guidance to agencies on defining reasonable policy alternatives. Finally, we argue that OMB should rethink its proposed policy on discounting.

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Introduction

Since the presidency of Ronald Reagan, all presidents have used executive orders that required federal regulatory agencies to prepare detailed regulatory analyses for economically significant regulations.[1] Executive Order 12866, signed by President Clinton and amended slightly under President George W. Bush, requires that agencies conduct analyses that identify policies that are not only cost-effective, but also provide benefits that justify their costs.[2]

The Office of Management and Budget recently released draft guidelines to federal agencies describing how they should conduct analyses to support regulatory decisions.[3] These guidelines can make the regulatory process more transparent and also help in devising policies that are economically sensible. This comment identifies two aspects of the proposed guidelines that are useful and offers three recommendations for improving OMB's draft guidelines for conducting regulatory analyses.[4]

Praise for OMB's Draft Guidelines

The new draft guidelines, which OMB hopes to finalize later this year, are the latest in a series of such documents that extend back to the 1970s.[5] In general, these

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[1] See Clinton (1993) for Executive Order 12866, § 1(d), which provides a definition of agency: "'Agency,' unless otherwise indicated, means any authority of the United States that is an "agency" under 44 U.S.C 3502(1), other than those considered to be independent regulatory agencies, as defined in 44 U.S.C. 3502(10)." See also Reagan (1981) for Executive Order 12291, § 1(d), which provides an identical definition of agency. Executive Order 12291, signed by President Reagan, preceded Executive Order 12866, signed by President Clinton. See also Presidential Documents (2002) for Executive Order 13258. Executive Order 13258, signed by President George W. Bush, amends but does not alter the substance of Executive Order 12866. Executive Order 13258 changes the regulatory responsibilities of the Vice President and the President's advisors. .

[2] For a discussion and definition of benefit-cost analysis (BCA) and cost-effectiveness analysis, see Appendix C, (OMB 2003, 5516). "The distinctive feature of BCA is that both benefits and costs are expressed in monetary units, which allows you to evaluate different regulatory options with a variety of attributes using a common measure…Cost-effectiveness analysis provides a rigorous way to identify options that achieve the most effective use of the resources available without requiring you to monetize all the relevant benefits or costs."

[3] See OMB (2003).

[4] These guidelines are included as Appendix C in the *Draft 2003 Report to Congress on the Costs and Benefits of Federal Regulations*. For a review of the OMB 2003 Draft Report, see Hahn and Litan (2003, forthcoming).

[5] OMB's new draft guidelines replace its 1996 economic guidelines, entitled *Economic Analysis of Federal Regulations under Executive Order 12866*. See OMB (1996). An example of OMB's earlier economic guidelines is the OMB Circular No. A-94, dated March 27, 1972 and entitled: "Discount Rates to be Used in Evaluating Time-Distributed Costs and Benefits." See OMB (1992).

guidelines provide a useful distillation of economic thinking on the subject of doing good public policy analysis. Only a few guidelines have changed from the earlier versions, a fact that reflects the substantial continuity that exists in the field of applied economic analysis.

There are two particularly useful features in this year's proposed guidelines. First, OMB proposes to require "mandatory" probabilistic analysis of benefits and costs for rules with impacts over $1 B per year.[6] This is a very good idea that will be difficult to implement because very few analyses currently pass such a standard. Indeed, most current analyses present ranges for possible values of costs and benefits without assigning any probabilities to the range. OMB's proposal could remedy this shortcoming.

A second feature of the guidelines that is noteworthy is the decision to require a summary of the rule in an accounting statement. This accounting statement would contain important information regarding annualized monetized, quantified, and qualitative benefits and costs for economically significant regulations. In addition, it would provide best estimates, upper and lower bounds for costs and benefits. We think that this summary is a good start, but would recommend that the agency be required to present more information, such as a breakdown of quantifiable benefits and costs by type and an analysis of alternatives to the regulation.[7]

Recommendations for Improving the Draft Guidelines

We offer three recommendations for improving the guidelines.

Recommendation 1: OMB should emphasize that benefit-cost analysis (BCA) is generally preferred to cost-effectiveness analysis (CEA) and encourage agencies to monetize as many costs and benefits as possible.

The new draft guidelines, addressed to regulatory agencies, state:

> "A major rulemaking should be supported by both types of analysis wherever possible. Specifically, you should prepare a CEA for all major rulemakings for which the primary benefits are improved public health and safety. You should also perform a BCA for major health and safety rulemakings to the extent that valid monetary values can be assigned to the expected health and safety outcomes."[8]

[6] See Appendix C, OMB (2003, 5523) for a discussion of how to treat uncertainty. In Appendix C, OMB states, "Whenever possible, you should use appropriate statistical techniques to determine a probability distribution of the relevant outcomes, and for rules that exceed the $1 billion threshold a formal quantitative analysis is required."

[7] See Hahn and Litan (2002) for a more extensive discussion. For an example of a summary table, see Hahn and Sunstein (2002, Table 4).

[8] See OMB (2003, 5516). "For all other major rulemakings, you should carry out a BCA. If some of the primary benefit categories cannot be expressed in monetary units, you should also conduct a CEA."

