Richard B. Belzer PhD

President

P. O. Box 319
Mt. Vernon, VA 22211
703-780-1850 v
202-478-1626 f
Belzer@RegulatoryCheckbook.Org

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Dr. John D. Graham
Administrator
Office of Information and Regulatory Affairs
Office of Management and Budget
Washington, DC 20503

TRANSMITTED VIA EMAIL TO OIRA_ECON_GUIDE@omb.eop.gov

Dear Dr. Graham:

I am pleased to provide the following comments on the Office of Management and Budget's most recent draft Report to Congress on the benefits and costs of federal regulations, and particularly its proposed revision to its Regulatory Impact Analysis Guidelines. I am especially enthusiastic about your decision to formalize these RIA Guidelines in an OMB Circular so that they will not automatically expire as they would if issued as an OMB Bulletin.[1]

Regulatory Checkbook is a nonprofit organization dedicated to improving and sustaining the highest quality scientific and economic information and analysis for public decision making. An essential element of this mission is monitoring the extent to which federal agencies comply with applicable statutory and Executive requirements, particularly those which cannot be readily enforced through judicial means. I have commented on each previous

[1] In 1991, OMB issued a Bulletin directing agencies to incorporate preliminary estimates of benefits and costs in their submissions for the annual *Regulatory Program of the United States Government*. When the Bulletin was not reissued in 1992, this budding effort to improve the quality of regulatory analysis withered on the vine.

OMB draft report to Congress, and each time I have noted that actual federal agency compliance with elementary benefit-cost principles tends to be spotty, both within and across agencies. I am hopeful that this revision of OMB's Guidelines, which were first put in place in 1990 and published in that year's edition of the *Regulatory Program of the United States Government*, will reinvigorate efforts all around to improve agencies' compliance record and thereby better inform the public concerning the impacts of federal regulatory actions.

For your convenience, these comments are structured to follow the organization of the 2003 Proposed RIA Guidelines. I have tried to focus on the most salient issues raised in this proposal.

"Preface"

The Proposed 2003 RIA Guidelines would supplant previous documents issued by OMB in 1996[2] and 2000, and reiterated in 2001. OMB states that this document primarily "refines OMB's 'best practices' document of 1996", which was amended only marginally in 2000.

This description is inaccurate. The 1996 document is not by any means a "best practices" document. The phrase "best practices" appears just once in the body of that document, in a section requiring "a full characterization of the uncertainties in the estimates to meet best practices in the use of [contingent valuation] methods." Virtually everything else in the 1996 document concerns matters that are more properly described as *minimum* or *common* practices for credible regulatory analysis. The phrase "best practices" comes from an accompanying transmittal memorandum.

To use a phrase made famous by the late Sen. Daniel Patrick Moynihan in an entirely different context, characterizing this document as reflecting "best practices" has the effect of "dumbing deviancy down." Best practices are things to which we aspire, and perhaps occasionally achieve, but not a standard to which others can reasonably hold us accountable for consistently

[2] Economic Analysis of Federal Regulations under Executive Order 12866, January 11, 1996. http://www.whitehouse.gov/omb/inforeg/riaguide.html.

meeting. Worse, minimum standards of performance make poor "best practices," for they encourage complacency and reward mediocrity.

It would be refreshing if OMB were more candid on this point. The reasons why OMB mischaracterized its 1996 document as reflecting "best practices" are generally well known and stale, and in any case far less important than simply correcting the error now that the obvious opportunity to do so has arisen. Failing to correct the record now undermines confidence in OMB's credibility as an impartial arbiter of policy-neutral methods for regulatory analysis.

"Why Analysis of Proposed Regulatory Actions Is Needed"

OMB discussion of the "why" of regulatory analysis is old hat to many. Nevertheless, it is worth repeating because others tend to forget, or perhaps never did understand, why credible and policy-neutral regulatory analysis matters. Much more energy seems to be spent casting specious doubts about the legitimacy of benefit-cost analysis because all effects cannot be quantified than on trying to develop better tools for improving quantification. An adverse side-effect of this misspent energy is that it encourages agencies to prefer languor and excuse-making over thoughtful innovation.

Given this background and history, I commend OMB for warning agencies at the outset not to attempt to use limits to the inability to quantify as a "trump card" to justify regulatory actions where quantified net benefits are severely negative.

"What Should Go Into a Regulatory Analysis?"

OMB reiterates here what it has required for over ten years: Agencies must provide:

- A statement of the need for the proposed action;
- An examination of alternative approaches; and
- An evaluation of the benefits and costs of the proposed action and the main alternatives identified by the analysis.

As it has been for more than 20 years, the "statement of need" should identify a failure in private markets or some other compelling reason for government intervention. Multiple alternatives must be analyzed, not just an agency's preferred option. The analysis must provide a credible regulatory baseline, an explanation of "how the actions required by the rule are linked to the expected benefits," and a careful analysis of unintended consequences, both good and ill.

A market failure is essential for any proposed regulatory action to yield present value net benefits. However, the mere presence of even a substantial market failure does not assure that regulatory intervention will achieve net benefits. Whether a regulatory action is reasonably expected to yield net benefits depends on how carefully and effectively a regulation is targeted. Sensitivity (the extent to which intervention succeeds in rectifying market imperfections) is essential for any benefits to be possible. Selectivity (the extent to which intervention avoids disturbing generally efficient markets) may be essential to avoid creating new governmental failures that drain away or perhaps eliminate net benefits.

Executive order 12866 expressly anticipates situations in which regulation can not or will not achieve present value net benefits. "Compelling public need," not market inefficiency, is the identified problem. In such cases, benefit-cost analysis has three non-normative objectives: (a) ensure that regulatory intervention does in fact achieve the identified non-efficiency objective; (b) identify and estimate what social benefits must be foregone ("opportunity costs") to achieve this objective so that tradeoffs between the objective and other values are transparent to both decision-makers and the public; and (c) eliminate, reduce or otherwise appropriately manage the magnitude of these foregone benefits. Some critics of Executive order 12866 (and critics of benefit-cost analysis generally) tend to gloss over this language in their zeal to mischaracterize the regulatory review process and its outputs.

Regulatory accounting statements

In its Proposed 2003 RIA Guidelines, 2003 OMB also directs agencies to provide a "summary of the benefit and cost estimates for each alternative, sometimes called a 'regulatory accounting statement,' so that readers can evaluate them." This suggestion is salutary insofar as summaries are often helpful for distilling complex information into its most critical elements.

