The Director of the Office of Management and Budget (OMB) has invited the public to comment on the principles and procedures governing regulatory review. The following comments provide four arguments for the proposition that cost-benefit analysis (CBA) should not play a significant role in the OMB review of regulation. These arguments in summary form contend:

- 1) Better alternatives to CBA exist, including economic impact analysis (which assesses the effects of a regulation on the performance of the economy), cost-effectiveness analysis, benchmarking (with respect to cost-per-life-saved, for example), knee-of-the-curve analysis (which detects diminishing returns to technology-forcing legislation), and exceptions for *de minimis* risks, among other methods.
- 2) CBA offers no plausible method to measure "benefit". The measure on which it relies, willingness to pay (WTP), could refer either to competitive market price (the *minimum* one conveniently has to pay for a good provided competitively) or total WTP (the *maximum* one would pay for a good if one had to). These are different. Neither has been shown to correlate with any concept of welfare or well-being not vacuously defined in terms of it. No one has measured *well-being* or *benefit* separately from *WTP*, however it is construed, and shown that a correlation holds between them. Any connection between WTP and a conception of utility rests on tautology or stipulation and has no basis in fact. For example, if income is taken as a surrogate for WTP and reports of subjective happiness as indicators of utility, studies overwhelmingly show that income and therefore WTP does not correspond to well-being after basic needs are met. That money does not buy happiness may be the best-proven hypothesis in social science research.
- 3) CBA conflates beliefs with benefits. The reasons for a regulation often refer to principles which people believe are right, not to purchases they wish to make. By "valuing" views, beliefs, arguments, ideals, and commitments as if they were consumer goods and thus in terms of amounts advocates are willing to pay to vindicate them, economists substitute their own theoretical construct, a perfectly competitive market, for a democratic political process. Economists privilege their own policy views as correct on the merits, forcing others to "price" their beliefs at the margin.
- 4) CBAs as experiments are not replicable. Different teams of economists if asked to prepare CBAs for the same regulation will produce widely different results. Dueling CBAs, commissioned by interest groups, have differed by an order of magnitude. As one agency official quipped, "You get the WTP you are willing to pay for."

Introduction

Historically, cost-benefit analysis draws on two influential philosophical traditions. The first, the tradition of Utilitarianism, recalls Jeremy Bentham (1748–1832) who argued that the government ought to seek to maximize the aggregate pleasure or happiness of its people. The second, the tradition of Progressivism and positivism, follows Auguste Comte (1798-1857) and Comte de

Saint-Simon (1760-1825), who advocated a system of social physics in which experts, primarily economists, would manage society on the basis of their knowledge and authority as scientists.

Today, few would agree with Bentham that experts can develop a "felicific calculus" by which to test the "happiness factor" of any action. With the downfall of the Soviet Union, fewer still would advocate that *apparatchiks* on the basis of a scientific theory of social well-being should occupy the "commanding heights" of government. Yet cost-benefit analysis in principle invokes the authority of science to prescribe an overall societal goal, namely, the maximum or aggregate net satisfaction of preference, preference weighed on the basis of WTP and taken as it comes. When used as a test for regulation, CBA draws on the still influential view that experts may maximize social utility through scientific analysis. This is the reason that critics of CBA regard it in principle as antagonistic to the deliberative processes of democratic governance and contrary to the constitutional processes that define the structure of our political institutions.

That people should be free to attempt to satisfy their preferences, fulfill their ideals, or work for social causes under rules and within institutions that assure the same liberty to others is a platitude few would question. It is also reasonable to assume that the government should seek to help people to satisfy certain of their preferences – those involving basic needs (according to a theory of justice), security (according to any political theory), and merit goods (if it wishes). To require cost-benefit analysis in regulatory review, however, is to substitute for the work of legitimate regulatory agencies a rule for making decisions and a criterion for judging them that have no clear justification. There is no reason to assume that economists are correct to believe that the satisfaction of preference, taken as it comes and ranked by WTP, is the purpose of government. As the following comments will argue, the rationale of CBA, namely, the maximization of net benefits construed in terms of preference-satisfaction, has no basis in ethical theory and no mandate in law. It functions as a pretext to allow economists to empower themselves to second guess any regulation in terms of their own view of the world.

