

April 15, 2011

MEMORANDUM FOR CASS SUNSTEIN

FROM: JOE ALDY

SUBJECT: Review of the *Draft 2011 Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities*

The *Draft 2011 Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities* presents in a transparent, concise, and understandable manner the benefits and costs of the U.S. Government's regulatory program. In the context of the recent heated but not always illuminating public discussion of the economic impacts of Federal regulations, this report will serve as a thoughtful resource. The decomposition of benefits and costs of regulations by agencies, and in some cases by major categories of benefits, are instructive. The 10-year look back is valuable to illustrate the longer-term trends in benefits and costs of government regulations. The recommendations for reform will improve the implementation and consideration of economic analysis in the design of government rules. The Office of Management and Budget should be commended for a job well done in synthesizing and summarizing the economic benefits and costs of government regulations. In the following I present a few major comments on the report and then some detailed comments on the text.

Major Comments

The Case for Efficient Government Regulation: An economic assessment of the Federal government's regulatory regime would benefit from an explicit statement of the public policy rationale for government intervention, for example in the executive summary. Well-designed regulations target market failures – such as negative externalities from production and consumption, market power, and asymmetric information. In doing so, the regulatory interventions make society better off, in some cases as measured by GDP (e.g., by mitigating the adverse impacts of asymmetric information on behavior in and outcomes of markets and in mitigating the adverse effects of market power on prices, quantities, and innovation) and in some cases by taking a full account of economic benefits including those that are not measured in market activities (e.g., improving the quality of and extending life through measures that mitigate morbidity and mortality risks). Benefit-cost analysis serves two important roles in this process. First, it can inform the design and consideration of various options so that decision-makers understand the opportunities for both minimizing the costs of achieving a social goal (cost-effectiveness) and maximizing net social benefits (efficiency). Second, such analysis can identify cases in which poorly defined policy risks substituting government failure for market failure and imposing net costs on society. This analysis can inform remedies by the executive branch, or when legislative mandate proscribes efficient regulation, inform proposals for legislative reform to deliver a more effective Federal regulatory program. In sum, it is important to remind the reader at the front of the report that public policy is intended to make society better off and benefit-cost analysis of the rules implementing public policy serve to identify how government actions can increase net economic benefits to the whole of society.

Distributional Impacts of Government Regulations: Implicit in several sections of the report, although not explicitly addressed, are issues of distribution. Benefit-cost analysis provides a transparent basis for

evaluating the efficiency of a proposed policy – Does it increase net social benefits? – but it does not provide determinative guidance on whether such a proposed policy is “fair,” recognizing that fairness can have a variety of meanings to different constituencies. Nonetheless, the economic analysis of Federal rules can present information on the distribution of benefits and costs without a normative conclusion about any given distribution. Some of the implicit discussions of distribution include: (1) large benefits and costs of air quality regulations (page 15; benefits to the entire population, with particular benefits to those with more respiratory conditions, and costs borne by pollution-intensive activities); small business (pages 33-35; with a curious focus on just the costs of regulations); labor compensation (pages 36-40; primary focus on costs); Greenstone study on employment, capital, and output effects of the Clean Air Act (page 46; are these just the adverse impacts in non-attainment areas, and if so, do attainment areas gain?); and the Kahn study on the distribution of benefits by income and ethnicity (page 48). An alternative way of structuring the presentation would be to frame these issues in terms of the distributional implications of regulatory interventions. It is important to note explicitly that paying particular attention to one category or population affected by a policy (e.g., small businesses, specific industries, income groups, etc.) and providing additional weight to their concerns in making policy decisions increases the risk that the final regulation does not maximize net social benefits. Such trade-offs may be valid when considering the entire suite of motivations for a policy, beyond just the efficiency criterion represented by benefit-cost analysis, but such consideration should be transparent and informed.

Using Benefit-Cost Analysis to Improve Policy Design: The reporting on the benefits and costs of Federal regulations could benefit by a discussion of how benefit-cost analysis has improved policy design. This is implicit in the discussion of the value of retrospective analyses of implemented regulations. Beyond that important task, the report could identify examples in which policy design evolved from the proposed to final rule-making stages that improved cost-effectiveness of implementation and/or increased net social benefits. This could illustrate the value of transparency and public participation as well as the insights that can be drawn from initial economic analyses of proposed rules. In addition, it could be instructive to identify examples of regulatory innovations that have delivered greater social benefits at lower costs. For example, a section of the report could be organized to draw from some of the existing discussion of information disclosure; report on the successes of market-based instruments in Federal regulation; and other lessons of importance.

Cost-Effectiveness Measures of Federal Regulations: I strongly concur with the recommendation for an evaluation of cost-effectiveness across Federal agencies. A significant number of Federal agencies promulgate rules that reduce mortality risk (e.g., DHS, FDA, DOT, EPA, OSHA, CPSC, and others). Estimating the net costs per life saved *and* the net costs per life-year saved would identify opportunities for improving the effectiveness of the Federal regulatory program. The annual report should present estimates for all rules with a primary or significant mortality risk reduction benefit. The report could also consider other cost-effectiveness metrics relevant to more than one agency, such as dollars per BTU saved for policies that impact energy consumption and dollars per ton of CO₂ avoided for policies that impact greenhouse gas emissions.

Retrospective Analyses: The retrospective analyses called for in EO 13563 are an excellent idea. For especially large and/or complicated rules, it would be valuable for such analyses to address not only the top line benefits and costs, but also the net social benefits of specific components of the rules. Some elements of a large rule may deliver greater social benefits at lower costs than other elements. This information would help inform regulatory review and identify opportunities for which regulations could be modified to increase net social benefits.

As a part of the effort to promote transparency by sharing more data online, the Administration could enable external experts to undertake ex post analyses of the benefits and costs of Federal regulations. For example, a number of regulatory agencies have external boards of technical experts. These boards could be tasked with providing guidance to the regulatory agencies on how they should collect, compile, and post online data that would enable non-governmental experts to estimate the realized benefits and costs of regulations. This information could be organized and presented in a manner to facilitate full benefit-cost analyses where feasible, and where not feasible, then focus on providing sufficient information to generate appropriate measures of cost-effectiveness.

Detailed Comments

Choice of dollars: Why 2001 dollars for all tables and figures? Why not a more recent year's dollars? At the very least, it would be useful for the report to provide a deflator in a footnote so the reader can convert to 2010 dollars.

Footnote 20: The definition of the value of a statistical life should be refined to make it explicit that this is a population-based measure. For example, the footnote could read: "...for example, the average person in a population of 50,000 may value a reduction in mortality risk of 1/50,000 at \$150. The value for reducing the risk of 1 *statistical* (as opposed to known or identified) fatality in this population would be \$7.5 million, representing the aggregation of the willingness to pay values held by everyone in the population."

Footnote 33: Given the lumpy timing of investments to comply with regulations, benefit-cost analyses should not simply present a future year's benefits and costs (e.g., in 2020) but the stream of annual benefits and costs.

Additional papers from the academic literature on regulation and firm relocation:

Ederington, J., A. Levinson, and J. Minier. 2005. Footloose and Pollution Free. *Review of Economics and Statistics* 87(1): 92-99.

Levinson, A. 2010. Offshoring Pollution: Is the United States Increasingly Importing Polluting Goods? *Review of Environmental Economics and Policy* 4(1): 63-83.

Levinson and Taylor. 2008. Unmasking the Pollution Haven Effect. *International Economic Review* 49(1).