Unfortunately, even under the best of circumstances "executive summaries" and the like tend to be difficult for readers to evaluate precisely because they exclude so much potentially essential information.

Regulatory Impact Analyses do not present anything close to "the best of circumstances." Rare is the RIA that does not suffer from the self-interest of its agency-author, and it is unreasonable to expect otherwise. The public should not rely on agency-authored summaries of benefit and cost estimates any more than, say, investors should rely on stock market research performed by subsidiaries of investment banking firms with a stake in subsequent investor decision-making. Conflicts of interest in stock market research have recently been interpreted as a scandalous market failure even though they were quite obvious to anyone who bothered to look. Analogous conflicts of interest in regulatory analysis are just as endemic, and perhaps more so because (unlike stock market analysis) each RIA is the product of a monopoly provider. A better analogy would be to a monopoly provider of stock market analysis, something which the investing public would not tolerate. Yet, in the public sector, analogous conflicts of interest that render all agency-authored RIAs fundamentally suspect are merely the norm, and few bother to think much about it.

A better (but still imperfect) approach would be for OMB to author and take responsibility for the regulatory accounting statement. This would be better because it would provide at least one additional interpretation besides that of the agency. It would be imperfect because OMB's actual independence from the agencies in nominally oversees is not always clear.

Transparency

OMB is surely correct in saying, "A good analysis is transparent." It is unfortunate that OMB does not actually require transparency, but merely recommends it. Agencies "should" state all pertinent assumptions such as discount rates and value-of-statistical life (VSL) defaults. It would be more accurate if OMB clearly stated the disclosure of default assumptions is *required* for transparency and that transparency itself is a *required* element of a "good" RIA. OMB states that it is "usually helpful" for agencies to provide sensitivity analyses that "reveal whether, and to what extent, the results of the analysis are influenced by plausible changes in the main assumptions."

What is difficult to figure out from OMB's discussion is exactly where sensitivity analyses are *not* helpful and hence are superfluous.

"I. Why Regulatory Action Is Needed"

This language borrows heavily from its various predecessors and thus is generally unremarkable. Nevertheless, it always bears repeating in RIA guidance, especially the following sentence:

> If you are trying to correct a significant market failure, the failure should be described both qualitatively and (where feasible) quantitatively, and you should show that a government intervention is likely to do more good than harm.

This speaks directly to the point that it is generally necessary but not sufficient to identify a market failure, or even to quantify it to six significant digits. Even a large market failure is merely an academic curiosity if there is little government can do to ameliorate it. Where objectives other than efficiency are intended by regulation, OMB's position regarding regulatory analysis is unchanged: Substantial evidence must be brought forward to show the nature and magnitude of the problem; that the proposed intervention will actually remedy it; and that the remedy will "do more good than harm." Thus, if we stipulate that some protection from global climate change (or from conflicted stock market analysts) is socially desirable even though relevant markets are adequately efficient, then the agency's responsibility is to provide a policy-neutral characterization of the nature and magnitude of the global climate change (or lazy investor) problem; show that the proposed intervention remedies global climate change (or protects lazy investors from themselves); and show that it solves some element of the global climate change (or lazy investor) problem without exacerbating other elements of it (or penalizing diligent investors).

OMB directs agencies to clearly identify situations where statutory language constrains administrative decision-making discretion and to describe the extent of administrative discretion available. This is an eminently sensible requirement and fully consistent with enhancing the public's right-to-know about regulation. Congress sometimes acts with extreme clarity such that an agency's role is merely to codify specific statutory requirements in the Code of Federal Regulations. Sometimes, however, Congress directs the

president through an Executive branch agency to exercise virtually unfettered discretion.

Public understanding of regulation is only enhanced when agencies make clear which regulatory provisions are statutorily mandated and which others reflect the agency's judgment concerning how to effect Congressional intent. In any case where Congress is less than specific, it has invited the president to share in the process and responsibility of legislating. Similarly, in any case where an agency is not specific (such as when it issues performance standards or relies on private consensus standards), it invites regulated entities to exercise judgment concerning how to achieve regulatory objectives. It is never helpful and always misleading to pretend that these nuances do not exist.

Market failure

The language in this section largely repeats what OMB has expected for over 20 years and explicitly stated in RIA guidance since 1990. It is time, however, to temper this language with a better appreciation for the *degree of residual imperfection* in a market instead of characterizing all imperfections as evidence of "failure," the connotation of which tends to be absolute.

It has become a rare situation when regulatory action occurs in a market that has truly failed (i.e., does not function at all). The *degree of market imperfection* matters for understanding the scope and scale of the problem regulatory action is supposed to solve. *Degree of imperfection* also matters because regulatory action itself is imperfect, and in many cases, wildly so. It is simply incorrect and seriously misleading to call market *imperfections* evidence of market *failure*, and fail to acknowledge that government interventions are inherently imperfect. In short, this terminology—which was invented by economic scholars to characterize all of the real world apart from the competitive equilibrium ideal—has become pejorative of markets but not of government and is no longer policy-neutral.[3]

[3] Policy neutrality is a preferred way to describe what is intended by the term "objectivity." Unlike "objectivity," the definition of which quickly gets philosophical and does not permit easy refutation, the condition of policy neutrality can be disproved by an evidentiary showing of policy bias.

Further, agencies seem to use the same tired, boilerplate recitation of market failure for the 100th regulation in a particular area that they used to justify the first one. We know that the market for clean air is imperfect, and it always has been so because transactions costs are not zero. But, it is unhelpful and seriously misleading to claim that the 100th major regulation aimed at reducing still more air pollution is justified by the same market failure on which the initial clean air regulations were founded. What matters is the degree of *residual* market imperfection that exists after the first 99 major regulations have been promulgated, and the scope and scale of governmental regulatory imperfections that grow with each new regulatory initiative. Without this kind of regulation-specific information, agency descriptions of the basis for regulatory intervention will continue to have little value.