While Congress typically delegates authority to interpret and implement the laws to regulatory agencies and not to the Office of Management and Budget (OMB), the need for regulatory review by experts at OMB and its Office of Information and Regulatory Affairs (OIRA) is obvious and not in dispute. As President Barack Obama wrote in his Memorandum of January 30, 2009 on Regulatory Review, "While recognizing the expertise and authority of executive branch departments and agencies, I also believe that, if properly conducted, centralized review is both legitimate and appropriate" Regulatory review at OMB is essential "to ensure consistency with Presidential priorities, to coordinate regulatory policy, and to offer a dispassionate and analytical 'second opinion' on agency actions."

The following comments will argue that OIRA to offer a "second opinion" on regulatory action need not insist, as CBA does, that the goal of social policy is to maximize the aggregate satisfaction of preference measured by WTP and taken as it comes. Officials at OIRA can rely on legitimate processes and methods for testing the reasonableness of regulation in view of goals that – unlike aggregate preference-satisfaction – society has reason to pursue and individuals have reason to want. These comments begin by describing well-known and legitimate methods by which OIRA can provide a "second opinion" on regulations. The comments will then offer arguments to show that CBA has no merit as a criterion in regulatory review.

Better alternatives to cost-benefit analysis are well known

The alternatives to CBA are so well known and understood that to do more than mention them may try the patience of the reader. An annotated list should suffice.

1) Cost-effectiveness analysis.

In 1980, Michael S. Baram, who was then Director of the Program on Government Regulation at the Franklin Pierce Law Center, Concord, NH, explained the difference between cost-benefit and cost-effectiveness analysis this way. "Cost-benefit analysis. . . is used by the decision-maker to establish societal goals as well as the means for achieving these goals, whereas cost-effectiveness analysis only compares alternative means for achieving 'given' goals." According to Baram, the regulatory use of cost-benefit analysis in practice substitutes net or aggregate preference-satisfaction, whatever that means, for goals mandated by legislation and thus in practice stifles and obstructs legislated health, safety, and environmental objectives. Agencies should engage in cost-effectiveness analysis, which aids in determining the least costly means to designated goals, rather than cost-benefit analysis, which improperly determines regulatory ends as well as means.

2) Risk-Risk Analysis

In limiting or preventing one risk, a regulation may produce another that is greater. The dangers that may result from a regulatory decision should be understood and compared with those it is intended to prevent.

3) A presumptive floor and ceiling (benchmark) for the cost of saving a statistical life or avoiding a statistical injury.

If the goal of regulating risk were simply to avoid needless deaths or injuries then it would make sense to equalize the marginal cost of lives saved or injuries avoided across programs. Because risks differ in their moral and social qualities – some are more dreadful, voluntary, familiar, etc. than others – deviations may be morally explicable or even praiseworthy. Reasons should be given to explain great deviations. As Cass Sunstein has written, "If an agency is going to spend (say) no more than \$500,000 per life saved, or more than \$20 million, it should explain itself."

A cost-benefit approach, in contrast, would draw a value per-life-saved or death-avoided from markets rather than from political reflection and legal practice. The CBA approach essentially returns to the theory that governed regulation a century ago, when workers chose to toil in conditions the dangers of which were known to them. Mining disasters claimed more than 3,000 lives in 1907 alone but social welfare was maximized in the sense that markets functioned efficiently. Information was available and bargaining costs were low. When civic groups managed to get states to pass laws to regulate working conditions in mines, on railroads, and in sweat shops, the courts often invalidated those laws because they prevented people from contracting freely. Regulations by impeding exchange made markets less efficient; they would therefore fail an efficiency or cost-benefit test no matter how many lives they saved. To suppose that a competitive market can determine the appropriate level or risk is to concur with the

opinion in *Lochner v. New York* (1905), in which the Supreme Court reviewed an ordinance that protected the health and safety of bakers by limiting to ten hours a day the time they tended ovens. The Court struck down the ordinance as an "unreasonable, unnecessary and arbitrary interference with the right and liberty of the individual to contract."

It is important to recognize that regulation serves as a social catalyst for change – for raising consciousness about risk – and is not simply a way to make market outcomes more efficient in view of "given" or "exogenous" preferences. Even in 1970, when Congress enacted the Occupational Safety and Health Act, it estimated that 14,000 Americans had died that year from job-related hazards. Almost 400,000 new cases of occupational diseases were reported. These horrors resulted from free and efficient markets. Bernard Kleiman, then a negotiator for the Steelworkers argued regulation was needed to make workers and employers more safety conscious. "Both sides have to be hit over the head a good deal before they develop the consciousness that permits them to move," he said. The "value" for lives saved economists derive from labor markets today reflect the regulations of yesterday – not the kinds of contracts people would make and have made in the absence of regulation.