While benefit-cost analysis generally requires more information, we think that it is preferred when it can be done and the assumptions are reasonable.[9] The reason is that benefit-cost analysis says something directly about the economic efficiency of a policy. Cost-effectiveness analysis typically takes the goal of a policy as *given*, and thus provides information that will help achieve that goal at the lowest social cost. We think this is useful, but unduly restrictive, when the goal of a specific policy is not prescribed by regulation or legislation.

One of the key requirements of Executive Order 12866 is that benefits justify costs. This requirement makes sense only if agencies conduct a benefit-cost analysis. Cost-effectiveness analysis cannot address this issue unless one makes an implicit assumption about what level of cost-effectiveness will equate costs and benefits at the margin.[10] Unlike benefit-cost analysis, cost-effectiveness analysis cannot adequately determine the economically efficient level of regulation.[11] Benefit-cost analysis can, in principle.[12]

<u>Recommendation 2</u>: OMB should be more explicit in directing agencies to analyze a reasonable set of alternatives.

For years, OMB has recommended that the agencies consider alternatives.[13] Despite these repeated recommendations, many regulatory impact analyses still fail to consider an appropriate set of alternatives.[14] OMB's draft guidelines, however, neither address this failure nor offer remedies.

OMB should modify its approach to the agencies by requiring them to use a two-step procedure. First, agencies should consider a broad set of alternatives so as to identify a few that are likely to be cost-effective and have high net benefits. Second, the agency

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[9] For a seminal discussion of the strengths and weaknesses of using different analytical approaches to assess social regulation, see Lave (1981).

[10] For example, if decision makers assume that the cost per ton of pollution reductions should not exceed $10,000 because that is the point at which marginal benefits equal marginal costs, then one could design such a policy using cost-effectiveness analysis. However, the choice of $10,000 is arbitrary without an attempt to monetize the benefits that flow from that investment.

[11] The economically efficient level of regulation is the point at which marginal benefits equal marginal costs. OMB states, "The size of net benefits, the absolute difference between total benefits and total costs, is the key to determining whether one policy is more efficient than another. That will be achieved at the point where the cost of a marginal increment in regulatory stringency is just matched by the marginal benefit." See OMB (2003, 5516).

[12] For a useful discussion of the strengths and weaknesses of benefit-cost analysis, see Arrow et. al. (1996).

[13] OMB stated in its 1996 Economic Analysis of Federal Regulations, "Agencies should identify (with an appropriate level of analysis) alternatives that meet the criteria of the Executive Order as summarized at the beginning of this document, as well as identifying statutory requirements that affect the selection of a regulatory approach." See OMB (1996, § 3(a)). OMB reiterated this suggestion to the agencies in Appendix C of its 2003 Draft Report, stating, "You should decide on and describe the number and choice of alternatives available to you and discuss the reasons for your choice." See OMB (2003, 5517).

[14] See Hahn (2000).

should then analyze these options in more detail to determine which yields the highest net benefits. [15]

<u>Recommendation 3</u>: OMB should reassess its proposal for expanding the range of discount rates to include rates as low as 1 percent per annum for regulatory impacts that span generations.

The use of discounting for regulatory impacts with long time horizons is controversial. OMB recommends expanding the range of discount rates for intergenerational analysis to include rates as low as 1 percent per annum.[16] We think that expanding the range to include the 1 percent rate is excessive. OMB should consider asking a group of distinguished economists to address this issue.[17]

<u>Conclusion</u>

In general, we think OMB's draft guidelines for economic analysis represent a step forward. The introduction of a requirement to provide a table summarizing the economic impacts of a regulation, and a requirement that uncertainty be handled more rigorously are welcome innovations. At the same time, OMB should emphasize that benefit-cost analysis is generally preferred to cost-effectiveness analysis and encourage agencies to monetize as many costs and benefits as possible. We believe both tools are useful, but that agencies should be encouraged to do benefit-cost analysis when the information is available to do it.

While this essay focuses on the guidelines for economic analysis, a more fundamental problem is that the guidelines are not enforced. Thus, we would also urge OMB to think very hard about ways it can effectively enforce its guidelines.

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[15] The agency should avoid selecting alternatives aimed at making its preferred option appear in a positive light.

[16] "Special ethical considerations arise when comparing benefits and costs across generations…Again the reasonable range might be expanded to include rates as low as 1 percent per annum." OMB, however, cautions: "If you choose to use a lower discount rate for intergenerational analysis, you should still be sure to show the calculated net benefits using discount rates of 3 and 7 percent as well." See OMB (2003, 5522-5523).

[17] For a model of the impacts of different discount rates on intergenerational projects, such as reductions in global warming, see Nordhaus (1999). Nordhaus provides optimal carbon taxes for alternative policies that use different discount rates to reduce global warming. At a 3 percent rate, the optimal carbon tax is 5.2 dollars per ton of carbon. At a 1 percent rate, the optimal carbon tax is 22.7 dollars per ton of carbon. At a 0 percent rate, the optimal carbon tax is 92.7 dollars per ton of carbon. This example illustrates that the choice of a discount rate can have a large impact on the optional policy.

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