OMB acquiescence in boilerplate statements of need has led to some truly exceptional analytic legerdemain, such as the simultaneous assertion of multiple, mutually exclusive market imperfections. These are especially noticeable in risk contexts. Consider first the case in which a product contains an unknown or undisclosed risk. In such a case, the market clearing price and quantity demanded will exceed what an efficient market would produce. A regulation designed to reduce the risk or require the provision of information about it might remedy this problem. Such a regulation will not, however, improve consumer confidence in the product's safety. Where consumer confidence is lacking, risk is perceived to be greater than it really is—precisely the opposite problem of an unknown or undisclosed risk. In short, consumers cannot simultaneously under- and overestimate risk. However, in two memorable situations that provided the foundation for massive new (and perpetually growing) federal regulatory programs, federal agencies made precisely this irreconcilable argument. OMB staff detected the problem and sought corrections, but OMB management did not insist that the agencies in question comply with minimum standards of internal consistency.[4]

[4] Belzer RB, "HACCP Principles for Regulatory Analysis" in The Economics of HACCP: Costs and Benefits, Laurian J. Uhnevehr, ed. St. Paul, Minn.: Eagan Press, 2000.

Inadequate and asymmetric information

By definition, *inadequate* information is evidence of market (or governmental) imperfection and *asymmetric* information implies it. The term *inadequate* does not define itself and information is always *asymmetric* to some extent. Thus, it is quite easy for an agency to claim that information is inadequate or asymmetric (or perhaps both), yet reveal virtually nothing interesting about the problem or its proposed solution. Like market "failure," the suggestion to remedy "inadequate" and "asymmetric" information has resulted in tired, boilerplate assertions lacking clarity or substance. OMB needs to provide greater guidance concerning the clarity of thought and empirical evidence it expects agencies to produce. If OMB continues to expect tired boilerplate, then that is all agencies will provide.

Imperfections or errors in risk perception

New in OMB's 2003 Proposed RIA Guidance is welcome language that specifically addresses the problem of discrepancies between policy-neutral risk estimates and risk perceptions:

> In the case of uncertain information about low-probability high-consequence events, markets may underreact or overreact depending on the rules-of-thumb and other mental assumptions that people use to cope with difficult issues. *Regulators should be aware of such mental quirks and not adopt policies based on a misunderstanding of the underlying reality* (emphasis added).

This language makes clear that agencies are not to base regulatory analyses or actions on risk perceptions that diverge from policy-neutral estimates. Some might incorrectly argue that this imparts a policy bias against regulation to reduce risk. It does not. It establishes a preference for *efficient* and *effective* risk reduction. With respect to efficiency, it discourages regulatory action where risk perceptions exceed policy-neutral risk estimates but encourages regulatory actions where policy-neutral risk estimates exceed risk perceptions. Basing decisions on risk perceptions would exacerbate inefficiency in risk reduction. With respect to efficacy, regulatory action cannot easily reduce risks that are lower than they are perceived to be.

Perhaps equally important, OMB's language directing agencies to rely on policy-neutral risk estimates says that the federal government should not

be in the business of manipulating risk perceptions. Regulatory agencies need to resist the temptation to promote, intensify or prey upon public concern about small or phantom risks that lay within their statutory jurisdiction to regulate. Nor should they downplay serious risks over which they lack authority to regulate, or the expertise to regulate efficiently or effectively. OMB's statement that imperfections in risk perception do not qualify as market "failures" provides an important bulwark against both of these temptations.

Other social purposes

Executive order 12866 expressly contemplates regulatory action taken in pursuit of objectives other than efficiency. OMB's 2003 Proposed RIA Guidance acknowledges this fact but does not provide much insight concerning how agencies should perform RIAs in these situations. Moreover, some of the handful of examples given ("a clearly identified measure that can make government operate more efficiently," "permit more personal freedom") may seem odd as regulatory objectives. Some critics of centralized regulatory review mistakenly believe that all OMB does is normatively apply benefit-cost analysis to all proposed regulatory actions, and the dearth of discussion here may well be misinterpreted as supporting evidence.

To provide better guidance to agencies (as well as inform the public), OMB should significantly expand this section. Where regulatory policy is intended to enhance agricultural price stabilization, energy independence, homeland security, or a host of non-efficiency objectives, agencies need more practical help in designing and implementing RIAs. For each such objective, it is essential that an agency establish a clear, objectively measurable definition against which proposed regulatory actions can be evaluated. Without such definitions, it is impossible to judge whether a proposed regulatory action achieves any part of its stated objective. For example, a regulatory action intended to improve U.S. energy independence cannot be credibly evaluated if we do not have agreement about what energy "independence" means and cannot determine which proposed actions enhance it or detract from it.

It would be especially harmful if regulatory actions were taken in the service of an objective like energy independence but careful analysis showed that they actually intensify import demand—i.e., they do not actually enhance energy independence as it is conventionally understood—and also im-

pose substantial efficiency costs as well. Without a common framework for analysis and rigorous application of consistent analytic methods, neither decision-makers nor the public can credibly evaluate whether the benefits of regulatory actions intended to achieve non-efficiency objectives justify the costs.

In addition to new, government-wide procedures for consistently analyzing non-efficiency regulatory objectives, OMB should insist that in all cases agencies estimate the likely foregone social benefits (i.e., opportunity costs) associated with regulatory actions intended to secure these objectives. It is a rare regulatory objective that is sacrosanct and must be achieved without any regard for the sacrifice involved, Public disclosure of the scope and scale of foregone benefits is essential for a fully informed citizenry.

Within the government, OMB is the only agency that deals with all such issues. Thus, OMB is best positioned to craft a workable set of procedures that deal with non-efficiency regulatory objectives. OMB should take the lead in fostering consistent approaches across the government, approaches that permit policy-neutral regulatory analysis and which are transparent and reproducible. If OMB fails to exercise leadership on this matter, RIAs in support of regulations with non-efficiency objectives will continue to have little value.

Showing that regulation at the federal level is preferred

This section largely reiterates instructions OMB has provided for over 10 years. Historically, OMB's focus has been to encourage action by the lowest governmental entity appropriate to the scope and scale of the problem to be solved. In many cases, this has served to protect the States from federal encroachment into matters where they have greater expertise, public accountability and constitutional foundation.

Some of the guidance in this section is new, however, and this new material is somewhat worrisome. OMB appears to be reversing course and suggesting that there is some overarching authority that compels the federal government to "harmonize" its regulatory actions with foreign governments or super-national bodies. The following text concludes with an entirely reasonable warning to avoid using regulation to erect non-tariff trade barriers that violate World Trade Organization rules to which the U.S. has sub-

scribed. But, the text preceding that reference could be read to imply that federal regulatory policy *should* be made consistent with foreign or international regulatory standards:

> The role of federal regulation in facilitating U.S. participation in global markets should also be considered. Harmonization of U.S. and international rules may require a strong Federal regulatory role. Concerns that new U.S. rules could act as non-tariff barriers to imported goods should be evaluated carefully.