4) Knee-of-the-Curve Analysis

In many contexts, technology-forcing regulation can allow morally acceptable amounts of pollution. In many industries, initial gains to the environment are inexpensive; eventually the cost of controlling the "next" or "incremental" unit of pollution increases. At some given state of technology, one can often find an inflection point or "knee-of-the-curve"—a point at which the cost of controlling the next or marginal unit of pollution increases rapidly and returns to the environment rapidly diminish per dollar spent. One morally acceptable way to allow some pollution (for example, through "cap-and-trade" markets for pollution allowances) is continually to encourage or prod industry to improve its processes and technologies to move the knee of the curve — the point at which costs may go asymptotic — ever farther out along the pollution-control axis. To the extent the government can encourage industries, through incentives and threats, to invent environment-friendly technology it can assure environmental progress while allowing at a given stage of technology a minimum amount of pollution necessary for economic growth.

5) Economic Impact Analysis

People care about the effect of regulation on the economy – on jobs, inflation, competitiveness, and the distribution of wealth. Cost-benefit analysis concerns microeconomic efficiency – something that interests welfare economists – but has no clear relation to the performance of the economy. It makes sense to ask how a major regulation will affect the "misery index" – e.g., involuntary unemployment and inflation. The use of CBA relies on microeconomic theory and does not reach the indicators of macroeconomic performance that we have reason to care about.

6) Heuristic Accounting

It may well make sense that OMB ask agencies to provide rich or thick descriptions of the reasons for and against a policy given the alternatives. These explanations will be salutary. CBA in contrast represents a highly professionalized and technical kind of analysis that

presupposes only one reason for regulation – the maximization of net benefits where these must be measured by adepts in a now cabbalistic science. A new Executive Order on Regulatory Review should sedulously avoid any mention of cost-benefit analysis because even to refer to this technique is in practice to issue a call to all economists to get on deck as consultants and sink the ship under the weight of their technical and methodological controversies and conundrums.

CBA offers no plausible way to measure benefits

Among these controversies and conundrums (which have exhausted many tens of millions of research dollars) one of the most intractable involves the definition and measurement of "benefit." Economists generally concede that interpersonal comparisons of utility are not possible since happiness is a private or "mental" state and thus is not observable. Accordingly, economists generally concede that what they mean by "benefit" has no necessary connection with happiness, well-being, or any other substantive conception of the good. It is rather defined, measured, and assimilated to willingness to pay. As Richard Posner has written, the "most important thing to bear in mind about the concept of value [in the economist's sense] is that it is based on what people are willing to pay for something rather than the happiness they would derive from having it." If economic value is a function of what people are willing to pay for something rather than the happiness or well-being they would derive from having it, it is unsurprising that those willing to pay the most for goods derive the most economic value from them. The term "economic value" simply coincides with "WTP" and has no known connection to anything else, i.e., anything of social use, moral meaning, or political importance.

Those who advocate CBA as a policy tool argue that its use will maximize the well-being or welfare of individuals collectively, i.e., social welfare. These advocates then define normative terms such as "benefit," "welfare," or "well-being" as whatever it is that WTP measures. A. Myrick Freeman III, for example, rightly observes that economic theory defines "the benefit of an environmental improvement as the sum of the monetary values assigned to these effects by all individuals directly or indirectly affected by that action." In this definition, WTP (assigned monetary value) is all that remains; substantive terms like "welfare" or "well-being" simply drop out. They function as stand-ins or as proxies for WTP and cannot be distinguished from it. The measuring rod of money correlates with or measures nothing but itself. The stipulated identity of welfare and WTP constitutes the normative foundation of welfare economics. The argument for CBA comes down to the proposition that resources should go to those willing to pay the most for them because they are willing to pay the most for those resources. This tautology provides the entire moral and political rationale for applying CBA to regulation. On this basis, proponents of CBA would override attempts by Congress and the regulatory agencies to improve actual welfare measured in common sense terms, for example, in terms of measures of human flourishing and in terms of the overall performance of the economy.