OMB should clarify that this language applies to such matters as WTP compliance and that it does not intend agencies to base regulatory decisions on foreign or international authorities apart from those codified by Congress.

"II. Alternative Approaches to Consider"

This section also largely reiterates what OMB has said for more than 10 years, and nothing in the intervening period has made the consideration of multiple alternatives any less important. Though the order differs and the text has been modified a bit, OMB's nine margins for alternatives analysis match up with the eight margins in OMB's 1996 RIA Guidance. It would be difficult to argue that any requirement in this section imposes any additional burden on agency analysts.

"III. Analytical Approaches"

The addition of cost-effectiveness analysis clearly appears to be a significant expansion of OMB's expected analytical requirements. That appearance seems exaggerated because OMB's text draws a greater distinction between these two approaches than actually exists, and perhaps overplays the extent to which agencies have in the past actually performed benefit-cost analysis instead of cost-effectiveness analysis.

Because cost-effectiveness analysis is only a reduced-form subset of benefit-cost analysis, it is best understood as a preliminary step toward full BCA and not a separate technique. Thus, OMB's directive that agencies perform CEA should create no additional burden. In fact, agencies have frequently performed CEA rather than BCA because the monetization of benefits can be difficult or controversial.

Still, OMB's extensive effort to draw a material distinction between BCA and CEA as analytic tools raises a serious concern that it may be signaling to agencies that a substantial reduction in analytic effort is acceptable. If that is not the case, then OMB must say so very clearly in its Final 2003 RIA Guidance, for absent such a statement some agencies or offices will misconstrue this language.

If OMB intended to signal a preference for CEA, however, then it should immediately withdraw this section of the 2003 Proposed RIA Guidelines. At its best, CEA is a partial substitute for BCA. It provides useful insights in that subset of situations in which there is a single benefit measure of interest (e.g., five-year cancer survival) and there are multiple alternatives whereby that single benefit measure might be accomplished. This is a reasonable approach for considering, say, alternative medical interventions among patients with single health problems (e.g., cancer). However, it breaks down even in medical settings where there are multiple objectives (e.g., five-year cancer survival *and* high quality of life) or patients have multiple health problems (e.g., cancer *and* diabetes) because medical interventions almost always entail tradeoffs. Similarly, in all but a few real-world regulatory settings, agencies seek to achieve multiple objectives through actions that target multiple facets of a public policy problem. CEA provides limited insights in these areas, but does not supplant benefit-cost analysis as the preferred analytic tool.

OMB may be trying to head this direction out of frustration with agencies' limited success in monetizing benefits, especially those in the environment, health and safety areas. These frustrations are understandable, but they will not be remedied by abandoning BCA. Rather, they will only intensify. Agencies will reduce or eliminate their limited existing efforts to monetize benefits, thereby decimating a vital research program. This will force increasing reliance on off-the-shelf default values for weighing types of benefits. At best, these values will have been critically examined at one time for one purpose. There will be no mechanism left for focusing attention on tradeoffs across competing benefit categories. Even though it is imperfect and poorly implemented by most federal agencies, BCA is the only available tool capable of performing this function in a policy-neutral way.

Cost-effectiveness analysis

OMB's discussion of CEA is generally useful, though the caveat above must be reiterated: CEA is a second-best analytic technique and should not be misconstrued as anything more than that.

Also, certain parts of OMB's discussion are worrisome. For example, at the outset OMB describes CEA in a fashion that is technically inaccurate on a rather major point:

> 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 of the relevant benefits *or costs* (emphasis added).

This is not correct. The full quantification of costs is essential for the results of CEA to be meaningful. If costs are not fully quantified, then the resulting ratio is merely the magnitude of *quantified* costs per unit of fixed benefit. That statistic is useful when comparing alternatives only if all alternatives have identical unquantified costs. If they do not, then there is no credible basis for ranking alternatives in terms of cost-effectiveness and the advantages of this second-best method simply evaporate. Indeed, OMB acknowledges as much later in its discussion:

> With regard to measuring costs, you should be sure to include all the relevant costs to society--whether public or private.

Whereas OMB's initial statement is erroneous, this statement is accurate. In its final version of these guidelines, OMB needs to avoid such inconsistent statements.

The remainder of OMB's discussion highlights several additional technical and interpretative difficulties with CEA, and these warnings are welcome. In fact, OMB has merely skimmed the surface of the ways in which CEA can be done improperly or its outputs can be misleading. CEA practically invites accounting legerdemain. Not least among these problems is the extent to which CEA focuses so much attention on the cost side when costs—properly understood as foregone benefits or "opportunity costs," are more difficult to estimate than direct benefits.

With respect to the analysis of public health and safety rulemaking, careful attention to what OMB calls "the effectiveness metric" is certainly warranted. However, OMB's discussion applies just as easily to BCA as it does to CEA. For example, the concept of quality-adjusted life years (QALYs) is perfectly reasonable and it has a rightful place in benefit-cost analysis in the identification of the commodity to be valued. That is, all life-years do not have equal value, and the quality of life experienced during any of these years clearly matters in estimating individuals' willingness to pay for health or safety gains. But, nothing in that statement applies solely to CEA, the only advantage of which is that it could short-circuit the potentially difficult task of developing monetized estimates of WTP for QALYs.

Full transparency and reproducibility in all these matters is clearly essential. OMB gets this half right:

> [A]gencies should provide *OMB* with the underlying data, including mortality and morbidity data, the age distribution of the affected population, and the severity and duration of disease conditions or trauma, so that *OMB* can make apples-to-apples comparisons between rulemakings that employ different measures (emphasis added).

Agencies should disclose all of this information to the *public* as well as OMB, so that the *public* can make "apples-to-apples" comparisons, to the extent that such comparisons are possible.

Once these many problems are fully accounted for and pitfalls avoided, the resulting product will look a lot like benefit-cost analysis for any regulatory problem that has typical real-world complexity. Given these limitations, combined with the perverse incentive an emphasis on CEA gives agencies to abandon research into valuing benefits, it is not at all transparent why is OMB placing so much emphasis on cost-effectiveness analysis. In its final guidelines, OMB should dramatically scale back this section to make the emphasis on CEA proportionate to its limited real-world utility and subordinate to BCA as an analytic tool.

Evaluating distributional effects

Distributional issues have always plagued the application of benefit-cost analysis (and its lesser cousins, like CEA). OMB has expressed concerns about distributional impacts many times and welcomed agency efforts to rig-

orously estimate them. Rarely, however, does an agency go beyond asserting that distributional impacts are significant and actually provide a quantitative analysis of them.

Given this experience, OMB should offer much more guidance concerning how distributional impacts should be analyzed and presented. OMB's explicit references to ancillary analyses that are clearly distributional in nature (e.g., EO 13045 [risks to children]; EO 13211 [energy impacts] provide an excellent basis for such an expansion. Without leadership from OMB, little can be expected in these areas and these Executive orders will remain fallow.

One thing with respect to distributional impacts is especially important: OMB needs to state clearly and without equivocation that *claims* concerning distributional impacts must be grounded in rigorous and cogent analysis. All unsupported claims should be stricken.

IV. Identifying and Measuring Benefits and Costs

This section largely reiterates guidance that has been in place for over ten years. The comments below focus on a few particularly important statements or problems that appear to have be new in the 2003 proposal.

Regulatory baselines

Crafting an appropriate baseline can be one of the most vexing analytic issues to address. OMB expresses considerable flexibility on how agencies do this, considering such matters as the level of compliance with existing regulations and likely changes resulting from market and regulatory evolution. Two statements stand out for special emphasis. First, OMB makes very clear that agencies are not permitted to mix-and-match regulatory baselines:

> In all cases, you must evaluate benefits and costs against the same baseline.

Second, agencies are instructed to account for regulatory costs and benefits contained in statutory language they are implementing, even if that language is self-implementing:

> In some cases, substantial portions of a rule may simply restate statutory requirements that would be self-implementing even in the ab-

> sence of the regulatory action. In these cases, you should use a pre-statute baseline.

Though OMB does not make the point as clear as it could, these requirements serve to advance the fundamental principle that all regulatory benefits and costs must be counted, and counted precisely once.

Evaluation of Alternatives

OMB suggests that agencies should analyze "at least three" options in which the agency's preferred choice is bracketed by alternatives that are more or less stringent. This advice is not new, and it is generally helpful provided that agencies do not bracket their preferred option with alternatives that are extreme. Moreover, the practice of bracketing the preferred option tends to make that option an implicit anchor point and it makes the other options look extreme even when they are not. OMB should be somewhat more directive on this point, instructing agencies to avoid extreme alternatives unless they analyze a much larger number of alternatives.

OMB clearly states that agencies ought to be fully transparent about both total and incremental estimates:

> Whenever you can compare the benefits and costs of alternative options, you should present them in terms of both total and incremental benefits and costs.

This language is helpful, for in many cases agencies have provided only totals and analyzed options that differed on more than one margin, thus making the calculation of incremental effects impossible.

OMB directs agencies to report schedules that disaggregate benefits and costs by the year in which each effect is expected to be realized. This is essential for transparency and should not be treated lightly.

Willingness to pay

Here OMB reiterates the longstanding principle that willingness to pay is the preferred measure for valuing opportunity cost. WTP captures the value to the individual of benefits that must be foregone to realize the regula-

tory benefit of interest. Willingness to accept measures also may be useful or appropriate, but as OMB notes:

> WTP and WTA are comparable measures when the change being evaluated is small and especially where there are reasonably close substitutes available.

For almost all regulatory actions, individual benefits are likely to be quite small such that either WTP or WTA provides an acceptable measure. The conceptual difference between them (equivalent vs. compensating variations) is much more subtle than the uncertainty entailed in either measurement.

Some commenters object to the use of WTP for valuing environmental, health and safety benefits, but these objections simply lack merit. First, as indicated above, for virtually all cases individual benefits are small such that WTP and WTP are essentially the same. The distinction between WTP and WTA makes no practical difference in valuation. Where WTP and WTA vary significantly is when individual effects are unusually large. The best examples supporting WTA occur when regulation substantially or completely effects a regulatory taking of human life or private property. In these cases, WTA is clearly preferred, benefit-cost analysis is very unlikely to be dispositive in decision-making, and there is no genuine analytic controversy.

Second, complaints that WTP measures "understate" social benefits tend to evince a peculiar bias toward inflating regulatory benefits and depressing regulatory costs. It is good to remember that individuals' have WTP (or WTA) to avoid costs just as they do for reaping benefits. The right measure is the one that best approximates the change in consumers' and producers' surplus.

Third, embedded within the logic of WTP opponents is the notion that individuals enjoy legally enforceable property rights to health, safety or environmental quality. While a fine sentiment, the claim is simply counterfactual in any instance where property rights do not exist or are undefined or are owned by others. Any assignment of property rights in these cases is arbitrary and obviously subject to challenge.

Voluntary vs., involuntary risk

In its discussion of indirect uses of market data for estimating benefits, OMB briefly mentions the distinction between "voluntary" and "involuntary" risk. This distinction has become increasingly popular in certain circles, especially among those who object to the use or application of benefit-cost analysis in regulatory policy. It is alleged that environmental, health and safety risks are "involuntary" and hence their avoidance is inherently more valuable.

OMB correctly reminds readers in a footnote that the distinction between "voluntary" and "involuntary" risk is an elusive one:

> Distinctions between "voluntary" and "involuntary" are arbitrary and should be treated with care. These terms are merely a proxy for differences in the cost of avoiding risks.

What OMB appears to mean is that risks that are expensive to avoid often are characterized as "involuntary," but risks that are easy to avoid are called "voluntary." In this usage, smoking poses a voluntary risk because it is easy to avoid. Analogously, exposure to some contaminant in drinking water might be characterized as an involuntary risk because it would be expensive for an individual to treat water for the entire system. Empirical research is necessary to verify whether these examples actually fit, however. Those who claim that smoking is inexpensive to avoid tend not to be smokers and thus may not be best positioned to know. Similarly, consumers may have several alternatives to public tap water ranging from bottled water to inexpensive home filtering equipment. Thus, whether the cost of avoiding risk is high or low cannot be ascertained without data.

Use and non-use values

OMB's discussion here is generally consistent with past guidance. Use values are straightforward, but non-use values can be confusing. The example OMB provides clarifies the matter only a bit:

> [T]he value an individual places on an environmental resource even though the individual will not use the resources now or in the future. Non-use value includes bequest, existence and option values.

What remains unclear from OMB's example is what is meant by the terms "bequest," "existence," and "option" value. In its final RIA Guidance, OMB should elaborate more about what these terms mean—and what they do not mean.