CBA conflates beliefs with benefits

From the perspective of CBA, individuals (other than economists) are not thought to have views, beliefs, or ideas worth considering on the merits. Rather, individuals are seen as locations where preferences – or WTP to satisfy them -- can be found. In CBA, the ideal-regarding, political, social, religious, and other beliefs people pursue without regard for their

own well-being are treated as preferences like any other – as "welfare" equal to the amount those individuals are willing to pay for them. Since 1970, indeed, research in environmental economics has been preoccupied with measuring "existence" value or "non-use" value, i.e., the welfare equivalent of policies people approve largely for ethical and not for "welfare" reasons.

To insist on CBA in reviewing regulations is to require that individuals attach value to objects or outcomes only in their capacity as consumers, in which context they may get what they pay for, but not in their capacity as citizens, where they might otherwise enter into public debate and share in the development of a public conscience. To deploy CBA is to presuppose that the good society is a perfectly competitive market and that the citizen has no role to play in determining social outcomes other than in his or her capacity to pay for them. Willingness-to-pay, after all, measures WTP, which is what economists mean by "welfare" and "benefit" and what they believe counts. If environmentalists and other social activists seek to advance other visions of the good society, economists feel their pain and offer to "price" it on the same WTP basis as any other consumer good. The assumption that the individual is the consumer and the economist the scientist – the former functioning as a source of data, the latter as the source of ideas -- is basic to the CBA approach. This is what makes CBA anathema to a democratic and deliberative political process and thus inappropriate as a rule for regulation.

CBAs as experiments are not replicable

The proposition that CBA represents a scientific or at least an intellectually respectable exercise – rather than an entirely self-serving and arbitrary procedure – could easily be tested. One need only ask two separate groups of economists to perform a CBA on the same regulation. If they come out anywhere near the same estimates, this would count in favor of the claim that CBA measures whatever it attempts to measure. If the two analyses differ significantly, this would suggest that CBA depends largely on subjective factors relating to the interests or preferences of those who practice or who pay for it.

In a well-known example of the use of CBA in a regulatory decision, both the Environmental Protection Agency and an affected industry – a coal fired power plant operating near the Grand Canyon – commissioned studies to determine WTP for improved visibility in that scenic area. Leland Deck, who as an EPA economist served as the lead technical analyst in the rulemaking, wrote in a detailed and thoughtful review that the benefits estimates of these two teams differed by an order of magnitude. The disagreement might have arisen, Deck conjectured, because of difficulty of measuring the non-use "benefits" associated with environmental goods, because of structural differences in the way the studies were designed and implemented, or even because "of the influence of the sponsor." In this instance, "the competing estimates effectively became a standoff." The bad news was that benefit analyses were attempted. The good news was that they canceled each other out.

Conclusion

The president is likely to issue an Executive Order to revoke and replace Executive Order 12866 of September 30, 1993, which now governs regulatory review at the Office of Management and Budget. This is a blessing. The new Executive Order should try to avoid mentioning the word

"benefit" if it can. Otherwise the community of technocrats and policy professionals – the nomenklatura – when it sees the term benefit will read it as WTP and then exhaust resources, patience, and time in a vain effort to measure WTP for any view, belief, outcome, or concern it deems relevant. An authoritative text on cost-benefit analysis declares, "Benefits are the sums of the maximum amounts that people would be willing to pay to gain outcomes that they view as desirable." Unfortunately, even to use the term "benefit" is to open a dike to flood policy analysis with often fanciful and usually irrelevant attempts to measure a very different concept, willingness to pay, which has only a stipulated – but no empirical, testable, or meaningful – relation to benefit.

In his Memorandum on Regulatory Review, President Obama wrote, "In this time of fundamental transformation, that process—and the principles governing regulation in general—should be revisited." A good way forward would be for OIRA to call on agencies to defend proposals on the basis of their relation to legislated goals and in the context of cost-effectiveness analysis, risk-risk analysis, economic impact analysis, and a thick or rich description of reasons for and against the proposed regulation and alternative regulations. The use of CBA, in contrast, has entrenched a set of methods and assumptions that do not serve but defeat the terms of democratic governance. The Executive Order should not give CBA an inch lest it take a mile.

Thank you for inviting public comment.

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(The views are those of the author alone and not of any institution or agency.)