In particular, all three values must be limited to assets to which the individual owns a clear property right. When they are extended to public goods it quickly becomes difficult to discern what is being bequeathed, by whom, and whether the benefactor of the bequest has any legitimate basis for making it. As a society, we may well value the existence of the Grand Canyon (an always popular example) or perhaps the Arctic National Wildlife Refuge (an example of perhaps more contemporary appeal) and want to bequeath these assets to future generations. The matter is complicated, however, insofar as there are conflicts in commodity definition within the population. Some may value the existence of these lands in their "natural" state whereas others value them for instrumental purposes, such as water power or petroleum. Economics admits to both interpretations of existence and bequest value and does not make value-laden distinctions between them. That is, the "existence" value of the Grand Canyon or the Arctic National Wildlife Refuge in their "natural" state is actually a form of "use" value. Whether that use is consumptive or not is really beside the point, for the critical idea is that there are opportunity costs associated with both consumptive and nonconsumptive uses.

Always the discussion concerning non-use values centers on environmental benefits, but there is no principle by which economic theory excludes other kids of non-use values. Many people place a high value on low unemployment independent of both the effects of employment on their livelihood and altruism they might feel for their fellow man. They believe that work is the natural and appropriate state of mankind and that the absence of work diminishes human dignity. Dedicated environmentalists may have genuine existence value for ANWR in its undeveloped state producing a flow of environmental services that they will never see or personally experience (the definition of "existence" value). But others will have an entirely different existence value for ANWR in a state of producing a flow of energy.

Economics provides no tools or principles for judging one form of existence value as more "legitimate" than the other. Yet, OMB's approach to non-use values displays a persistent bias in favor of environmental goods. In its

final guidance, OMB should expand this section to account more broadly for the full array of non-use values and remove this longstanding bias.

Contingent valuation

OMB's discussion of contingent valuation methods is largely consistent with past guidance on the subject. Comments below are limited to areas that deserve special emphasis or which may present new issues.

There is no question that stated preference methods like contingent valuation "raise issues about [] accuracy in estimating willingness to pay compared to methods based on (indirect) revealed preferences." Thus, OMB is right to state that "value estimates derived from contingent-valuation studies require greater analytical care than studies based on observable behavior."

Where OMB falls short is in prescribing what looks too much like a checklist of design standards and too short a description of the kinds of performance tests that a stated preference estimate must meet to be considered plausible. The checklist includes such elements as the undocumented assertion that "face-to-face and telephone interviews may elicit more reliable information" and various survey design elements. OMB's text on performance standards, though brief, bears reiteration because it contains important tests of plausibility[5] which often are not included in CV study design:

> As with all other estimates of benefits and costs, your CV results should be consistent with economic theory. First, as price increases and the amount of the good is held constant, the number of respondents willing to pay a particular price should fall. This is akin to negative own-price elasticity for a marketed good. Second, respondents should be willing to pay more for a larger amount (or higher quality) of the good. This is often referred to as being sensitive to scope. If your only test of consistency with economic theory is a scope test, it should be an

[5] See Belzer RB and RP Theroux, "Criteria for Evaluating Results Obtained from Contingent Valuation Methods," in Valuing Food Safety, Julie Caswell, ed. (Boulder, Colo.: Westview Press), 1995

> external (split sample) test rather than an internal (within sample) test.

CV studies that fail to demonstrate a downward sloping demand function for the commodity being valued should be rejected per se.

Information quality

OMB's specific reference to information quality in this context is welcome, but it would be more reassuring if information quality concerns were evident throughout the 2003 Proposed RIA Guidance. Information quality issues permeate the entire RIA process and are not specific to stated preference methods such as contingent valuation. Moreover, it is fine that OMB states "special care should be taken to ensure compliance" with government-wide information quality guidelines, but this admonition would be more useful if OMB offered useful insights concerning how agencies might accomplish this.

Information quality has become a very big issue over the past couple years. In its final RIA guidance, OMB should make a serious effort to infuse the document with instruction on how to incorporate information quality concerns into the RIA process from the outset. Suggestions made elsewhere along these lines should be reconsidered, particularly the proposal for early and active public involvement in the development and oversight of RIA Blueprints.[6] Although the proposal pre-dates OMB's final information quality guidelines, there is no question that the RIA Blueprint concept would improve the quality of information used in RIAs by empowering the public and injecting urgently needed competition into the development of high-quality data.

Benefits transfer

OMB's approach to benefits transfer is both succinct and on target:

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[6] See Belzer RB. "Making Executive Review Work," Weidenbaum Center Forum, *Executive Regulatory Review: Surveying the Record, Making It Work*, Washington, DC, December 17, 2001. http://wc.wustl.edu/ExecutiveRegulatoryReviewTranscripts/Belzer.pdf.

> Although benefit transfer offers a quick, low cost approach for establishing values for goods and attributes of goods, you should consider it as a last resort option.

Though inadequate for non-specialists, OMB's discussion of the perils of benefits transfer is generally sound and helpful. An unstated message of this section is that the use of off-the-shelf default values derived for different purposes and in other contexts is not acceptable.

Nonmonetized Benefits and Costs

OMB provides generally helpful suggestions in this section that, again, parallel similar guidance it has issued in the past. Agencies should carefully consider the precise definition of benefits that can be quantified but not monetized while taking care not to double-count benefits that have been monetized elsewhere. Where benefits are not even quantifiable but whose presence is uncontroversial, OMB calls directs agency analysts to:

> present any relevant quantitative information along with a description of the unquantifiable effects... For cases in which the presence of unquantifiable benefits or costs affects a policy choice, you should provide a clear explanation of the rationale behind the choice. Such an explanation could include detailed information on the nature, timing, likelihood, location, and distribution of the unquantified benefits and costs. Also, please include a summary table that lists all the unquantifiable benefits and costs, ordered by expected magnitude, if possible.

These disclosure requirements significantly aid in evaluating the merits of unquantified benefits that an agency might claim.

Throughout its proposed guidance, OMB presumes that identified benefits and costs are in fact real. Additional problems arise at the boundary where benefits are unquantified because their existence is a matter of dispute. Because agencies are sometimes prone to claim unquantified (or unquantifiable) benefits that do not exist, OMB should include in its final guidance clear language that helps establish the minimum evidentiary hurdle that must be leaped before an agency is allowed to assert unquantified benefits. For example, a strong theoretical basis for expecting such benefits to exist would seem to be essential. Scientific, technical or economic evidence supporting such a theory, but not sufficient evidence to permit reliable quantifi-

cation, also ought to be presented. In contrast, where an agency lacks a strong theoretical basis for expecting these benefits to exist, empirical supporting empirical evidence should be looked at very skeptically.

Monetizing health and safety benefits and costs

OMB's discussion here is significantly expanded over previous editions of OMB's RIA Guidance. Generally, this discussion is helpful and instructive. Faithful adherents to benefit-cost analysis can be heartened that OMB clearly states a preference for BCA over cost-effectiveness analysis:

> We expect you to provide a benefit and cost analysis of major health and safety rulemakings in addition to a CEA. The BCA provides additional insight because (a) it provides some indication of what the public is willing to pay for improvements in health and safety and (b) it offers additional information on preferences for health using a different research design than is used in CEA.

OMB does not mention that BCA also permits the comprehension of tradeoffs across alternative benefits, whereas CEA does not.

The discussion of monetizing non-fatal and fatal human health risks is generally good, though some confusion might arise in OMB's discussion of VSL estimates. OMB acknowledges that values differ widely and correctly attributes these differences (at least in part) to "different lifesaving contexts depending upon factors such as the magnitude of the probabilities and the health preferences of the target population." Thus:

> Studies aimed at deriving VSL values for middle-aged populations are not necessarily applicable to rules that address lifesaving among children or the elderly.

Other important factors are at play here, too, which OMB seems to recognize:

> VSL values based on fatal cancers or heart attacks are not necessarily relevant to a rule that prevents fatal causes of trauma, violence, or infectious disease.

There is more at work than merely context. VSL estimates can be obtained from numerous sources where the "statistical lives" in question reflect com-

plex commodities with multiple attributes besides premature death. Disentangling these attributes may be very difficult. Still, where OMB states that "VSL is not expected to be a universal constant," much of the variance in estimates probably can be attributed to various non-mortality attributes that accompany estimates derived from studies where premature mortality arises in very different guises.

Life-years

The use of life-years offers a significant improvement over lives in these monetization exercises. Strictly speaking, OMB is correct in noting that the VSLY concept implicitly assumes that WTP is proportional to the length of life extension. This assumption is surely violated often, if not always, but the assumption implied by the VSL method—that all life extensions have equal value—seems likely to be violated much more severely. For the last ten years there has been a concerted effort to focus on children's risks. It is incomplete to characterize children as just a sensitive subpopulation, for not all sensitive subpopulations garner such attention. Rather, it reflects in part an intuitive understanding that preventing premature mortality among children confers greater social value than extending by hours or days the lives of the seriously infirm.

Discounting

In this section OMB summarizes well-known and very conventional knowledge and understanding about how rates of time preference affects benefits and costs that are not immediately realized. But, in certain important respects, OMB also departs from past guidance in ways that are troubling. After reiterating the 7 percent default rate which comes from Circular A-94, the text then departs into problematic terrain. For example, OMB claims that lower discount rates are justified if consumption rather than capital investment is affected:

> When regulation primarily affects private consumption (e.g., through higher consumer prices for goods and services), a lower discount rate may be appropriate.

The problem with this argument is that the same facts may also justify a higher discount rate if the affected population's consumption rate of interest

exceeds 7 percent. This is especially likely to occur when regulatory costs are borne by the poor (who display much higher rates of time preference) or where regulatory benefits are captured by the rich (for whom rates of time preference are lowest). Relying on lower rates of time preference that characterize more wealthy segments of the population implicitly permits agencies to prefer regulatory alternatives that redistribute wealth from the poor to the rich.

If the locus of regulatory beneficiaries and burden-bearers is the same, then the correct discount rate is that rate which best characterizes the affected population. For a regulation that implicitly taxes the rich to provide benefits to the rich (e.g., user fess on remote National Parks or wilderness areas), a low discount rate is likely to be quite appropriate. However, a regulation that implicitly taxes the poor to provide benefits to the poor (e.g., drinking water standards for small rural community water systems) should use the much higher rate of time preference that comports with how the poor make intertemporal choices.

When regulatory beneficiaries and burden-bearers are different, then the choice of discount rate presents distributional impacts that tend to be unaccounted for. Regulatory standards now require low-priced appliances preferred by low-income households to have the same energy efficiency attributes as the high-priced appliances that high-income households like better. Evaluating alternatives based on a low discount rate imposes on the poor a rate of time preference that applies to the rich. Conversely, using a high discount rate imposes on the rich a rate of time preference that applies to the poor. Either approach potentially transfers income or wealth from one group to the other. In this case, the market needs little or no help providing energy efficiency attributes that the rich prefer, and the poor often display rates of time preference exceeding 20 percent. So, the practical effect of these standards is to transfer wealth from the poor to the rich. Using a low discount rate merely exacerbates the severity of this perverse wealth transfer.

By recommending that agencies consider default discount rates lower than 7 percent, OMB is implicitly encouraging perverse wealth redistributions. Ironically, opponents of discounting also tend to prefer very low discount rates–and in some cases, no discounting at all. That they typically belong to wealthy elites means that their perspectives are consistent with their social class orientation. That explanation does not apply to OMB, which his-

torically has tended to put its thumb on the scale toward higher discount rates. Even though OMB officials and professional staff belong to the same wealthy elites as do opponents of discounting, no rejection of class consciousness is necessarily apparent: High discount rates reflect OMB's institutional predisposition against spending other peoples' money.

Independent of the specific choice of discount rate, there is something profoundly unsettling about OMB continuing to rely on default discount rates. It is perhaps no accident that the economics literature OMB cites is rather dated, for there is little reason to continue researching this problem in specific public sector contexts if OMB is merely going to direct agencies to use default values. In this regard, OMB's persistent reliance on default discount rates is reminiscent of regulatory agencies' persistent use of scientifically dubious default values in quantitative risk assessment. Whenever default values are permitted they discourage original thought.. From an incentive perspective, whether OMB prescribes 7 percent or 3 percent or even 12 percent ultimately doesn't matter, for any such prescription stifles new research and improved understanding of the rich diversity of values among the American people. Why does OMB recognize that the "VSL is not expected to be a universal constant" but fully expect the discount rate to be both constant and immutable?

Instead of prescribing any default value (or values) for "the" discount rate, OMB should maintain the existing 7 percent rate in Circular A-94 as a weak default value that permits interagency comparisons, and instruct agencies to routinely perform a robust sensitivity analysis across multiple discount rates. The single most important discount rate is the one where present value benefits equal present value costs. Where the break-even discount rate is high, a regulatory action offers benefits to a wide swath of the American public irrespective of their household wealth. Where the break-even rate is low, however, that's a signal that only wealthy households are likely to gain.

The break-even rate cannot be prescribed, but only calculated from the problem at hand. A rich database of break-even discount rates—and the distributional consequences implied by each—would be much more useful for decision-makers and the public than any fixed value.

Intergenerational discounting

OMB's proposal to apply still lower discount rates in the 1 to 3 percent range for what it calls "intergenerational" effects is very disturbing. Not only does it imply the institutionalization of a wealth transfer from poor to rich, it dramatically expands the burden on the poor of bearing this unfair burden. In addition to being forced to subsidize the consumption of the current rich, the current poor would be forced to subsidize the future rich as well.

Part of the problem lies in the fact that OMB has confused rates of time preference with uncertainty over the realization of future benefits. According to OMB,

> A second reason for discounting the benefits and costs accruing to future generations at a lower rate is *increased uncertainty* about the appropriate value of the discount rate, the longer the horizon for the analysis. *Aversion to uncertainty* discourages any such long-term investments. Private market rates provide a reliable reference for determining how society values time within a generation, but for extremely long time periods no comparable private rates exist. Symmetric uncertainty would have the effect of lowering the discount factor applied to future costs and benefits. Again the reasonable range might be expanded to include rates as low as 1 percent per annum.

Uncertainty should be accounted for elsewhere than in the discount rate. If the uncertainty pertains to doubt about whether future costs or benefits will materialize, those doubts have nothing to do with rates of time preference. Private markets offer multiple ways to make intergenerational investments and transfers. In the environmental area, land can be dedicated for any length of time including perpetuity (unless government interferes by expropriating it or condemning it under eminent domain proceedings). Hundreds of nonprofit foundations have been established that will never expire (unless government changes the rules such that they must actually expend their assets instead of investing them).

OMB's argument might apply in the exceedingly narrow example where an investment in the distant future must be made now and only now, and there will no intermediate returns on this investment for decades or hundreds of years. Perhaps global climate change is the hidden example OMB is considering, but if so it proposes to allow a preferred set of policy out-

comes to dictate the parameters of the analysis—something that should never happen.

Latency and "ramp-up" lags

Here OMB adds new and welcome material. It has been clear for a long time that many benefits, especially in the environmental health area, are subject to two forms of delay that heretofore have not been taken into account. The first is conventional latency in which the same biological mechanism that delays the onset of disease also delays the realization of benefits. Historically, agencies have ignored latency in their benefit estimates, and this practice exaggerates benefits in ways that could not always be divined because latencies differ across risks.

The second from of delay is the ramp-up of benefits (what OMB somewhat awkwardly calls a "cessation lag") over the term of the biological risk model believed to best characterize how a risk is realized. Historically, agencies have erroneously assumed that health risks caused by a lifetime of exposure would vanish immediately after exposure ceased. This assumption is both implausible and inconsistent with the model used to estimate the risk in the first place.

Given agencies' past resistance to taking account of these phenomena (because they reduce present value benefits), OMB's advice to "use professional judgment as to the average cessation lag for the chronic diseases affected" seems to defer too much discretion to agency analysts. Where reliable scientific information exists concerning the rate at which risk declines (e.g., due to biological repair mechanisms that begin to operate) once exposure ceases, benefits should ramp up according to that rate. Where no such information is available, then agencies should use simply invert the risk model that they used to generate the risk estimate. For example, if the risk model is based on cumulative lifetime exposure over 70 years, then the appropriate default assumption is that benefits ramp-up over 70 years at a rate proportional to the decline in exposure.

Uncertainty Analysis

OMB's new requirement to perform formal uncertainty analysis is welcome but inadequate. The proposed $1 billion threshold for formal uncer-

tainty analysis is way too high. The requirement should apply to all economically significant draft rules. In addition, agencies should expend some effort to analyze the effects of critical parameters in analyses that are not economically significant. Generally, OMB should avoid intensifying agencies' already powerful incentives to keep regulations below specific thresholds (and to subdivide them, if necessary) just to avoid analytic requirements.

More disconcerting still is OMB's fixation on benefits. It proposes a threshold for uncertainty analysis that is triggered by a single cost estimate of unknown merit. The rule provides zero room for nuance, such as perhaps an *x* percent chance that actual costs will exceed *y* dollars. And, for any draft regulation caught up in the requirement for uncertainty analysis, only the benefit side of the analysis would be subjected to the requirement. In its final guidance, OMB should require uncertainty analysis to be performed with equal intensity of both sides of the ledger and allow the level of intensity to vary depending on the scale of effects (costs and benefits combined) and the extent to which net benefits are likely to be small.

Cost

A substantial weakness of OMB's Proposed 2003 Guidance is the dearth of attention given to cost. This asymmetry in treatment, which began in 1990 and expanded in 1996, has now become untenable as a balanced portrayal of benefit-cost analysis. Approximately 5 percent of the text concerns cost; the rest is about benefits. This imbalance is especially ironic given that Congress enacted the law governing this report based on a concern that regulatory *costs* had perhaps grown out of control.

One possible justification for this imbalance is that it is easier to estimate costs that benefits. The problem is that this justification is false, or perhaps more accurately, it is true only as long as costs are estimated incorrectly. OMB states several places that opportunity cost is the conceptually correct measure. Opportunity cost, in turn, consists of benefits foregone. That means benefit-cost analysis ought to be understood as "benefits-benefits *foregone*" analysis. Properly understood, costs are therefore much harder to estimate than benefits.

The problem of inadequate attention to cost is not mitigated in any manner by agencies' unusually dexterous or effective efforts to estimate op-

portunity costs. Agencies do not estimate opportunity cost; they estimate *compliance* cost. By doing so, they generally understate social costs by a potentially large amount. By focusing so much attention on benefits (and on cost-effectiveness analysis), OMB sets in place a regime whereby regulatory analysts are debating ever more abstruse theoretical issues and empirical quandaries on the benefits side but have yet to confront more fundamental inadequacies on the cost side.

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I appreciate the opportunity to provide these comments in behalf of Regulatory Checkbook. If you or your staff have any questions, please do not hesitate to ask.

Sincerely,

Richard B. Belzer